



A History of Traditional Chinese Medicine

JAUNG-GENG LIN, PEI-CHI CHOU,
PO-HSIN LIN, HUI-CHUAN SHIH



Great Masters Last Forever *—Preface to the History of Chinese Medicine*

Chinese medicine has enjoyed a long history, with records that can be traced for at least 2,000 years. A number of masterpieces in Chinese Medicine have been published in the 20th and 21st centuries: the History of Chinese Medicine (〈中國醫學史〉) by Bang-Xian Chen (陳邦賢); the Brief History of Chinese Medicine (〈中國醫學史略〉) by Xing-Zhun Fan (范行準); the Chinese Medical History (〈中華醫藥學史〉) co-authored by Man-Ching Cheng (鄭曼青) and Pin-Shi Lin (林品石); the History of Chinese Medicine (〈中國醫學史〉) by Zhi-Ya Zhen (甄志亞) and Wei-Kang Fu (傅維康); the General History of Chinese Medicine (〈中國醫學通史〉) by Jing-Wei Li (李經緯), Jaung-Geng Lin (林昭庚), Tie-Tao Deng (鄧鐵濤), Zhi-Fan Cheng (程之范), Jing-Feng Cai (蔡景峰), Qing-Hua Li (李慶華), Bing-Huan Zhang (張冰浣) and Wei-Kang Fu; and a History of Chinese Medicine (〈中醫史〉) by Jing-Wei Li. This new work by Professor Lin contains several new features: (1) Each period has sections entitled “Historical Background”, “An Introduction to the History of Traditional Chinese Medicine”, “Medical Works” and “Biographies of Medical Experts”; (2) Brief descriptions of Chinese medicine history in Taiwan have been added; and (3) The book is intended to be published in



English.

Professor Jaung-Geng Lin is a senior Chinese medicine expert who specializes in acupuncture treatment and holds the position of Chair Professor of the School of Medicine at China Medical University. He has authored many publications and has taught a number of students of Chinese medicine. From 1998 to 2004, he was President of the National Union of Chinese Medical Doctors' Association, R.O.C. He has been a powerful influence upon Chinese medicine treatment, education, research and policy-making. I have known Professor Lin for 20 years and the following influential publications have been edited or written by Professor Lin:

A Comparative Dictionary of Chinese and Western Medical Disease Names (〈中西醫病名對照大辭典〉); New Statement on Acupuncture (〈針灸大成新解〉), A Review of the History and Practice of the Needling Depth of Acupoints (〈針刺穴位深度研究〉) and The Evolution of Traditional Chinese Medicine in Taiwan under Japanese Rule (〈日治時期の台灣中醫〉); these four books were all published by the National Research Institute of Chinese Medicine. Other publications include the History of Chinese Medicine in Taiwan (〈台灣中醫發展史〉); New Ideas on Acupuncture (〈針灸學新論〉); The Newly Edited Color Book of Acupuncture and Moxibustion (〈新編彩圖針灸學〉); and the Medical History of Acupuncture (〈針灸醫學史〉), all of which are milestones and pioneering works in acupuncture. Therefore, on the eve of



the publication of this History of Chinese Medicine, I am happy to contribute a few words to express my congratulations and respect.

Yi-Tsau Huang

Director, National Research Institute of Chinese Medicine

March 6, 2014





Prologue

Professor Jaung-Geng Lin is one of the most excellent renowned alumni of the second graduation of the School of Chinese Medicine in China Medical University. He is also the foremost acupuncture doctor and the first Taiwanese professor of traditional Chinese medicine authorized by the Ministry of Education. In addition, he is a member of the Board of Trustees of the university, and an outstanding chair professor.

Professor Lin became committed to clinical medical research after his graduation, serving in the acupuncture department of the Taipei Veterans General Hospital. Following this, he was appointed by the government to practice medicine for many years in Saudi Arabia. As Professor Lin was able to cure the chronic illnesses of senior Arabian government members with acupuncture and provide medical treatment for many Arabian citizens, he won their deep trust and was awarded the Golden Robe Award, which is the highest honor in Saudi Arabia.

After returning to Taiwan, Professor Lin worked at China Medical University, not only practicing medicine to help people, but also devoting himself to clinical medical research, sparing no efforts to guide and support his juniors. In addition to being a full-time professor, Professor Lin is also a part-time professor or guest professor at many other well-known



universities at home and abroad. In Taiwan, these include the National Taiwan University, National Yang-Ming University, National Defense Medical Center, and Chang Gung University. Overseas, these include the University of Victoria, Australia, the Health and Science College of the Royal Melbourne Institute of Technology, the University of Barcelona, and the Institute of Acupuncture and Moxibustion at the Complutense University of Madrid, Spain, Melbourne RMIT University, the University of Oradea of Romania, and the University of Vasile Goldis of Romania, as well as the Fujian University of Traditional Chinese Medicine, besides others. Professor Lin has delivered lectures worldwide. Due to his proficiency in acupuncture and charismatic style of speaking, as well as his passion for passing on Chinese medicine, he has been awarded high praise from academic institutions and students, both at home and abroad.

Since 1985, Professor Lin has continuously published professional books and textbooks related to acupuncture through his own effort or by working with other experts. These books include the Paper Collection of Acupuncture Research (《針灸研究論文專輯》), the Medical Digest of Acupuncture (《針灸醫學文摘》), the Collection of New Acupuncture (《新針灸大成》), the Digest of Traditional Chinese Medicine (《中醫文摘》), New Ideas on Acupuncture (《針灸學新論》), the Collection of New Acupuncture (New Edition) (《新針灸大成(增訂版)》), the Medical History of Acupuncture (《針灸醫學史》), General History of Chinese Medicine (Ancient) (《中國醫學通史(古代卷)》), A Comparative



Dictionary of Chinese and Western Medical Disease Names (《中西醫病名對照大辭典》), the Newly Edited Color Book of Acupuncture and Moxibustion (《新編彩圖針灸學》), The Evolution of Traditional Chinese Medicine in Taiwan under Japanese Rule (《日治時期的臺灣中醫》), and A Review of the History and Practice of the Needling Depth of Acupoints (《針刺穴位深度研究》). Since 2004, Professor Lin has been entrusted by National Research Institute of Chinese Medicine, Public Health Bureau of the Executive Yuan, to publicize the following: The Chinese Herbal Pharmacopeia, Guidelines of Using Chinese Medicine to Prevent SARS, Research Guidelines for Evaluating the Safety and Efficacy of Herbal Medicines (translation), Guidelines for Clinical Research on Acupuncture (translation), Guidelines for the Appropriate Use of Herbal Medicines (translation), WHO standard Acupuncture Point Locations in the Western Pacific Region (translation), and WHO Traditional Medical Strategy (translation), besides others. In recent years, several well-known foreign publishing companies have invited him to write and publish books on acupuncture therapy and replaceable medical books. It is thus clear that Professor Lin's merits and achievements accumulated in both teaching and professional practice have drawn the attention of authorities at home and abroad.

In Professor Lin's view, the development of acupuncture should integrate both ancient and modern techniques, and the secrets of ancient Chinese medicine should be reinterpreted from a modern perspective. As



the integration of Chinese medicine with Western medicine is also a developing trend in traditional medicine in the modern era, Professor Lin is committed to promoting traditional medicine education internationally, so as a result, he actively takes part in academic activities of various kinds.

In 1985, Professor Lin was honored as the most outstanding acupuncturist at the World Congress of Chinese Medicine in Los Angeles in USA, for which he was complimented by the US Senate and the US House of Representatives. Since then, he has proved to be a brilliant figure at international academic conferences, even acting as chairman and special commentator in significant global traditional medicine conferences. For instance, he was the chairman of the 14th International Congress of Oriental Medicine (ICOM) in December 2007, the distinguished speaker at the Chicago Annual Conference On Complementary and Alternative Medicine co-hosted by Chicago University and the Mayo Clinic in December 2008, the honorary chairman at the 2nd Health and Medicine Workshop held in Cyprus in July 2010, and served as the representative of the WFAS and Taiwan when attending the Workshop on Implementation of the Regional Strategy for Traditional Medicine in the Western Pacific 2011-2020, held in Hong Kong by the WHO in May 2012. Professor Lin was also invited to be the chief guest speaker at the Shanghai Graduates Academic Forum in December 2012. Professor Lin has a clear mind for developing and expanding traditional medicine and its education, which helps him to successfully promote Taiwanese medical diplomacy.



Professor Lin has also been chief editor of the Chinese Medical Journal and the China Medical College Journal, and has published and issued the Taiwan Journal of Chinese Medicine within his term as board chairman of the National Union of Chinese Medical Doctors' Association, R.O.C. He has also been an editorial board member and chief editor for several international SCI medical journals for many years, including serving as senior consultant and editor for both the American Journal of Chinese Medicine and the Chinese Journal of Integrative Medicine. At present, he is editor of *Acta Pharmacologica Sinica* and has been awarded a lifetime achievement honor, as well as being associate general editor of the Journal of Chinese Medicine. In June 2012, Professor Lin was invited by Evidence-Based Complementary and Alternative Medicine (ECAM) to become the guest general editor for the Special Edition: Clinical Efficacy, Mechanisms and Safety of Acupuncture and Moxibustion.

Over the past 30 years, Professor Lin has published 325 journal articles, 220 of which have been published in SCI journals. His research scope even extends to traditional Chinese medicine and its influence upon fracture healing, the effectiveness of Chinese medicine in allergic rhinitis, as well as in Yin disease, which is widely affirmed by the international academic circle. Mainland China, which is the origin of traditional Chinese medicine, awarded Professor Lin with the first Medical Saint Cup in 1994 and published a special book to introduce his life story and academic achievements.





In addition to the quality and quantity of his world-class research papers, Professor Lin knows very well that the springboard for traditional medicine research and application is medical classics and history. Since 1988, Professor Lin has completed various medical works, such as the Revised Great Compendium of Acupuncture and Moxibustion, the Revised Great Compendium of Acupuncture and Moxibustion (added edition), the New Understanding of The Great Compendium of Acupuncture and Moxibustion, the Medical History of Acupuncture, The General History of Chinese Medicine (Ancient & Relics and Atlas), The History of Traditional Chinese Medicine in Taiwan, as well as The Evolution of Traditional Chinese Medicine in Taiwan under Japanese Rule. Throughout this time, he has advised postgraduate and doctoral students majoring in medical classics and history at China Medical University on the writing of their dissertations on traditional books and medicine. In 2012, Professor Lin founded the Taiwan Institute of Traditional Chinese Medicine History and Literature, taking the position of first board director, contributing yet more to research in traditional medical literature.

Traditionally, Chinese medical history has lacked a systematic textbook. It is fortunate that Professor Jaung-Geng Lin wrote and published the History of Chinese Medicine; it covers research results over many years, and systematically reorganizes the traditional medical history





of more than 3000 years, short and compendious, each word a gem.

Chang-Hai Tsai

Chairman of the board of CMU and Medical Systems





Prologue

History is an honest documentation of past human developments. Everything long-lasting including science and technology has the time to attest its own values. The 5,000-year Chinese history is a trustworthy testimony of great Traditional Chinese Medicine heritages. With the great impacts brought along by human race, Chinese medicine has entailed the progress of the civilization among East Asian areas. Chinese Medicine, Ancient Babylonian medicine, Indian medicine, feature richest histories of traditional medical practices in the world. Of these three, only Chinese Medicine remains in practice and influential around the world. The 5000-year development of Chinese medicine has had a unique theoretical structure. With the recent integration of traditional Chinese medicine and Western medicine. There is a trend for hospital to provide integrative medical care of Western and Chinese medical treatments. Therefore, in the process of modernizing traditional Chinese medicine, we should consider how to promote the traditional Chinese medicine essence and innovate it without rigidity so as to maintain the original features of Chinese medicine whilst advancing both Chinese and Western medicines.

Professor Lin is a contemporary medical historian. He is committed to medical history besides his clinical practice and research focus on



acupuncture and moxibustion. A History of Traditional Chinese Medicine written by Professor Lin is composed of ten chapters, namely, Ancient Times, Xia Dynasty, Shang Dynasty, Zhou Dynasty, Spring and Autumn Period, Qin Dynasty, Han Dynasty, Three Kingdoms, Western Jin and Eastern Jin Dynasty, Northern and Southern Dynasties, Sui Dynasty, Tang Dynasty, Five Dynasties, Song Dynasty, Liao Dynasty, Jin Dynasty, Yuan Dynasty, Ming Dynasty, early and middle period of Qing, as well as modern times. This book briefly introduces the historical background and traditional Chinese medicine. Besides the medical development and history, the book also depicts the politics and economy, science and culture, and philosophy and religion in reference to different social conditions. In addition, this book reviews various medical works and medical experts' biographies in order to explore the thoughts of pharmacologists at that time. Today, the book of the History of Chinese Medicine is about to be printed. I firmly believe that this book will soon offer worldwide view for readers. Therefore, I strongly recommend and endorse this book.

Wen-Hwa Lee, Ph.D.

Chancellor and Chair Professor
China Medical University (Taiwan)
Distinguished Research Fellow
Academica Sinica
March 2014



Prologue

History is the process of development. To discuss the history of Chinese medicine, we should be clear that Chinese medicine is closely related with human lives. In ancient times, our ancestors dressed in the skins of animals. When humans lived the life of savages, they began to discover that certain animals, plants or minerals could ease their pains and even cure their diseases. They also discovered that eating other things by mistake, could lead to disease and even death. Therefore, humans have accumulated considerable medicinal experience. With the growing influence of society, economy, culture and technology through the dynasties, there have been changes in direction and degree in Chinese medicine. However, following several thousand years of progress, research into Chinese medicine has become popular worldwide and it is now necessary to compile a comprehensive history of the development of Chinese medicine.

A comprehensive history of Chinese medicine needs to cover a wide range of topics, including politics, economics, culture and international exchange. At present, the related published books are: General History of Chinese Medicine (《中國醫學通史》) by Jing-Wei Li (李經緯); History



of Chinese Medicine (《中國醫學史》) by Zhi-Ya Zhen (甄志亞); History of Chinese Medicine (《中國醫學史》) by Bang-Xian Chen (陳邦賢); History of Chinese Medicine (《中國醫學史》) by Zhong-Xu Shi (史仲序); A Historical Outline of Chinese Medicine (《中國醫學史綱》) by Jian-Ming Kong (孔健民), and the First Volume of History of Chinese Medicine (《中國醫學史》) by Cun-Ren Chen (陳存仁) etc. Every book has its own strengths, but it is hard to digest everything from such a wide range of topics. Therefore, Professor Lin and colleagues decided to write a concise and brief history of Chinese Medicine, which has led to the birth of this book.

In order to forge a set of comprehensive concepts regarding the development of Chinese Medicine, this book adopts the historical development of Chinese Medicine as the longitudinal axis in order to explore the impact of social background and cultural background on the development of Chinese medicine and prominent medicine experts from various dynasties. The above-referenced books and modern Chinese medicine periodicals have previously included brief introductions to the social background, medical development features, basic theories of Chinese medicine, development of clinics, development of medicine and famous medicine experts, and these are expected to offer a framework and set of complete concepts for the development history of Chinese medicine. After careful and prudent editing and proofreading, it has taken a long time



to bring this book to publication. Due to limitations in my knowledge, if there are errors or careless mistakes, I will look to the readers for guidance and correction.

Jaung-Geng Lin





Introducing of the Main Author

Professor Jaung-Geng Lin

Professor Jaung-Geng Lin is the chair professor at China Medical University, Taiwan. He is not only qualified in both Chinese and Western medicine, but is also the foremost doctor of acupuncture in Taiwan and the first Chinese medicine professor to be approved by the Taiwan Ministry of Education. With his profound knowledge of both Chinese and Western medicine, Professor Jaung-Geng Lin has undertaken in-depth research into the evidence-based medicine (EBM) of acupuncture, acupuncture anesthesia and safe depths of acupuncture, with an abundance of published works, including 51 books and 325 published papers at home and abroad (220 papers published in SCI medical journals).

In addition to his involvement in research into clinical acupuncture, Professor Jaung-Geng Lin has devoted himself to the classics of Chinese medicine history, and has completed the Medical History of Acupuncture, The History of Traditional Chinese Medicine in Taiwan, the Comprehensive History of Chinese Medicine (ancient period) and the Comprehensive History of Chinese Medicine (volume of cultural relics and pictures). In 1980, Professor Lin used acupuncture to cure chronic illnesses of top officials in the Saudi Arabian government and the people





of Saudi Arabia. He won the respect of the people of Saudi Arabia and he was awarded Saudi Arabia's highest "Golden Robe award". In 1989, Professor Lin was listed in "The World Who's Who" by the American Historical Association. In 1990, he was awarded an "Academic Contribution" from the President of the Central America Republic of El Salvador, Yanni Christopher. In 1991, Professor Lin was accepted into the "International Celebrities", published by the UK Cambridge International Biography Center. In 1993, he won the Presidential Cultural Award, given by president Deng-Hui Lee of Taiwan. In 2003, Professor Lin won an inscribed board, "Excellence in Traditional Chinese Medicine", from President Shui-Bian Chen of Taiwan (Hua Zong Er Rong Zi No. 09200120670) to commend his significant contributions to Chinese medicine.

Professor Jaung-Geng Lin has held the positions of Presidential National Policy Advisor, Chairman of the National Union of Chinese Medical Doctor's Association, R.O.C., Professor of the College of Medicine, National Taiwan University, Director of the Acupuncture Research Center at China Medical University, chairperson of the Chinese Medicine Institute of China Medical University, and visiting professor at the National University of Madrid, the National University of Victoria in Australia, Australian RMIT, Guangzhou University of Traditional Chinese Medicine, Honorary Professor of the Romanian Academy, President of the 4th International Congress of Oriental Medicine (ICOM) and Honorary





Professor for many other universities at home and abroad. In 2008 AD, the Mayo Clinic of the University of Chicago jointly organized a Chicago Annual Conference On Complementary and Alternative Medicine and invited Professor Lin to be their first keynote speaker. Since 2009, Professor Lin has attended many conferences organized by the United Nations and other bodies, including “The WHO Working Group Meeting on Clinical Studies on Phytotherapy” in Milan. In 2012, Professor Lin participated in the “Workshop on Implementation of the Regional Strategy for Traditional Medicine in the Western Pacific 2011-2020” held by the WHO. Following Taiwan’s departure from the UN, Professor Lin was the first person to be invited to attend UNESCO’s 2014 conference in Paris, France. There, he attended “The 9th Session of the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage”, where he delivered a lecture in the ICHNGO Forum. Professor Jaung-Geng Lin is the honorary chairman of the National Union of Chinese Medical Doctor’s Association and chairman of the Taiwan Association of Traditional Chinese Medical Literature and History.





Brief introduction to this Book

The development of medicine is closely related to changes in history. As medicine has evolved, innumerable figures, events, ideas, theories and experiences have helped to construct a wonderful history. The two publications, *Medical Classics* and *History of Chinese Medicine*, serve as the major core works of traditional Chinese medicine and are also important foundation stones in the developmental process of Chinese medicine. If medical practitioners can understand the related history alongside the studies and research into medical theories and techniques, they can expand their horizons and depth of mind, draw upon experience and acquire wisdom. Such growth is not only for recognition by the medical profession, but also the enhancement of self-studies and responsibilities towards patients. Robin George Collingwood, the English philosopher, historian, and archaeologist, stated that historical knowledge refers to the knowledge of history as knowledge that has been obtained by souls in the past. At the same time, it repeats this activity and perpetuation of the past that it lies in at this moment. This is the original motive for writing this book.

Professor Jaung-Geng Lin has focused on the development of research into the history of Chinese medicine, editing numerous medical historical classics of Chinese medicine. Given that many historical works





on Chinese medicine are either too simplistic or too demanding and difficult in level of content, Professor Lin has taken the Comprehensive History of Chinese Medicine, a book he edited in 2000, and has rewritten, revised and referenced an additional 15 important books and 117 articles from modern Chinese Medicine periodicals. This present book has not lost any of the detail in the Comprehensive History of Chinese Medicine. This book consists of 10 chapters and is arranged in chronological order according to historical periods. Each chapter includes a historical background, an introduction to the history of traditional Chinese medicine, medical works and biographies of medical experts and discusses the content of the related history. It is hoped that this book will enable readers to develop a preliminary yet comprehensive understanding of the process and framework of the development of Chinese medicine. The book also contains approximately 100 illustrations, many of which are of rare and precious relics in Taiwan.

This book is suitable as a textbook for the History of Chinese Medicine course for related majors at university and also as a reference for the extended reading of related academic research. It will serve as an excellent reference book for anyone interested in the development of Chinese medicine.





CONTENTS

Great Masters Last Forever / Yi-Tsau Huang	i
Prologue / Chang-Hai Tsai	v
Prologue / Wen-Hwa Lee	xiii
Prologue / Jaung-Geng Lin	xv
Introducing of the Main Author	xix
Brief introduction to this Book	xxiii

Chapter 1

Medical Science from Remote Antiquity to the Neolithic Age (from Remote Antiquity to 2070 BC)

Section 1 Historical Background	3
Section 2 An Introduction to the History of Traditional Chinese Medicine	11
Section 3 Legendary Medical Experts	15

Chapter 2

Medical Science in the Xia, Shang, and Western Chou Dynasties (from 2070 BC to 770 BC)

Section 1 Historical Background	33
Section 2 An Introduction to the History of Traditional Chinese Medicine	38
Section 3 Biographies of Medical Experts	53





Chapter 3

Medical Science in the Spring and Autumn Period and the Warring States Period (from 770 BC to 221 BC)

Section 1	Historical Background	59
Section 2	An Introduction to the History of Traditional Chinese Medicine	62
Section 3	Medical Works	73
Section 4	Biographies of Medical Experts	83

Chapter 4

Medical Science in the Qin and Han Dynasties (from 221 BC to 220 AD)

Section 1	Historical Background	95
Section 2	An Introduction to the History of Traditional Chinese Medicine	105
Section 3	Medical Works	117
Section 4	Biographies of Medical Experts	129

Chapter 5

Chinese Medicine in the Periods of the Three Kingdoms, Wei Jin and North-South dynasties (from 220 AD to 589 AD)

Section 1	Historical Background	151
Section 2	An Introduction to the History of Traditional Chinese Medicine	155
Section 3	Medical Works	170
Section 4	Biographies of Medical Experts	179



**Chapter 6****Medical Science in the Period of Sui, Tang, and the Five Dynasties
(from 581 AD to 960 AD)**

Section 1	Historical Background	201
Section 2	An Introduction to the History of Traditional Chinese Medicine	204
Section 3	Medical Works	216
Section 4	Biographies of Medical Experts	240

Chapter 7**Medical Science in the Period of Song, Liao, Jin and Yuan
Dynasties (from 960 AD to 1368 AD)**

Section 1	Historical Background	269
Section 2	An Introduction to the History of Traditional Chinese Medicine	272
Section 3	Medical Works	295
Section 4	Biographies of Medical Experts	321

Chapter 8**Medical Science in Period of Ming Dynasty
(from 1368 AD to 1644 AD)**

Section 1	Historical Background	349
Section 2	An Introduction to the History of Traditional Chinese Medicine	351
Section 3	Medical Works	364
Section 4	Biographies of Medical Experts	391





Chapter 9

**Medical Science in the Early and Middle Period of Qing Dynasty
(from 1644 AD to 1840 AD)**

Section 1	Historical Background	449
Section 2	An Introduction to the History of Traditional Chinese Medicine	456
Section 3	Medical Works	475
Section 4	Biographies of Medical Experts	508

Chapter 10

**Traditional Chinese Medicine in Modern Times
(from 1840 AD to 2013 AD)**

Section 1	Historical Background	555
Section 2	An Introduction to the History of Traditional Chinese Medicine	562
Section 3	Biographies of Medical Experts	593
Appendix	643





Jade Cong from the later Neolithic Age (This picture is provided and authorized by the National Palace Museum for publication)



Ancient Historical Traditional Chinese Medicine Relics (Photographed by Pei-Chi Chou at the Osaka Museum, Japan)



Chapter 1 *Medical Science from Remote Antiquity to the Neolithic Age* (from Remote Antiquity to 2070 BC)

Section 1 Historical Background

When human beings first appeared in history, they used stones as tools for living. Consequently, human life during this period is commonly known as the Stone Age. The Stone Age, a period over 14,000 years ago, is also referred to as the Paleolithic Age, a time when people mainly lived as nomadic hunter-gatherers, started to make simple utensils and to live in tribes. In the Neolithic Age (around 10,000 years ago), people started to raise livestock and develop agriculture. They also had fixed homes, and no longer moved around to find herbage and water. Life became comparatively stable compared to that of the Paleolithic Age. As the history of this period can only be understood from archeological relics and records scattered across different places, this period is also referred to as the Legendary Era.

Once human beings appeared, medicine and healthcare started to emerge due to the social nature of their lives. This chapter introduces the development of medical science from that time up to the Neolithic Age





The Neolithic Age - production and life tools made from bone.
Source: *A General History of Traditional Chinese Medicine*, a volume containing collections of illustrative plates and an atlas of historical relics; page 5. (From a collection at the Museum of the History of Traditional Chinese Medicine).

using the evidence of human activities. Human evolution followed different phases, from australopithecus (early Homo erectus), Homo habilis (late Homo erectus), early Homo sapiens (paleoanthropus), to late Homo sapiens (eoanthropus). Researches on ancient cultural remains have revealed that human beings experienced a very long period of primitive society.¹

Humans first started to make tools from stone. They roughly hewed hard stone materials, such as quartz, flint, and gravel to obtain simple stone tools. Judging from the appearance and usage of such tools, the stone tools





of the Paleolithic Age can be divided into pointed tools, chopping tools, and scraping tools, etc. Beijing Ape-men were able to make different stone tools for different purposes. Other early Homo sapiens remains found in China include Maba Man in Guangdong province of China, Changyang Man in Hubei province of China, and Dingcun Man in Shanxi province of China. By the middle of the Paleolithic Age, the stone tools of Dingcun Man were specific and defined, with a culture of stone tools mainly consisting of large, thickly pointed tools and tools for chopping. Later Homo sapiens remains from the period include Liujiang Man in Guangxi province of China, Ziyang Man in Sichuan, Hetao Man in Neimeng, and Upper Cave Man in Zhoukoudian, Beijing. By the time of the late Paleolithic Age, tools produced were mainly made from stones and bones. Narrow and long stone blades were used to make different kinds of tools and weapons, such as spears, javelins, harpoons, fishhooks, and bone needles with holes, etc.² During the next period, the Mesolithic Age, people started to use microliths, and combinations of implements, such as bows and arrows, emerged. The invention and usage of such polished stone implements, together with pottery, are considered to be milestones of the Neolithic Age. Helping to improve people's daily lives and work, these primitive tools gradually developed into tools that were suitable for specific purposes, and such tools were also used in medical activities.³

With respect to food, from early times, humans mainly lived on a vegetable-based diet, occasionally eating animal meat. Their fishing,



hunting, and planting skills improved, and they gained a better understanding of animals and plants during the processes of crop-planting, hunting, and raising livestock. Gradually, they were able to learn the differences between food and toxicants, and also understand the influence and characteristics of certain medicinal plants and animals on the human body, slowly accumulating knowledge of zootomy.⁴

The recognition, control, and mastering of fire developed from the middle and later periods of the Paleolithic Age, constituting an important development in human life. During the processes of tool and weapon making, people gradually mastered the methods for making fire. There are records of fire-making skills in several ancient books, such as *Han Fei Zi* (《韓非子》), *The Book of Rites* (《禮記》), *Zhuang Zi* (《莊子》), and *Huainan Tzu* (《淮南子》). The earliest method of making fire is probably “striking a stone to make fire” while “drilling wood to make fire” probably has a similar long history. Minorities, such as the Li ethnic group of Hainan, the Ximengwa ethnic group and the Jingpo ethnic group in Yunnan have preserved the primitive skills of making fire even today.⁵ Once the methods of fire-making were developed, humans were able to control fire, a natural force, and use it widely to improve their living environment and dietetic hygiene. Using fire in a living environment enables expansion of the living space and prohibits dangers caused by dark nights, cold weather, and attacks from animals. More importantly, the use of fire encouraged humans to eat cooked food rather than partake in



omophagia. As a result, the chances of gastrointestinal diseases and microbial infections caused by omophagic eating greatly decreased, which helped to increase the ability of the human body to resist disease, thus prolonging life-span.

The origins of clothing stem from the use of animal hides and tree barks that ancient human beings wrapped around their bodies to defend against cold. As hunting tools advanced and the productivity of such materials increased, while still wearing hides, early humans started to use natural materials to make clothes. After processing or weaving, animal feathers, leaves, and thatch became outfits to defend against the cold. Textile technology is another major invention in the development of clothing. Weaving tools in primitive societies were mainly composed of spinning wheels of varying sizes and types. The fibers of wild plants were used as the raw materials for textiles. People from nomadic areas sometimes also used the hair and fleece of livestock as textile materials.

According to archaeologists, bone awls with a hole at one end, bone needles, and spinning wheels have been found at the Upper Cave Man relic site in Zhoukoudian, Beijing. It indicates that, at that time, humans had developed sewing skills and applied these skills to make clothes out of hides. At the “Hemudu Site” (「河姆渡遺址」) in the Yangtze River basin, Yuyao City, Zhejiang Province, parts of a lignin textile machine were discovered, with the winding arbor, shuttle, and wood being used to divide a warp knit. A stone spinning machine and a ceramic spinning



wheel were unearthed at Yangshao and Banpo Village, Xi'an City, and linen patterns remain on some pottery fragments, which means that people at that time had developed the skills of weaving linen and sewing cloth. The use of clothing allowed primitive men to progress from being naked to using hides and bark as clothing. Subsequently, primitive weaving and sewing activities emerged. The development of such living skills not only expanded people's living spaces, but also strengthened the adaptability of humans to nature's seasonal and climatic changes, reduced the occurrence of diseases caused by pathogenic factors and traumas that happened during farming and hunting, and further improved human health.

With respect to housing, at the beginning of primitive society, people selected dry, sunward and leeward facing natural caves as their living spaces, known as "cave dwelling". In this respect, most of the residential caves of primitive men discovered in China have openings that face south in order to avoid the invasion of cold brought by strong northwesterly winds in winter in China. The caves have comparatively small openings to prevent attacks from large animals and to protect against the cold wind. In addition, these caves are always located on comparatively high land with good shelter and no water inside, which is beneficial for preventing moisture, thus reducing diseases caused by humidity. As social groups developed, people gradually left the caves and started to build their own dwelling places on the land, form a residential style with the coexistence of "nest dwellings" and "cave dwellings". A "nest dwelling" refers to a



kind of nest-shaped primitive building built from wood and herbage and situated in a tree that offers protection from the weather and beasts. A “cave dwelling” is a kind of bag-shaped pit covered by a shield to avoid the rain. These are mainly distributed on the Loess plateau in the upper and middle streams of the Yellow River. As the walls of these caves were composed of loess, underground water, surface water, and rain could penetrate the inside, and cause damp problems. However, as construction skills improved, half-cave dwellings gradually emerged, and houses made from an earth-wood structure appeared. On the Yangshao relic site, layers of burnt-soil ground were found in many areas. Consequently, it can be deduced that burning vitrifying the soil might have been the best damp proofing measure at that time. At the time of the Longshan culture, half-cave dwellings had developed into ground-built buildings. As humans at that time had begun to understand damp proofing methods, living conditions were improved, and the occurrence of damp-related diseases decreased. Due to the gradual enhancement of people’s requirements for better quality housing, dwellings evolved from nest dwellings and cave dwellings into constructed houses, progressing from stone houses and earth houses to wooden houses with walls and roofs, and then to “pole fence type buildings”. Pole fence type buildings were wood-frame buildings constructed on a level and secure base. Stakes were first driven into the ground, then wooden boards were used to form a base, after which rooms were constructed on top of the base. Pole fence type buildings were



mainly distributed in the Yangtze River basin and the area to its south. On the Hemudu site in Yuyao County, Zhejiang Province, over a thousand wooden building components were discovered, including wood boards, plywood and log billets, and square timbers with mortise and tenon joint structures.

1,800,000 to 10,000 years ago, in the Paleolithic Age, Taiwan and Mainland China were joined due to lower sea levels. In 1969AD, archeologists Wen-Hsun Sung (宋文薰) in Taiwan discovered a cultural relic site at Changbin Township, Taitung County. Director Ji Lee (李濟), then of the Institute of History and Philology, Academia Sinica named this cultural style Changbin Culture. Implements unearthed from this site included rough stone implements that could be held by hand, knife-like stones, hard textured microliths, and bone, antler and horn implements that might have been tools for fishing. After analyzing the features of these unearthed implements, archeologists commonly agree that Changbin culture originated in Southern China. Zuozhen Man unearthed in Tainan County, Taiwan is another typical cultural relic of the Paleolithic Age in Taiwan. Unearthed cultural relics of the Neolithic Age in Taiwan include Zhishanyan Culture in the Shihlin District of Taipei, Yuanshan Culture in Yuanshan, Taipei, Niumatou Culture in the Cingshuei District of Taichung, Dongjiao Culture on the north bank of the midstream of the Jhuoshuei River in Nantou County, Niuchouzi Culture in the Jente Township of Tainan County, and Kenting Culture on the Hengchun Peninsula of



Pingtung County. The main feature of the cultural relic sites of this age is that most of them are distributed on stable land along the river or on low land near the coast. As unearthed pottery of this age is commonly decorated with corded lines, it is often called “Corded Ware Culture”. It is further deduced that the people of the Yuanshan culture may also have had the custom of tooth extraction, and the Kenting culture provides evidence of the earliest rice planting in Taiwan. Although cultural relics of the Paleolithic Age and the Neolithic Age were unearthed in Taiwan, it is a shame that no implements directly related to medical treatment have ever been found.

Section 2 An Introduction to the History of Traditional Chinese Medicine

It can be said that the first signs of medical science were seen during the early ages of human development. Diseases threatened people’s health and lives, and forced them to find solutions. The culture of Chinese medicine dates back to as early as the prehistoric period. In the remote antiquity era, when early human beings “had disease while knowing no medicine”, people had no idea about medical science and medicine. They were only able to maintain their health and prevent and cure diseases by observing the connections between the common rhythms of the human body and the nature around them, the accumulation of living experiences



in their communities, and the instructions given by wise men. This is how medicine was gradually developed in these early eras. For example, You Cao Shi (有巢氏) taught people to use wood to construct nest dwellings, Sui Ren Shi (燧人氏) drilled wood to make fire, Fu Xi Shi (伏羲氏) produced nine different needles, Shen Nong Shi (神農氏) tasted all kinds of herbs, and the Yellow Emperor (黃帝) created medical science. The wisdom of these ancestors was gradually gathered together to form the basis for the development of Chinese medicine.⁶

In the remote antiquity era, humans mainly lived on plants. When



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)



searching for food, they sometimes ate toxic substances, which caused vomiting, diarrhea, coma, or even death. With the accumulation of countless experiences, people gradually learned to distinguish between good food and toxic substances. As their production skills improved, people undertook further tests on animals and plants, and observed them during the processes of crop planting, hunting, and livestock raising. Thus, apart from the features of plants, humans gradually gained better knowledge of zootomy, body nutrition and toxicity. Knowledge of mineral medicine was also obtained during the processes of mining and smelting. In such primitive society, people began to recognize that the simple food they lived on could also be used as medicine for diseases. This is known as “medical science sharing its origin with food” (「醫食同源」) or “medicine sharing its origin with food” (「藥食同源」). *An Analytical Dictionary of Characters* (《說文解字》) written by Shen Xu (許慎) of the Eastern Han Dynasty states, “Medicine: herbs that can cure diseases. The upper part of the character for medicine (藥) in Chinese is radical grass (艸), and the bottom part of (藥) is the character (樂, meaning pleasure).” (「藥，治病草，从草樂聲。」) According to *Illustration of An Analytical Dictionary of Characters* (《說文釋例》) written by Yun Wang (王筠) of the Ching Dynasty, “Medicine is the general name for those herbs; trees, minerals, stones, birds, beasts, worms, and fish that can cure diseases are all named as medicine.” (「草木金石，鳥獸蟲魚之類，堪愈疾者，總名為藥。」) This means that anything in nature, whether



plants, animals, or minerals, as long as they can cure diseases, can be regarded as medicine.⁷ Both *Xiu Wu Xun of Huainan Tzu* (《淮南子·修務訓》), *Philosophers of Huainan* written by An Liu (劉安) of the Western Han Dynasty, and *Legends of Demigods* (《搜神記》) written by Bao Gan (干寶) of the Jin Dynasty recorded that when “Shen Nong Shi tasted all kinds of herbs” it was the beginning of the science of Chinese medicine. In the ancient eras, as people ate herbs growing in the wild, drank un-boiled water, collected the fruits of trees, and ate the uncooked meat of snails and clams, they constantly suffered from different diseases and illnesses, and were often threatened by animals and toxic insects. Shen Nong Shi taught people to plant five types of cereal, and grow different plants in accordance with the features of the geographic environment. Shen Nong Shi also tasted all kinds of herbs and springs, letting people know which animals and plants were edible and which should be avoided.

In the remote antiquity era, human beings were able to relieve pain brought by disease through the use of massage, puncture and pressing, or moxibustion. The use of fire greatly enhanced the treatment effects of hot medicated compresses (熱熨), moxibustion, and the decoction of medicinal ingredients, etc. When people in remote antiquity started to use fire, animals, and plants to cure diseases, they also started to use stone and bone implements as medical instruments, such as stone needles, choppers, scrapers, bone needles, bone awls, and bone knives.

In remote antiquity, medical science originated for the sole purpose of



relieving or getting rid of pain caused by disease and to improve the health of human beings.

Section 3 Legendary Medical Experts

Fu Xi Shi (伏羲氏)

Fu Xi Shi is also known as Pao Xi Shi (庖羲氏). His family name was Feng (風), and his given name was Tai-Hao (太昊). According to Chinese myth, he is the first human ancestor. He was born in the middle to late period of the Paleolithic Age. It is said that he taught people to fish and raise livestock and is regarded as the inventor of early stock farming. He knew everything. He invented the Eight Trigrams, and was familiar with the connections mentioned by the five element theory and diseases. According to *Yi Zhuan · Xi Ci Part II* (《易傳·繫辭下》), “In remote antiquity, when Pao Xi Shi was ruling the kingdom, he observed the phenomena of the sun, the moon, and the stars in the sky, looking for rules and changes on the ground, and observing the lines of feathers and fur of the birds and animals. His observations started with the human body and human lives, and then expanded to the universe. Thus, he invented the Eight Trigrams, and used them to understand the secrets of the universe, comparing them with all things on Earth.” (「古者，庖羲氏之王天下也，仰則觀象於天，俯則觀法於地，觀鳥獸之文與地之宜。近取諸身，遠取諸物，於是始作八卦，以通神明之德，以類萬物之情。」)



Shen Nong Shi (神農氏)

Shen Nong Shi is also known as Yan Di (炎帝). He was born in the later period of the Neolithic Age, approximately 3494 BC, in Jiangshui, and thus had the family name of Jiang (姜). Shen Nong Shi made farming implements, taught people to farm, and helped them to transform their lives from gathering, fishing, and hunting to farming. *Xiu Wu Xun of Huainan Tzu (Philosophers of Huainan)* written by An Liu of the Western Han Dynasty, states, “Shen Nong Shi began to teach people. He tasted all kinds of herbs and distinguished between the sweetness and bitterness of springs... at that time, he was poisoned 70 times a day, and thus medical



The statue of Shen-Nong
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 15 (From a collection at the Museum of the History of Traditional Chinese Medicine located at the Shanghai University of Traditional Chinese Medicine)



prescriptions emerged.” (「神農乃始教民，嘗百草之滋味，識水泉之甘苦，……當此之時，一日而遇七十毒，由是醫方興焉。」) According to *Stories of Emperors* (《帝王世紀》) written by Fu-Mi Huang (皇甫謐) of the Jin Dynasty, “Shen Nong Shi taught people to grow five types of cereal as food, instead of killing livestock. He tasted herbs, and claimed that medicine could cure diseases and sickness and save people’s lives when wounded. People used these medicines in their daily life without knowing their medical effects. Therefore, he wrote four volumes of books, known as the *Herbal Foundation* (《本草四卷》).”

Yellow Emperor (黃帝)

The Yellow Emperor is said to be the ancestor of all Chinese people. His family name was Gong Sun (公孫) and as he was born in Jishui, he took Ji (姬) as his surname. His given name was Xuan Yuan (軒轅), and he formally called himself Xuan Yuan Shi or You Xiong Shi (有熊氏). He was born in approximately 2674 BC. It is said that during the war in Zhu Lu (涿鹿) with Chi You (蚩尤) from the South, the Yellow Emperor invented a mechanical compass vehicle and bows and arrows. Following victory, the Yellow Emperor was chosen to be the general ruler of all tribes. It was the start of the establishment of a country of Chinese people. Later on, the Yellow Emperor defeated Xun Yu (葷粥) in the North, and unified all the tribes located in the Yellow River basin. The Yellow Emperor invented Chinese characters, arithmetic, silkworm breeding, clothes,





The statue of the Yellow Emperor
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 16 (From a collection at the Museum of the History of Traditional Chinese Medicine located at the Shanghai University of Traditional Chinese Medicine)

tonality, weapons made of jade and stones, and designed boats and vehicles for transportation. Lei Zu (嫫祖), the wife of the Yellow Emperor, taught women to raise silkworms to obtain silk, and how to use silk to weave cloth and make clothes. Thereafter, the development of clothing the human body began. Cang Jie (倉頡), a historiographer of the Yellow Emperor, observed the footprints of horses and birds, and was inspired to create hieroglyphics. Thus, China started to record its history.

Much of the ancient Chinese literature records the Yellow Emperor's inventions and discoveries in medicine. *The Yellow Emperor's Inner Canon* (《黃帝內經》) (also called *The Inner Canon* 《內經》) is the earliest literature on Chinese medicine to exist. It illustrates the medical



knowledge of the time, mainly from conversations between the Yellow Emperor and Qi Bo (岐伯), Bo Gao (伯高), Shao Yu (少俞), and Tong Jun (桐君). In addition, according to *Yi Wen Zhi of The History of the Han Dynasty* (《漢書·藝文志》, *Literature Catalog*) the Yellow Emperor is also named as the author of other eminent medical works, such as *The Yellow Emperor's Outer Canon* (《黃帝外經》), *Taishi Year Prescriptions of the Yellow Emperor, Bian Que, and Yu Fu* (《泰始皇帝扁鵲俞跗方》), *The Yellow Emperor and Qi Bo: Massage* (《黃帝岐伯按摩》) and *The Mingtang Canon of the Yellow Emperor* (《黃帝明堂經》).

Jiu Dai Ji (僦貸季)

Jiu Dai Ji is said to have been a medical scientist in ancient times. In *The Inner Canon of the Yellow Emperor, Plain Questions · Treatise on Moving Essence and Transmuting Qi* (《素問·移精變氣論》), when answering a question raised by the Yellow Emperor, Qi Bo said, “Diagnosing by complexion and pulse is valued by God, and the skills are passed down by masters. There was a famous doctor named Jiu Dai Ji in ancient times. He studied the truth of the complexion and the pulse, and understood the ideas of God. He was able to blend together the five elements of metal, wood, water, fire, and earth, as well as the four seasons, eight winds, and six ways, so as to perceive the changing rules and understand the main points by analyzing normal conditions and changes. In order to understand these main points, we need to study the complexion



and pulse.” (「色脈者，上帝之所貴也，先師之所傳也。上古使儻貸季理色脈而通神明，合之金木水火土，四時八風六合，不離其常，變化相移，以觀其妙，以知其要。欲知其要，則色脈是矣。」) *The Complete Compendium of Medical Works* (《古今醫統》) written by Chun-Fu Xu (徐春甫) of the Ming Dynasty states, “Jiu Dai Ji lived in the period of the Yellow Emperor’s ruling. He was the master of Qi Bo. His conversations with Qi Bo were recorded in *The Inner Canon*.” *The History of Luo* (《路史》) written by Luo Mi (羅泌). Mi of the Southern Song Dynasty says, “Shen Nong Shi ordered Jiu Dai Ji to study the complexion and the pulse, proclaim what he had learned to the public and obtain people to follow and study his proclamations, so that people could maintain good health.” (「神農命儻貸季理色脈，對察和齊摩踵，純告以利天下而人得以繕其生。」)

Qi Bo (岐伯)

Qi Bo is said to be the medical teacher of the Yellow Emperor. Thus, the Yellow Emperor called him “Imperial Master” (天師). *Stories of Emperors* written by Fu-Mi Huang of the Jin Dynasty states, “The Yellow Emperor asked Qi Bo to taste herbs, and write down medicines and classic prescriptions. Thus the *Magic Pivot* (《靈樞》) and *Plain Questions* (《素問》 also *Elementary Questions*) were published.” (「帝使岐伯嗜味草木，典主醫藥，經方、本草、素問之書咸出焉。」) According to the preface of *The Yellow Emperor’s Inner Canon*, “Qi Bo was an official of



the Yellow Emperor. He taught the Yellow Emperor and the Yellow Emperor asked him about medical science. Thus came the *Plain Questions* and *Magic Pivot*, which constituted the 18 volumes of *The Inner Canon*. Bing Wang (王冰), the official in charge of stock farming in the Tang Dynasty, explained the book: It is the first book of medical science, covering all the details about pulses, patho-mechanisms, treatments, needle canon, movement and qi. Qi Bo was a born saint. He cultivated people using a book which has been preserved to this day.” (「岐伯為黃帝之臣，帝師之問醫，著為《素問》、《靈樞》，總為《內經》十八卷，唐太僕王冰次注，為醫之祖書，脈理、病機、治法、針經、運氣，靡不詳盡，真天生聖人，以贊化育之書也，今行世。」) Chinese medical science is also known as “Qi Bo and the Yellow Emperor (「岐黃」)” or “The theories of Qi Bo and the Yellow Emperor (「岐黃之術」)”, which demonstrates that Qi Bo was a leading authority on medical science at that time.

Yu Fu (俞跗)

Yu Fu is said to also have been a medical scientist in ancient times and an official of the Yellow Emperor. Both literature and the historical works of the Western Han Dynasty mentioned the stories of Doctor Yu Fu as told by Yue-Ren Qin (秦越人). According to *The Historical Records · Biographies by Bian Que and Cang Gong* (《史記·扁鵲倉公列傳》), “Zhong Shu Zi (中庶子) said... I heard that in ancient times, there was a



doctor called Yu Fu. Instead of medicinal soup or wine, he used stone needles, exercises, massage, and hot packs to cure diseases. He lifted patients' clothes to find the causes of the diseases. Based on the points of the five viscera, he cut up the skin and muscle, dredged channels, connected sinews, pressed the rear of the head and the spine, teased the diaphragm, cleaned the guts, flushed the five viscera, and changed the essential qi and complexion.” (「中庶子曰……臣聞上古之時，醫有俞跗，治病不以湯液醴灑，鑿石橋引，案抃毒熨，一撥見病之應，因五臟之輸，乃割皮解肌，訣脈結筋，搦髓腦，揲荒爪幕，湔洗腸胃，漱滌五臟，練精易形。」) Another work, *Identifying Things · Shuo Yuan* (《說苑·辨物》) recorded that Bian Que (扁鵲) cured the Prince of Zhao Kingdom (趙王) who had died of a sudden disease. It mentioned that: “Yu Fu treated patients by pressing the rear of the head and the spine, leashing the diaphragm, scorching the nine orifices to stabilize the channels and network vessels, and brought dead people back to life. Consequently, he was called Yu Fu.” (「俞跗之為醫也，搦腦髓，束盲莫，炊灼九竅，而定經絡，死人復生，故曰俞跗。」) The above records indicate that Yu Fu had excellent medical skills, and was specialized in surgical treatment.

Bo Gao (伯高)

It is said that Bo Gao was a doctor of the channel vessels school, and also an official of the Yellow Emperor. According to the foreword in *The*



Yellow Emperor Systematized Canon of Acupuncture and Moxibustion (《黃帝針灸甲乙經》), “the Yellow Emperor consulted Qi Bo, Bo Gao, and Shao Yu about the five viscera and six bowels, blood qi, complexion, and symptoms. He also compared humans to the universe so as to find the essence of life, and explored the secrets and changes. Thus, acupuncture appeared.” (「黃帝咨訪岐伯、伯高、少俞之徒，內考五臟六腑，外綜經絡、血氣、色候，參之天地，驗之人物，本之性命，窮神極變，而針道生焉。」) *The Complete Compendium of Medical Works* states (《古今醫統》), “Bo Gao and the Yellow Emperor discussed the pulse canon, studied the common truths, and included them in *Elementary Questions*.” (「伯高佐帝論脈經，窮究義理，附《素問》中。」) *Magic Pivot · Length of Life and Toughness and Softness* (《靈樞·壽夭剛柔》) stated that Bo Gao was specialized in external treatments, such as acupuncture and moxibustion, and hot medicinal compresses. He was also knowledgeable about pulse theories. Therefore, the content on channels, network vessels, and blood vessels in the *Yellow Emperor's Inner Canon* was closely related to the legendary Bo Gao.

Shao Yu (少俞)

Shao Yu was a doctor in ancient times. He was also one of the officials who talked about medical skills with the Yellow Emperor. *The Complete Compendium of Medical Works* says, “Shao Yu was an official of the Yellow Emperor and younger brother of Yu Fu. His medical skills were



similar to those of his elder brother.” *Medical Science* (《醫說》) states, “Both Bo Gao and Shao Yu were officials during the period of the Yellow Emperor’s rule. Their surname was unknown. They assisted the Yellow Emperor, and talked with him about pulse canon, studied the common truth, and wrote a pulse theory which is used even today.”

Gui Yu Qu (鬼臾區)

According to *Plain Questions · The Great Treatise on the Origins and Principles of Heaven* (《素問·天元紀大論》), the Yellow Emperor once asked Gui Yu Qu about “the movement of the five qi’s ruling the four seasons” (「五運之主時」). Gui Yu Qu answered, “I have checked the *Taishi Year Brochure of the Origins and Principles of Heaven* (《太史天元冊文》).” *The Complete Compendium of Medical Works* states, “Gui Yu Qu assisted the Yellow Emperor to create the five phases, narrate a pulse canon in detail, and study the common truth in order to propose a theory which is still used today.” It can be seen that Gui Yu Qu was also an official of the Yellow Emperor. He was one of the ancient doctors, and specialized in the five phase theory (五行之說).

Lei Gong (雷公)

Lei Gong was also one of the officials of the Yellow Emperor. He was a doctor in ancient times, and specialized in teaching medical theories, acupuncture and moxibustion skills, plus theories on diagnosis by



complexion, etc. The *Treatise on the Supreme Doctrines of Plain Questions* (《素問·著至教論》), *Treatise on Showing the Breadth of Vision of the Plain Questions* (《素問·示從容論》), and *Treatise on Explaining the Five Errors* (《素問·疏五過論》) were written in the form of conversations between the Yellow Emperor and Lei Gong and covered medical skills and medicinal treatments. For example, *Treatise on the Supreme Doctrines of Plain Questions* states, “The Yellow Emperor sat in the hall, sent for Lei Gong, and asked, ‘Do you know the principles of medical science?’ Lei Gong answered, ‘I read medical books, but am not able to understand completely. Those I can roughly understand, I am not able to analyze or distinguish. Those I can analyze and distinguish, I am not able to further understand their essences or the things behind them. Those where I can further understand their essences and the things behind them, I am not able to extend and apply them into practice. Therefore, my knowledge is sufficient to cure diseases of ordinary officials, but not of dignitaries and kings. I hope you can teach me about the ideas of heaven, how to integrate the yin and yang of the four seasons, how to measure the lights of the sun, the moon, and the stars, etc. in order to further explain the principles. Thus, people of later generations will have a better understanding, and get to know the ideas of Shennong Shi. Also, these accurate principles will be spread. Such contributions can be compared to that of the two emperors.” The above content shows the relationship between Lei Gong and the Yellow Emperor in medical knowledge learning.



Tong Jun (桐君)

Tong Jun is said to be a pharmaceutical expert from ancient-mediaeval times and was also an official of the Yellow Emperor. He was engaged in gathering herbs and had quite a wide knowledge of nature, flavors, and the treatment effects of medicinal substances. He was famous for his knowledge on herbs. His works include four volumes of the *Pairs of Medicina* (《藥對》) and *Medicinal Herb Gathering* (《採藥錄》). In the foreword of *Variorum of the Divine Husbandman's Herbal Foundation Canon* (《本草經集注》) written by Hong-Jing Tao (陶弘景) of the Liang Dynasty, it states, “Knowledge of the nature of medicinal substances was spread by oral communication. Then, Tong Jun and Lei Gong compiled a book which was similar to *Plain Questions*.” (「至於藥性所主，當以識識相因，不爾何由得聞，至於桐雷，乃著在於編簡，此書應與《素問》同類。」) *The Complete Compendium of Medical Works* states, “Tong Jun understood the nature and flavors of trees, herbs, minerals, and stones, and classified these medicinal substances into three grades to determine the sovereign, minister, assistant, envoy and medicinal roles of a prescription.” (「桐君識草木、金石性味，定三品藥物，以為君臣佐使。」)

Shao Shi (少師)

Shao Shi was also one of the officials of the Yellow Emperor. He was a doctor in ancient times, specializing in theories on the constitution of the



human body. *Connecting with Heaven of Magic Pivot* (《靈樞·通天》) recorded Shao Shi's answers to the Yellow Emperor's questions regarding the yin and yang of human beings: "In the universe, everything is connected to the number five. So are human beings... There are five kinds of people: people of greater yin, people of lesser yin, people of greater yang, people of lesser yang, and people of balanced yin and yang. These five kinds of people have different shapes, sinews, bones, blood, and qi." (「天地之間，六合之內，不離於五，人亦應之……蓋有太陰之人，少陰之人，太陽之人，少陽之人，陰陽平和之人。凡五人者，其態不同，其筋骨氣血各不等。」) Shao Shi then further narrated the constitutions, characters, and behavioral features of these five kinds of people in detail. According to *Length of Life and Toughness and Softness of Magic Pivot* (《靈樞·壽夭剛柔》), the Yellow Emperor asked Shao Shi, "I heard that human beings are born with different qualities, toughness or softness, strength or weakness, long or short, and yin or yang. I want to hear more." Shao Shi answers, "Yin contains yang, and yang contains yin. We need to understand the rules of yin and yang so that we can apply acupuncture treatment better. We need to understand the courses of diseases so that we can use acupuncture properly. We need to carefully deduce the factors causing the diseases, and connect them to the climate of the four seasons..." (陰中有陰，陽中有陽，審之陰陽，刺之有方。得病所始，刺之有理。謹度病端，與時相應。……)



Shi-Huang Ma (馬師皇)

Shi-Huang Ma was a veterinarian in the period of the Yellow Emperor's ruling. According to *Tales of Gods* (《列仙傳》), “Shi-Huang Ma was familiar with the shapes and qi of horses. Every horse he treated got better. Then, a dragon came down from heaven, and flattened its ears and opened its mouth in front of Shi-Huang Ma. Shi-Huang said, ‘This dragon is sick. I can cure it.’ He acupunctured its lips and points inside its mouth. Then he boiled liquorice for the dragon. The dragon drank the medicinal soup and was cured.” Although recordings about Shi-Huang Ma have a mythic quality, it can be deduced that, at that time, veterinarians were not only able to use medicinal substances, but could also adopt other methods, such as acupuncture, to treat animals.

Wu Fang (巫妨)

Wu Fang is also known as Wu Fang (巫方). He was a legendary shaman healer who specialized in divining the life, death, and diseases of children. According to *The Origin and Indicators of Disease* (《諸病源候論》) written by Yuan-Fang Chao (巢元方) of the Sui Dynasty, “There was a Wu Fang in mediaeval times. He wrote a fonticuli canon to predict children's death, life, and diseases. The canon has been passed down, and contains prescriptions for children.” (「中古有巫方，立小兒顛凶經，以占夭壽，判疾病死生，世所相傳，有小兒方焉。」)



Wu Xian (巫咸)

Wu Xian, also known as Wu Wu (巫戊), was an official during the period of Tang Yao's rule (唐堯時期). He was also a legendary shaman healer. *The Complete Compendium of Medical Works* says, "Wu Xian was an official of Emperor Yao (堯). He became Yao's doctor because of his excellent prediction skills. He could pray to extend people's fortunes and cure diseases. He could pray to have trees withered and have birds fall." *On Judgment* (《論衡》) says, "Wu Xian could pray to extend the duration of diseases and deteriorate misfortunes." According to *The Songs of Chu* (《楚辭》), "Wu Xian is arriving tonight." Yi Wang (王逸) explained that "Wu Xian, wizard of the ancient times, appeared during the period of Yin Zhong Zong's (殷中宗) rule."

Miao Fu (苗父)

Miao Fu was a shaman healer in ancient times. He was also known as Di Fu (第父). In *Han Shi Wai Zhuan* (《韓詩外傳》), people who were fond of the formulas of the Chinese medicine of Zhong Shu Zi (中庶子) questioned Bian Que, "I heard that there was a doctor called Di Fu in ancient times. During treatment, he used herbs as the mat for a fete, weaved a dog with herbs, and incanted facing the north. After 10 sentences, those who were brought to him recovered to their normal state." (「吾聞上古醫曰第父，第父之為醫者，以莞為席，以芻為狗，北面而祝之，發十言



耳，諸扶輿而來者，皆平復如故。」) Similar statements appeared in *Shuo Yuan* (《說苑》) and *The Complete Compendium of Medical Works*.

References

1. Jing-Wei Li & Jaung-Geng Lin (2000). General History of Traditional Chinese Medicine (Volume of Ancient Times). *Beijing: People's Hygiene Press*. pp. 1-37.
2. Jaung-Geng Lin & Liang Yan (1995). History of Acupuncture & Moxibustion. *China Press of Traditional Chinese Medicine, Beijing*. pp. 1-12.
3. Wei-Feng Zhang (2000). Origin of Medicine. *Chinese Journal of Medical History*. 30(1). pp. 48-51.
4. Yun-Hoi Li (1983). *The Historical Narrative of Chinese Medicine*. Taipei: Ming-Wen Books. pp. 1-8.
5. Zhi-Ya Zhen (1994). History of Medicine in China. Taipei: Zhi-Yin Books. pp. 1-37.
6. Shi-Zuo Huang (1999). Medicines in Myth and Myth in Medicines. *Journal of Gansu College of Traditional Chinese Medicine*. 16(1). pp. 59-61.
7. Wen-Chiuan Hsien (2000). Herbalism. Taichung: Institute of Chinese Pharmaceutical Sciences, China Medical College. pp. 1.



The statue of Shen Nong (photographed by Pei-Chi Chou in the Shen Nong Temple, Shihlin District of Taipei City)




The statue of Shen Nong (photographed by Pei-Chi Chou in Sukunahikona Shrine (少彦名神社), Osaka, Japan)

Chapter 2 *Medical Science in the Xia,
Shang, and Western Chou
Dynasties*
(from 2070 BC to 770 BC)

Section 1 Historical Background

During the Xia, Shang, and Western Chou Dynasties, primitive society evolved into a society ruled mainly by royal families and with a slavery system. During this period, slaves were widely used for laboring work (such as farming and hunting). While agriculture remained at the heart of society, people began to produce bronze ware, pottery, and weaving, and the country became one of the most developed countries in the world.¹ The main production tools of the people of the Xia Dynasty were stone wares, clam wares, and bone tools. In the Shang and Western Chou Dynasties, the cultivated areas for agricultural production were significantly increased. In order to consolidate the economic base of the country, increase agricultural and land tax revenues, and solve the unbalanced tax and corvée issues, rulers started to carry out the “Well-regulated Land System” (「井田制度」). Due to the experience accumulated in building systems for land regularization, irrigation, farm



crop seed selection, and field management, plus the emergence of land for garden management and planting mulberries to feed silkworms, all of which expanded the production territory, people gradually transformed their primitive lives into an agricultural society, one which was agriculture production-based.

In order to promote agricultural production, the need for knowledge of astronomy and calendars dramatically increased and achieved great progress. The *Xia Xiao Zheng* (《夏小正》) calendar system in *Dai Senior's Book of Rites* (《大戴禮記》) is an important literary work about the calendars of the Xia Dynasty. It details aspects of astronomic and atmospheric changes, phenology, and records the changes in the stars, the points and directions of the Big Dipper, and the climate on a monthly basis. Ancient people connected astronomical phenomena to phenology, and used it as the basis for their timing when conducting agricultural activities. They also perceived that the physiological features of human bodies were not completely the same as the seasons changed. In the Western Chou Dynasty, observations made on changes in astronomical phenomena became more meticulous. The year was divided into the four seasons of spring, summer, autumn, and winter. The people also invented the method of “measuring shadow by gnomon”, and used such ancient Chinese gnomon to measure the length of the sun’s shadow to confirm solar periods, such as the Winter Solstice (the day with the longest high-noon sun shadow of the whole year) and the Summer Solstice (the day with the







shortest high-noon sun shadow of the whole year). Improvements in agricultural production skills also promoted increases in the yields of a variety of crops, such as cereal, wheat, millet, corn and rice. The harvest of crops also enhanced the development of the brewing industry. There is a record of “making wine out of kaoliang” (「以秫作酒」) in the Xia Dynasty, where kaoliang refers to modern-day sorghum. When kaoliang was grown in the Shang Dynasty, medicinal wines began to appear. The medical effects of such wines increased the treatment effects and scope of medicine. The development of different fields in the societies of the Xia, Shang, and Western Chou Dynasties also promoted the progress of medical science. For example, the emergence of industries producing bronze ware, pottery, stone ware, bone tools, jade ware, tanned hides, weaving, boats and carriages brought about obvious improvements in the application of medical science and improvements in medical instruments.


Characters from the Shang Dynasty include inscriptions found on bones or tortoise shells and bronze objects. Bronze inscriptions have been found on ancient bronze objects used for formal occasions. The inscriptions of ancient characters carved on tortoise shells or the scapulae of large animals (cattle) were mainly used for divination and are the earliest characters discovered so far in China. They were commonly used by civilians of the Shang Dynasty. During this period, inscriptions on bones or tortoise shells and bronze inscriptions evolved from drawings, but the degree of pictography was still very high. The character patterns were




not fixed. Judging from characters identified, ancient people had gained a certain knowledge of their bodies.


For example,  or  (head) look like the side of a


head,  or  (ear) look

like the outline of an ear, 


or  (eye) look like a




human eye,  (nose) looks

like a human nose,  or



 (tongue) look like a tongue stuck out of a mouth,

 or  look like a

human heart, and  or

 (tooth) look like teeth in the mouth. Additionally,  or  (arm)

of the inscriptions on bones or tortoise shells indicate the place of the arm,

and  or  (body) look like a human body from the side. At the

beginning of the Western Chou Dynasty, the main characters used for inscriptions on bronze objects had almost the same shapes as the characters



Characters representing parts of the body in inscriptions on bones or tortoise shells

(A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin))



used in the late Shang Dynasty. In the late Western Chou Dynasty, in order to simplify the writing, some changes, such as “linearization and flattening” were made to the characters. After these changes, the pictographic degree of the characters significantly decreased.² The evolution of characters in the Shang and Chou Dynasties not only laid the foundation for the development of Chinese characters, but also helped to preserve the knowledge of medical treatments, medicines, and hygiene.

When people had little knowledge of natural phenomena, they believed that the changes in natural phenomena were dominated by unknown spirits, and that the fortunes, misfortunes, diseases and pains of human beings were also governed by spirits. Archaeological excavations covering the period of the Xia Dynasty have discovered divination bones. In the subsequent Shang Dynasty, there were a large number of diviners working for the Shang king. They could not only speak, sing, and dance on behalf of the spirits, but could also cure diseases.³ People of that time believed that there were four factors causing disease: those given by the Gods, haunting by ghosts, confusion by evil monsters, and abnormal changes of astronomical phenomena (the heavens had six qi of yin, yang, wind, rain, darkness, and brightness). They generally sought psychic explanations as treatments for diseases believed to be caused by the first three causes, and went to a physician for treatments of diseases caused by abnormal changes in astronomical phenomena. Some inscriptions on bones or tortoise shells from the period of King Wuding (商王武丁) of the



Shang Dynasty unearthed at Yinxu (殷墟) recorded inscriptions for divination. For example, “Wuding had a dental disease, and offered sacrifice to his father Yi to pray for a cure” (「武丁病齒，祭于父乙，以求賜愈」), and “Wuding had a tongue disease, and sacrificed to his late mother Geng” (「武丁病舌，祈于亡母庚」). These are examples that show that wizards prayed for the cure of a disease by offering a sacrifice to the ancestor of the patient.⁴

Section 2 An Introduction to the History of Traditional Chinese Medicine

In the Shang Dynasty, the ancient character “醫” (meaning medicine) was once written as “醫”, which indicates there was a period when shaman healers (巫) and physicians were united as one. Shaman healers were better at medical treatment than ordinary wizards. They could not only communicate with the Gods and ghosts, but could also conduct medical treatments. Of the inscriptions on bones and tortoise shells of the Shang Dynasty unearthed at Yinxu, there are 36 pieces that have disease names on them, such as “sarcoptic” (「疥」), “nose disease” (「疾鼻」), “body disease” (「疾身」), “foot disease” (「疾足」), “toe disease” (「疾止」), “blindness” (「盲疾」), “children’s diseases” (「小兒病」), “head disease” (「疾首」), “eye disease” (「疾目」), “ear disease” (「病耳」), “tooth disease” (「疾齒」), “tongue disease” (「疾舌」), and “voice



disorder” (「疾言」). These inscriptions were for divination and were used to pray for disease recovery. According to the content of the inscriptions, “King Wuding of the Shang Dynasty had an eye disease, a son of Wuding had a head disease, a princess of Wuding had a foot disease, King Yinzhen (殷貞王) of the Shang Dynasty had a tooth disease and abdomen disease, many princesses had gynecological diseases…” These inscriptions comprehensively explain that when the royal families of the Shang Dynasty had diseases, shaman healers used the divination inscriptions to cure diseases by “psychic explanations (祝由)”, assisted by




Oracle inscriptions on bones and tortoise shells from the Western Zhou Dynasty

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 22



rites to dispel disease evils as treatments. In addition, they also used medical treatments or other methods, such as moxibustion, acupuncture, massage therapy, tooth extraction, and bone-setting to cure diseases.⁵

Ancient people perceived that their living environment was greatly influenced by the Sun, the Moon, and the stars. Thus, in order to describe, by type, the changing rules of the four seasons and explain the features of all things on the Earth, the theories of yin and yang, and the five-phase theory (五行學說) were gradually developed. According to *The Book of Changes* (《易經》), “heaven (yang) and earth (yin) are the origins of all things”. *Hong Fan of Shang Shu* (《尚書·洪範》) (Book of History; a compendium of documents in various styles, making up the oldest extant texts of Chinese history) says, “The five phases are water, fire, wood, metal, and earth. Water flows downward to moisten all things. Fire is hot and goes upward. Wood is about curves and straightness. Metal is about reform. Earth is about planting crops and harvests. Water has the attribute of moist precipitation with saltiness. Fire going upward has a bitter attribute. Wood being both curved and straight has a sour attribute. Reformative metal has an acrid attribute. Earth with crops has a sweet attribute.” (「五行：一曰水，二曰火，三曰木，四曰金，五曰土。水曰潤下，火曰炎上，木曰曲直，金曰從革，土爰稼穡。潤下作鹹，炎上作苦，曲直作酸，從革作辛，稼穡作甘。」) All things and phenomena in nature can be separated into the system of these five phases in accordance with the properties and features of wood, fire, earth, metal,






and water. The theory of the five phases indicates the idea of the perpetual motion of all things. It proposes that no one thing is isolated or motionless. Instead, all things maintain a coordinated and restricted balance during the eternal motions of endangerment and restraint (相生、相剋). The development of medical science also used the five-phases theory to make analogous descriptions of human physiology and pathological features. For example, the sun rises in the East, which is similar to the growing features of wood. Therefore, the East belongs to the phase of wood. The physiological system of the visceral manifestation of the liver of the human body possesses the features of growth and free coursing. Therefore, it belongs to the phase of wood. The South has a hot climate, which is similar to the feature of fire. Therefore, the South belongs to the phase of fire. The physiological system of the visceral manifestation of the heart of the human body possesses the feature of warmth. Therefore, the South belongs to the phase of fire. The ground possesses the features of breeding and fostering. Therefore, it belongs to the earth phase. The physiological system of the visceral manifestation of the spleen of the human body mainly governs the transportation and absorption of water and food, just like the Mother Earth. Therefore, the spleen belongs to the earth phase. Anything possessing the features of tranquility and astringency belongs to the phase of metal. The physiological system of the visceral manifestation of the lungs of the human body possesses the feature of depurative bearing-down, which is similar to the chilling features of metal. Therefore, the



lungs belong to the phase of metal. Anything possessing the features of cold, moistness, downward tendency, or preservation belongs to the phase of water. The physiological system of the visceral manifestation of the kidneys of the human body possesses the functions of storing essences, absorbing qi, and governing water (liquidity of the human body). Therefore, kidneys belong to the phase of water.

Due to the progress made in agriculture, people harvested rich grains. In the primitive society period, people gathered wild fruits and grains, and due to the accumulation of life experiences, people then gradually discovered the techniques for making wine. *The Intrigues of the Warring States* (《戰國策》) recorded that during the period of Yu's rule in the Xia Dynasty, Yi Di (儀狄) started to make wine. *Shang Shu* (《尚書》), also known as *Shu Jing* (《書經》), mentions that "drinking wine" was a custom of the Shang Dynasty. Most of the bronze wares unearthed at Yinxu are drinking vessels. On the site of the Shang Dynasty at Gaocheng Taishi Village (蒿城台西村), Hebei Province, a comparatively complete brewing workshop and different-sized pottery pieces, such as jars, large-open vats, goblets, and kettles, were discovered, indicating that the brewing industry had achieved large-scale development at that time.⁶ *An Analytical Dictionary of Characters* (《說文解字》) says, "Medical science uses wines in accordance with the features of diseases. Therefore, the character "medicine" (醫) has the radical of wine (酉)... indicating that wines were used to cure diseases." (「醫之性然，得酒而使，故從酉……酒所以治





病也。』) It means that wines were not only drunk in daily life, but also used to cure diseases. There is also a record of using koji, used for brewing, to cure disease. Both wines and koji were used as food and as cures for diseases, which is an example of ancient people's idea of “medicine and food sharing the same origin (「藥食同源」)”. Inscriptions on bones and tortoise shells (甲骨文) recorded the existence of “Chang Wine (「鬯其酒」; tulip wine used in the offering sacrifice)”. “Chang” is a kind of wine made from black millet and herbs. According to *Bai Hu Tong* (《白虎通》), “Chang is brewed using herbs and radix curcumae”. Radix curcumae is a kind of plant. Its subterraneous stem can be used as medicine or as a yellow dye. Adding radix curcumae when brewing a wine can make the color of the wine as beautiful as gold. Consequently, “Chang Wine” has a beautiful color and a tasty flavor. Wine has other effects, such as freeing the blood vessels, nourishing spleen qi, thickening the stomach and intestines, moistening skin, eliminating cold qi, and making medicine. In traditional Chinese medicine, wines are commonly used to make medicinal wines. As wines have a multitude of functions, *The Book of Han · Agricultural Production, Cloth and Silk Production, and Currency Circulation* (《漢書·食貨志》) records wine as the father of many types of medicine. Using wines as medicines in the Shang Dynasty widened the application scope of medicines.⁷

According to the divination inscriptions (卜辭), in the Xia, Shang, and Western Chou Dynasties, people had objective and detailed



descriptions of human physiology, anatomy, pathogenesis, and disease symptoms. They knew how to use certain plants, animals, minerals, and wines as medicine, and applied treatment methods, such as acupuncture and moxibustion, massage, conduction exercise (導引), decoctions, and external treatments, to cure diseases. The earliest formula known is to chew a single medicine into fragments, and then boil the fragments for a drink. In the Shang Dynasty, as the variety of medicines increased and people had more experience in using medicines, they started to boil various medicines at one time, and drink the medicinal soup for treatment. On the site of the Shang Dynasty at Gaocheng Taishi Village, Hebei Province, more than 30 different kinds of plant seed were discovered. Of these, peach kernels, apricot kernels, and prunus japonica seeds can be used as medicine. As people's experience of food increased, they also discovered the medicinal effects of many food types. For example, fresh ginger and cinnamon twigs were common food materials used for cooking, as well as common medicinal materials used in the clinical trials of Chinese medicine. As a result, they gradually developed as "medicine and food sharing the same origin". In the Shang Dynasty, cooks working for the royal families appeared. It is said that Yin Yi (伊尹) was the cook of Shang Tang (商湯). He was later appointed as Prime Minister for his unique ideas on government affairs. It is said that the method of boiling ingredients for decoctions was created by Yin Yi.

According to historical records, the medical institution system was



established in the Western Chou Dynasty. *Rites of Chou · Tian Guan Zhong Zai* (《周禮·天官冢宰》) records a complete medical administration and a strict assessment system. At that time, in medical administration, the position of “I-Shih (「醫師」)” was regarded as the leader of all physicians. Medical officials taking charge of medical administrative affairs were responsible for the implementation of medical laws, and the gathering, supplying, and preservation of medicines. With respect to persons assisting the physician to carry out the administrative management of hygiene, “there were two Shang Shi (上士), four Xia Shi (下士), two Fu (府), two Shi (史), and 20 apprentices (徒)”. They had different duties. “Shang Shi and Xia Shi” refer to those officials who assisted the physician to carry out the administrative management of medical affairs. “Fu” is the person in charge of the medicinal supplies of the palace. “Shi” refers to officials in charge of documents and case reports for the palace. “Apprentice” is responsible for nursing or chores. This is the earliest organization of the management of medical affairs known so far in China. There was also a standard for assessing physicians. According to the *Rites of Chou · Tian Guan Zhong Zai*, “at the end of the year, assess the results of medical treatments to determine the salaries of physicians. A complete cure is the top level. Missing one out of ten is in second place. The next is missing two out of ten, and then missing three out of ten. Missing four out of ten is the lowest level.” (「歲終則稽其醫事，以制其食。十全為上，十失一次之，十失二次之，十失三次之，十失四為下。」) It means



that the physician took charge of the year-end assessments, and the levels of the physicians' medical skills and salaries were determined by the clinical effects of their patients. The assessment results were divided into five levels. Physicians having a 100% cure rate were deemed to be physicians with brilliant medical skills, physicians having a 40% unhealed rate were regarded as physicians with poor skills, and the rest were regarded as ordinary physicians. Such a strict assessment and payment system laid a solid foundation for the development of medical science.

Apart from the assessment system for medical treatments, different medical branches (醫學分科) started to emerge in this period. According to the *Rites of Chou · Tian Guan Zhong Zai*, “patients either with sores on the head or wounds on the body came to the physician. The physician sent different physicians from different departments to treat them.” (「凡邦之有疾病者、疔瘍者造焉，則使醫分而治之。」) Physicians were divided into four types; Shih-I (dietary physicians; 食醫), Chi-I (disease physicians; 疾醫), Yang-I (sore and wound specialists; 瘍醫), and veterinarians, all taking charge of different medical fields. Dietary physicians were responsible for the food in the palace. There were two to three Chung-Shi (中士). They were responsible for the food of the king, and decided the content of the king's diet in accordance with changes in the seasons and products. The dietary physician was regarded as the top position of the four kinds of physician. They were Chung-Shi, and were only second to the physician who was Shang Shi. It shows that people at



that time had realized the profound influence of diet on health. The duties of the dietary physicians were recorded in the book, as follows. “... took charge of the combination of six foods, six drinks, six meats, all kinds of flavors, all kinds of sauces, and eight dainty dishes. When combining the content of the diet, compare the food with the features of spring, soups with summer, sauces with autumn, and drinks with winter. With respect to flavors, food should be sourer in the spring, more bitter in summer, more acrid in autumn, and saltier in winter, and smooth and sweet food should be blended in. With respect to the combination of meat and food, beef should go with rice, mutton with broomcorn millet, pork with corn, dog meat with sorghum, wild goose with wheat, and fish with wild rice. The diet of a gentleman should follow the above rules.” (「掌和王之六食、六飲、六膳、百羞、百醬、八珍之齊。凡食齊視春時，羹齊視夏時，醬齊視秋時，飲齊視冬時。凡和，春多酸，夏多苦，秋多辛，冬多鹹，調以滑甘。凡會膳食之宜，牛宜稌，羊宜黍，豕宜稷，犬宜粱，雁宜麥，魚宜苽。凡君子之食恒放焉。」) Dietary physicians had to follow the changes of the four seasons and the physiological features of human bodies over four seasons to adjust the content of the diet. In addition, fermentation technology was first used to make different sauces with the purpose of preventing the spoilage of food and increasing the nutrition from the food. In this period, “dietary physicians” possessed the idea of “superior treats before being sick” (「上工治未病」), similar to modern day prophylactic medicine.





A bronze needle of the Western Zhou Dynasty
Source: General History of Traditional Chinese Medicine, a Volume of collections of illustrative plates and atlas of historical relics, page 23 (A collection held at the Zhoyuan Museum in Baoji City, Shaanxi province)

Chi-I (disease physicians; 疾醫) were responsible for disease treatments. They belonged to the group of physicians known as internists. There were eight Chung-Shi, and their responsibilities were as follows. “Take charge of curing diseases for all people. There were different diseases across the four seasons due to the disharmony of qi: headaches in the spring, itchy sores in the summer, cold malaria in the autumn, and coughs and asthma in the winter. Use five flavors, five grains, and five medicines to cure diseases. Firstly, judge whether the patient is curable using five qi, five sounds, and five colors. Secondly, observe any changes in the nine orifices of the patient. Thirdly, diagnose the motions of the nine viscera of the patient. Send different physicians to treat distinctive diseases.” (「掌養萬民之疾病。四時皆有癘疾，春時有瘡首疾，夏時



有癢疥疾，秋時有瘧寒疾，冬時有漱上氣疾。以五味、五穀、五藥養其病。以五氣、五聲、五色視其死生；兩之以九竅之變，參之以九臟之動。凡民之有疾病者，分而治之。」) Chi-I (disease physicians) at that time were physicians not only for royal families, but also for ordinary people. They used diagnostic techniques during their inspections, such as listening and smelling, questions, investigations and palpations to diagnose a patient's ailments. They inspected the physiological functions of the five viscera (liver, heart, spleen, lung, and kidney), listened to changes of the five sounds (Gong, Shang, Jiao, Zhi, Yu; 宮、商、角、徵、羽), and observed the changes in the five colors (green, red, yellow, white, and black) and other special symptoms to confirm the disease and prescription. During the clinical treatment of diseases, apart from the flexible use of medicines following the four qi (cold, hot, warm, and cool) and the five flavors (sour, bitter, sweet, acrid, and salty), physicians also divided the properties of food into the four qi and five flavors, and suggested patients eat the food that was beneficial for their recovery from the disease they were suffering.

Yang-I (sore and wound specialists; 瘍醫) were responsible for all kinds of external injuries and bone damage. They belonged to general surgeons and physicians of the Department of Orthopedics and Traumatology. There were eight Xia Shi, and their responsibilities were as follows. "Take charge of the topical applications of medicine for patients with swollen sores, ulcers, open-incised wounds, and broken sores with



certain dosages, the scraping of pus and blood, and eroded rotten flesh. When treating sores, they used five toxicants for topical applications, five qi to regulate and nourish, five medicines to treat, and five flavors to adjust the effects of the medicines. Sour medicines supplement and nourish the skeleton. Acrid medicines supplement and nourish sinews and tendons. Salty medicines supplement and nourish vessels. Bitter medicines supplement and nourish qi. Sweet medicines supplement and nourish fresh. Lubricating medicines supplement and nourish orifices. Patients with sores could go to the Sore Physician for treatment.” (「掌腫瘍、潰瘍、金瘍、折瘍之祝藥副殺之齊。凡療傷，以五毒攻之，以五氣養之，以五藥療之，以五味節之。凡藥，以酸養骨，以辛養筋，以鹹養脈，以苦養氣，以甘養肉，以滑養竅。凡有瘍者，受其藥焉。」) According to records, Sore physicians had mastered the usage of toxic medicines, such as the five toxicants of the fan-shaped corallodiscus, cinnabar, realgar, arsenopyrite, and loadstone (五毒：石膽、丹砂、雄黃、礬石、慈石). They used these medicines to produce a type of medicine (丹藥) that could be used for topical applications on surgical patients. Sore physicians belong to Xia Shi. Their status was comparatively low among physicians of the palace.

Shou-I (veterinarians; 獸醫) were responsible for raising livestock and curing the diseases of domestic animals. They were specialized physicians for animals. There were four Xia Shi, and their responsibilities were as follows: “Take charge of the diseases and sores of domestic



animals. When a domestic animal falls ill, Shou-I pours in medicines to make it able to walk. Control the speed of its walk to motivate its vessel qi. Then observe the vessel qi to treat the animal. When treating the sores of an animal, pour in the medicines first, and then scrape any pus and blood, as well as rotten flesh, to remove the dead parts. After that, apply medicines on the top, nourish the animal, and feed it. When domestic animals fall ill, veterinarians are sent to treat them. The number of uncured animals is recorded as the basis for the increase or decrease in a veterinarian's salary.” (「掌療獸病，療獸瘍。凡療獸病，灌而行之，以節之，以動其氣，觀其所發而養之。凡療獸瘍，灌而刮之，以發其惡，然後藥之、養之、食之。凡獸之有病者、有瘍者，使療之。死則計其數以進退之。」) The main duty of veterinarians was to cure diseases and the sores of domestic animals. The salaries of veterinarians were decided and based on the effects of medical treatments given out.

With respect to the public health and epidemic prevention system, in the *Rites of Chou Li*, the articles of *Tian Guan Zhong Zai* (〈天官冢宰〉); Tian Guan means the minister of Heaven; Zhong Zai means the head of the Ministry of State), *Di Guan Si Tu* (〈地官司徒〉); Di Guan means office of earth; Si Tu is in charge of disciples of followers), *Xia Guan Si Ma* (〈夏官司馬〉); Xia Guan is the official or office for summer; Si Ma is in charge of horses), and *Qiu Guan Si Kou* (〈秋官司寇〉); Qiu Guan means official or office of autumn; Si Kou means Minister of Justice) recorded the duties of officials in charge of hygiene, health, and public



epidemic prevention. For example, officials responsible for draining away the waste water in the palace were called “Gong Ren” (「宮人」). Officials responsible for the inspection and supervision of dietetic hygiene were called “Nei Yong” (「內饗」). “Ling Ren” (「凌人」) were responsible for using ice to cool down and prevent sunstroke, to refrigerate food, and preserve antiseptics. Officials who traveled to conduct rescues following an act of god or epidemic of disease were called “Si Jiu” (「司救」). Full-time or part-time medical workers were also sent to work with the army to establish medical teams for the battlefield, primarily to reduce the number of soldier casualties.

Except for the specialization of specific medical sections and public health, the *Tian Guan of Rites of Chou* also mentions that “when people fell ill, they were sent to different physicians for treatment. If the patient died, the causes were recorded, and reported to the I-Shih.” (「凡民之有疾病者，分而治之，死終，則各書其所以，而入於醫師。」) It indicates that in the Western Chou Dynasty, case reports had appeared. Treatment processes were recorded in detail, and statistical reports on diseases and deaths were made. The establishment of such a case report system had a considerable influence on the accumulation of case reports, the inheritance of treatment experience, and the enhancement of medical skills.



Section 3 Biographies of Medical Experts

Yin Yi (伊尹)

Yin Yi's given name is Zhi (摯). Yin Yi was a dowry slave of Shang Tang's (商湯) wife, You Shen Shi (有莘氏). He was good at cooking, and thus became Shang Tang's cook. He used the ideas of a balanced diet and seasoning to comment on political issues, and was appreciated by King Tang. Thus, he was appointed as the Prime Minister by King Tang. Afterwards, he assisted Tang to defeat Xia Jie (夏桀), and establish the Shang Dynasty. He was an important figure who assisted Shang Tang to conquer the country. After Shang Tang's death, the crown was passed to his grandson Tai Jia (太甲). Tai Jia intended to change the ruling principles of the former king. As the founding hero, Yin Yi sent Tai Jia to the Tong Palace (桐宮) to understand the people's sufferings. After three years, he welcomed Tai Jia back to the palace, and handed over the reins of political power. As a result, Yin Yi was regarded as the first wise Prime Minister of the Shang Dynasty. Yin Yi was good at cooking, and also proficient in medical science. He applied his experiences of cooking food to the preparation of decoctions. With respect to the saying that the decoctions were created by Yin Yi, *Zi Zhi Tong Jian* (《資治通鑑》) says, "Yin Yi wrote *Herbal Foundation for Decoctions* (《湯液本草》). The features of



brightness, cold, heat, warmth, and coolness, the flavors of sourness, bitterness, acidity, sweetness, saltiness, and pale taste, the light and clear, heavy and turbid, and upbearing and down-bearing of yin and yang; they all travel in the interior and exterior of the 12 channels and network vessels.” (「伊尹作《湯液本草》，明寒熱溫涼之性，酸苦辛甘鹹淡之味，輕清重濁，陰陽升降，走十二經絡表裡之宜。」)

Peng Wu (巫彭)

Peng Wu is a legendary shaman healer. According to *The Complete Compendium of Medical Works* (《古今醫統》), “Peng Wu was a medical official of the Chou Dynasty at first. He said people could only use five grains and five medicines to cure diseases, and use five sounds and five colors to judge patients’ cures or death. Observe the changes of the nine orifices, refer to the motions of the five viscera, and then use five toxicants to attack the disease, and medicines to cure it - as mentioned in the *Record of the Grand Historian* (《史記》).” (「巫彭初作周醫官。謂人惟五穀五藥養其病，五聲五色視其生。觀之以九竅之變，參以五臟之動，遂用五毒攻之，以藥療之。出《史記》。」) *The Record of the Grand Historian and West Classic of Dahuang of the Classic of Mountain and Sea* (《山海經·大荒西經》) also mentioned that Wu Xian (巫咸) and Wu Peng once visited the Ling Mountain (靈山) to search for medicine with dramatic effect.



References

1. De-Chen Yao (2001). Reasons Affecting Communication in Medicine Between China and Abroad. *Journal of Nanjing University of Traditional Chinese Medicine*. 2(1). pp. 21-24.
2. Mo-Ruo Guo (1976). A Draft of Chinese History (1). *Chinese Social Science Press*. pp. 200.
3. Man-Ching Cheng & Pin-Shi Lin (1982). History of Chinese Medicine. *Taipei: The Commercial Press Ltd*. pp. 7-13.
4. Xin-Zhong Wang & Shu-Ming Wei (2001). The Influence of Wu Culture on Ancient Medicine. *Journal of Shaanxi Institute of Education*. pp. 35-36, 65.
5. Cun-Ren Chen (1969). *The Historical Narrative of Chinese Medicine*. *Taipei: National Research Institute of Chinese Medicine*. pp. 6.
6. Bin Li (2000). Probe Into the Development History of Chinese Diet Therapy. *Culinary Science Journal of Yangzhou University*. 3. pp. 23-25.
7. Zhi-Rong Huang & Ai-Qun Huang (2001). On the Origin of the Relationship Between Alcohol and Health Care. *Journal of Jiangxi University of Traditional Chinese Medicine*. 13(1). pp. 14-16.





Drawings of Conduction Exercise, Beijing Science Technology Publishing House (photographed by Pei-Chi Chou)



Chapter 3 *Medical Science in the Spring
and Autumn Period and the
Warring States Period*
(from 770 BC to 221 BC)

Section 1 Historical Background

The political situation was unstable in the Spring and Autumn period and the Warring States period, which was different from the Western Zhou Dynasty that was said to have only one kingdom. The royal family of the Eastern Zhou Dynasty was unable to maintain a stable social order. The Emperor, regarded as the Son of Heaven at that time, was not only incapable of preventing powerful vassals from invading and annexing smaller kingdoms, but was also unable to expel the Rong and Di, barbarians from beyond the borders of old China, and guarantee the safety of the lives and property of people living in Hua Xia (the ancient name of China). The Hua Xia region was predominately agricultural, and was constantly harassed by nomads from the frontier areas, which finally led to the usurping of the throne of the Five Overlords, namely Qi, Jin, Qin, Chu, and Song (齊、晉、秦、楚、宋), in the Spring and Autumn period. The kings of all the vassal states felt threatened, and when it came to the period



of the Warring States, the political situation had evolved into the co-existence of seven warring states (Qi, Chu, Yan, Qin, Han, Zhao, and Wei; 齊、楚、燕、秦、韓、趙、魏).

People used all kinds of iron farm implements, and adopted the method of the ox plough, which raised the yields obtained. Whilst committed to enriching the states and strengthening the armies, vassal states also paid attention to construction projects related to agricultural production, such as embankment construction, the digging of channels and canals, and barren land reclamation. The planting and application of some medicinal plants also achieved certain developments.

With respect to astronomy and the calendar, observations and studies on the movements and laws of the sun, the moon, and the planets also achieved considerable progress. For example, there were quite detailed observational records on certain astronomical phenomena, such as solar eclipses, lunar eclipses and explosions of novae. *The Spring and Autumn* (《春秋》) was the first book in the world that recorded a solar eclipse and the appearance of Halley's Comet. *Astronomy and Astrology* (《天文星占》) written by Gan De (甘德) of Chu State, and *Astronomy* (《天文》) written by Shi Shen (石申) of Wei State in the period of the Warring States, contained the world's first maps of the movements of the 28 constellations and the five major planets of Venus, Jupiter, Mercury, Mars, and Saturn. To meet the requirements of knowledge for agricultural production, people began to combine the lunar calendar with the solar calendar when



generating calendars. Considering that the total number of days in 19 tropical years (the solar calendar) equaled the total number of days in 19 common years plus seven leap months (the lunar calendar), people then referred to the previous method of adding leap months (「置閏」), thereby developing “seven leap months in 19 years” to balance the difference between the solar calendar and the lunar calendar. Ancient people observed that during the four seasons of a year, as the relative positions between the major planets and the earth changed, the yin qi, yang qi and temperature between the heaven and the earth changed, as did the phonological phenomena in people’s living environments. According to the features of these changes, people invented “twenty-four solar terms” to instruct their agricultural activities. Apart from the close relationships between agricultural activities and the twenty-four solar terms, people then also realized that the health and diseases of the human body were also closely related to climate changes, developing the view of life cultivation whereby “heaven and humankind were mutually responsive” (「天人相應」).

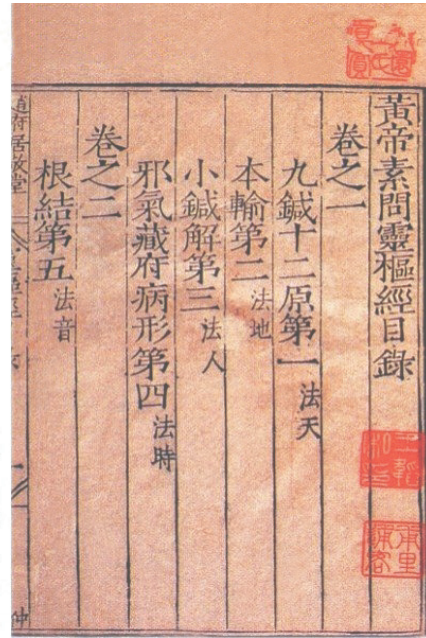
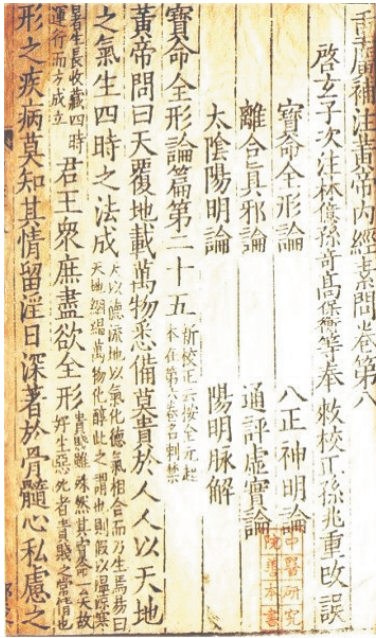
With respect to the metallurgical industry, bronze smelting and casting skills had reached a mature level. People were able to inlay gold or silver on the surface of bronze ware to construct characters or patterns. Apart from farm implements and other daily utensils, people at that time were able to use bronze to produce tools for acupuncture, and different needles depending on different clinical uses.



Section 2 An Introduction to the History of Traditional Chinese Medicine

The basic framework of the theory of Chinese medicine began to mature in the Spring and Autumn and the Warring States periods. During these periods, all kinds of thoughts arose. For example, books by famous scholars, such as *Zuo's Commentary* (《左傳》), *Lao Zi* (《老子》), *The Analects of Confucius* (《論語》), *Meng Zi* (《孟子》), *Mister Lu's Spring and Autumn Annals* (《呂氏春秋》), *Han Fei Zi* (《韓非子》), *Xun Zi* (《荀子》), *The Book of Rites* (《禮記》), and *Guan Zi* (《管子》), not only guided the development of the entire socially conscious atmosphere, but also influenced people's ideas on nature and human health, and of course, their understanding of the causes of disease and ways of disposition. Based on various theories, such as the essential qi theory, the yin, yang, and five phases theory, and the theory of mutual responsiveness of heaven and humankind, medical skill researchers then developed the theory of Chinese medicine, systematically describing general issues related to medical science, and gradually developing a complete Chinese medicine theory. Subsequently, Chinese medical science started its independent development.

The essential qi theory states that qi was the primal chaos before the universe emerged. It then gradually evolved into the original and subtlest



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 31-32 (A collection held in the library of the Chinese Medicine Research Institute in China)

essence that constitutes everything on earth. After heaven and earth appeared, “qi” is in the general clouds in the sky, the air people breathe in and out, the air flowing between the heaven and the earth, and all tangible substances on the earth. All of them were transformed from intangible qi, as were human bodies. In the period of the Warring States, Guan Zi first proposed the idea that the original qi was the basic substance that constituted everything. *Nei Ye of Guan Zi* (《管子·內業》), recorded that “with respect to the life of humankind, the heaven provides the essence, the earth provides the shape, and they both combine to become a human



being.” (「凡人之生也，天出其精，地出其形，合此以為人。」)

These records mention that “essence is just the essence of qi.” (「精也者，氣之精者也。」) Which indicates that the essential qi of human beings comes from the qi of the heaven, and the materials for human bodies come from the qi of the earth. The combination of these two produces human beings. Essence is the most essential part of qi. Therefore, “qi” is also called “essential qi” or “essence”. It is only when human bodies are filled with the essential qi of the universe that they can maintain normal physiological functions. Consequently, Chinese medicine theory believes that the creation of a new life depends on the gathering of the earlier and the later qi, and that the normal physiological functions of the human body are the result of the movements of the earlier and later qi. Whether the life rhythms of humans can be displayed normally depends on whether the qi systems inside the human body are responsive to the rhythms of nature, thus guaranteeing the harmony of the physiological functions. For example, according to *Plain Questions · Great Treatise on the Five Normal Rules* (《素問·五常政大論》), “those rooted inside are called the spiritual mechanism. When the spirit is gone, the mechanism stops working. Those rooted outside are called established qi. When qi disappears, life ends. (「根於中者，命曰神機，神去則機息；根於外者，命曰氣立，氣止則化絕。」)”. According to *Plain Questions · Great Treatise on the Subtleties of Six* (《素問·六微旨大論》), “when the inward and outward movement stops, the spiritual mechanism is



destroyed. When the upbearing and downbearing movement stops, the established qi disappears. Therefore, without inward and outward movement, there will be no birth, growth, maturity, senility, or death, and without upbearing and downbearing movement, there will be no birth, growth, change, withdrawal, or storage. Consequently, everything has upbearing, downbearing, inward, and outward movement.” (「出入廢則神機化滅，升降息則氣立孤危。故非出入，則無以生長壯老已，非升降，則無以生長化收藏。是以升降出入，無器不有。」) It indicates that the essential qi of nature and the qi inside human bodies are equally important for the development and operation of life.

In this period, Chinese medicine theories had multi-aspect descriptions on the concept of “spirit” (「神」), and these can be divided into the following five major categories. First, there is the functional performance of the regularly changing rules of substance in nature. For example, *Plain Questions · Great Treatise on the Origins and Principles of Heaven* (《素問·天元紀大論》) says, “Thus, the growth of things is called transformation, growing into extreme conditions is called change, unpredictable changes of yin and yang are called spirit, and the flexible use of the principle of spirit is called saint.” (「故物生謂之化，物極謂之變，陰陽不測謂之神，神用無方謂之聖。」) Second, there is the general term for describing the normal performance of vital functions. For example, *Plain Questions · Treatise on Moving Essence and Transmuting Qi* (《素問·移精變氣論》) says, “With spirit, live. Without spirit, die.”



(「得神者昌，失神者亡。」) *Magic Pivot · The Nine Needles and Twelve Sources* (《靈樞·九針十二原》) says, “Maintaining the body is the general method, and maintaining the spirit is the best method.” (「粗守形，上守神。」) Third, the wisdom, the capability of dominating everything, and the activities of spiritual consciousness are of human beings. They are also called “spirit-mind” (「神志」) and “spirit light” (「神明」). For example, according to *Plain Questions · Treatise of the Arcane Book of the Orchid Chamber of the Spirit Tower* (《素問·靈蘭秘典論》), “the heart is the most important organ. It is where spirit light comes from.” (「心者，君主之官，神明出焉。」) According to *Plain Questions · Treatise of Heavenly Truth from Remote Antiquity* (《素問·上古天真論》), “Thus he can maintain both the body and the spirit, and enjoy his natural life-span.” (「故能形與神俱，而盡終其天年。」) Fourth, “spirit” refers to the attention of physicians. For example, in *Plain Questions · Treatise on Treasuring Heaven’s Mandate to Preserve the Body* (《素問·寶命全形論》) it says, “When channel qi comes, preserve it. Despite the acupuncture depth, the methods of obtaining qi are the same. Hold the needle firmly and steadily, and the spirit should not be distracted.” (「經氣已至，慎守勿失，深淺在志，遠近若一，如臨深淵，手如握虎，神無營於眾物。」) Fifth, during treatment, a patient’s emotions will also affect the clinical effects. Therefore, in some classic books, “spirit” is also used to describe patients’ minds and intentions. For example, according to *Plain Questions · Treatise on Decoctions, Winter-Brewed*



Liquors, Turbid Liquors, and Sweet Liquors (《素問·湯液醪醴論》), “The Yellow Emperor asked, ‘When a disease has developed into the stage where the body is exhausted, and the qi and blood are terminated, the patient is not curable. Why?’ (帝曰：形弊血盡而功不應者何?) Qi Bo answered, ‘Because the spirit can’t play its role’ (神不使也). The Yellow Emperor asked, ‘What does that mean?’ Qi Bo answered, ‘Acupuncture is just a treatment method. The spirit of the patient is dispersed, and the attention is scattered. Thus, the disease is not curable.’” (針石道也。精神不進，志意不治，故病不可愈。) This emphasizes that a patient’s attention to the treatment is related to the results of their treatment. In this period, Chinese medicine theory stressed that a healthy person must possess both the body and the spirit completely. In *Magic Pivot · Natural Life-Span* (《靈樞·天年》), it states, “it is only when the blood and qi are harmonious, the movement of construction qi and defense qi are unobstructed, after the five viscera are shaped, and the spirit and qi are stored in the heart, that a person can be called a healthy person.” (「血氣已和，營衛已通，五臟已成，神氣舍心，魂魄畢具，乃成為人。」) The “body” and the “spirit” are interdependent. “The unification of the body and the spirit” (「形神統一」) is an important foundation for the existence of life, and an important basis for disease diagnoses and treatment.

In this period, professionals in medical science appeared, such as Yi Huan (醫緩), Yi He (醫和), and Qin Yue Ren (秦越人). Yi He proposed the idea that diseases were caused by six qi (「六氣致病說」), which was



above the idea that diseases were caused by ghosts and gods (「鬼神致病說」). This explained how excessive changes in the climate could easily cause diseases. Specialized medical works began to spread in ancient China, such as *The Yellow Emperor's Inner Canon* (《黃帝內經》) and *Formulas for Fifty-Two Diseases* (《五十二病方》). *The Yellow Emperor's Inner Canon* is the only completely preserved classic work of Chinese medicine. For over 2000 years, it has been considered as one of the most important works of Chinese medicine.¹ *Formulas for Fifty-Two Diseases* records 280 ancient formulas for treating 52 diseases. It was an unearthed relic in the No.3 Han Dynasty Tomb of Mawangdui (馬王堆), Changsha, Hunan Province.²

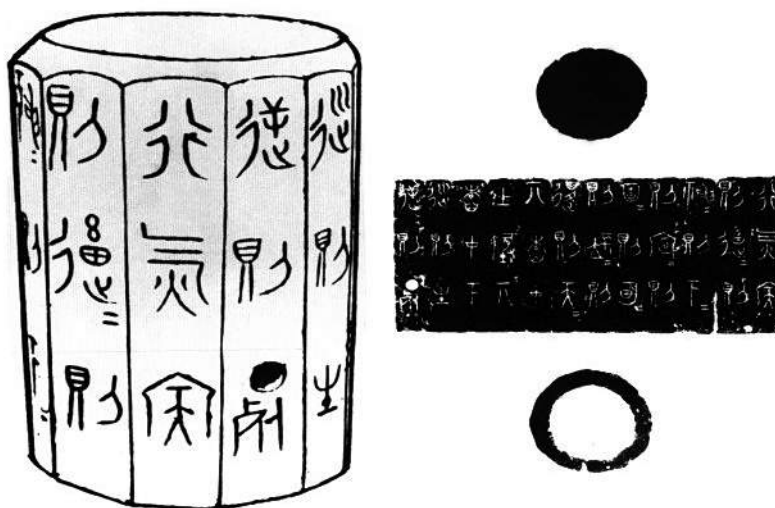
With respect to personal hygiene, according to *The Book of Rites*, people of the period had the idea of washing their hands before meals and gargling after meals. They also realized that regular bathing and body cleansing were very helpful for health cultivation and disease prevention. Bathing was not only a method of cleaning the skin and promoting blood circulation, but also a simple method for curing diseases. Incense-fumigation or applying perfume while bathing was considered to be the etiquette of showing extreme respect. Therefore, bathing facilities were set up for bathing in palaces or hotels. They were called “Bi” (「溲」), which was equal to the “bathroom” today. With respect to food, people believed the content of their diets should be adjusted according to seasonal changes, and eating at irregular times or eating too much might cause diseases. For



example, Mister Lu's Spring and Autumn Annals mentions that a regular diet and dietary allowance are beneficial for the five viscera (「五臟之葆」), and excessive eating and strong liquors are the origins of disease. In addition, to prevent food spoilage, people had mastered the methods of preserving food in natural ways. They used ice or original refrigeration storage to preserve food,³ or dried the food in the sun for storage, such as dried meat. The dried meat was called “Xiu” (「脩」) at that time. *Shu Er of The Analects of Confucius* (《論語·述而》) mentions “several pieces of dried meat” (「束脩」).⁴

With respect to disease prevention, people of the period had realized that keeping healthy was more important than treatment after falling ill. The idea of preventive medicine had been mentioned in some classic medical works. *Plain Questions · Treatise on Regulating the Spirit in Accordance with the Four Seasonal Qi* (《素問·四氣調神大論》) not only proposes that people should adjust their daily routines in accordance with the climatic features of the four seasons, but also clearly promotes the idea of preventive medicine by “treating disease before it arises” (「治未病」). “This is why saints prefer to prevent diseases, and prevent riots. Isn't it too late to treat diseases after people fall ill, to quell the riots after they happen. It is akin to drilling a well only when you feel thirsty, or producing weapons after a war begins. Is it not too late?” (「是故聖人不治已病治未病，不治已亂治未亂，此之謂也。夫病已成而後藥之，亂已成而後治之，譬猶渴而穿井，鬥而鑄錐，不亦晚乎？」) In addition,





Epigraph inscriptions on jade from the period of the Warring States - Inscription about moving qi on a girdle (pictures on the right hand side are from a section of ink rubbing)

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 33

Zhuang Zi · On Health Cultivation (《莊子·養生主》) mentions the idea of health cultivation. The article mentions the living philosophy of “preserving the natural qualities of life to maintain good health” (「全生保身」), the health cultivation philosophy of “Paoding’s very good skills in cooking pork” (庖丁解牛), the view of life and “leaving it to nature (「委於自然」)”, and the living philosophy of “satisfying with the status quo” (「安時處順」). The article uses fable stories to explain how to protect oneself, how to preserve natural qualities, how to keep in good health, and how to follow nature’s rules and not harm one’s life-span. *Zhuang Zi · Ke Yi* (《莊子·刻意》) says, “Breathe in fresh air, breathe



out turbid qi, pull up like a bear, and spread out your wings like a bird. These are just ways to prolong life. People do these things to soothe sinews and strengthen bones, and to maintain good health. This is exactly what people living a long life like Peng Zu pursue.” (「吹呴呼吸，吐故納新，熊經鳥申，為壽而已矣，此道引之士，養形之人，彭祖壽考者之所好也。」) It indicates that apart from putting the ideas of health cultivation into practice, good breathing and the conduction of exercise had also begun their development.

Plain Questions · Treatise of Heavenly Truth from Remote Antiquity (《素問·上古天真論》) promotes the principals of health cultivation as “maintaining both body and spirit to enjoy a natural life-span” (「形與神俱、盡終天年」). It neatly points out that the rules for keeping in good health rely on “following the changing rhythms of yin and yang, exercising in the right way, eating and living regularly, and avoiding overwork” (「法於陰陽，和於術數，食飲有節，起居有常，不妄作勞」), and “health cultivation is organic, growing, catching, and hiding elements” (養生、養長、養收、養藏) in accordance with the seasonal waxing and waning of yin and yang. It also reminds people of the importance of adjusting their dietary content as the seasons change and that adjusting dietary content can assist disease treatment. According to *Plain Questions · Methods of Treating Visceral Qi in Accordance with the Seasons* (《素問·臟氣法時論》), “attack evils with toxicity, use five grains as nourishment, use five fruits as assistance, eat meat as it is beneficial, and eat vegetables as a



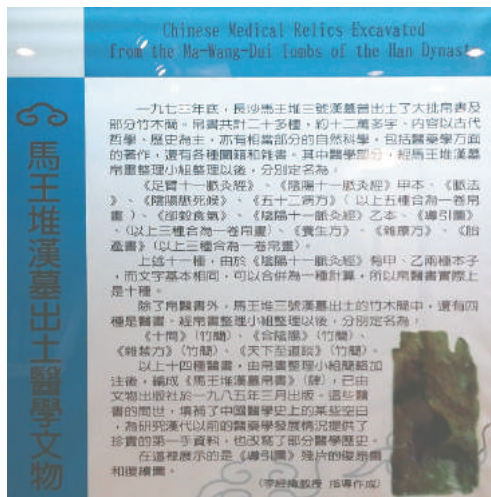
supplement. Taking in the proper combination can boost essence and qi. These five categories have acrid, sour, sweet, bitter, and salty flavors. They are beneficial for certain visceral qi. Dissipation, contraction, relaxation, tension, hard or soft, choose to use different functions in accordance with seasonal changes and different conditions of the qi of the five viscera. The disease should be cured in accordance with medicines in the five flavors.” (「毒藥攻邪，五穀為養，五果為助，五畜為益、五菜為充，氣味合而服之，以補精益氣。此五者，有辛酸甘苦鹹，各有所利，或散或收，或緩或急，或堅或軟，四時五臟，病隨五味所宜也。」) It is generally believed that *Jade Inscription on Moving Qi* (〈行氣玉佩銘〉), written at the beginning of the Warring States period, records the earliest rules of qi cultivation for maintaining good health. The article records a set of training methods for deep breathing. It is also called “exhaling-inhaling” (「吐納」), “moving-qi” (「行氣」), “swallowing qi” (「咽氣」), or “eating qi” (「食氣」). In addition, the silk painting (帛畫), *Drawings of Conduction Exercise* (《導引圖》), unearthed at Mawangdui records 44 kinds of conduction exercise for health cultivation and disease treatment.



Section 3 Medical Works

Myriad Things (《萬物》)

Myriad Things is one of the Han Dynasty bamboo slips unearthed from the second generation's Ruyin Vassal Xiahou Zhao's tomb at Fuyang Shuanggudui (雙古堆), Anhui Province. In *Myriad Things*, medical issues are recorded by way of one sentence for the treatment of one disease. It records about 31 disease names in internal medicine, surgery, ophthalmology



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)



and otorhinolaryngology, and neurology, such as cold and heat, vexation of the heart, heart pain, inflation, intestinal afflux, enuresis, water sounds in the body (漉), bone tumor, hemorrhoids, pimples (癩), chapped hands, fracture, ears, confusion, sleep, insomnia, and amnesia. The prescriptions generally include one or two medicines.⁵ *Myriad Things* has much content on herbalism. It records about 71 different types of medicine. Most of them are edible plants found in daily life that have medical effects. With respect to the choice of medicinal materials, the book classifies the officinal parts of plants into root, leaf, fruit, and kernel, such as catalpa root juice, mugwort leaf, and apricot kernel, and classifies the officinal parts of animals into brain, gallbladder, fat, and waste, such as mouse brain, and ox's gallbladder. People of that period had realized that different plant and animal parts had different medicinal effects. Medicinal processing methods recorded in this book include “gnawing” (「齧」), “boiling” (「煮」), “baking” (「焙」), and “pounding” (「築」). For example, it states, “gnaw and boil Argy Wormwood Leaf”. Moreover, medicinal functions recorded in the book are often still used in the clinical practice of Chinese medicine today. For example, the use of old ginger to treat wind-cold common colds. As *Myriad Things* is not a specialized remedy book, there is a lack of instruction on medicinal gathering, preparation, dosage, prescription, and directions. However, it has been deduced that *Myriad Things* was compiled earlier than *Formulas for Fifty-Two Diseases* (《五十二病方》), and the unearthing of *Myriad Things* provides precious



literary evidence of the history of herbalism and medicine in the periods of the Spring and Autumn and Warring States.⁶

Medical works unearthed at Mawangdui (《馬王堆出土醫書》)

From 1972 AD to 1974 AD, Chinese archeologists excavated the No.1, No.2, and No.3 Han Dynasty tombs in the eastern suburbs of Changsha City, Hunan Province. From this group of graves, a large number of precious medical literatures were unearthed, including many lost ancient medical books. In particular, from the No.3 Han Dynasty Tomb of Mawangdui, which was excavated at the end of 1973 AD, large quantities of silk manuscripts and bamboo and wood slips were unearthed. It was later proven that they had been buried in the 12th year of Emperor Wen of the Western Han Dynasty (168 BC). There are about 200 bamboo and wooden slips, all of which are medical books, such as *Ten Questions* (《十問》), *Blending of Yin and Yang* (《合陰陽》), *Miscellaneous Secret Formulas* (《雜禁方》), *Discussion of the Culminant Way in Under-Heaven* (《天下至道談》). Except for *Miscellaneous Secret Formulas*, which is written on wood, the rest are bamboo slips. The silk manuscripts are written on tough silk. There are over 20 kinds' of silks, with a total of about 120,000 characters. Ancient medical works include *Moxibustion Canon of 11 Channels of Legs and Arms* (《足臂十一脈灸經》), *Version 1 of Moxibustion Canon of 11 Channels of Yin and Yang* (《陰陽十一脈灸經》甲本), *Version 2 of Moxibustion Canon of 11 Channels of Yin and Yang*



(《陰陽十一脈灸經》乙本), *The Channel Canon, Death Symptoms by Yin and Yang Pulses* (《陰陽脈死候》), *Formulas for Fifty-Two Diseases, Avoiding Grains and Consuming Qi* (《卻穀食氣》), *Drawings of Conduction Exercise, Formulas for Health Cultivation* (《養生方》), *Miscellaneous Formulas* (《雜療方》), and *Formulas for Parturition* (《胎產方》). Among the medical books unearthed at Mawangdui, *Avoiding Grains and Consuming Qi* is the earliest medical book discovered so far on avoiding grains and conduction exercises for qi cultivation. *Drawings of Conduction Exercise* is the earliest medical book existing on conduction exercise therapy, which was developed and based on the function of disease prevention and treatment. About 10,000 characters of *Formulas for Fifty-Two Diseases* have been preserved. The book records a total of 283 prescriptions for 52 diseases, using about 247 medicines. About 103 disease names are mentioned in this book, covering diseases related to internal medicine, surgery, gynecology, pediatrics, and ophthalmology and otorhinolaryngology. Statements on diseases related to surgery take up the majority of the content. The treatment method for genitourinary disorders (癰) recorded in this book are still used today in the clinical practice of Chinese medicine. The diagnosis and pattern treatment of symptoms, such as dribbling urinary incontinence (血淋), stone strangury (石淋), unctuous strangury (膏淋) and female strangury (女子淋) is considered to be the earliest method of using pattern identification as the basis for determining treatment. *Formulas for Fifty-Two Diseases* mainly records the treatment



method of decoction. It also records many other treatment methods, such as external methods of treatment, plaster therapy (敷貼法), fumigation (煙熏) or steam fuming, hot medicinal compresses (熨法), acupuncture, moxibustion, massage, and cupping (fire cupping therapy; 火罐療法). The descriptions of hemorrhoid treatments in the book contain not only oral administrations, but also some wonderful surgical operations.

Medical works unearthed at Mawangdui are copies produced in the period of the Qin and Han Dynasties. However, it is estimated that these books were written much earlier than the Qin and Han Dynasties. *The Yellow Emperor's Inner Canon* was once regarded as the earliest preserved medical work until now. However, judging from the content structure, some of the medical books unearthed at Mawangdui must have been written earlier than *The Yellow Emperor's Inner Canon*. If *The Yellow Emperor's Inner Canon* was written in the middle and late stages of the Warring States period, then these medical books might have been written in the earlier stage of the Warring States period or even the late stage of the Spring and Autumn period. Although *The History of the Han Dynasty, The History of Han · Literature Catalog* (《漢書·藝文志》) does not have any records of medical work handed down, the medical works unearthed at Mawangdui fill in the gaps in the development history of Chinese medicine before *The Yellow Emperor's Inner Canon*.



The Jiangling Zhangjiashan Medical Works Bamboo Slips (《江陵張家山醫簡》)

From the end of 1983 AD to the beginning of 1984 AD, when the local museum of Jingzhou, Hubei Province was excavating three tombs of the early Western Han Dynasty at Zhangjiashan, Jiangling County, a large number of bamboo slips stored in bamboo boxes were discovered. The slips remain intact, and the strokes are clear. According to experts on the team sorting the Zhangjiashan bamboo slips of the Han Dynasty, the tombs can be traced back to the period from Queen Lu Hou (吕后) to the first year of Emperor Wen (about 200 BC). It is the same period or even a little earlier than that of the No.3 Tomb of the Han Dynasty at Changsha Mawangdui. Apart from the literature on law, the military, and mathematics, the bamboo slips also contain two different medical books, namely *On Channels* (《脈書》) and *On Conduction Exercise* (《引書》).

On Channels includes about 65 bamboo slips, with a total of 2028 characters. The content is divided into five parts. The first part talks about the manifestations of diseases (病候). It describes 67 disease names from the head to the feet and brief symptoms of these diseases. The diseases are related to internal medicine, surgery, the five orifices (nose, eyes, lips, tongue, and ears; corresponding colors of the viscera), gynecology, and pediatrics. Two fifths of the diseases mentioned are related to internal medicine. Although the book doesn't mention the diagnosing methods or



treatment methods, it is still considered to be the earliest book discovered so far on disease symptoms. The content of the second part is exactly the same as the content of *versions 1 and 2 of the Moxibustion Canon of 11 Channels of Yin and Yang* (《陰陽十一脈灸經》甲、乙本) unearthed at Mawangdui. The characters of *On Channels* are more completely preserved than those of the *Moxibustion Canon of 11 Channels of Yin and Yang*. They state the circulation and movement directions of 11 channels of the human body, as well as the main diseases concerning those channels. The content of the third part of *On Channels* is roughly the same as the content found in the *Death Symptoms by Yin and Yang Pulses* (《陰陽脈死候》), except that the former has more characters preserved than the latter. It talks about the three yin channels and three yang channels, and details the symptoms and features of extremely poor prognosis on the flesh, bone, qi, blood, and sinews. The fourth part of *On Channels* discusses the tissues or physiological functions of bone, sinews, blood, pulse, flesh, and qi, and the disease symptom of “pain”. The content of the fifth part of *On Channels* is similar to that of *The Channel Law* (《脈法》) unearthed at Mawangdui. It mainly illustrates the importance of “channels” to the human body, the physiological rhythms of vessel qi, and the principles of treatment.

On Conduction Exercise (《引書》) is written on approximately 113 bamboo slips, and has a total of 3235 characters. The content is divided into three parts. The first part illustrates methods for staying healthy in the four seasons, and has tips for health cultivation in each season. It



emphasizes that maintaining good health must follow the operating rules of nature. The second part illustrates the conduction exercise movements and their functions. There are about 110 movements. It can be deduced that before the Han Dynasty, people had accumulated abundant experience in using conduction exercise to treat diseases. *On Conduction Exercise* can be considered a great book on conduction exercise for medical treatment. *On Conduction Exercise* was written about 800 years earlier than *The Origin and Indicators of Diseases* (《諸病源候論》), which integrated conduction exercise. It is a precious source of conduction exercise before the Han Dynasty. The third part of *On Conduction Exercise* talks about disease causes, prevention methods, and theories of health cultivation. It not only echoes the first part, but also repeats the main idea that health cultivation should correspond to nature.

The Yellow Emperor's Inner Canon (《黃帝內經》)

The Yellow Emperor is said to be the ancestor of the Chinese people, and also the origin of Hua Xia culture. Therefore, much literature in history was named after the Yellow Emperor. *The Yellow Emperor's Inner Canon*, also known as *The Inner Canon*, contains two parts: *Plain Questions* (《素問》) and *Magic Pivot*. Each part has nine volumes, and each volume has nine articles. Thus, each part has 81 articles. It is said to be a masterpiece of medical science, with conversations between the Yellow Emperor and his officials, such as Qi Bo (岐伯), Lei Gong (雷公), and Gui Yu Qu (鬼與



圖). The conversations cover subjects such as the common rhythms of the human body, the corresponding rhythms of the channels, blood, and qi of the human body to time changes, human physiology, pathology, diagnostics, principles of treatment, and pharmacology. *The Inner Canon* established all kinds of theories on Chinese medicine, such as the theory of yin, yang, and the five phases, the theory of pulse manifestation, the theory of visceral manifestation, the channel theory, the theory of the causes of disease, the pathomechanical theory, disorders, examination, treatment principles, health cultivation, and the movement and qi theory. *Plain Questions* focuses on the illustration of human physiology, pathology, and the principles of disease treatment, as well as basic theories on the relationships between humankind and the natural environment. *Magic Pivot* focuses on human anatomy, bowels and viscera, channel and network vessels, point acupuncture, and the treatment principles of special diseases, etc. Although *The Yellow Emperor's Inner Canon* only clearly records 13 prescriptions using 26 medicines, it gives a pointed elaboration on the basic theories of Chinese medicine, such as four qi and five flavors, upbearing, downbearing, floating and sinking, and what the five viscera desire and are afraid of. Together with the illustration of the five flavors and five viscera systems, it opens a door for channel entry theory that appeared in later ages. In addition, *The Yellow Emperor's Inner Canon* also discusses theories of formulas. For example, it discusses the principles of formula composition, decoction methods, suitability of medication, and



the prudent choice of the type and dosage of medicines based on disease conditions, upper and lower positions of the disease site, the dynamics of diseases, and the length of disease courses. *The Yellow Emperor's Inner Canon* contains detailed records on the qualities of the water used for decoctions, the types of water, duration of decoctions, the concentration of decoctions, and the control of time and temperature.

The Yellow Emperor's Inner Canon was first mentioned by *The History of Han · Literature Catalog* written by Ban Gu (班固). For over 2000 years, *The Yellow Emperor's Inner Canon* has been considered an important masterpiece of Chinese medicine and it is the earliest work discovered so far on Chinese medicine theories. The achievements made in the theories of Chinese medicine by physicians in past ages are generally rooted in this book. However, there has never been an agreement on the author and writing date of *The Yellow Emperor's Inner Canon*. Judging from the content, the book was not written by a single person, or at any one time or even in the same place as it contains not only different dialect characters, local customs, and the features of people from different places, but also conclusions on medical experience and theoretical knowledge both before and during the Spring and Autumn and Warring States periods. Therefore, the book was considered to be the “Origin of Medical Books” by later generations.⁷ *The Yellow Emperor's Inner Canon* has not only been widely praised and studied by physicians at all times, but has also had a considerable influence on foreign scholars. Both Japan and Korea once



included *The Yellow Emperor's Inner Canon* in the list of set books for traditional medicine scholars. Today, *Plain Questions* and *Magic Pivot* have been translated into English, French, and German, and have spread worldwide.

Section 4 Biographies of Medical Experts

Yi Huan (醫緩)

Yi Huan lived in the Spring and Autumn period, and came from Qin State. According to *Zuo's Commentary* (《左傳》), in the 10th year of King Chengong of Lu State (魯成公) (581 BC), King Jingong of Jin State (晉景公) fell ill, and was treated by Sang Tian Wu (桑田巫). After divination, Sang Tian Wu confirmed that King Jingong's disease was caused by the ghosts of Dafu (大夫; a senior official in feudal China) plus Tong Zhao (趙同) and Kuo Zhao (趙括) of Qin State who were killed by the king. King Jingong's condition was deteriorating and physicians did not know what to do. King Jingong heard that there was an excellent physician in Qin State and sent an envoy to Qin State to ask for medical help. King Huangong of Qin State (秦桓公) sent Yi Huan to help with treatments in Jin State. On the night before Yi Huan's arrival, King Jingong of Jin State dreamed of a conversation between the two ghosts inside his body. One ghost said, "I hear that Yi Huan from Qin State is an





Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 28 (From a collection at the Museum of the History of Traditional Chinese Medicine located at the Shanghai University of Traditional Chinese Medicine)

outstanding physician. If he comes to treat the disease, he may hurt us. How should we avoid that?" The other ghost said, "We are hiding between Gao (膏) and Huang (盲). Even though he has excellent skills, how could he hurt us?" Yi Huan arrived in Jin State. After diagnosing the disease, he reported, "I am not able to cure the disease. It has developed into the place above Gao and below Huang. The effects of fire moxibustion and acupuncture cannot reach this place. Decoctions and the topical application of medicinal paste cannot reach Gao and Huang either. Yi Huan is helpless!" After hearing Yi Huan's diagnosis report, Jinggong of Jin State thought it confirmed the content of his dream. He praised Yi Huan for his excellent



medical skills, gave generous gifts, and sent him back to Qin State. Before long, King Jinggong of Jin State passed away. This is the literary explanation of the idiom “Disease Spreads to Gao and Huang”. The above historical record indicates that excellent physicians at that time were able to diagnose diseases in the deep places of the human body, and judge whether the diseases were curable with acupuncture, moxibustion, and medicinal administration.

Yi He (醫和)

Although it is not known when Yi He was born, he lived in the Spring and Autumn period, and was a famous physician from Qin State. Records on Yi He can be seen in *Zuo's Commentary*, and *Guo Yu* (《國語》) etc. According to *Zuo's Commentary in the record of The First Year of King Zhaogong* (《左傳·昭公元年》), King Pinggong of Jin State (晉平公) fell ill, and asked Qin State for an excellent physician. King Jinggong of Qin State (秦景公) sent Yi He to give treatment. After diagnosis, Yi He reported the cause of the disease as follows. “The disease is not curable because you have excessively indulged in feminine attractions. It has gu symptoms (蠱症), but not caused by ghosts and spirits.” King Pinggong said, “Can't I have women anymore?” Yi He answered, “You must undertake abstinence”. He also explained the pathogenesis of the disease in detail. “The heaven has six qi, and thus generates five flavors (sweetness of earth, sourness of wood, saltiness of water, bitterness of fire, and acridness of metal), five colors (black of saltiness, white of aridness, red of bitterness,



yellow of sweetness, and green-blue of sourness), and five voices (Gong of yellow, Shang of white, Jiao of green-blue, Zhi of red and Yu of black). These flavors, voices, and colors are supposed to nourish people, but over use will cause diseases.” (天有六氣，乃生五味（土味甘、木味酸、水味鹹、火味苦、金味辛）、五色（鹹色黑、辛色白、苦色赤、甘色黃、酸色青）、五聲（黃聲宮、白聲商、青聲角、赤聲徵、黑聲羽），色、聲、味本有益於人，惟太過則生疾病。） Yi He went on to say, “The six qi are yin, yang, wind, rain, darkness, and brightness. The blending and changes can be divided into four seasons (warm spring, hot summer, cool autumn, and cold winter), and correspond to the five phases arranged in a certain sequence. However, excessive or insufficient changes in the six qi can easily cause six diseases: excessive yin causes cold diseases, excessive yang causes hot diseases, excessive wind causes limb diseases, excessive rain causes abdominal diseases, excessive darkness causes confusion diseases, and excessive brightness causes heart diseases. People should rest in the evening, and sleeping with too many women can easily cause diseases resulting from internal heat. If Your Majesty cannot control your lust, how can you stay healthy?” The clinical application based on the theories of heaven and earth, qi and flavor, yin and yang, the five phases, and lasciviousness proposed by Yi He proved that medical theories had developed quite systematically already at that time. Also, according to the records of *Tong Zhi* (《通志》), “say, moderate is harmonization and is sounded as ear.” (「或曰：緩即和也，音訛耳。」)



In ancient times, some people said that Yi He and Yi Huan were actually the same person.

Yi Ju (醫洵)

Yi Ju came from Qin State. Shi Jiao (尸佼) from the Eastern Chou in the Warring States period wrote in his book *Shi Zi* (《尸子》), “Yi Ju successfully removed King Xuanwang’s (宣王) pimples (痤) and King Huiwang’s (惠王) hemorrhoids. Zi Zhang (張子) asked Yi Ju to treat his swollen back and he recovered.” (「為宣王割痤，為惠王療痔皆愈。張子之背腫，命洵治之，遂愈。」) Judging from the content of this book, Yi Ju is good at treating surgical diseases. He must have been a surgeon with superior medical skills.⁸

Qin Yue Ren (秦越人)

Qin Yue Ren, well known as Bian Que (扁鵲), was born between 407 BC to 310 BC. He was a physician in the Warring States period. *Strategies of the Warring States* (《戰國策》), *Han Fei Zi* (《韓非子》), *Lie Zi* (《列子》), *Han Shi Wai Zhuan* (《韓詩外傳》), *Yan Tie Lun* (《鹽鐵論》), and *Xin Yu* (《新語》) also recorded Bian Que’s life and stories. Qian Sima (司馬遷) wrote a biography of him in *Record of the Grand Historian* (《史記》). It is said that Bian Que was a hotel manager (舍長) when he was young. Mr. Chang-Sang (長桑君) imparted his medical skills to him, and gave him a book, entitled *Secret Formulas* (《禁方書》). Qin





Qin Yue Ren (Bian Que)
A collection from the Exhibition Room
on Li-Fu Chinese Medicine located at
China Medical University, Taiwan
(Photographed by Dr. Jaung-Geng
Lin)

Yue Ren practiced medicine among the people for a long time. He traveled to different states, such as Qi, Zhao, Song, Wei, and Qin. When he was practicing medicine in these different places, he followed the local customs. He was named Lu-Yi (盧醫) in Qi State, and Bian Que in Zhao State. The name Bian Que was his most famous name, and is the name which had the greatest influence.

Bian Que was an expert in diseases related to internal medicine, surgery gynecology, pediatrics and five sense organs. He provided his medical services in accordance with the requirements of the home village or town, and was made very welcome. When he traveled to Handan (邯鄲), he heard that the Handan people valued women's health. Thus, he acted as an obstetrician and gynecologist. When he traveled to Xianyang (咸陽), he heard that the people of Qin State cared very much about children. He then acted as a pediatrician. Bian Que had excellent medical skills and noble



medical ethics, and was well respected by the masses. Bian Que was proficient in four examinations (四診) and pulse manifestation (脈理), and was especially famous for his inspections (望診) and his palpation (切脈). Before the Qin Dynasty and in the Han Dynasty, many literatures mentioned Bian Que's stories of diagnosing diseases through inspection of the complexion (望色知病). According to *Record of the Grand Historian*, when Bian Que first met Huanhou of Qi State (齊桓侯), based on the changes in Huanhou's complexion, Bian Que figured out that Huanhou had a disease. If not treated, this disease would get worse and worse. Although he reminded Huanhou of Qi of this several times, Huanhou wouldn't listen to his advice, and refused treatment. In the end, Huanhou of Qi died of the disease. Thereafter, Bian Que was considered to be an expert on pulse states and was very famous for his pulse examinations. He could accurately judge the conditions of different diseases by qi and blood changes in pulse manifestations. Bian Que was also a master of acupuncture. When Bian Que and his disciples passed through Guo State, they heard that the prince of Guo State (虢國) had just passed away. Bian Que asked the city guard about the course of the disease, and deduced it to be "deathlike reversal" (「尸厥症」) (equal to shock nowadays). After delivering the message, the king of Guo State invited Bian Que to treat the prince. Bian Que acupunctured the Three Yang Fivefold Convergence Point (三陽五會穴), asked his disciples to use half-hot medicines to compress the four limbs of the prince to make them warm, and then



prepared a decoction for the prince to drink. The prince revived gradually. This is the earliest case history of Chinese medicine. The stories of Bian Que rescuing the prince became famous. Later, people remarked that Bian Que was capable of bringing dead people back to life.⁹ The preface of *On Cold Damage and Miscellaneous Diseases* (《傷寒雜病論》), written by Zhong-Jing Zhang (張仲景) of the Eastern Han Dynasty, says, “Every time I read about Yue-Ren’s diagnosis in Guo State, and his diagnosis from Qihou’s complexion, I cannot help but admire his excellent skills” (「余每覽越人入虢之診，望齊侯之色，未嘗不慨然嘆其才秀也。」) This is a high-level evaluation of and praise for Bian Que’s medical skills and medical ethics.

Wen Zhi (文摯)

Wen Zhi came from Song State. *Mister Lu’s Spring and Autumn Annals · On Royalty* (《呂氏春秋·至忠篇》) records Wen Zhi’s outstanding medical skills. It is said by Tian Di (田地) (323 BC to 284 BC), that King Min of Qi State (齊潛王) fell ill because of anxiety and preoccupation, and did not get better after seeing many physicians. Wen Zhi was then invited by the prince to the palace. After diagnosis, Wen Zhi said to the prince, “I can cure the king’s disease, but once His Majesty recovers, he will kill me for sure”. The prince was surprised, and asked, “Why would the king kill you?” Wen Zhi answered, “The king’s disease can be cured by anger therapy. The king can only recover after an intense



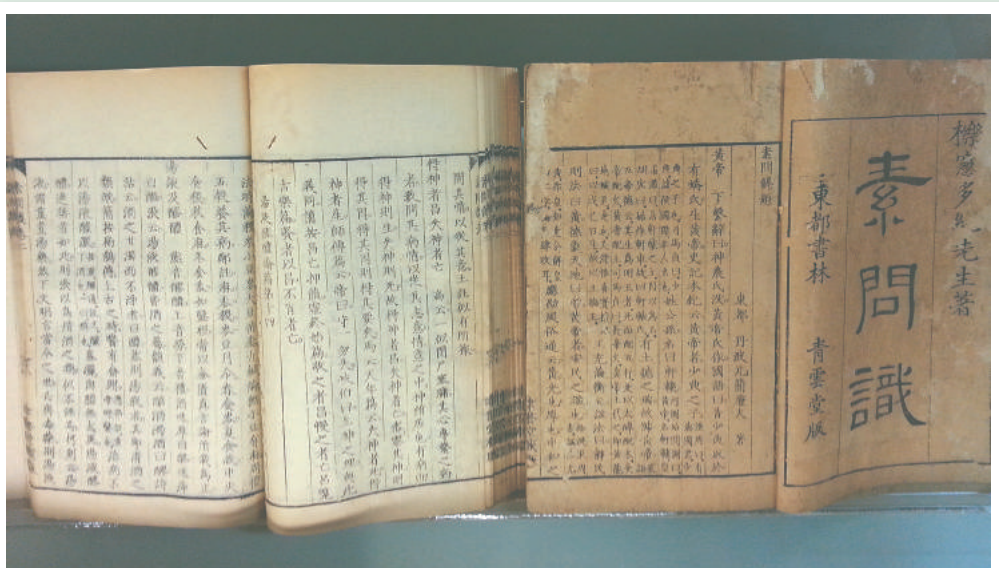
burst of fury. However, I will be dead if I anger the king.” The prince sincerely requested, “If you can cure the king, my mother and I will defend you at any cost. Then, the king will certainly not kill you”. Wen Zhi sighed, and said, “I will cure the king at the expense of my life!” However, he agreed to treat King Min of Qi State. Wen Zhi deliberately missed the appointed time for the king’s treatment and subsequently missed appointments three times. King Min of Qi State got very angry, and thought “Wen Zhi despises the king”. When Wen Zhi finally arrived to treat King Min, he went straight to the king’s bed. He stepped up to the bed without taking off his shoes, and also stepped on the clothes of King Min. It almost drove King Min crazy, but Wen Zhi spoke arrogantly and rudely, enough to infuriate the king. Finally, King Min could not bear it any more. He jumped up from the bed, and scolded Wen Zhi loudly. At that very moment of fury, the stasis qi and blood became free, and King Min’s disease was cured. After that, although the prince and the queen pleaded mercy for Wen Zhi, King Min was still exasperated, and ordered that Wen Zhi was boiled to death. This famous physician of his generation then ended up dead.

References

1. Yi Hsieh (2000). The Theory Fountainhead of Chinese Medical Development-*Huang Di Nei Jing* (The Yellow Emperor’s Inner Canon).



- Journal of Henan Medical College for Staff and Workers*. 12(2). pp. 29-30.
2. Kai-Jie Wu (2000). Cultural Den of Ancient Chinese Medicine Development. *Journal of Jingmen Vocational Technical College*. 15 (2). pp. 42-47.
 3. Shi-Zhi Ma (1983). On Underground Construction and Cold Storage Wells in the Han Capital Xinzheng. *Archaeology and Cultural Relics*. 1 (8).
 4. Jing-Wei Li & Jaung-Geng Lin (2000). A General History of Medicine in China (Volume of Ancient Times), *Beijing: People's Hygiene Press*. pp. 63-112.
 5. Literature Research Office of Cultural Department of Museum of Fuyang City, Anhui Province Area-Organizing Group for the Han-Dynasty Bamboo Slips From Fuyang. (1988). Wan Wu in the Han-Dynasty Bamboo Slips From Fuyang. *Cultural Relics*. 4(36).
 6. Ping-Sheng Hu & Zi-Qiang Han (1988). An Introduction of *Myriad Things*. *Cultural Relics*. 4(48).
 7. Yi Hsieh (2000). The Theory Fountainhead of Chinese Medical Development-Huang Di Nei Jing (The Yellow Emperor's Inner Canon). *Journal of Henan Medical College for Staff and Workers*. 12(2). pp. 29-30.
 8. Man-Ching Cheng & Pin-Shi Lin (1982). History of Chinese Medicine. *Taipei: The Commercial Press, Ltd*. pp. 11-53.
 9. Yi Cheng (2000). Medical Records of Yue People's Treatment in Guo State. *Chinese Journal of Medical History*. 30(2). pp. 123.



Understanding Plain Questions (《素問識》), a relevant work of Plain Questions written by Dambamototsan (丹波元簡). A collection of the Exhibition Room of Chinese Medicine located inside China Medical University, Taiwan (Photographed by Pei-Chi Chou)



Chapter 4 *Medical Science in the Qin and Han Dynasties* (from 221 BC to 220 AD)

Section 1 Historical Background

By destroying the other six states, Emperor Shihuang of Qin State (秦始皇) obtained control of the seven powers in the period of the Warring States, and established the first despotic and centralized country in the history of China. Emperor Shihuang also sent General Meng Tian (蒙恬) to recover the land of the Hetao (河套) area. He then ordered the repair and completion of the Great Wall (長城), and sent forces to fight the Xiongnu (匈奴) people in the North and the Baiyue (百越) in the South, thus unifying the whole country. With respect to politics, the Qin Dynasty not only abolished the hereditary feudal system but also created a centralized province and county system to prevent the restitution of vassal regimes. The central government controlled the army, political administration, and the finance of local government, and all civil and military officials were appointed by the emperor. Meanwhile, the Qin Dynasty implemented the “Three Dukes and Nine Chamberlains system” (「三公九卿制」), which was a separation of the three areas of jurisdiction, civil administration, and



military affairs. The “Three Dukes” refers to the Prime Minister (who assisted the emperor to deal with all affairs), Taiwei (太尉; the top military officer who controlled the military leaders), and Yushi Dafu (御史大夫; the grand master of the censors; in charge of the supervision, prosecution, and impeachment of officials, and who assisted the prime minister to deal with government affairs). The “Nine Chamberlains” were in charge of a wide variety of affairs, and were responsible for imperial court and royal matters. Such a minute division system can greatly enhance administrative efficiency and provide mutual constraints, which is beneficial to the governance of a country and consolidation of a regime. With respect to the economy, the Qin Dynasty started to unify the weights and measures system, for both volume and weight, and produced standard measuring vessels for verification. It unified the domestic currencies, and determined that gold was the upper currency, and copper-coin was the common currency. In order to encourage people to develop agriculture and handicraft industries, the Qin Dynasty implemented the policy of “pro-agriculture and anti-commerce”. Private ownership of land was confirmed, and a complete household registration system was established to be used as the basis for levying taxes. In order to manage the descendants of the royal and noble families of the other six states, the Qin Dynasty moved rich and powerful people and nobles to the capital city of Xianyang (咸陽) for the purpose of supervision and to enhance the importance of the capital. Meanwhile, water conservation projects, dredging projects, and canal



construction were conducted in many local areas to improve agricultural irrigation and increase agricultural output.¹

After unifying the central plain, Emperor Shihuang ordered Si Li (李斯) et al. to unify the Chinese characters and car tracks (a car being a form of chariot). The small seal style was confirmed as the official script format. The policy of “same car tracks and same characters for writing” greatly influenced the implementation of government decrees and cultural communication. However, in order to control the dissenting voices of the public, Emperor Qin Shihuang instigated the burial of Confucian scholars alive and the burning of all books except for books on medical science, divination, and agriculture. This incident was called “burning books and burying Confucian scholars alive” (焚書坑儒). It caused a great deal of harm to both the preservation of classical books in many fields and to China’s academic heritage.

After unifying the whole country, the Qin Dynasty created an imperial system that governed local areas through provinces and counties. Emperor Shihuang strongly implemented all kinds of decree that were beneficial to the unification of the country and its centralization. He gathered people from all over the country to live in the central Xianyang imperial city, which greatly promoted the communication of customs, medical science and the cultures of different places, plus the integration of different regional nationalities. However, as Emperor Shihuang implemented his massive construction projects, people were conscripted and exploited for



extreme labor. His tyrannical policy of “burning books and burying Confucian scholars alive” aimed to closely monitor and control peoples’ ideas, but it finally evoked people’s outrage, and caused political wars.²

Bang Liu (劉邦) established the Han Dynasty in 206 BC. He was the first emperor of the Han Dynasty, also known as Emperor Gao Zu of Han (漢高祖), and was the first emperor in China’s history to be born a commoner. At the beginning of the Western Han Dynasty, Emperor Gao Zu of Han thought the feudal system (封建制) and the provinces. and county system (郡縣制) had both advantages and disadvantages, and thus decided to conduct a system of “coexistence of the prefecture and county system and the feudal system”. A rehabilitation (休養生息) policy was implemented which reduced land rents, encouraging some soldiers to return to their hometown to farm, resulting in the increase of agricultural output year on year. Meanwhile, the government allowed the free development of commercial activities to promote the recovery of the social economy after years of war. Subsequently, Emperor Wen (文帝) and Emperor Jing (景帝) adopted the governance idea of doing nothing that would go against nature, which led to a thriving and prosperous society. This period was called the “Rule of Wen and Jing” (「文景之治」) in China’s history. After succeeding to the throne, Emperor Wu of the Han Dynasty (漢武帝) strengthened the civil administration and military forces, and brought the country to its peak by implementing several decrees. For example, in order to prevent currency chaos and to increase



taxation income, the government forbade private coinage, releasing “Wu-Zhu Coinage” (「五銖錢」) as the universal currency. The government also specified that salt, iron, and wine were monopolized commodities, setting up a salt authority, iron authority, and wine authority to manage these exclusive trades. In order to stabilize the prices of commodities related to people’s livelihoods, the government adopted “Standard Principals” (「平準法」), with the government setting up a “Standards Authority” (「平準官」) in the capital city that could collect goods from different areas, and then adopt the method of “buying expensively and selling cheaply” (「貴賣賤買」) to stabilize market prices. The government continued to implement the “Tax Substitute Method” (「均輸法」), and set up “Tax Substitute Authorities” in all provinces to transport tribute items to places that lacked such items, before selling them at high prices to increase the income of the national treasury.

During the period of Emperor Wu’s rule, “Qian Zhang’s diplomatic mission to the western regions” (「張騫出西域」) was the incident that had the greatest influence on the development of foreign trade. At that time, the Han Dynasty was powerful. Emperor Wu sent Qing Wei (衛青) and Qu-Bing Huo (霍去病) to fight against the Xiongnu people in the north, and set up four provinces in the Hexi Corridor to weaken the Xiongnu’s strength in the northwest. After that, Emperor Wu twice sent Qian Zhang on a diplomatic mission to the western regions, uniting countries in these regions to fight against the Xiongnu. Later on, these



countries presented tributes to the Han Dynasty one after another, and admitted the Han Dynasty as common suzerain. This not only resolved political disputes but also cleared vital traffic lines connecting China with the countries in the western regions. As a consequence, the Silk Road developed. It started from Chang'an (長安), went through Dunhuang (敦煌) and the Yumen Pass (玉門關), then cut off in both the north and south directions, went through the western regions, and finally reached Central Asia. The Silk Road (絲路) not only promoted trade with Southwest Asia countries, but also strengthened the medicinal input and output between China and the Southwest Asia region.

Emperor Guangwu (Xiu Liu) (光武帝; 劉秀), the first emperor of the Eastern Han Dynasty, chose Luoyang (洛陽) as the capital city. Emperor Guangwu promoted Confucianism and the intellectuals' style (士風). At the beginning of the dynasty, the regime remained stable, but after the mid period of the dynasty, the regime gradually fell under the control of the relatives of the emperors' mothers, wives, or eunuchs. They took over power alternately, fighting against and killing each other. When it came to the rules of Emperor Huang (桓帝) and Emperor Ling (靈帝), the disaster of debarring Dang people from holding office (「黨錮之禍」) erupted. All distinguished officials were killed, and the affairs of the imperial government were managed by eunuchs. Due to political corruption, invasions from the people of Xiqiang (西羌), Xianbei (鮮卑), and Wuhuan (烏桓), badly damaged the nation's strength with years of war. Finally, in



the late Eastern Han Dynasty, the Yellow Headscarf Uprising (黃巾起義) occurred, and Zhuo Dong (董卓) rebelled, which not only led to the fragmentation of the country by powerful warlords, but also quickened the demise of the Eastern Han Dynasty, resulting in a confrontation between three kingdoms (三國鼎立).

In the Qin and Han Dynasties, in order to resolve the problem of agricultural irrigation, large-scale water conservation projects were conducted in all places. During this period, people managed the Yellow River, and accumulated much experience in managing rivers. Moreover, some highly efficient sowing and irrigation tools were invented. For example, the falling equipment (dragon-bone water lift) (翻車; 龍骨水車) invented in the Eastern Han Dynasty was an implement used to assist with irrigation. During this period, Shi Cui (崔寔) wrote *Ordinances for the Months* (《月令》). The book recorded agricultural outputs in accordance with the four seasons and solar terms. It also recorded the medicinal materials that were most suitable for harvesting in each month, and made considerable contributions to the preservation of records on Chinese medicinal planting. In addition, the recording of crop cultivation and the method of using hot springs or greenhouses to grow plants also provided references for the pharmacology of Chinese medicine.

The Silk Road that developed during the Western Han Dynasty not only increased the exports of Chinese silk fabrics and lacquerware to western countries, but promoted the spread of iron-casting skills and well-



digging skills to the West. It also promoted the input of goods and materials from countries in the western regions, such as horses, gems, spices, medicinal materials, grapes, and cucumbers, which provided rich materials for Chinese medicine, cooking, livestock raising, crafting, and medicines.

Scientific and technological breakthroughs also occurred during the Qin and Han Dynasties. *Records of the Grand Historian · Tian Guan Shu* (《史記·天官書》) records in detail the movement of the constellations and stars in the evening. During the rule of Emperor Wu of the Western Han Dynasty, the armillary sphere, an implement for angle measurement, was invented. Meanwhile, Qian Sima (司馬遷) et al. generated a comparatively complete calendar named the “Taichu Calendar” (「太初曆」; Taichu means the absolute beginning). This calendar adopted the first month of the lunar year (Yin month; the third of the ten Heavenly Stems) as the beginning of a year. It replaced the “Zhuanxu Calendar” (「顓頊曆」; Zhuanxu was a legendary monarch in ancient China) which adopted the lunar October (Hai Month; the last of the twelve Earthly Branches) as the beginning of a year, and which had been used since the Qin Dynasty. When it came to the period of the Eastern Han Dynasty, astronomers already knew what caused an eclipse of the sun. There were also records of sunspots and polar lights. Hong Liu (劉洪) developed the Qian Xiang calendar (「乾象曆」), and compiled the diagram of the movement speed of the moon. Since then, calendars have been compiled based on these works. In the period of the Eastern Han Dynasty, Heng



Zhang (張衡) invented the world's first instrument that could confirm the direction of earthquakes, named the Houfeng Seismograph (「候風地動儀」). The invention of such instruments for meteorological monitoring and the development of meteorological theories increased people's recognition of natural phenomena, and further promoted the complete development of movement and qi theory and the theories behind disease causes and the six qi (六氣病因學說) of Chinese medicine.

With respect to cinnabar sublimation, alchemists hoped to refine gold or silver from cheap metals or other materials, and also hoped that by using cinnabar sublimation, they could produce an immortality elixir. After years of effort, although they did not succeed in producing an immortality elixir during sublimation nor the appearance of gold or silver, alchemists gained further understanding of the attributes and changes to mercury, lead, and sulfur, etc., which not only instigated the invention of gunpowder, but also led to the identification of many Chinese medicines. Bo-Yang Wei (魏伯陽) in the period of the Eastern Han Dynasty was a representative engaged in health cultivation theories, and necromancy, astrology, and medicinal art studies. *Zhou Yi Can Tong Qi* (《周易參同契》), written by Bo-Yang Wei, was considered by later generations as the “Father of All Cinnabar Canons” (「萬古丹經之祖」), the “Originator of the Cinnabar Canons” (「丹經鼻祖」), and the “King of All Cinnabars” (「萬古丹中王」).

With respect to religious beliefs, immortality theories were popular during this period. In order to cater to the nobles' wishes of enjoying



wealth forever, alchemists made great efforts to preach immortality medicines or prescriptions for becoming immortal. By using their health cultivation methods and medical skills, these alchemists gained favors from emperors. During this period, Indian Buddhism spread from the western regions to China through the Silk Road. The spread of Buddhism and the successful translation of Buddhist sutras increased the synergy between Chinese medicine and Buddhist medicine, expanding the connotations of Chinese medicine. Apart from religious books, classic works in other fields, such as *Record of the Grand Historian* (《史記》), *The History of Han* (《漢書》), *The Spring and Autumn of Wu and Yue* (《吳越春秋》), and *Yue Jue Shu* (《越絕書》), also have records on medical systems, medical experts, clinical medicine, diagnoses and treatments, medicines, hygiene customs, and the medical administration of minority groups, etc. *An Analytical Dictionary of Characters* (《說文解字》) by Shen Xu (許慎) of the Eastern Han Dynasty also records information related to medicine and hygiene at that time.



Section 2 An Introduction to the History of Traditional Chinese Medicine

The development of medicine and pharmacy

The Qin and Han Dynasties were crucial periods for the development of China's medical system, and were also the foundation-laying periods for basic theories on Chinese medical science. As the medical system in this period gradually developed into a complete one, related scholars became active in summarizing and studying medical bibliography, and medical communications with other countries became frequent, which further laid a solid foundation for the development of traditional Chinese medicine. The clinical subjects of cold damage, medicinal treatments for miscellaneous internal diseases, and surgery, also achieved considerable development.

It is said that Emperor Shihuang valued medical science very much. Serving physicians carried medicines at their sides at any given time, in case of need. Consequently, among the national administrative structure of the Qin Dynasty, medical administration organizations were established. In addition, unique laws and regulations on medical administration were generated, which greatly influenced the development of medical organizations in later dynasties. According to *Tong Dian · Chih-Kuan* (《通典·職官》; *functional officials*), and both Tai-I Lin (太醫令;



Imperial Physician) and Tai-I Cheng (太醫丞; Aide to the Imperial Physician) in the Qin and Han Dynasties were subordinate to Shao Fu (少府). Later, the Han Dynasty further confirmed the positions of Yao Cheng (藥丞; Pharmacist Aide to the Imperial Physician) and I-Kung Chang (醫工長; Chief of Physicians). Tai-I Lin and Tai-I Cheng are mentioned in the book Aide to the Imperial Physician that refers to the imperial physician and pharmacist. Tai-I Cheng is the superior, and Tai-I Cheng is the assistant. As both Tai-I Cheng and the Tai-I Cheng are superior officers taking charge of medical administration, they are jointly called Lin and Cheng. Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau were formally listed in the official positions of the Qin Dynasty. It is one of the six officials (六丞) subordinate to Shao Fu (少府) who is subordinate to the Nine Qing (九卿). Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau took charge of the medical affairs of the country and the imperial palace. They had subordinate officers, such as the Shih-I (侍醫; Attending Physician) and the I-Chang (醫長; chief of the medical affairs administrators of the imperial palace). A Shih-I was the imperial physician who attended and served the emperor. The Western and Eastern Han Dynasties continued to use the medical system of Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau created in the Qin Dynasty. Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau remained the highest medical affairs administrators. However, the divisions of the subordinate physicians became more detailed. There were other positions, such as Tai-



I Chien (太醫監; Imperial Medical Supervisor), Shih-I, Shang Yao Chien (尚藥監; Director of Palace Medications), and Yao Chang (藥長; Pharmaceutical Director). Tai-I Chien supervised medical affairs, and reported to Tai-I Lin and Tai-I Cheng. In addition, the Han Dynasty set up the positions of Yao Cheng and Fang Cheng (方丞; administrators of medicines and prescriptions). They were responsible for medicinal and prescription management. Dian Ling Fang Yao (典領方藥) focused on the research and development of medicines and prescriptions for the needs of the palace. Ben Cao Tai Chao (「本草待詔」; Expectant Physician of Herbal Foundation) was an adhocacy that was responsible for collecting precious herbal medicines that could prolong life and that were for the use of the emperor. In the Han Dynasties, medicines needed in the palace were regarded as tributes from local areas. Each province was required to send precious medicinal materials from their local area as tributes to the imperial palace. When the imperial palace lacked certain medicinal materials, Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau would send people to different places to purchase the required materials. *The History of the Han Dynasty · Table of Officials, Gong, and Qing* (《漢書·百官公卿表》) also states, “Shao Fu was an official in the Qin Dynasty, taking charge of national taxes to support the imperial family. He had six subordinate officers.” (「少府，秦官，掌山海池澤之稅，以給供養，有六丞。」) According to the records, Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau under Shao Fu were mainly responsible for



medical services to the palace, and the subordinate position of Tai-I Chien was generally held by a powerful physician. Shih-I in the Han Dynasty continued to follow the system of the Qin Dynasty, and was responsible for treating the imperial families and the vassals. Female Shih-I, female physicians (女醫), and obstetricians (乳醫), were responsible for treating diseases related to gynecology and obstetrics for the empress, princesses, etc.

With respect to the medical administration organizations, although vassals of the Western Han Dynasty referred to the imperial court medical system when establishing medical administration organizations in their palaces, there were few records on local medical administration organizations in the provinces, counties, townships, and Ting (亭; neighborhood, a unit in a sub-District). Physicians working in vassal palaces were recruited from society or fostered by the vassals. For example, the Vassal of Jibei (濟北王) used Qi Gao (高期) and Yu Wang (王禹), both of whom were imperial physicians. He also sent someone to learn pulse examination and acupuncture from the famous physician Yu-Yi Chun (淳于意) in Linzi (臨淄) for a whole year. In the period of the Eastern Han Dynasty, the central court cancelled the Taichang system (太常系統), and confirmed the positions of Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau, under the Shao Fu system, would take charge of 293 subordinate physicians and nineteen officials. As mentioned, Tai-I Lin and Tai-I Cheng of the Imperial Medical Bureau were responsible for



treatments and medical affairs. Most medicines used in the palace were tributes from different provinces. They were precious and expensive. The imperial court also added Yao Cheng and Feng Cheng (one for each department) to manage medicines and prescriptions, respectively. In order to deal with urgent medical and hygiene situations, when an epidemic disease prevailed, the imperial court would establish temporary hospitals to accept patients and treat them. However, although society and the regime were then destabilized, these temporary hospitals provided short term salvation, with the therapy of the medical organizations unable to be transferred to permanent organizations.

The medical administration organizations of the Western and Eastern Han Dynasties were slightly different from the previous dynasty. The Eastern Han Dynasty increased some of the medical positions. Local medical affairs were no longer managed by the central government, but were directly supervised by the local government. The organizational system was more complete than that of the Western Han Dynasty. With respect to the cultivation education of physicians, based on the service objects, the physicians of the Han Dynasty could be divided into two categories, namely folk physician and official physician. A folk physician adopted the mentoring system to pass on their medical knowledge and skills, while the education of an official physician followed organizational and systematic recruitment methods and training. As an official medical school had not yet been established, most official physicians were



recruited from folk physicians who had excellent clinical efficacy. Although the main service objects of official physicians were officials of the imperial court, they would sometimes be appointed to treat soldiers, ordinary people, or even prisoners. For example, in the Eastern Han Dynasty, Ching Chao Yin (京兆尹; administrative head of the dynastic capital) Gui Chen (陳龜) once sent official physicians to treat ordinary people. *The Stone Tablet of Min Guo-Taishou of Danyang* (《丹陽太守郭曼碑》) records that official physicians responsible for treating prisoners were named emissaries of “Nan Zhen Gong” (南甄宮). It also records that a prisoner would be exempted from punishment and then receives treatment. On the other hand, when issues related to disease treatments or medicines occurred, the imperial court would also call in folk physicians for their opinions. When a physician healed the disease of the emperor, he would usually receive a grand award, or the level of his job title would be enhanced. In such ways, the social status of physicians was gradually improved.

With respect to the literature on medical history, in the Qin and Han Dynasties, literature reviews were mainly organized by the country. The imperial court was active in summarizing and studying medical works, which promoted the maturity of the basic theories of Chinese medicine and pharmacy, and also enabled the publication of classical medical works, such as *The Yellow Emperor's Classic of 81 Difficult Issues* (《黃帝八十一難經》), *The Divine Husbandman's Herbal Foundation Canon* (《神



農本草經》), and *On Cold Damage and Miscellaneous Diseases* (《傷寒雜病論》). Most of the cultural relics passed down from the period before the Warring States did not have direct medical information. However, there were a few wood slips and bamboo slips on which characters related to medicinal names and decoction were discovered. Before paper-making was invented by Lun Cai (蔡倫) in the Eastern Han Dynasty, people mainly communicated and recorded incidents by carving characters on wood or bamboo chips, and then used ropes to string them together. The wood and bamboo slips were first discovered during the period from the 32nd year to the 34th Year of Guangxu of the Qing Dynasty (清光緒; from 1906 AD to 1908 AD). Physician Stein (斯坦因) from Hungary came to the western regions of China for archaeological study. He discovered several wood and bamboo slips in drift sand in the northwest of Dunhuang and Niya (尼雅). They might have been accidentally lost in the desert in ancient times. After more than 2000 years, these slips still remained intact. Thus, these slips were named “Dropped Slips in Drift Sand” (「流沙墜簡」). Later on, Stein took photos of these slips. The great litterateurs Zhen-Yu Luo (羅振玉) and Guo-Wei Wang (王國維) of the Qing Dynasty examined the slips and, based on the reign title written on the wood slips, they confirmed that these antiquities could date back to the period from the Han Dynasty to the Xijin Dynasty. Among the hundreds of wood and bamboo slips that Zhen-Yu Luo observed, there were about 11 wood slips recording disease names and prescriptions. These wood and bamboo slips are still held in the British



Museum in London. The museum also holds the original “Dropped Slips in Drift Sand” that Stein obtained from China. In 1930 AD, an investigation group from the National Scientific Union of China in Gansu (甘肅) province Juyan (居延) discovered a batch of wood slips weighing over 6000 kg. They date back to the period from the Warring States to the beginning of the Han Dynasty. Among these slips, there are various medical records, such as the prescription for a four agent decoction for cold damage (「傷寒四物」), and a prescription for the cold pain of horses (「馬傷水方」). There are also records of various medicines, such as gingers, cinnamon bark (桂), asarum (細辛), gleditsia (皂莢), aconite (附子), and polygala (遠志).

In the Qin and Han Dynasties, physicians’ opinions on fundamental theories of medicine and their clinical applications started to be recorded. For example, Yu-Yi Chun, a famous physician of the Western Han Dynasty, recorded in detail all kinds of treatment information for patients with miscellaneous internal diseases in his work *Case Record* (《診籍》), which set the precedents used for later physicians to write medical records and case records. Zhong-Jing Zhang (張仲景) completely recorded and analyzed the diagnoses and treatment principles of externally contracted febrile disease and medicine related to miscellaneous internal diseases in his work *On Cold Damage and Miscellaneous Diseases*. The theory of the six channels system was used to treat cold damage and bowel and visceral diagnoses were used to treat miscellaneous diseases, thus establishing a



diagnosis system that combines medical theories and clinical practice, and contains principles, methods, formulas, and medicines. The basic theories and norms for pattern identification as the basis for determining diseases, such as the four examinations, eight principles, and eight methods, were confirmed, constructing a complete framework for the development of Chinese internal medicine. In addition, during this period, the magic physician Hua-Tuo, who is revered as the “Originator of Surgery” of Chinese medicine, invented “anesthetic powder” (「麻沸散」) to anaesthetize patients before surgical operations. This is the earliest record of a Chinese anesthetic medicine used in surgical operations.³

Medical Exchange

With respect to medical communication, in the period of the Qin and Han Dynasties, as the national systems and characters were unified and traffic became convenient due to the unified specifications for the planning of roads and car tracks, then politics, the economy, culture, and medical science all achieved great development. The medical activities of Yu-Yi Chun and Hua-Tuo, et al. further promoted the heritage and communication of the clinical experience of medical science. Furthermore, as Emperor Shihuang was addicted to necromancy and medicine, he sent people everywhere to search for the secrets of eternal life. Consequently, China started to communicate with neighboring countries, such as Japan and India. Also, due to the Silk Road, the communication between China



and the rest of the world (such as Vietnam, Central Asia, Southwest Asia, and Europe) became more frequent,⁴ accompanied by communication in medical theories, medical experience, and medicines.

- Japan

The culture of traditional Chinese medicine followed in the steps of those Taoist priest who sought the elixir of eternal life, reaching Japan. Among these people, Fu Xu (徐福) was the most powerful. According to the records, Fu Xu was a native of Qidi (nowadays Xufu Village, Jinshan Township, Ganyu County, Jiangsu Province). In the 28th year of Emperor Shihuang's rule (219 BC), Fu Xu et al. submitted a statement, saying that there were three holy mountains (named Penglai 蓬萊, Fangzhang 方丈, and Yingzhou 瀛洲) in the East China Sea. Consequently, Emperor Shihuang sent Fu Xu to find immortals in the East China Sea, but he never returned. It was said that the alchemist Fu Xu understood medical science, especially herb-gathering and cinnabar sublimation. He was honored as a "Medicinal God" (「司藥神」) in Japan. In Te Ra Yi (諸富町浮盃), Saga (佐賀), Japan, there still stands a stone tablet saying "Landing Place of Fu Xu". At the Asuka Shrine (阿須賀神社), there are buildings named in his memory, such as the Fu Xu Palace.⁵ To remember Fu Xu's contribution, for a long period, Japan held a regular sacrificial event. From the Emperor Uda (宇多天皇) to Emperor Kameyama (龜山天皇), more than 80 fetes were held by different emperors. The tradition continued until Emperor



Meiji (明治). On November 28th each year, people in Shingucho of Wakayama (和歌山新宮市) still celebrate Fu Xu's sea voyage eastward. In 1980 AD, they celebrated the 2200th anniversary of Fu Xu's.

- India

The communication between China and India, also known as Shendu (身毒) or Tianzhu (天竺), started in the period of the Qin and Han Dynasties. The medical science of ancient India was advanced. A lot of famous physicians appeared, such as Caraka (闍羅伽) and Susruta (妙聞). As the dynasty declined, the medical science of ancient India also declined. However, Indian medical experience gradually spread eastward. Later, Emperor Shihuang seeking the elixir of eternal life, sent people to find famous physicians in India. When Buddhism was introduced to China in the Han Dynasty, medical experience and skills were also introduced. According to the records, Emperor Ming of Han sent Yin Cai (蔡愔) et al. to India to ask for Buddha figures and Buddhist sutras. Indian monks Kas/yapa-matanga (攝摩騰) et al. came back to China with them. In Luoyang, they translated the Buddhist sutras, including knowledge on medicine and hygiene. At that time, the king of Zhi-Guo Huang (黃支國) (i.e. Dravida (羅毗荼國) in South India) also sent an emissary to offer rhinoceros horn as a gift to the imperial court of the Han Dynasty. Historical records show that the introduction of ancient Indian medicine to China is closely related to the eastward spread of Buddhism. Although Indian medicine theories



did not prevail in China, the experience of medicinal usage and several medical theories influenced Chinese medicine in later generations. For example, we can find traces of Buddhist medicine in *A Thousand Gold Pieces Prescriptions* (《千金要方》) written by Si-Miao Sun (孫思邈).

- Vietnam

According to the historical records of Vietnam, in 257 AD, Chinese physician Chuan Cui (崔傳) cured the weaknesses of Yong-Xuan (雍玄) and Ren-Xie (任修) in Vietnam. He also wrote a book called *Gong Yu Ji Ji* (《公余集記》). In the period of Emperor Wu's rule of the Han Dynasty, along with Chinese culture, Chinese medicine spread to Vietnam, Meanwhile, ivory, pearl, hawksbill turtle, rhinoceros horn, longan, acorus, and coix from Vietnam were introduced to China in succession.

- Central Asia, Southwest Asia, and Europe

Medical science and cultural communication between China and Central Asia, Southwest Asia, and Europe in the period of the Qin and Han Dynasties mainly relied on land transportation. Emperor Wu (武帝) of the Western Han Dynasty sent Qian Zhang (張騫) on diplomatic missions to the western regions twice, and this began the economic and cultural communication between the central plain and the border areas of the Northwest and Southwest, gradually forming the world-famous Silk Road. Apart from silk fabric, there were trades of other goods and medicines,



such as cinnamon bark and rhubarb. Later, as the Silk Road extended, the economic and cultural communication between the East and the West became more and more frequent. Products from different countries were brought to China one after another, items such as furs, wool fabrics, jade, and livestock from Central Asia, amber from the Baltic Sea, gold (ranked 1st), glass, coral, and pearls from different places in Rome, and even medicinal plants (walnut, pomegranate, jasmine, etc.) and animals and minerals from the western regions that could be used for medicines. Therefore, the medicinal scope of clinical Chinese medicine widened.

Section 3 Medical Works

The Yellow Emperor's Classic of 81 Difficult Issues (《黃帝八十一難經》)

The Yellow Emperor's Classic of 81 Difficult Issues is also known as *The Classic of Difficult Issues* (《難經》) or *81 Difficult Issues* (《八十一難》) for short. The book has three volumes. Most medical experts believe that the main purpose of *The Classic of Difficult Issues* is to elaborate *The Inner Canon* (《內經》). However, some scholars argue that the medical connotations of *The Classic of Difficult Issues* belong to a classical branch of Chinese medicine which is different from *The Inner Canon* and that, in fact, it was not written to elaborate *The Inner Canon*. It



王翰林集註黃帝八十一難經綱目

盧國秦越人撰 東京道人石友諒音釋

呂廣丁德用楊玄操虞庶康傑註解

翰林醫官殿中省尚藥奉御王惟一校正

第一 經脈診數 二十四首

第二 經絡大數 九二首

第三 奇經八脈 九三首

第四 榮衛三焦 九貳首

第五 臟腑配像 九六首

三編 經脈診數 九二首

七

圖一八

Edition of *The Yellow Emperor's Classic for 81 Difficult Issues* from the Song Dynasty; the original copy is currently in a collection held at the National Palace Museum (photographed by Dr. Po-Hsin Lin)

was said that the original version of *The Yellow Emperor's Classic of 81 Difficult Issues* was written by Yue-Ren Qin (秦越人), but this information was not mentioned in the *Biographies of Bian Que and Cang Gong in the Record of the Grand Historian* (《史記·扁鵲倉公列傳》). This work was not mentioned in any literature until the late Eastern Han Dynasty. It was mentioned in the preface of *On Cold Damage and Miscellaneous Diseases* written by Zhong-Jing Zhang (張仲景). *The Classic of Difficult Issues* was written during the period from the late Western Han Dynasty to the Eastern Han Dynasty. The earliest annotation of *The Classic of Difficult Issues* was written by Guang Lv (呂廣) who was a Tai-I Lin of the Imperial



Medical Bureau of the Kingdom of Wu in the period of the Three Kingdoms (三國). Of the existing copies, the earliest are the versions by *Yi Yao Ji Lan Bin* (醫要集覽本), released by the official printing authority of the Ming Dynasty, and a copy made by a Japanese person called Takemura Ichibei (武村市兵衛) of the varieties of *The Yellow Emperor's Classic of 81 Difficult Issues* written by Jiu-Si Wang (王九思) of the Song Dynasty.

The *Classic of Difficult Issues* is written in the form of asking questions (i.e. questions vs. answers) on Chinese medicine theories. The content covers sphygmology, channels and network vessels, bowels and viscera, diseases, points, and acupuncture. With respect to sphygmology, the work introduces the basic theories of pulse examination. It was the first work that proposed the choice of an “inch opening (「寸口」)” for pulse examination. This book indicates that an inch opening is the converging place of the pulses. It is where the channel qi (visceral qi) of the twelve channels can gather together, and be used to judge the conditions of the five viscera and six bowels. The book also discusses a streaming sore and the ends of the channels, and proposes “eight extraordinary vessels” (「奇經八脈」), fifteen network vessels, and related disease patterns. It also introduces the anatomical forms and physiological functions of the bowels and the viscera, together with the circulation of construction qi and defense qi. With respect to the illustrations of diseases, it emphasizes using the four examinations and eight principles (四診八綱) for basic pattern identification, and use of the engendering and restraining relationships



among the five phases (五行) to explain the shifts and prognoses of diseases. The section on acupoints emphasizes disease patterns related to the acupoints of the five viscera, and also values the relationships between certain special points (the alarm point (募穴) and the back transport point (背俞穴)) and the movement of the channel qi and viscera. With respect to acupuncture treatment, *The Classic of Difficult Issues* mainly discusses the application of supplementation and drainage by acupuncture, and proposes the principle that “vacuity is treated by supplementing the mother and repletion is treated by draining the child” (「虛者補其母，實者瀉其子」). To summarize, *The Classic of Difficult Issues* is significant for elaborating the theories of Chinese medicine and their clinical applications.

The Divine Husbandman’s Herbal Foundation Canon (《神農本草經》)

The Divine Husbandman’s Herbal Foundation Canon (《神農本草經》) is also known as the *Foundation Canon (《本經》)* or the *Herbal Foundation Canon (《本草經》)* for short. It is the earliest work on pharmacology that has been preserved in China. As the origins of many of the medicines recorded in the book are ancient names used in the Qin and Han Dynasties and before, it is concluded that the book was written in the period from the Qin Dynasty to the Eastern Han Dynasty. The book comprehensively illustrates experts’ and ordinary peoples’ experiences in



medicinal usage during the time before the Eastern Han Dynasty. It records medicines for the treatment of over 170 diseases. There are about 365 kinds of medicine, but 18 are repeated. Thus, the actual number of medicines recorded is about 347. Medicines recorded in this book are still used today. For example, the book mentions that “ephedra can calm panting” (「麻黃平喘」), and ephedra is still one of the most important medicines used in modern medicine today for the treatment of asthma.⁶

The Divine Husbandman's Herbal Foundation Canon is composed of two parts, namely the “summary” (「序錄」) and the “main body” (「正文」). The summary consists of one volume. It is the pandect of pharmacology, and contains content such as the three grade classification method, namely the top grade (上品), the medium grade (中品), and the low grade (下品). The summary also includes the prescription formulating principle of “sovereign, minister, assistant, and courier” (「君臣佐使」), the theory of the seven effects and relevant harmony (七情合和理論), nature, flavors, and the origins of medicines, distinguishing the truth from the false, the preparation and usage of medicines, clinical medication, dosage, and the methods and times for taking medicine. The “main body” classifies medicines into three grades, and describes the names, nature, flavors, and diseases that the medicines are mainly used to treat, together with their origins (mountain, valley, river, lake), and other names, respectively. The book adopts the method of three-grade classification to classify medicines into the top grade, medium grade, or low grade



depending on a medicine's medicinal properties and its effects. Medicines of the top grade are those that “nourish the body, respond to the heavens, have no toxicity, and will not harm the human body even if they are taken in large quantities and for a long period of time.” (「主養命以應天，無毒，多服久服不傷人。」) Medicines of the top grade are usually sovereign medicines. 120 top grade medicines are recorded in the book, with 125 types. Most of them are nourishing medicines. Medium grade medicines are those that “nourish nature, respond to the heavens, might be toxic, or might not. The dosage should always be considered.” (「主養性以應天，無毒有毒，斟酌其宜。」) Most medium grade medicines are minister medicines in a prescription. 120 medium grade medicines are recorded, with 118 actual kinds. Most of them have both nourishing and disease-treatment effects. Low grade medicines are those that “are mainly used to cure diseases, that respond to the earth, and most of them are toxic, and cannot be taken for long” (「主治病以應地，多毒，不可久服」). Most low grade medicines are assistant and courier medicines in a prescription. 125 low grade medicines are recorded, with 122 actual kinds. Most of them have disease-treatment effects, can eliminate cold and heat, and break accumulations and gatherings. *The Divine Husbandman's Herbal Foundation Canon* laid the preliminary foundation for the theories of Chinese medicine pharmacology and, moreover, had profound influences on the development of herbalism and formulas. For example, Hong-Jing Tao (陶弘景) extended and explicated *The Divine*



Husbandman's Herbal Foundation Canon, absorbed the study results on herbs from other experts, and then wrote *Variorum of the Divine Husbandman's Herbal Foundation Canon* (《神農本草經集注》).⁷

***Formulas for A Hundred Diseases* (《治百病方》)**

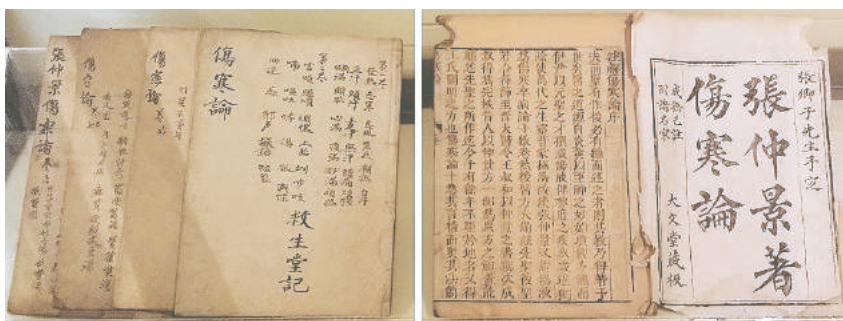
Formulas for A Hundred Diseases was a bamboo slip (簡牘) dating back to the Eastern Han Dynasty. In November 1972 AD, a tomb was discovered at Hantanpo (旱灘坡), Wuwei City, Gansu Province. After verification, it was decided that the occupant of the tomb may have been an aged physician from the Eastern Han Dynasty. Apart from a cane with a turtledove (鳩首杖) and Wu-Zhu coins (五銖錢), the burial objects include 92 handwritten medical slips. These were first named the *Wuwei Medical Bamboo Slips* (《武威漢代醫簡》). However, as the slips contained characters of “formulas for a hundred diseases” (「治百病方」), they were renamed as *Formulas for A Hundred Diseases*. The content of the work covers diseases related to internal medicine, surgery, gynecology and obstetrics, pediatrics, and facial features. It describes the causes, pathology, and patterns of different diseases, such as coughs, cold damage, ulcers, hemorrhage, infertility, and leprosy. The content was written in sequence with one disease followed by one prescription. Each clause lists the formula name, the disease name or pattern, the dosage, pharmacy, instructions for taking the medicine, and contraindications, etc. The work also records about a hundred medicines, the preparation



methods, the different preparations, and the differences in the periods for taking the medicines. With respect to acupuncture, the work also records a variety of information, such as points for acupuncture, methods of needle retention, contraindications of acupuncture, and the ages of patients. *Formulas for A Hundred Diseases* has comparatively few medical theories, which makes it different from other medical works. Although the work is not long, and does not have many characters, it is a record of clinical experience, and is significant for studies on the medical science of the Han Dynasty.

On Cold Damage and Miscellaneous Diseases (《傷寒雜病論》)

On Cold Damage and Miscellaneous Diseases was written by Zhong-Jing Zhang (張仲景). The book has a total of 16 volumes. Based on two areas, namely causes and lesions, scholars of later generations divided the content of the book into two sections, specifically “cold damage” and “miscellaneous diseases”. The section on “cold damage” is the current edition of *On Cold Damage*, and the content of the section on “miscellaneous diseases” is also known as *Essential Prescriptions of the Golden Coffer (《金匱要略》)*. *On Cold Damage and Miscellaneous Diseases* is a book featuring a set of diagnoses and treatment principles that include principles, methods, formulas, and medicines. Zhong-Jing Zhang wrote the book to discuss cold damage by the six channels and a



On Cold Damage written by Zhong-Jing Zhang
Source: A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan
(Photographed by Dr. Jaung-Geng Lin)

discussion about miscellaneous diseases by viscera, referring to the basic theories in classical medical works such as *Plain Questions* (《素問》), *Magic Pivot* (《靈樞》), and *81 Difficult Issues*, combining his own clinical experience. *On Cold Damage and Miscellaneous Diseases* records a total of 269 prescriptions. Medicines used include 214 different types. The book contains commonly used formulas for different departments. Therefore, it is regarded as the “Origin of Remedy Books” (「方書之祖」).

On Cold Damage has 10 volumes, and 22 articles. There are a total of 397 clauses. It focuses on a discussion of externally contracted diseases and relevant changes. The book illustrates pulse manifestations, patterns, treatment prescriptions, and prognosis judgments, etc. of cold damage at different stages in the form of clauses. The book not only introduces the features of different patterns and corresponding treatments, but also

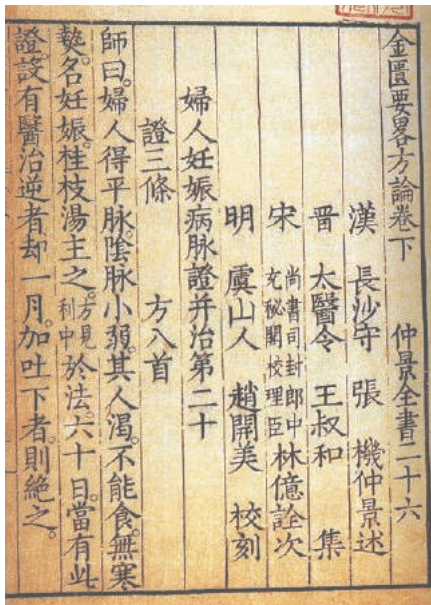


explains the shifts and combination diseases of different patterns, as well as the transmuted patterns and bad patterns caused by improper treatment, and remedies. Zhong-Jing Zhang summarized the treatment methods into “eight-principle pattern identifications” (「八綱辨證」) (eight principles: yin, yang, exterior, interior, cold, hot, vacuity, and repletion (八綱：陰、陽、表、裏、寒、熱、虛、實)) and “six-channel treatment method decisions” (「六經論治」) (six channels: Three Yang Channels (三陽經) (the Tai Yang channel (太陽經), Yang Ming channel (陽明經), and Shao Yang channel (少陽經)) and the Three Yin channels (三陰經) (Tai Yin channel (太陰經), Shao Yin channel (少陰經), and Jue Yin channel (厥陰經))). Zhong-Jing Zhang referred to the principle of the six-channel shift of diseases proposed in *Plain Questions · Treatise on Heat* (《素問·熱論》) when observing the development of externally contracted diseases. Considering the different symptoms at different stages of a disease, Zhong-Jing Zhang connected the occurrence and shifts in a disease to the entire viscera, channels, and network vessels, and then comprehensively analyzed the strength of a patient’s constitution, pathological mechanisms, physiological changes, and urgency and the normal progress of the disease. Thus, he obtained six categories of pattern. After diagnosis, patients were treated by different methods of sweating, vomiting, discharging, harmonizing, warming, clearing, supplementing, and dispersing (汗、吐、下、和、溫、清、補、消). In addition, *On Cold Damage and Miscellaneous Diseases* emphasizes that during treatment, for the patterns



of the Three Yang channels, eliminating disease evils (病邪) is the main purpose, and for the patterns of the Three Yin Channels, the treatment should follow the principle of recovering the body's disease-defending abilities. As most formulas in this book have simplified medicine selections, proper combinations, and significant effects, people from later generations regarded *On Cold Damage and Miscellaneous Diseases* as "Classical Formulas" (「經方」).

Essential Prescriptions of the Golden Coffer (《金匱要略》) is also known as *On the Essential Prescriptions of the Golden Coffer* (《金匱要略方論》). The book is divided into 25 articles by disease. It talks about miscellaneous diseases that cause internal damage. The content mainly



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 62. (A collection held in the library of the Chinese Medicine Research Institute in China)



covers miscellaneous internal diseases, along with diseases of surgery, and gynecology, etc. The first article is entitled “Morbid Pulse and Signs of Viscera and Channels and Network Vessels” (「臟腑經絡先後病脈證」). This article is the basis for the content of the entire book. Based on the theories of viscera, channels and network vessels, it explains the occurrence and changes of different patterns, and their relationships with the viscera, channels and network vessels. The book refers to the theory of yin, yang, and the five phases, and the theory of viscera, channels and network vessels proposed by *The Inner Canon*, using it as the theory behind pattern identification as the basis for determining treatment. With respect to diagnosis, Zhong-Jing Zhang not only comprehensively applied four examinations (inspection, smelling and listening, inquiry, and palpation; 望、聞、問、切), but also gave a detailed description of tongue examinations and abdominal examinations for several diseases. With respect to pulse examination (脈診), Zhong-Jing Zhang proposed a flexible identification method of “precedence of pulse over signs and precedence of signs over the pulse” (「捨證從脈、捨脈從證」). Currently, the earliest preserved copy of *Essential Prescriptions of the Golden Coffer* is the carved copy from the Yuan Dynasty. *Expanded Prescriptions of the Golden Coffer* (《金匱方論衍義》) by Yi-De Zhao (趙以德) of the Yuan Dynasty is a comparative, early annotated work of this book, with *Understanding of the Essential Prescriptions of the Golden Coffer* (《金匱要略心典》) by Yi You (尤怡) of the Qing Dynasty being the most



famous version.⁸

Section 4 Biographies of Medical Experts

Yu-Yi Chun (淳于意)

Yu-Yi Chun was born around 200 BC, in his native place of Zibo (淄博), Shandong Province. He used to be known as Tai Cang Zhang (太倉長) (taking charge of the national granary) of Qi State, and thus was also called Tai Cang Gong (「太倉公」) or Cang Gong (「倉公」). When he was young, he liked to study medical skills. He once followed Gongsun Guang (公孫光) to study medical works and gain experience in disease treatment. Later, he acknowledged Gongcheng Yangqing (公乘陽慶) as his mentor to study medicine, prescriptions, and methods of diagnosis and prognosis judgment using five colors. After learning his medical skills for three years, he started to practice medicine. His treatment methods included medicines, acupuncture, and moxibustion, etc. It is said that Yu-Yi Chun (淳于意) had excellent medical skills and an arrogant personality. It was not easy to seek medical help from him. Thus, he had many enemies. In the fourth year of Emperor Wen's rule (176 BC), the local official believed a false accusation made against Yu-Yi Chun and decided to send him to Chang'an to receive interrogation. Yu-Yi Chun had five daughters, but no son. At that time, he sentimentally said, "Having no son, you have



no one to rely on in urgent situations” (「生子不生男，緩急非所益」). Thus, his youngest daughter Ti-Ying (緹縈) insisted on accompanying her father to Chang'an. Ti-Ying submitted a statement to the emperor, imploring that her father was innocent, but that he had to suffer from corporal punishment due to a false accusation. She expressed her willingness to become a servant for the local authorities in exchange for exempting her father from punishment. Emperor Wen (漢文帝) called her in for questioning. He was moved by Ti-Ying, thus acquitting Yu-Yi Chun, and abolishing corporal punishment.⁹

Yu-Yi Chun had rich experience in different departments. With respect to the four examinations (inspection, smelling and listening, inquiry, and palpation), Yu-Yi Chun was especially good at inspection and palpation. *Case Record* (《診籍》) records 25 cases, covering internal medicine, surgery, gynecology, pediatrics, and ophthalmology and otorhinolaryngology. Each case record records detailed information on the patient's name, age, gender, occupation, address, disease symptoms, diagnosis, disease cause, treatment, treatment effects, and prognosis, etc. Most of the case records noted in this book have information on the patients' pulse manifestations, such as floating pulse, deep pulse, string-like pulse, tight pulse, rapid pulse, and weak pulse, etc. This book contributes greatly to the literature and the field of case records in Chinese medicine history.



Dan Su (蘇耽)

Dan Su was born around 200 BC, and was a citizen of Guiyang (桂陽) (nowadays Chenzhou City of Hunan Province). Dan Su had excellent medical skills. His father passed away when he was young and he treated his mother with filial respect, and was kind to his neighbors. It was said that Dan Su was capable of predicting diseases. During the period of Emperor Wen's rule in the Western Han Dynasty (from 179 BC to 157 BC), Dan Su was regarded as the "Immortal Su" (「蘇仙」) by the villagers. *Tales of Immortals* (《列仙傳》) records the story of the "Orange Leaf and Well Water" (「橘井泉香」) and how Dan Su saved the villagers. It is said that Dan Su took care of his mother with extreme filial piety, and then became an immortal. He once told his mother, "An epidemic disease will spread next year. If someone falls ill, fetch one liter of water from the well in the courtyard, and add one leaf from the orange tree. The patient will recover after drinking the water." The following year, an epidemic disease did occur. His mother treated a patient in accordance with his instructions. The patient recovered once he drank the water. As a result, even people from faraway places came to drink the well water with an orange leaf in it. Nowadays, there is the Temple of the Immortal Su (蘇仙觀) Stone to commemorate Su becoming immortal (飛升石), and the White Deer Cave (白鹿洞) at the Immortal Su Ridge in the suburb of Chengzhou, Hunan Province. These sites are important cultural relics that



commemorate Dan Su. There are even several streets and shops in the city that are named after the Immortal Su.¹⁰

Weng Fu (涪翁) and Gao Cheng (程高)

In the period of the Eastern Han Dynasty, an old man often went fishing near Fushui, Sichuan Province (四川涪水). As nobody knew his name, he was called Weng Fu and was said to be a hermit physician. He had outstanding medical skills, and was especially proficient in acupuncture and moxibustion. He would treat any patients he met. He did not use decoctions for treatment, but simply acupunctured several points to cure diseases. Weng Fu's works included *Needle Canon* (《針經》) and *Methods of Pulse Examination* (《診脈法》), and it is a pity that both of these have been lost.

Gao Cheng was the student of Weng Fu. He stayed with Weng Fu for some time to learn medical skills. When Weng Fu realised that his student did not intend to use his medical skills for fame or fortune, he passed all his skills to Gao Cheng. As Gao Cheng was neither interested in fame or fortune, nor willing to take an official career, he too became a hermit, and lived in a rural area to practice medicine. *The History of the Late Han Dynasty · Collected Biographies of Remedies* (《後漢書·方伎列傳》) has the following simplified record of the story of Weng Fu and Gao Cheng: Weng Fu “survived by begging for food. He would acupuncture any patient he met, and his treatment had immediate effects. He wrote



Needle Canon and Methods of Pulse Examination. Gao Cheng asked to be his student for years, and then Weng Fu took him in.” The people of Mianzhou (綿州) entered Weng Fu into the Ten Saints Hall of Nanshan (「南山十賢堂」). The “Weng Fu Stone Sculpture” and the “Han Stone Portrait of Weng Fu” in the local area are memorials to Weng Fu that have been passed down the generations.

Yu Guo (郭玉)

Yu Guo was a physician in the early Eastern Han Dynasty. His native place was Luoxian, Guanghanjun, Sichuan Province (四川廣漢郡雒縣). When he was young, he followed Gao Cheng to learn the remedy books, pulse examination, and acupuncture, etc. He used to be an officer of the Imperial Medical Bureau during the rule of Emperor He of the Han Dynasty (漢和帝) (from 89 AD to 105 AD). The biography of Yu Guo in *The History of the Late Han Dynasty · Collected Biographies of Remedies* records his stories. When noble women in the imperial palace invited the physician to the palace to give medical treatment, they only needed to reach out their hands from behind the bed-curtain to receive a diagnosis. As Yu Guo had excellent skills and had cured many patients with serious diseases, Emperor He of Han wanted to test his skill of pulse examination. He ordered a man with fair skin and thin wrists and a woman from the palace to stay behind the bed-curtain, and asked Yu Guo to examine the pulse of a hand of each of them. When Emperor He asked about the



situation of the patient, Yu Guo answered, “The pulse of the left hand is yin, and the pulse of the right is yang. The pulses show the features of both male and female. They seem to be the pulses of different people. I am wondering why.” (「左陰右陽，脈有男女，狀若異人，臣疑其故。」) Emperor He of Han admired his correct diagnosis very much.

Yu Guo had superior medical skills, and was kind-hearted. He had noble medical ethics and tried his best to treat patients. When he met poor patients, he treated them equally. However, his treatment of nobles often didn't have good results. Therefore, Emperor He of Han ordered a noble patient to put on the clothes of an ordinary person, change his place of living, and then invite Yu Guo to treat him. After receiving acupuncture, the noble recovered. Emperor He of Han called in Yu Guo and asked him why. Yu Guo answered, “Attention is very important to a physician. Small gaps between the muscles and the skin texture require skillful needle manipulation. Even the smallest error in acupuncture can cause severe results. The secret of the manipulation technique lies in the mind and the hand. It can be understood but cannot be described. The nobles stand high above me, and I feel panic. My treatment for them encounters four difficulties. Firstly, they may not follow my instructions. Secondly, they don't take good care of their health. Thirdly, they don't have strong bones and sinews, which is not good for using medicines. Fourthly, they are indolent. Acupuncture has different techniques and depth, and timing is very important. Furthermore, I panic and am cautious in my judgment.



How can these reasons be beneficial to disease treatment? This is why I can't heal them.” (「醫之為言意也，腠理至微，隨氣用巧，針石之間，毫芒即乖，神存乎心手之際，可得解而不可得言也。夫貴者處尊高以臨臣，臣懷怖懼以承之，其為療也，有四難焉：自用意而不任臣，一難也；將身不謹，二難也；骨節不強，不能使藥，三難也；好逸惡勞，四難也。針有分寸，時有破漏，重以恐懼之心，加以裁慎之志，臣意且猶不盡，何有于病哉？此其所為不癒也。」)

Kang Han (韓康)

Kang Han styled himself as Bo-Xu (伯休), and was also known as Tian-Xiu (恬休). His native place was Baling, Guanzhong (關中霸陵) (nowadays Shidong, Xi'an). He was born around 200 AD, and although born to a distinguished family, he was honest and disciplined. He had no interest in fame or fortune, but devoted himself to medical study and survived by collecting and selling medicines. He was famous for “no bargaining for over 30 years” (「口不二價，三十餘年」) at a fair in Chang'an. This was his way of showing credit, indicating that his goods were genuine and his prices were reasonable, and that he never cheated children or elderly adults. Afterwards, the term “being honest even to children and aged people” (「童叟無欺」) was regarded as a description of fair trading.

During the rule of Emperor Huan of the Han Dynasty (漢桓帝) (from 147 AD to 167 AD), the imperial court heard of Kang Han's knowledge



and talent, and awarded him the title of Scholar. The court sent lavish gifts and a carriage to collect him. When the emissary carrying the imperial edict arrived at his house, he could only agree to go with them. However, he refused to take the carriage of the court, and instead drove his own ox cart, leaving before dawn. Before arriving at a certain place, the governor of the Ting heard that Kang Han would be passing by. The governor spent manpower and animal power to repair the road and build a bridge. However, when Kang Han arrived, the governor judged him by his appearance and thought Kang Han was a farmer. Thus, he ordered the confiscation of his ox. After a while, the emissary of the court arrived. He found that Kang Han's ox had been taken away, and ordered that the governor of the Ting should be killed. Kang Han said, "This is my fault. You can not blame the governor. He is not guilty", and he stopped the emissary from killing him. However, later on his journey, Kang Han managed to escape eastwards into the Baling Mountains, and he lived there in seclusion until the end of his life.

Weng Hu (壺翁) and Chang-Fang Fei (費長房)

Weng Hu was born around 200 AD, and was a drug salesperson in the Eastern Han Dynasty. Literature indicates "Xie Yuan, who was also called Hu Gong, citizen of Li Yang County, sold drugs in the market at fixed prices. The drugs he sold to patients for healing diseases all work." (「壺公謝元，歷陽人，賣藥於市，不二價，治病皆癒。」) As he always



hung a calabash (葫蘆) as a sign for medical services and medicine sales, he was also called “Hu Gong” (「壺公」). Hu Gong was very good at medical techniques and was kind and charitable. He was the mentor of Chang-Fang Fei. *The History of the Late Han Dynasty* (《後漢書》) records the detailed story of when Weng Hu taught Chang-Fang Fei his medical skills. It was said that Chang-Fang Fei was a native of Runan, Henan Province (nowadays Xinan, Shangcai County, Henan Province). One day, he saw an old man (Weng Hu) selling medicines in the fair. The old man carried a bamboo pole on which hung a calabash. When it got dark, and people were leaving the fair, the old man jumped into the calabash. Nobody except Chang-Fang Fei saw this. He was standing upstairs at the time and he felt strange, In order to find out who the old man was, Chang-Fang Fei treated him with wine. However, the old man knew Chang-Fang Fei’s purpose, and asked him to return the next day. When Chang-Fang Fei visited the old man again, the old man invited him to enter the calabash. The hall was set neatly and gorgeously. Delicious food and wine had been prepared. After a conversation with the old man, Chang-Fang Fei immediately asked to be his student. He subsequently learned medical skills and methods of turning himself into an immortal. Years later, when Chang-Fang Fei had finished his studies, Weng Hu gave him a bamboo pole for treating diseases and dispelling ghosts. From then on, Chang-Fang Fei started to hang a pot on the pole to practice medicine. As the story spread and was passed on, people in later generations changed the





Hua-Tuo

General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 57 (A collection of National Palace Museum)

《國志》) have a biography on him. Hua-Tuo was very smart and worked hard in his studies, and was good at multiple cannons. He loved studying medical skills, especially knowledge on maintaining good health. When Hua-Tuo was young, he went to Xuzhou (徐州) for study. He was good at integrating the practical experiences of different physicians from different schools. Therefore, he had a wide knowledge of medicines. Consequently, Prime Minister Gui Chen (陳珪) and Taiwei Wan Huang (黃琬) invited him to become a government official several times, but Hua-Tuo just thanked them and refused.

Hua-Tuo was proficient in internal medicine, surgery, gynecology,

phrase “practicing medicine” into “hanging pot” (「懸壺」).

Hua-Tuo (華佗)

Hua-Tuo styled himself as Yuan-Hua (元化). He was a native of Qiaoxian of Pei State (nowadays Haoxian, Anhui Province), and was born in the period from 110 AD to 207 AD. He was an excellent physician in the Eastern Han Dynasty. Both *The History of the Late Han Dynasty* and *Records of the Three Kingdoms* (《三



pediatrics, ophthalmology and otorhinolaryngology, acupuncture, and moxibustion. He was especially famous for surgery, acupuncture, and moxibustion. Later generations honored him as the “Originator of Surgery” (「外科鼻祖」). According to the *Biography of Hua-Tuo in The History of the Late Han Dynasty* (《後漢書·華佗傳》), “If the disease is in the abdomen where needles and decoctions cannot reach, let the patient take anesthetic powder with wine. The patient will act like he is drunk, and will not feel anything. Then cut open the abdomen, remove the accumulated things. If the disease is in the stomach or intestines, wash it, and cut out the damaged part. After that, sew up, and apply magic paste. The wound will heal in four to five days, and the patient will recover within one month”. The “anesthetic powder” (「麻沸散」) mentioned in the biography is the earliest record of an anesthetic. In order to reduce pain during surgical operations, based on the effects of aconite, henbane seed, ephedra, and yellow azalea recorded in *The Divine Husbandman’s Herbal Foundation Canon* and combining his own clinical experience, Hua-Tuo created a prescription using several medicines that had anesthetic effects, including datura. This prescription was called “anesthetic powder”. Hua-Tuo was also inspired by the fact people would pass out if they drank too much alcohol, and become unconscious. He asked patients to take his anesthetic powder with wine before a surgical operation. Later, this method was widely used in surgical operations. In the period of the Three Kingdoms, Guan Gong (關公) was shot by a toxic arrow in his right arm



at Fangcheng (樊城). Hua-Tuo sprayed the anesthetic powder on the wound before cutting open the arm with a pointed knife, and scraping the bone to remove the toxin. Due to the anesthetic and the pain-relieving effects of the powder, Guan Gong could still drink wine, play I-go, and talk and laugh with others, which were admired by both officers and soldiers. The story spread wide.

With respect to prescriptions and medication, the *Biography of Hua-Tuo in The History of the Late Han Dynasty* writes that “he was proficient in prescriptions. He used only a few medicines for one formula. He mastered the proportion of the medicines in his mind, and there was no need to weigh the medicines”. In addition, it is said that Hua-Tuo created Five Animal Exercises (五禽戲). He emphasized that exercising all four limbs was the key to strengthening the human body. Exercise could free blood vessels, prevent diseases, promote health, and thus prolong life. Five Animal Exercises created by Hua-Tuo has unique features and advantages. Imitating the movement of five different animals has different fitness effects. Firstly, when imitating the movement of a tiger, the exercise features vigor and strength. Frequent exercise can strengthen all four limbs, and increase strength. Secondly, imitating the movement of a deer will help a person to calm down and relax, and to stretch and twist. Frequent exercise can stretch the sinews, and make the waist and legs flexible. Thirdly, imitating the movement of a bear can ensure footsteps are steady, and that movement is powerful. Frequent exercise can greatly



The Five Animal Exercises of Hua-Tuo (A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

increase strength and promote blood flow. Fourthly, imitating the movement of a monkey can ensure movement is agile and precise. Monkeys jump freely, and climb flexibly. They like to rub their faces. Frequent exercise can result in a clear mind and flexible movement. Fifthly, frequently imitating the movement of a bird in the sky, leisurely flying high and landing gently can make your actions lively, and make you happy.

The biography of Hua-Tuo in Records of the Three Kingdoms (《三國志·華佗傳》) records a case of parasitic disease treatment. Hua-Tuo once met a patient on the road. The patient pressed his abdomen with two



hands, and bowed down from time to time to vomit. Hua-Tuo immediately examined the patient's pulses, and concluded that it was caused by a blockage of the biliary tract, esophagus, and throat due to the retrograde movement of a worm. Hua-Tuo said to him, "The person ahead selling cakes has sour pickled mustard soup. It can stop your pain." He asked the patient to drink a large bowl of the soup, gave him a prescription, and asked him to take the medicine in a few days. The patient had come all the way from an urban area to seek medical help. He doubted Hua-Tuo's words, but still followed his instructions. After he drank the soup, the pain stopped, and he no longer felt uncomfortable in his throat. The vomiting also stopped. A few days later, he took the medicine, and vomited a long, fat worm. The patient went to thank Hua-Tuo. Unfortunately, Hua-Tuo was not at home. The patient entered a simply arranged house, and was surprised to find many worms hanging on the wall to the north. The worms were of different sizes, and were stiff. Their shape was exactly the same as the one he had vomited. He then admired Hua-Tuo's medical skills even more than before.

Hua-Tuo did not stick to one method for disease treatment. He often used flexible methods to treat people. *The biography of Hua-Tuo in Records of the Three Kingdoms* records a case of gynecology and obstetrics. The case concerned an injury during the pregnancy of the wife of General Li. This case of twin diagnosis was the earliest record in literature about a dead fetus remaining inside the mother for a long time.



General Li's wife had fallen ill, and had asked Hua-Tuo to treat her. After palpation, Hua-Tuo believed that it was because a fetus had not been born due to an injury during the pregnancy. General Li told Hua-Tuo that the baby had been born. A few days later, General Li's wife was a little better. However, a few months later, she felt severe pain in her abdomen. They again invited Hua-Tuo and, after palpation, Hua-Tuo told General Li that his wife's pulse manifestation was the same as before. She had been carrying twins. When the first baby was born, she had lost too much blood, which affected the delivery of the other baby. The baby was now dead inside her. Hua-Tuo acupunctured Mrs. Li, and prescribed a formula for her. Two days later, Mrs. Li felt something in her abdomen, but the baby couldn't be delivered. Hua-Tuo concluded that the fetus had become dry, and the strength of the medicine prescribed was not enough to push it out. An operation must be conducted or the life of the mother would be in danger. He immediately instructed the female servants to remove the fetus and a dead fetus was taken out. The shape was identifiable, but its color had turned to black.

Zhong-Jing Zhang (張仲景)

Zhong-Jing Zhang's (150 AD-219 AD) given name was Ji (機). He came from Niyang, Nanyangjun (nowadays Nanyang, Henan Province). He lived in the last years of the Eastern Han Dynasty. At that time, eunuchs and relatives of the emperor's mother and wives fought against each other,



and most of the Shi Da Fu was single-minded in pursuing fame and fortune. Social morality was ruined. As people paid no attention to medical science and believed in shaman healers, the development of medical science was halted. At that time, natural disasters still happened frequently, and wars continued. Then, epidemic diseases started to prevail. Zhong-Jing Zhang mentioned in *On Cold Damage and Miscellaneous Diseases · Author's Preface* (《傷寒雜病論·自序》) that

“my clan was prosperous. There were about 200 people. From the first year of Jian’an, two thirds of them died within 10 years, and seven tenths of them died of cold damage”. According to the record, the clan of Zhong-Jing Zhang was noble and prosperous in the local area and used to have more than 200 people. However, in under 10 years, counting from the first year of Jian’an (196 AD), two thirds of them had died of disease, and seven tenths of the deaths were caused by cold damage. In order to alleviate the pain for patients, Zhong-Jing Zhang followed Bo-Zu Zhang (張伯祖) to study medicine. Much literature has recorded Zhong-Jing Zhang’s excellent medical skills. It is said that when Zhong-Jing Zhang traveled to



Zhong-Jing Zhang

A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)



the capital city, he met Cang Wang (王粲) (one of the seven scholars of Jian'an). He said to Cang Wang, "You have a disease. You will lose your eyebrows when you are 40, and half a year after that, you will die. You can take a five stone decoction (五石湯) to prevent this disaster." Cang Wang was then only just over 20 years old and he felt the words were unpleasant. He accepted the medicines but did not take them. Three days later, Zhong-Jing Zhang again met Cang Wang, and asked, "Did you take the medicines?" Cang Wang answered, "Yes." Zhong-Jing said, "Judging from your complexion, you didn't take the medicines. Why not value your own life?" Cang Wang still didn't believe his words. 20 years later, his eyebrows fell off just as Zhong-Jing had predicted and half a year later, he passed away. In *Bao Pu Zi · Zhi Li* (《抱朴子·至理》), the author Hong Ge (葛洪) regarded Zhong-Jing Zhang as being of the same level as Bian Que (扁鵲), Wen Zhi (文摯), Yu-Yi Chun (淳于意), and Hua-Tuo, and honored him as the "Saint of Medical Gurus" (「醫宗之聖」).

References

1. Jing-Wei Li & Jaung-Geng Lin (2000). *General History of Chinese Medical* (Volume of Ancient Times). Beijing: People's Hygiene Press. pp. 113-168.
2. Zhi-Ya Zhen (1994). History of Medicine in China. *Taipei: Zhi-Yin Books*. pp. 63-126.



3. Rong-Qing Xu & Heng Zhou (2000). Achievements of the Development of Traditional Chinese Medicine in the Dynasties of Qin, Han, Jin, Tang, Song and Jin. *Journal of Nanjing University of Traditional Chinese Medicine (Social Science)*. 1 (1). pp. 23-28.
4. De-Chen Yao (2001). Reasons Affecting Communication in Medicine Between China and Abroad. *Journal of Nanjing University of Traditional Chinese Medicine (Social Science)*. 2(1). pp. 21-24.
5. Guo-Qiang Chen, etc. (1988). History of Bai Yue Nationality. *Chinese Academy of Social Sciences Press*. pp. 262.
6. Yi Hsieh (2000). The Earliest Pharmacopoeia in Chinese History-Shennong Ben Cao Jing (Shennong's Herbal). *Henan Medical Information*. 8 (6). pp. 65-66.
7. Li Chen & Xin-Jian Huang (1997). The Development of Pharmacology in the Spring and Autumn (770 BC-476 BC) and Warring States (475 BC-221 BC) Periods Viewed From the Perspective of *Myriad Things* and *The Formulas for Fifty-Two Diseases*. *Journal of Traditional Chinese Medicine University of Hunan*. 17 (2). pp. 3-5.
8. Jaung-Geng Lin (2001). Development of Chinese Medicine and Its Future Viewed From the Perspective of Cultures of the Chu and Han Dynasties. *Special Issue I of Academic Conference Papers for Cultures of the Chu and Han Dynasties*. pp. 212-223.
- 9 Yu-Feng Tao (2000). Textual Research on Medical Records Prior to the Song Dynasty. *Acta Universitatis Traditionis Medicalis Sinensis*



Pharmacologiaeque Shanghai (Shanghai University of Traditional Chinese Medicine). 14 (1). pp. 14-17.

10. Apricot Forest Lay Buddhist (1998). Myths of Divine Doctors and Medicines. *China Yoga Press, Taipei*. pp. 27-28.





A statue of Hua-Tuo (photographed by Pei-Chi Chou at the Longshan Temple, Wanhua district of Taipei City, Taiwan (萬華龍山寺))



Chapter 5 *Chinese Medicine in the Periods
of the Three Kingdoms, Wei Jin
and North-South dynasties
(from 220 AD to 589 AD)*

Section 1 Historical Background

The period from 220 AD-589 AD was one of the most turbulent periods in China's history. Towards the end of the Eastern Han dynasty (25 AD-220 AD), the eunuch dictatorship and the relatives of the emperors' mothers and wives fought for power. Political corruption was rife, thus sparking off endless peasant uprisings. In 220 AD, Cao Pi (曹丕) (Cao Cao's (曹操) son) made Emperor Xian (漢獻帝) relinquish the throne to him, before establishing the State of Wei (「魏」). In 221 AD, Liu Bei (劉備), a distant relative of the Han imperial clan, declared himself Emperor of the State of Han in present-day Chengdu (成都), Sichuan Province. The state, historically known as “Shu Han” (「蜀漢」) or “Shu” (「蜀」), governed the upper reaches of the Yangtze River (長江) (covering present-day Sichuan Province, Yunnan Province, Northern Guizhou Province, and the previous Hanzhong Prefecture in present-day Shaanxi Province). In 222 AD, Sun Quan (孫權) declared himself “Emperor of Wu” (「吳王」)



in Jianye (建業) (present-day Nanjing Province). Also known as “Eastern Wu” (「東吳」), the state ruled the middle and lower reaches of the Yangtze River and the territory to the south of the river. These three states of Wei, Shu, and Wu coexisted for more than 40 years (220 AD-265 AD) during which time these three kingdoms went to war almost every year. The tripartite situation was not over until Wei conquered Shu Han in 263 AD. The conquest of Shu was accredited to Sima Zhao (司馬昭) who was granted the title of “Duke of Jin” (晉王). Gradually, the Sima clan wielded their immense power in Wei.

In 265 AD, Sima Yan (司馬炎), Sima Zhao’s son, usurped the Wei throne and proclaimed himself Emperor Wu of the Jin dynasty (晉武帝). The dynasty was historically known as Western Jin (265 AD-316 AD). In 280 AD, the Jin conquered Eastern Wu, ending the chaos of the late Eastern Han dynasty, and unifying China. However, the unification did not last long because the Sima clan’s completion of a central ruling power quickly weakened the dynasty. In the War of the Eight Princes (「八王之亂」), various imperial princes waged a 16-year tangled war to grab power. The long war not only exhausted the force of those kings, but also seriously disrupted social progression. Consequently, various ethnic groups rose up against the Jin regime, and at the same time, minorities in the North seized the chance to invade central China. At that time, the Yellow River (黃河流域) basin was in chaos. Large numbers of clans and peasants fled from central China to south of the Yangtze River to escape



the war. In 316 AD, Emperor Min of the Jin (「晉愍帝」) was captured and the Western Jin dynasty ended. Once again, a north-south confrontation formed in China. Northern China was at war, known as the Sixteen Barbarian States (「五胡十六國」). During this period, more than ten local regimes were set up, one after another. In 439 AD, the Northern Wei (386 AD-557 AD) (a Xianbei (鮮卑) regime) unified northern China, thus bringing about nearly a hundred years of stable life. However, in 534 AD the Northern Wei was split into the Eastern and Western Wei, which were then supplanted by the Northern Qi (北齊) and Northern Zhou (北周) successively. In 581 AD, the Sui dynasty (581 AD-618 AD) became the governors of northern China by conquering the Northern Zhou (557 AD-581AD). In southern China, Sima Rui (司馬睿) King of Langya (琅琊王) from the Western Jin Dynasty, founded the Eastern Jin (317 AD-420 AD) at Jiankang (建康) in 317 AD. Because of the narrow territory, the relatively social stability promoted the flourishing of economics and culture in the Eastern Jin.

In 420 AD, Liu Yu (劉裕) usurped the Eastern Jin and founded the Liu Song (劉宋) Dynasty (420 AD-479 AD). From then on, the southern regime was successively controlled by Liu Song (420 AD-479 AD), the Southern Qi (479 AD-502 AD), the Liang (梁) dynasty (502 AD-557 AD), and then the Chen (陳) dynasty (557 AD-589 AD). Because of their geographical position, these four dynasties are historically known as the Southern Dynasties (420 AD-589 AD), with the Northern Wei (386



AD-535 AD), Eastern Wei (534 AD-550 AD), Western Wei (535AD-557 AD), Northern Qi (550 AD-577 AD), and Northern Zhou (557 AD-581AD) known as the Northern Dynasties (439 AD-581 AD). Although both the North and the South had unified governments, the north-south confrontations lasted for one and half centuries. However, although wars broke out from time to time, the Southern army never crossed the Yellow River to invade the North, and nor did the Northern army cross the Yangtze River for the same reason. This is why this period was called the Northern and Southern Dynasties. In 589 AD, the Sui dynasty overthrew the Chen dynasty, ending the breakup the Period of the northern and southern dynasties and reunifying China.

Closely related to people's lives, religions interact with medical science and pharmacy. During the period of the Han dynasty (206 BC-220 AD), Confucianism was the official state ideology. Due to the rise of Buddhism and the popularity of Taoism, the dominant position of Confucianism was weakened in the late Western Han when Buddhism was introduced to China from India. In the Wei and Jin dynasties, Indian and Western region monks regularly came to China. Indian medicine was introduced to China along with the translation of Buddhist canons. Gradually, a tripartite coexistence formed between Confucianism, Buddhism, and Taoism.



Section 2 An Introduction to the History of Traditional Chinese Medicine

The development of medicine and pharmacy

In a turbulent society, the Powder of Five Minerals (「寒石散」) was very popular with ordinary people who believed in metaphysics. This medicine not only promoted the rapid development of alchemy, but also brought about many new diseases. On one hand, social unrest facilitated multi-ethnic merger and cultural exchange. This meant physicians of that period had access to various medical sciences and pharmacies of other ethnic groups. On the other hand, frequent wars required more clinicians, thus promoting the development of specialized clinical disciplines, and enriching clinical experience. Meanwhile, official medical education, the edition of annotations sort-out to medical classics, and international exchange of medical knowledge all encouraged the full development of Chinese medicine.

Following the development of society, medical science and pharmacy, people paid more attention to their personal hygiene, dietetic hygiene, and environmental hygiene, an important measure of personal hygiene, was recorded in a three-volume tome *On Bathing* (《沐浴經》) in the *History of Southern Qi* (《南齊書》). This indicated how much people valued bathing. After



Buddhism was introduced into China, people were more concerned about bathing as they had to wash themselves before worshipping the Buddha. This is why most temples had a warm room (i.e. bathroom). As an extract from the title *Mysterious Stories about the Bathrooms of Famen Temple* (《法門寺浴室院暴雨沖注唯浴室鑊器獨不漂沒靈異記》) goes, “there were bathrooms in the southeast of the temple... monks of Linzi gathered there. Both Buddhist



Coloured sculpture located in the Mogao caves in Dunhuang, Gansu (The Northern Wei Dynasty).

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 74.

adherents and the monks bathed in the same bathroom. The bathrooms received about one thousand visitors a day” (「寺之東南隅有浴室院……溜侶雲集，凡聖混同，日浴於數。」)¹

In terms of dietetic hygiene, Fu Xuan in the Jin dynasty (265 AD-420 AD) maintained that poor eating habits could cause diseases. As he put it, “illness finds its way in by mouth” (「病從口入」). The two-handled vessel with holes in the bottom (「雙耳鑊孔器」) excavated from a tomb



of the Jin dynasty in Ruichang County, Jiangxi Province is said to be a tool for moist-heat sterilization. The vessel was very easy to use: cups with ears were first placed into the vessel, and the vessel was then sunk into boiling water, before finally being removed from the water. When the vessel was lifted out, water seeped from the three holes in the bottom. This utensil not only helped remove grease from cups or spoons, but was also able to kill bacteria.² With regard to environmental sanitation, street cleaning was practiced. For example, in the *History of Southern Qi*, Wang Jingze (《南齊書·王敬則傳》) narrated a story about a burglar who was ordered to “clean the street with a long broom”. *The History of Zhou: Secrets of Setting up and Maintaining Houses* (《周書秘奧營造宅經》) also stressed the importance of a clean environment: “unobstructed canals and clean houses do not create foul odors that may cause plague.” (「溝渠通浚，屋宇潔淨，無穢氣，不生瘟疫病。」) It is obvious that people of that time had realized they could prevent disease by maintaining a clean environment.

Central medical administrative organizations in the Three Kingdoms period were slightly different from those of previous dynasties. The State of Wei, following the official medical system of the Han dynasty, offered such positions as Tai-I Lin (太醫令; Director of the Imperial Medical Bureau), Tai-I Cheng (太醫丞; Associate Director of the Imperial Medical Bureau), Shang Yao Chien (尚藥監; Director of Palace Medications), Yaocangsi Ren Jian (藥長寺人監; Pharmacy Supervisor), and Lingzhiyuan



Jian (靈芝園監; Director of the Magnificent Iris Garden). Referring to the *Preface to the Canon on Acupuncture of the Jade Chamber* (《玉匱針經序》), the *Tai ping Imperial Encyclopedia* (《太平御覽》) mentioned that the State of Wu had a Tai-I Lin (Director of the Imperial Medical Bureau), and that the medical system of Shu Han was unable to be verified through textual research. Since the Jin dynasty adopted the official system of the State of Wei, it offered the same official medical positions, including Tai-I Lin (Director of the Imperial Medical Bureau), Shang Yao Chien (Director of Palace Medications), and Yaocangsi Ren Jian (Pharmacy Supervisor). In the Eastern Jin dynasty, the office of Tai-I Lin (Director of the Imperial Medical Bureau), once held by the Chamberlain for the Imperial Clan, was then changed and administered by Shih-Chung (侍中; palace attendant). In the Northern and Southern dynasties (420 AD-589 AD), the Tai-I Lin (Director of the Imperial Medical Bureau) and Tai-I Cheng (Assicuate Director of the Imperial Medical Bureau) in the State of Liu Song were all led by Shih-Chung; while in the State of Qi, these medical positions were subordinate to both the Ministry of Public Construction and the Commandant. According to *A General Reflection for Political Administration* (《資治通鑑》), the State of Qi offered the position of Yu-Shih (御師; Imperial Physician); the States of Liang and Chen, adopting the same official system, offered such positions as Yao-Tsang Cheng (藥藏丞; Supervisor of Pharmacy in the Secretariat of the Heir Apparent) and Tien-I Cheng (典醫丞; Supervisor of the Office of



Medication in the establishment of the Heir Apparent.) as well as Tai-I Lin (Director of the Imperial Medical Bureau) and Tai-I Cheng (Associate Director of the Imperial Medical Bureau) which belonged to Men-Hsia Sheng (門下省; Chancellery, and executive agency in the central government's top echelon). Furthermore, these two states even had physicians in a prefecture or district. In *History of the Northern Dynasties · Yao Sengyuan* (《北史·姚僧垣傳》) recorded that the central government also had the position of Tai-I Cheng (Associate Director of the Imperial Medical Bureau) for physicians. *The Prime Tortoise of the Record Bureau* (《冊府元龜》) showed that since the State of Liang, the position of Shang Yao Chien (Director of Palace Medications) was replaced by Tai-I (Palace Physician) as a part time position.

In the Northern Wei (386 AD-535 AD), the Tai-I Lin (Director of the Imperial Medical Bureau) was attached to the Tai-Chang (太常; Chamberlain for Ceremonials, in charge of great state sacrificial ceremonies). The Shang Yao Chu (尚藥局; Palace Medications) and Shih Yu-Shih (侍御師; Imperial Physician-in-attendance) were subordinate to the Men-Hsia Sheng (門下省; Chancellery, an executive agency in the central government's top echelon). According to *The History of Wei · Records of Official System and Chinese Family Names* (《魏書·官氏志》), the Northern Wei also provided a Tai-I Po-Shih (太醫博士; Medical Erudite) (Junior Rank Seven (七品下)) and a Tai-I Zhu-Jiao (太醫助教; Teaching Assistant) (Ordinary



Rank Nine (九品中)). In the Northern Qi (550 AD-577 AD), the central government had an Tai-I Shu (太醫署; Imperial Medical Office) which was staffed with the Tai-I Lin (Director of the Imperial Medical Bureau) and Tai-I Cheng (Associate Director of the Imperial Medical Bureau). The Secretariat of the Heir Apparent (太子門下坊) had a Yao-Tsang Chu (藥藏局; Pharmacy in the Secretariat of the Heir Apparent) that was staffed with the Yao-Tsang Chien (藥藏監; Directorate of Pharmacy in the Secretariat of the Heir Apparent), Yao-Tsang Cheng (Supervisor of Pharmacy in the Secretariat of the Heir Apparent), Shih-I (侍醫), and the like. The Princedoms had a Tien-I Cheng (典醫丞; Supervisor of the office of medication in the establishment of the Heir Apparent.). In addition, the Chung Shih-Chung Sheng (中侍中省; Palace Security Service), a eunuch agency that controlled access to the inner chambers of the imperial palace, headed by two Palace Superintendents, had a Chung Shang Yao Tien Yu (中尚藥典御; Chief Steward of Palace Medications). The Men-Hsia Sheng (Chancellery) had the Shang Yao Chu (尚藥局; Imperial Drug Bureau), which was staffed with the Shang Yao Tien Yu (尚藥典御), Shang Yao Cheng (尚藥丞; Pharmacist of the Imperial Physician), Shih Yu-Shih (侍御師; Imperial Physician-in-attendance), and Shang Yao Chien (Director of Palace Medications), and so on. Furthermore, the Shang Shu Sheng (尚書省; Department of State Affairs), the Men-Hsia Sheng (Chancellery), and the Chung Shu Sheng (中書省) offered the position of I-Shih (醫師; Physician). The medical system of the Northern Zhou was apparently



different from previous dynasties as its central government had medical organizations such as Tai-I Hsia Ta-Fu (太醫下大夫; Palace Physician at the level of Junior Grand Master), Hsiao-I Hsia Ta-Fu (小醫下大夫; Palace Physician at the level of Junior Grand Master), Hsiao-I Shang Shi (小醫上士; Senior Servicemen of the Palace Physician), Yang-I Shang Shi (瘍醫上士; Senior Servicemen of Sore and Wound Specialists), Yang-I Chung Shi (瘍醫中士; Ordinary Servicemen of Sore and Wound Specialists), Yang-I Hsia Shi (瘍醫下士), I-Cheng Shang Shi (醫正上士; Senior Servicemen of the Principal Practitioner of the Imperial Medical Office), I-Cheng Chung Shi (醫正中士; Ordinary Servicemen of the Principal Practitioner of the Imperial Medical Office), Shih-I Hsia Shi (食醫下士; Dietary Physicians as Junior Servicemen), Chu-Yao Hsia Shi (主藥下士; Pharmacist as Junior Servicemen) et al., who all belong to Tian Guan (天官; Minister of Heaven). On the other hand, the Lu-I Shang Shi (魯醫上士), Shou-I Chung Shi (獸醫中士; Veterinarians as Ordinary Servicemen), and Shou-I Hsia Shi (獸醫下士; Veterinarians as Junior Servicemen) all belong to Xia Guan (夏官; the Official or Office for Summer, Traditionally Considered the Season for War). Of these positions, the highest grade was the upper fourth Honor (正四命), and the lowest was the upper first Honor (正一命). At that time, the central official medical system and institution showed the fine division of the labor force. The Northern Zhou (557 AD-581 AD), in particular, divided physicians into Tai-I (太醫), Shou-I (獸醫), and seven other categories. Each category was then subdivided. In



this way, a grading system was established by the central government for the local administration. This system was highly conducive to the administration of medical affairs and assessing physicians' performance. Few records related to local medical organizations and systems have been found in the recorded history, except for a few records noted in the State of Liang in the Southern dynasty, indicating that the commandery or district was also staffed with physicians.

In terms of medical education, traditional Chinese medicine (TCM) was always taught between a master and an apprentice, a father and son. For example, Hua Tuo (華佗) and his students Pu Wu (吳普), Fan E (樊阿), and Dang Li (李當) were all famous physicians in this period. The Xu family (徐氏家族) from the East China Sea was well-known for practicing



An iron medical mortar and pestle from the Jin Dynasty. Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 71. (From a collection at the Museum of the History of Traditional Chinese Medicine located in Shanxi University of Chinese Medicine)



medicine for generations in the Northern and Southern dynasties. Zhi-Cai Xu (徐之才) was the most famous physician of the family and was given the title of Commandery Prince of Xi-Yang (西陽郡王), also known as Commandery Prince Xu (徐王). Sorting out the secret recipes handed down through the family, he compiled a ten-volume tome, *Formulas of Commandery Prince Xu's Family over Eight Generations* (《徐王八世家傳效方》). Another famous medical family was the Yao clan. In this family, Seng-Yuan Yao's (姚僧垣) father Pu Ti (菩提) was well-known for his superb medical skills. Seng-Yuan Yao inherited family property and began to practice medicine at the age of 24. He later became a famous physician in the Northern and Southern dynasties, both domestically and internationally. Furthermore, Seng-Yuan Yao's son also became a well-known physician of that time. As the above-mentioned medical education pattern was mostly adopted for individuals, the number of physicians was unable to meet the actual clinical needs of the populace. Therefore, for this reason, the government of the period introduced medical education institutions. As *Six Managers of the Tang Dynasty* (《唐六典》) puts it, "Before the Jin dynasty, the Department of Instruction was asked to teach the descendants of acupressure practitioners who wanted to practice medicine. In the twentieth year of the reign of Emperor Yuanjia of the State of Liusong (443 AD), Cheng-Zu Qin (秦承祖), the Tai-I Lin (Director of the Imperial Medical Bureau), petitioned for a medical school to teach more medical students. Later, the school was founded by thirty



departments of the central government” (「晉代以上，手醫子弟代習者，令助教部教之。宋元嘉二十年，太醫令秦承祖奏置醫學，以廣教授。至三十年省」). This quotation shows that physician education had been given since the Jin dynasty. However, the earliest record on official medical education can be traced back to 443 AD (the twentieth year of the reign of the Emperor Yuanjia) when Cheng-Zu Qin presented a memorial for physician education. This official medical education system laid a foundation for later medical education.

During this period, about two hundred medical books were published, among which *The Pulse Canon* (《脈經》) by Shu-He Wang (王叔和) of the Jin dynasty and *The Systematized Canon of Acupuncture and Moxibustion* (《針灸甲乙經》) by Fu-Mi Huang (皇甫謐) were particularly well-known. In addition, outstanding progress had been made in pharmacology. *Variorum of the Herbal Foundation Canon* (《本草經集注》), compiled by Hong-Jing Tao (陶弘景) in the Southern and Northern dynasties, was the most influential book about herbalism of that time. In this book, Hong-Jing Tao, referring to *Foundation Canon* (《本經》), *Materia Medica Completed by Noted Physicians* (《名醫別錄》), and other books, reorganized the former achievements made in herbalism and added his own findings. Another important medical work was Xue Lei's (雷斅) *Master Lei's Treatise on Drug Processing* (《雷公炮炙論》), which was the first book in China dealing specifically with the herb medicine process. With the development of official medical education,



imperial physicians gathered together a number of physicians to compile medical books and then publish them. In the Northern and Southern dynasties, *Classic Formulas Issued by Prince Jianping of the State of Liu Song* (《宋建平王典術》), Xiu Li's (李修) *Formulary* (《藥方》), and Xian Wang's (王顯) *Formulary* (《藥方》) were all medical books issued by the government (官頒醫書).

Medical Exchange

- India

According to literature in ancient China, India was once translated into Chinese as Shendu (身毒), Tianzhu (天竺), Xiandou (賢豆), and Brahman (婆羅門), but it was after the Tang dynasty that India was known as Yin Du (印度) in China. As two great countries with ancient civilizations, China and India had shared a lot of science and culture, especially medicine. In ancient India, medical science was closely related to Buddhism. Ancient Indian Buddhism proposed *Pañcavidyā* (五明學; the Five Classes of Knowledge of Ancient India), i.e. *Śabdavidyā* (science of language), *hetuvidyā* (science of logic), *cikitsāvidyā* (science of medicine), *śilakarmasthānavidyā* (science of fine arts and crafts), and *adhyātmavidyā* (science of spirituality). Of these, *cikitsāvidyā* talked about *Ayurveda* (壽命吠陀): the so called veda is the pinyin of *vidyā*, meaning perception of wisdom. *Cikitsāvidyā* is also known as Ayurveda (「阿喻吠陀」), a system of traditional Hindu medicine. The system was composed of eight



branches. The first, Kayachikitsa (internal medicine, also known as medical illness) was referred to by Monk Yi Jing (義淨) of the Tang dynasty as physical diseases in *Commentaries on Buddhist Doctrines Written in Sri Vijaya* (《南海寄歸內法傳》). The other seven were Shalya Tantra (Surgery), Shalakyā Tantra (Ophthalmology/ENT/Dentistry), Bhuta Vidya (Demonology/Exorcism/Psychiatry), Kaumarabhritya (Pediatrics), Agada Tantra (Toxicology), Rasayana (Anti-aging), and Vajikarana (Aphrodisiacs).

Hindu Buddhism was introduced to China in the Jin dynasty. From then, Indian medicine started to gradually influence traditional Chinese medicine. Some Indian medical books, such as *Nagarjuna's Recipe* (《龍樹菩薩方》), *Brahman's Recipe* (《婆羅門藥方》), *Nagarjuna's Treatises* (《龍樹論》), and *Jivaka's Handbook of Pulse in Verse* (《耆婆脈訣》) were mentioned in *History of the Sui Dynasty · Records of Classics and Books* (《隋書·經籍志》). Of these, Jivaka's Handbook of Pulse in Verse was translated by the famous translator Kumārajīva (鳩摩羅什) in the Late Qin dynasty (384 AD-417 AD). Meanwhile, the influence of Chinese medicine on Indian medicine can be seen in the works of Tang Seng (唐僧) who had previously visited India to study Buddhist scriptures. In the sixth century, Monk Yun Song (宋雲) related in his book *Travelling Records* (《行紀》) how Hua Tuo's art of healing spread in India, and that the Chinese medicine imported to India via the Silk Road was locally called "Fine Chinese Herbs" (「神州上藥」).



- Japan

During this period, the medical exchange between Japan and China was conducted mainly via Korea. Korean medical remedies had been introduced to Japan during the reign of Emperor Nintoku (仁德天皇). Later, Emperor Yūryaku (雄略天皇) and Emperor Kimmei (欽明天皇) sought help from Korean physicians when they themselves or the royals were suffering from disease. Meanwhile, Korea sent physicians to Japan to cure Japanese patients with Korean medical remedies. At that time, the Korean medical remedies were actually a medical system that mainly used traditional Chinese medicine. Later on, in 552 AD, China gave a copy of the *Canon of Acupuncture* (《針經》) to Japan. In 562 AD, Zhi Cong (知聰) of the State of Wu took a total of 164 medical book volumes, including *Bright Hall Charts of Acupoints* (《明堂圖》) to Japan. These books exerted significant influence on ancient Japanese medicine, especially those on acupuncture and moxibustion.³

The introduction of Chinese medicine promoted the rapid development of Japanese medicine, leading to the appearance of “Kampo Medicine” (漢方醫學; a Japanese form of Chinese medicine), from which a great number of well-known kampo physicians and medical books were introduced. Wake Hiroyo (和氣廣世) and Ono Konzou (小野根藏) were typical kampo physicians. *Classified Formulas of the Daido Period* (《大同類聚方》) by Izumo Hirosaka (雲廣真), *Essential Recipes at Hand* (《掌中要方》) and *Japanese Names of Chinese Materia Medica* (《本草和名》) by



Hukae Sukehito (深江輔仁) were two of the earliest Kampo medical books written in Japan.

- Korea

Korea, called “Chaoxian” (「朝鮮」) in ancient China, was a neighboring country of China and both countries had had close cultural exchanges since ancient times. During the Jin and Northern-Southern period (in the fourth century), Chinese monks Shundao (順道), A’dao (阿道), Malananda (摩羅難陀) and Mohuzi (墨胡子) brought the Chinese version of the Buddhist Scriptures to Korea, including Goguryeo (高句麗), Baekje (百濟), and Silla (新羅). As the hetuvidyā (「醫方明」; science of logic) in Pancavidyā (「五明」) was included in the Buddhist Scriptures, most of the monks of that time had some medical knowledge and knew several remedies. For this reason, monk medicine was once very popular in Korea.

As previously mentioned, in 562 AD, Zhi Cong of the State of Wu had visited Japan with a total of 164 medical book volumes, including *Bright Hall Charts of Acupoints* and *Herbal Foundation Canon* (《本草經》). When he passed Goguryeo, he stopped to teach the locals in traditional Chinese medicine, which further promoted the development of Korean medicine. In addition, Baekje adopted the medical system of the Southern-Northern dynasties of China by distinguishing Tai-I Cheng (Associate Director of the Imperial Medical Bureau) and Yao-Tsang Cheng (Supervisor of Pharmacy in the Secretariat of the Heir Apparent) and setting up a



Scholar of Medicine (醫學博士) and Medicinal Herb Picker (採藥師). Jing-Hong Tao's *Variorum of the Herbal Foundation Canon* included several herbal medicines that were native to Goguryeo and Baekje, such as ginseng (人參), jinxie (金屬), as arum (細辛), coltsfoot (款冬花), centipede (蜈蚣), and kelp (昆布), describing their appearance and properties in detail. For example, the description of ginseng in the book states, "thin, solid and white, smells lighter than codonopsis; big but soft, not as good as Baekje". This quotation showed that China and Korea had a close exchange in medicinal items.⁴

- Other countries

During this period, in addition to the above-mentioned countries, China had medical exchanges with Vietnam, Arabia, and other regions. At that time, Vietnam was known as Cochin or Annam. Quoting from *Records of Eight Commanderies in the South* (《南中八郡誌》), Si-Miao Jia (賈思勰) wrote in *Important Arts for the People's Welfare* (《齊民要術》) that, "Cochin is rich in quality platycodon, big and sweet. But do not eat too much because it causes diarrhea". This book also mentioned betel pepper, bucket, areca, and bittersweet fruit, all of which were grown in Vietnam and could be used as medicine. According to *History of the South*, (《南史》) (in 501 AD) the King of Funan (present-day Cambodia) sent an envoy to present tulip (鬱金), storax (蘇合香), and other herbal medicines to China.⁵

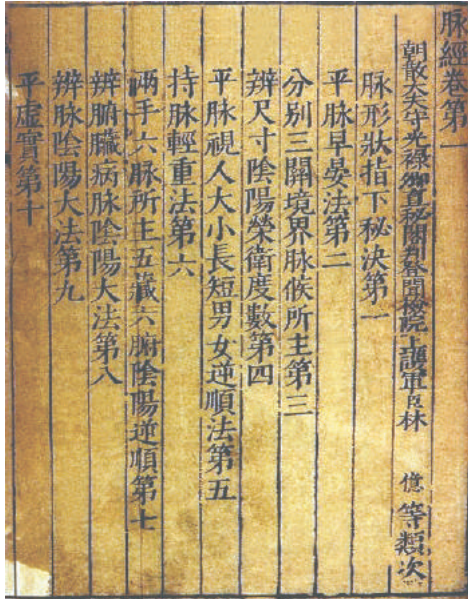


The Arab Emirates, known as Dashi (大食) or the Saracen Empire (薩拉森帝國), is an Islamic country that was established in the Arabian Peninsula in the seventh century. In the Western Jin dynasty, Shu-He Wang's (王叔和) *The Pulse Canon* had been introduced to the Arabian region. Local medical sage Avicenna's description of the pulse conditions in *Classics of Medicine* (《醫典》) was referred to in *The Pulse Canon*. Still, medical books were also introduced from other countries to China. The ten-volume *Remedies for Mental Diseases in Kantoli* (《乾陀利國治鬼方》) and the five-volume *New Remedies for Mental Diseases in Kantoli* (《新錄乾陀利治鬼方》) recorded in the *History of the Sui Dynasty · Records of Classics and Books* were a case in point. It has been proved that Kantoli (「乾陀利國」) is present-day Sumatra (蘇門答臘) in Indonesia, and that the remedy for mental diseases is similar to the Bhuta Vidya (「鬼病方科」) of Indian medicine.

Section 3 Medical Works

The Pulse Canon (《脈經》)

The Pulse Canon is the earliest extant monograph on sphygmology in China. The book was written by Shu-He Wang who, for the first time, expounded traditional Chinese medicine sphygmology based his own clinic experience. Comprising of ten volumes with 98 chapters, *The Pulse*



The Pulse Canon written by Shu-He Wang.
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 66. (A collection held in the library of the Chinese Medicine Research Institute in China)

Canon introduced 24 pulse conditions. These were: float pulse, scallion-stalk pulse, surging pulse, slippery pulse, rapid pulse, slippery pulse, string-like pulse, tight pulse, sunken pulse, hidden pulse, drum skin pulse, replete pulse, faint pulse, rough pulse, fine pulse, soft pulse, weak pulse, vacuous pulse, dissipated pulse, moderate pulse, slow pulse, bound pulse, interrupted pulse, and stirred pulse. The book described how these pulses responded to fingers, and provided a way of distinguishing eight groups of similar pulse. In addition, the book explained the symptom shown by each pulse, how these pulses were physiologically related to the viscera and bowels, and then suggested treatment based on the pulse condition, syndrome, and pathomechanism. Treatment methods depicted in the book still have clinical reference value today.



The Pulse Canon also proposed that the inch (寸), bar (關), and cubit (尺) were three locations of clinical significance on the wrist when looking for a pulse. Feeling the pulse at the inch opening of the left wrist can detect the manifestations of problems of the heart and small intestine, liver and gallbladder, kidney and bladder. While feeling the same position on the right wrist, the manifestations of the lungs and large intestine, spleen and stomach, kidney and bladder, can be identified respectively.

The Systematized Canon of Acupuncture and Moxibustion (《針灸甲乙經》)

The Systematized Canon of Acupuncture and Moxibustion is the earliest extant work on acupuncture and moxibustion in the history of traditional Chinese medicine. Also known as *Three Collections of the Yellow Emperor's Systematized Canon of Acupuncture and Moxibustion* (《黃帝三部針灸甲乙經》), *The Systematized Canon of Acupuncture and Moxibustion* was compiled during the period from about 256 AD-282 AD by Fu-Mi Huang who referred to other traditional Chinese medicine classics, such as *Magic Pivot* (《靈樞》), *Plain Questions* (《素問》), *Bright Hall Points and Essentials of Acupuncture and Moxibustion* (《明堂孔穴針灸治要》), and *Classic of Difficult Issues* (《難經》). The twelve-volume book included bowel and viscera theory, qi and blood theory, twelve body channels and eight extraordinary vessels, basic theory of acupuncture, inquiry of acupoints and basic knowledge of medicine.



The acupoints mentioned in these books are organized in the order of head, face, neck, chest, abdomen, and limbs. Each acupoint is described in detail with its location, function, needling depth, and number of cones required for moxibustion.

As *The Systematized Canon of Acupuncture and Moxibustion* is a professional classic that describes both basic theory and clinical treatments, the Imperial Medical Bureau of the Tang dynasty used it as the textbook for medical students who practiced acupuncture and moxibustion. The book was also well-received in foreign countries. For example, Japan used it as a required course for medical students, while Korea, France and other foreign countries viewed it as an important reference for learning acupuncture and moxibustion.

A Handbook of Prescriptions for Emergencies (《肘後救卒方》)


A Handbook of Prescriptions for Emergencies, or *Handbook of Prescriptions (《肘後方》)* for short, was written by Hong Ge (葛洪). “Handbook” (「肘後」) here means the book could be conveniently carried in the physician’s sleeve as a ready reference in case of emergency. Hongjing Tao of the Southern Dynasties and Yong-Dao Yang (楊用道) of the Jin dynasty supplemented the handbook, thus forming the extant version. The book included many experimental prescriptions; for example, daily fruits and vegetables, such as fresh ginger (生薑), mume fruit (烏梅), and eggs were cleverly used to cure common ailments. This book also



recorded emergency treatment for such events as wind strike, stupor, sudden death, and acute abdomen pain. These therapies included moxibustion, mouth-to-mouth resuscitation, restitution of dislocated joints, intestinal anastomosis and cautery hemostasis. In Hong Ge's preface to the *Handbook of Prescriptions for Emergencies*, he pointed out that the spread of recipes depended on clinical effect rather than on whether the recipe was created by a well-known physician. This reveals the essence of traditional Chinese medicine.

Master Lei's Treatise on Drug Processing (《雷公炮炙論》)

Master Lei's Treatise on Drug Processing was the earliest book on the processing of drugs in the history of traditional Chinese medicine. Written by Lei Xue, the book included about 300 medicinal substances, summarized the basic knowledge of pharmaceuticals, the methods for processing medicines in the Jin dynasty, and recorded the working processes and experimental data in detail.⁶ This book stressed how to identify medicinal herbs to avoid drug misuse, especially as medical plants from different families may have different curative effects. The book introduced three medical processing methods: water processing, fire processing, and fire and water processing. As the book had been lost, only a small section remained in Shen-Wei Tang's (唐慎微) *Classified Emergency Herbal Foundation Based on Historical Classics (《經史證類備急本草》)*. In addition, *on the Properties of Drugs Processed by Lei-*





Gong (《雷公炮炙藥性賦》), as compiled by Zhong-Zi Li (李中梓) in the Ming dynasty, and Xi-Yong Miao's (繆希庸) *Comprehensive Handbook on the Processing of Drugs* (《炮炙大全》) were both based on *Master Lei's Treatise on Drug Processing*, along with clinical experience that spread among people.

***Materia Medica Completed by Famous Physicians* (《名醫別錄》)**

The content of *Materia Medica Completed by Famous Physicians* was first included in the *History of the Sui Dynasty · Records of Classics and Books*. According to later textual researches, the book was written by Hong-Jing Tao from the Southern dynasties. When Tao was compiling *Variorum of the Herbal Foundation Canon* (《本草經集注》), he systematically arranged and selected the herbalism works of famous physicians and herbalists of that time. Although the original was lost in the Song dynasty, segments of the book can still be seen in other medical books, such as *Newly Revised Herbal Foundation* (《新修本草》), *Variorum of the Herbal Foundation Canon, Wings of the Thousand Gold Pieces Formulary* (《千金翼方》), *A Complete Collection of Classified Materia Medica* (《經史證類大觀本草》), and *Revised Zhenghe Classified Emergency Materia Medica* (《政和本草》).



Variorum of the Herbal Foundation Canon (《本草經集注》)

Variorum of the Herbal Foundation Canon was compiled by Hong-Jing Tao who selected 365 different kinds of drug from *The Divine Husbandman's Herbal Foundation Canon* (《神農本草經》) and *Materia Medica Completed by Famous Physicians*. In order to differentiate the text of *The Divine Husbandman's Herbal Foundation Canon* and *Materia Medica Completed by Famous Physicians*, Hong-Jing Tao composed the book using bright red and black colors. In the section entitled “Universal Drugs” (「諸病通用藥」), Tao also chose these two colors to write the drug names for the division of the cold-hot nature of the medicines. *Variorum of the Herbal Foundation Canon* recorded drug processing and preparation methods, established the stylistic rules of universal drugs, included antidotes, pointed out what can and cannot be done after taking drugs, listed drugs that cannot be decocted, and those that cannot be taken with wine. In the book, Tao held that drug effects were related to the patient's sex and age, climate, region, and seasons. Tao also reminded physicians about dosage. As weights and measures vary in every dynasty, physicians should consider the dosage in accordance with the actual situation.



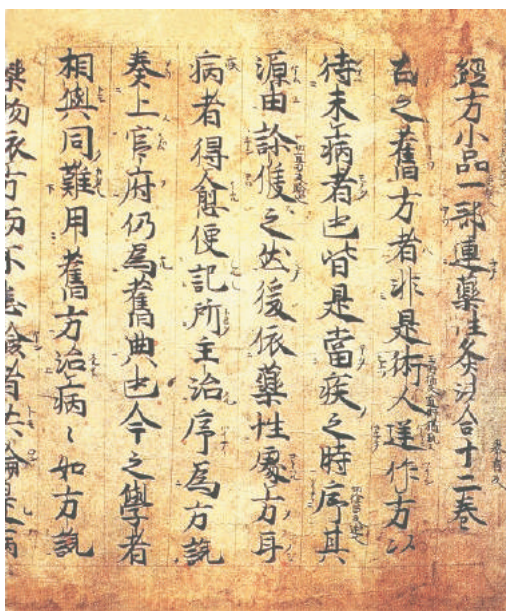
Juan-Zi Liu's Ghost-Bequeathed Remedies (《劉涓子鬼遺方》)

Juan-Zi Liu's Ghost-Bequeathed Remedies, also known as *Immortal-Bequeathed Remedies (《神仙遺論》)*, was a monograph on external diseases. Legend described how Juan-Zi Liu (劉涓子), in the late Jin dynasty, picked up the book of surgery in the Danyang District where he happened to meet the ghost of the yellow father (「黃父鬼」). According to *History of the Sui Dynasty · Records of Classics and Books*, the ten-volume book was passed on from Liu's descendants to Qing-Xuan Gong (龔慶宣) of the Northern Qi. Gong compiled the present *Ghost-Bequeathed Remedies (《鬼遺方》)*. The book recorded over 140 prescriptions, and discussed the treatment for wellings and flat abscesses, incised wounds, static blood, and external damage, etc. It was the earliest extant monograph on wellings and flat abscesses, and incised wounds. It clearly explained how to differentiate wellings and flat abscesses, how to predict the probable course and outcome by observing pathogenic sites, and how to cure them.⁷ Since the Wei and Jin dynasties, taking a mineral powder was very popular, thus speeding up the incidence rate of wellings and flat abscesses. This is why the book was also known as *Prescriptions for Wellings and Flat abscesses (《癰疽方》)*.



Small Formulary (《小品方》)

Small Formulary, also known as *Classic Small Formulary* (《經方小品》), was written by Yan-Zhi Chen (陳延之). The book was first found in the *History of the Sui Dynasty · Records of Classics and Books*. The historical book, however, did not recount Chen's life or the time that Chen finished *Small Formulary*. According to textual research, the book was probably completed sometime in the Song and Qi period of the Southern Dynasties. Although it was lost in the Song dynasty, its contents are partially included in *One Hundred Supplements to the Handbook of Prescriptions for Emergencies* (《肘後補闕百一方》), *A Thousand Gold Pieces Prescriptions* (《千金要方》), *Medical Secrets of An Official*



Small Formulary
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 88. (A collection of Oriental Medicine Research Center of the Kitatsato Institute, Japan; a piece of extant fragment of one book)



(《外臺祕要》), and *Prescriptions at the Heart of Medicine* (《醫心方》).⁸ As the book deals with emergency treatment, maternal and child hygiene, dosage standards, and comprehensive treatment, the Imperial Medical Bureau in the Tang dynasty set it as a required course for imperial medical students. Applying the same medical institution system as the Tang dynasty, Japan also used *Small Formulary* as a medical textbook.

Section 4 Biographies of Medical Experts

Shu-He Wang (王叔和)

Shu-He Wang, also known as Xi (熙), was born in Gaoping District (present-day Shandong Province) in 210 AD and died in 285 AD. He was a quiet person, fully acquainted with classical prescriptions, and also known for his expertise in health cultivation. He served as the Tai-I Lin (Director of the Imperial Medical Bureau) during the reign of Emperor Wu of the Jin dynasty. Gaoping County annals recorded that he had a stone pharmaceutical room. His



Shu-He Wang
A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan.



tomb in Xinzhou County, Hubei Province was known as “The Tomb of the King of Medicine” (「藥王墓」). His statue was enshrined in the Temple of the King of Medicine established by local people. Wang’s great contribution to traditional Chinese medicine was that he rearranged Zhong-Jing Zhang’s *On Cold Damage* (《傷寒論》) and *Essential Prescriptions of the Golden Coffin* (《金匱要略》) into *The Canon of the Golden Coffin and Jade Sheath* (《金匱玉函經》). In terms of Wang’s recovery of the lost *On Cold Damage and Miscellaneous Diseases* (《傷寒雜病論》), later physicians held various opinions, with some praising



Corrected Annotated and Illustrated edition of the *Classic of Difficult Issues and Pulse in Verse* (校正圖註難經脈訣), Good Advice Printing House, Shanghai (photographed by Pei-Chi Chou)



him and others criticizing him. For example, Wu-Ji Cheng (成無己) in the Jin dynasty and An-Dao Wang (王安道) in the Yuan dynasty thought that, owing to Wang's efforts, Zhong-Jing Zhang's academic works were able to be preserved. Meanwhile, Jia-Yan Yu (喻嘉言) and You-Zhi Fang (方友執) of the Qing Dynasty held that Wang had disturbed the order of the original, thus preventing later generations to see the original structure. However, Shu-He Wang contributed to the conservation of *On Cold Damage and Miscellaneous Diseases*.

Wang's other contribution was that he composed *The Pulse Canon*, the first monograph on sphygmology in the history of traditional Chinese medicine. A great work on ancient pulse diagnosis, the book not only expounded the relationship between pulse manifestations and symptoms, but also recorded about 30 medical cases.

On the other hand, Shu-He Wang showed remarkable insights into people's daily regimen. He suggested people take good care of themselves through their daily diet in order to eliminate diseases and prolong life. He proposed diet in moderation, and emphasized the adjustment of diet according to the season.

Huang-Fu Mi (皇甫謐)

Huang-Fu Mi, also named Jing (靜), styled Shi-An (士安), and literary name Xuan-Yuan (玄晏), was born in Anding Chaona (now Lingtai of Gansu Province) in 215 AD and died in 282 AD. When he was young,



he was taken into his uncle's family. Later he moved to Xin'an County, He'nan Province (now Mianchi) with his uncle. In his childhood, he disliked studying and loafed around all day. At the age of 21, he was advised and encouraged by his aunt to learn from his fellow villager Xi-Tan (席坦). After that time, he studied very hard, becoming a scholar. At the very beginning, he was interested in literature and history and showed



Huang Fu-Mi
A collection from the
Exhibition Room on Li-Fu
Chinese Medicine located
at China Medical University,
Taiwan

extraordinary talent. However, a serious disease changed his ideas. Frailty and long-term fatigue, along with externally contracted wind-cold, made him suffer from wind impediment, which causes hemiplegia. Afflicted by the disease and also affected by the social atmosphere, he began to take the Powder of Five Minerals. Unfortunately, the powder worsened his condition. When he got better, he became determined to study medicine. He read many classical remedies, carefully delved into the techniques of acupuncture and moxibustion, and finally cured himself of his illness.

Referring to *Magic Pivot*, *Plain Questions*, *Bright Hall Points and Essentials of Acupuncture and Moxibustion* (《明堂孔穴針灸治要》), and *Classic of Difficult Issues*, Huang-Fu Mi wrote *The Systematized*



Canon of Acupuncture and Moxibustion, the earliest extant work on acupunctotherapy in the history of traditional Chinese medicine. In addition, he also left some other works, such as *Records of Emperors and Kings* (《帝王世紀》) that recorded the history of China from the Three Emperors to the end of the Han dynasty; *Biographies of Virtuous Women* (《列女傳》) that described the miserable fate and unequal social status of women at that time; *Stories of Eminent Scholars* (《高士傳》) that reflected his aspirations and spiritual sustenance; and his own biography *The Life of Xuanyan* (《玄晏春秋》).

Feng Dong (董奉)

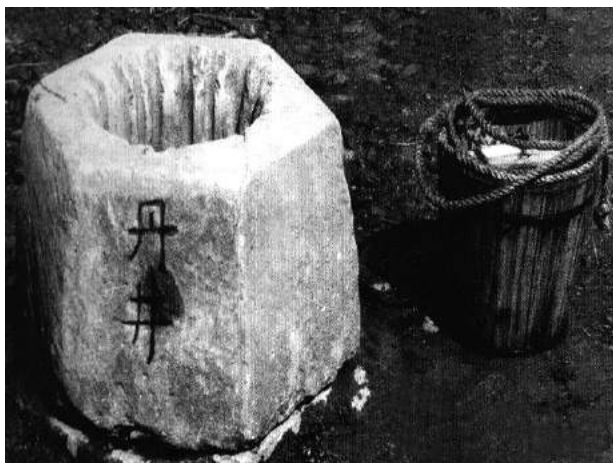
Feng Dong, styled Jun-Yi (君異), was born in Houguan (present-day Changle County, Fujian Province) in 220 AD and died in 280 AD. He was a physician in the State of Wu during the Three Kingdoms period. He was proficient in conduction exercises. As he had once secluded himself in the mountains to perform the exercises, he was known as Immortal Dong (「董仙」). He was also one of the Three Miracle-working Physicians and worked in Jian'an (「建安三神醫」), the others being Ji-Zhang (張機) in Nanyang and Hua Tuo in Qiaoxian County. According to *Biographies of Divine Immortals* (《神仙傳》), Feng Dong was a highly skilled physician with great medical ethics in Lushan. He never charged his patients for medical fees. On the other hand, when a patient was cured of a serious disease, he asked that five apricot trees be planted in a nearby



grove. If the disease was less serious, he asked that only one tree be planted. Many years later, the apricot grove grew to over 100,000 trees. His house was surrounded by luxuriant apricot trees where various beasts and birds frolicked. People thus called the grove “Immortal Dong’s Apricot Grove” (「董仙杏林」). When the apricots were ripe, Dong exchanged apricots for food to help poor people or those travelers who were in need. Nearly 20,000 people benefited every year. Gradually, the term “Apricot Grove” (「杏林」) became a synonym for medical circle. People used such phrases as “Apricot Grove in Spring” (「杏林春暖」) and “Famous in the Apricot Grove” (「譽滿杏林」) to praise and thank physicians for their great skills and noble ethics.

Fa-Kai Yu (于法開)

Fa-Kai Yu, whose birth and death dates are unknown, was born in Yan County (now Sheng County, Zhejiang Province). A physician in the Jin dynasty, he was familiar with the art of healing and the philosophy of Buddhism. According to *Records of Shaoxing Prefecture* (《紹興府志》), Yu cured a dystocia on his journey. He first fed some mutton soup to the pregnant woman and then performed needling. Finally, the fetus was delivered along with the amnion. Also, the *History of the Sui Dynasty · Records of Classics and Books* recorded that Yu had written a volume of *Comments on Backup Remedies* (《議論備預方》), but that the book had been lost.



A well utilized by Hong Ge to apply alchemy.
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 67.

Hong Ge (葛洪)

Hong Ge, styled Zhi-Chuan (稚川), also known as Pu-Zi Bao (抱朴子), was born in 281 AD in Danyang, Jurong County (now Jiangsu Province) during the Eastern Jin dynasty and died in 342 AD. At the age of thirteen, his father died, and his family then became very poor. He often chopped firewood and sold the wood for money to buy stationery and books. In this way, he read a lot of books. He learned alchemy and medicine from Tai-Xuan Bao (鮑太玄), Governor of Nanhai. Appreciating Ge's talent, Bao not only taught him all his knowledge but also married him to his daughter. The Wei and Jin dynasties saw frequent civil wars and continual treason. These wars made people unable to live a peaceful life.



However, on the other hand, they also brought about plenty of diseases. As a consequence, Hong Ge, who was in the army, decided to leave the army to focus on alchemy, medicine, and writing. As he read widely and was able to study the attitude of many schools of thought, he made outstanding achievements in alchemy and medicine. He wrote *The Master Who Embraces Simplicity* (《抱朴子》), *Emergency Standby Remedies* (《肘後備急方》), *Prescriptions for Decoction with a Jade Slipcase* (《玉函煎方》), *Essential Prescriptions* (《金匱藥方》), and *Pellet Prescriptions of Divine Immortals* (《神仙服食方》). Of these, the first two books were the most well-known. *The Master Who Embraces Simplicity* was a book about philosophy, alchemy, and regimen and was written in two parts: the Inner Chapters and the Outer Chapters. The Inner Chapters recorded a large amount of chemistry knowledge, such as experimental methods of making pills and mercury of immortality; alchemistic equipment; pellet prescriptions; and alchemistic materials, such as mercury, lead, cinnabar, alum, and muscovite. The Outer Chapters were about Confucian ethnics, describing the problems that afflicted the secular world and his proposed solutions. Hong Ge held that Daoist alchemists should study Confucianism theory while they were practicing alchemy. In addition, *The Master Who Embraces Simplicity* recorded many regimens that could boost longevity, cautioned about long periods of sitting, long periods of walking, staring, listening, overwork, and proposed having breakfast on winter mornings, not overeating on summer evenings, not getting up before the rooster's



crow, and not staying in bed when the sun rises.⁹

Wang Fan (范汪)

Wang Fan, styled Xuan-Ping (玄平), whose birth and death dates are unknown, was a physician during the Eastern Jin dynasty. He was born into an official family in Yingyang (now Xuchang, Henan Province). He was also said to be born in Shunyang (now Neixiang County, Henan Province). As he once served as Minister of the Ministry of Personnel (吏部尚書), in the Prefecture of Xu and Dongyang (now Jinhua, Zhejiang Province), people also called him “Dong-Yang Fan” (范東陽). Fan had excellent medical skills. He was also a charitable man, often helping patients without asking for money for his medicine. He treated all his patients, rich or poor, alike. Fan collected effective prescriptions and compiled them into a 500-volume Medical Prescriptions. Later, Mu Yin (尹穆) selected some of the prescriptions from the book and rearranged them into *Dong-Yang Fan's Prescriptions* (《范東陽方》), which was also known as *Wang Fan's Prescriptions* (《范汪方》) or *Dong-Yang Fan's Prescriptions for Miscellaneous Diseases* (《范東陽雜病藥方》). Unfortunately, the manuscript of *Dong-Yang Fan's Prescriptions* has been lost. However, some of the contents can be seen in *A Hundred Supplementary Formulas to the Handbook of Prescriptions for Emergencies*, *Prescriptions at the Heart of Medicine* and *Medical Secrets of an Official*.



Min Wang (王珉)

Min Wang, styled Ji-Yan (季琰), whose childhood name was Seng-Mi (僧彌), was born in Langye (now Linyi, Shangdong Province) in 351 AD and died in 388 AD. He was a physician during the Eastern Jin dynasty. His grandfather was the former Minister of the Eastern Jin dynasty. He also served as Director of the Chancellery (黃門侍郎) and Secretariat Director (中書令). When he was young, he showed great talent. He was not only good at calligraphy but also adept in medicine. He wrote a volume of *Formulary* (《藥方》), also known as *Experimental Prescriptions for Cold Damage* (《療傷寒身驗方》), which has been lost.

Xin Yang (羊欣)

Xin Yang, styled Jing-Yuan (敬元), was born in 359 AD and died in 433 AD. He served as Governor of Southern City of Mountain Tai (泰山南城), and was also a physician. As he served as the Grand Master of Palace Leisure (中散大夫), people called him “Courtier Yang” (「羊中散」). Besides his medical skills, he was also an expert on daily regimen. He was the author of *Formulary* and *Formulas for Miscellaneous Decoction, Pellets, Powder, and Medicated Wine* (《雜湯丸散酒方》), but both have been lost.



Dao-Qia Hu (胡道洽)

Dao-Qia Hu was born in Guanglin (now Yangzhou, Jiangsu Province) and was also known as Hu-Qia (胡洽), his name being changed to avoid confusion with the same word for Daoism. He was a physician in the early period of the Liu Song dynasty but his birth and death dates are unknown. He was a quiet man who was known for his medical skills. According to *New History of the Tang Dynasty* (《新唐書》), he was the author of *Prescriptions for Hundreds of Diseases* (《治百病方》). However, this book has also been lost.

Cheng-Zu Qin (秦承祖)

Cheng-Zu Qin was a medical scientist of the Liu Song dynasty in the fifth century AD. He was said to be the author of *Canon of Miscellaneous Acupuncture and Moxibustion with Three Mingtang Charts* (《偃側雜針灸經》), *Bright Hall Charts of Acupoints* (《明堂》), *The Pulse Canon, Canon with Three Mingtang Charts* (《側偃人經》), *Herbal Foundation*, and *Formulary*. However, all these books have been lost. Qin was adept at acupuncture and moxibustion as well as medical herbs. Known as “Shan-Sou” (meaning master 「上手」), he enjoyed high prestige in court when he served as the Tai-I Lin (Director of the Imperial Medical Bureau) of the Liu Song dynasty.



Xue Lei (雷斅)



Xue Lei
A collection from the
Exhibition Room on Li-Fu
Chinese Medicine located
at China Medical University,
Taiwan (Photographed by
Dr. Jaung-Geng Lin).

Xue Lei was born in the Liu Song dynasty (420-479 AD). He was the author of *Master Lei's Treatise on Drug Processing*. The name of the book was first seen in *Illustrated Canon of Materia Medica* (《本草圖經》) in the Song dynasty. However, the original was lost in the Yuan dynasty. Fortunately, most of the book's contents were included in later herbalist works. The book was a monograph on the processing of drugs and is why Lei was known as the ancestor of pharmaceuticals.

Hong-Jing Tao (陶弘景)

Hong-Jing Tao, style name Tong-Ming (通明), was born into a physician family in Moling, Danyang Prefecture (now Zhenjiang, Jiangsu Province) in 456 AD and died in 536 AD. He was also known by his literary name Mr. Yin-Ju (隱居先生) or Hua-Yang Yin-Ju (華陽隱居), and his posthumous title Mr. Zhen-Bai (貞白先生). Although he was born during the Liu Song period, he lived through the Song, Qi, and Liang



dynasties. At the age of ten, he was deeply affected by Hong Ge's *Biographies of Divine Immortals* (《神仙傳》) and decided to search for the way to immortality. Later, he retired to Moshan in Jurong Prefecture. As Emperor Xiao Yan of the Liang dynasty (梁武帝蕭衍) trusted him very much, the Emperor often went to the mountains to consult him about state affairs. He was thus known as “Prime Minister of the Mountains” (「山中宰相」).



Hong-Jing Tao
A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin).

Tao was the author of *Records of Knives and Swords* (《古今刀劍錄》), a book that recorded the names, owners, and smelting processes of all the famous knives and swords before the Southern Dynasties. The book also talked about “the methods for casting steel” (「灌鋼法」). This is the earliest record of steel casting in the history of China's smelting industry.

Tao not only arranged Hong Ge's *Handbook of Prescriptions* into *A Hundred Supplementary Formulas to the Handbook of Prescriptions for Emergencies*, but also wrote *Effective Experimental Prescriptions* (《效驗方》) and *Classics of Nursing Life* (《養生經》), medical's health experiences before Six Dynasties was compiled as *Records of Nature*



Cultivation and Life Extension (《養性延命錄》). In addition, he systematized *The Divine Husbandman's Herbal Foundation Canon* and *Variorum of Herbal Foundation Canon*, and combined these two books into *Variorum of the Herbal Foundation Canon* based on his own dedicational experience. In this way, he established universal drugs, a method of classifying drugs in terms of their therapeutic properties.

Yuan-Qi Quan (全元起)

Yuan-Qi Quan, whose birth and death dates are unknown, lived during the Qi and Liang periods (479-502 AD), serving as Attendant Gentleman (侍郎). He had excellent medical skills. As people said, “when you suffer from severe diseases and are likely to die, if you meet Yuanqi, you can survive; if you let him go, you will die” (「得元起則生，舍之則死」). According to *The History of Southern Dynasties · Biography of Seng-Yuan Wang* (《南史·王僧儒傳》), Quan visited Seng-Yuan Wang (王僧儒) for stone needles before Quan annotated *Plain Questions. Variorum of The Yellow Emperor's Plain Questions* (《注黃帝素問》) was Quan's earliest notes to *Plain Questions*.

Cheng Chu (褚澄)

Cheng Chu, styled Yan-Dao (彥道), was born in Yangdi (now Yuxian County, Henan Province) around the fifth century. During the Southern Qi period, he served as Governor of Wujun (吳郡太守), ranked as the Left



Palace Secretary (左中尚書). According to *The History of Southern Qi · Cheng Chu* (《南齊書·褚澄傳》), he wrote *Miscellaneous Formulary* (《雜藥方》) (that has been lost) and *Prescriptions Bequeathed by Cheng Chu* (《褚氏遺書》). *Prescriptions Bequeathed by Cheng Chu* revealed the secrets of qi, blood, yin, and yang. The book had ten chapters that, respectively, dealt with individual formations, source qi, normal pulse, liquid and humor, body constituents, essence and blood, eradication of diseases, examination of subtlety, observation, and the way to conceive a baby boy. The book highlighted that the diseases of Buddhist monks, nuns and widows, and those of married women, should not be treated in the same way, because as far as Buddhist monks, nuns and widows were concerned, mental factors must be considered in addition to the patient's condition.

Yun-Luan Shi (釋曇鸞)

Yun-Luan Shi, also known as Tan-Luan (曇鸞), was a physician in the Northern and Southern dynasty. He was born in Yanmen (now Datong, Shanxi Province) in 467 AD and died in 542 AD. When he was a child, he became a Buddhist monk and began to study medicine. Later he followed Hong-Jing Tao to study the way to immortality. He wrote *Miscellaneous Pellet Prescriptions for Hundreds of Diseases* (《療百病雜丸方》), *Remedies for Regulating Qi* (《調氣方》) and other medical books. However, all these books have since been lost.



Zhi-Cai Xu (徐之才)

Zhi-Cai Xu (492 AD-572 AD), styled Shi-Mao (士茂), was a physician in the Northern Qi dynasty. Xu's deceased grandfather was known for his medical skills in the Southern dynasties. Xu was a prolific author who was good at materia medica and formulae. He wrote *Couplet Medicinals, Prescriptions for Infantile Diseases* (《小兒方》), *Lei's Couplet Medicinals* (《雷公藥對》), *Effective Prescriptions of Commandery Prince Xu's Family over Eight Generations* (《徐王八世家傳效驗方》), *Secret Remedies Handed Down in Xu's Family* (《徐氏家秘方》) and *Commandery Prince Xu's Formulary* (《徐王方》). Pitifully, all these books have been lost. In addition, he proposed to nourish the fetus month by month (「逐月養胎法」). This method helped improve pregnant women's awareness of hygiene and heredity.

Xian Wang (王顯)

Xian Wang, styled Shi-Rong (世榮), was a physician born in Yang Ping District, Leping Prefecture (now Jinyang, Shanxi Province) in the Northern Wei dynasty. His father An-Dao Wang (王安道) was a professional physician. When his father went to see a patient, Xian Wang often followed him and watched how his father made a diagnosis and gave a prescription. This is why he was adept in medical skills. *The History of Northern Wei · Xian Wang* (《北魏書·王顯傳》) recorded that Xian



Wang, along with the other famous physician Qian Xu (徐 騫), was summoned to the palace to treat Queen Mother Wen-Zhao (文昭太后). Wang believed that her condition was aroused owing to pregnancy rather than heart disease. His diagnosis was then proved, and he won the great trust of the Queen Mother and was sent to attend Emperor SeJong (世宗帝), who had been constantly ill since childhood. Due to his excellent medical skills, Emperor SeJong's health improved, and Xian Wang was offered such posts as Vice Minister for Law Enforcement (少卿) and Attendant Censor for Imperial Medicine (營進御藥), finally granted as the Earl of Weinan (「衛南伯」). In addition to *Folk Prescriptions* (《單方》), he also wrote a 35-volume *Formulary* and under Emperor SeJong's order, put it into circulation. Sadly, these two books have been lost.

Seng-Yuan Yao (姚僧垣)

Seng-Yuan Yao, also known as Seng-Tan (僧坦), style name Fa-Wei (法衛), was born in Wuxing, Wucheng (now Qiantang, Zhejiang Province). He held positions in the Liang dynasty, Northern Zhou, and the early Sui dynasty. His father Pu-Ti Yao (姚菩提), Director of Gaoping (平令) in the Liang dynasty, loved to study medicine because of his poor health. Coincidentally, Emperor Wu of the Liang dynasty (梁武帝) was keen on medicine as well. Thus the Emperor often talked with Pu-Ti Yao about the art of medicine. As Seng-Yuan was interested in medicine when he was a child, he often studied medical books with his father. At the age of 24,



Seng-Yuan Yao became a physician. Emperor Wu summoned him to the court and asked him some medical questions, to which he answered fluently. The Emperor appreciated his talents and offered him the position of Tai-I Cheng (太醫正). According to historical documents, Emperor Wu of the Liang Dynasty once had a fever, and wanted to take rhubarb (大黃) to clear away the heat. At that time, Seng-Yuan advised, “Rhubarb is cold in nature. As Your Majesty is old, it is not suitable for you.” However, the Emperor did not follow Yao’s advice because he thought he himself was familiar with the principles of medicine. As a result, his condition worsened but he later recovered with the help of Seng-Yuan. Yao also cured Emperor Yuan of the Liang dynasty (梁元帝) of his gastrointestinal disease. In order not to damage Emperor Yuan’s original qi, the imperial physicians proposed to use an alleviating prescription. However, Seng-Yuan suggested taking rhubarb, given the fact that the abiding problem was an obstruction and the pulse was surging and replete. Emperor Yuan took his advice and soon recovered. *The History of the Houzhou* (《後周書》) also recorded many cases of how Seng-Yuan cured patients. These cases indicated his excellent medical skills. Seng-Yuan Yao composed *Traveling Notes* (《撰行記》) and *Collection of Experimental Prescriptions* (《集驗方》). Although the *Collection of Experimental Prescriptions* had been lost, its contents can still be seen in later medical books, such as *Medical Secrets of an Official* by Tao Wang of the Tang dynasty and *A Hundred Supplementary Formulas to the Handbook of Prescriptions for Emergencies* by



Yong-Dao Yang.

Xiu Li (李修)

Xiu Li, styled Si-Zu (思祖), was a physician in the Northern Wei Dynasty. He was born in Yangping, Guantao District (now Guantao County, Hebei Province) around the fifth century, and once served as Chung-San Lin (中散令; Director of Courtiers) and Tai-I Lin (Director of the Imperial Medical Bureau). His father Liang Li (李亮) studied the medical remedies of various physicians with Seng-Yuan Yao, showing insight into acupuncture and moxibustion as well as prescriptions. Xiu Li followed in his father's footsteps. He was asked to gather about a hundred instructors and handwriting artisans in the Eastern Palace to compile and publish over one hundred volumes of *Formulary*. Unfortunately, this book has been lost.

Jun-Zhi Gan (甘濟之)

Jun-Zhi Gan, also known as Rui-Zhi Gan (甘睿之), was a physician whose life was unknown. According to the *History of the Sui Dynasty · Records of Classics and Books*, Gan was the author of *Essential Copies of Herbal Medicine for Welling-Abscesses and Flat-Abscesses on the Ears and Eyes* (《癰疽耳眼本草要鈔》), *Pathogenesis of Miscellaneous Welling-Abscess and Flat-Abscesses* (《癰疽部黨雜病疾源》), and *Prescriptions for Otopathy and Ophthalmopathy* (《療耳眼方》). It thus can be inferred that he was probably a physician sometime during the period from 229 AD to 589



AD, was good at external signs (外證) and otorhinolaryngology.

References

1. Jing-Fu Chen (1998). Famen Temple. *Sanqin Press*. pp. 184.
2. Yi-Hua Zhang (1998). Sterilizing Utensils of More Than 1700 Years. *World of Cultural Relics*. pp. 48.
3. Guo-Qiang Chen, et al. (1988). *History of Baiyue Nationality*. China Social Sciences Press. pp. 262.
4. Zheng-You Lu (1978). Korean Medical History of Systematic Korean Cultural History. *Ethnic Culture Research Institute of Korea University*. pp. 737, 768.
5. Shi-DeYan (1998). Royal Court Medicine in Ancient China and Its Historical Meanings. *Information of Traditional Chinese Medicine* (4). pp. 3-5.
6. Zhi-Jun Shang (1999). The Contribution of *Variorum of the Herbal Foundation Canon* by Hong-Jing Tao in Liang Dynasty to Herbalism. *Journal of Beijing University of TCM*. 22(3). pp. 7-8.
7. Jun-Bing Zhou (1998). Great Achievements in Surgery in China Between the Wei and Jin Dynasties and the Five Dynasties. *Journal of Nanjing University of Traditional Chinese Medicine*. 14(6). pp. 366-368.
8. Rong-Qing Xu & Heng Zhou (2000). Achievements of the Development of Traditional Chinese Medicine in the Dynasties of Qin, Han, Jin, Tang,



Song and Jin. *Journal of Nanjing University of Traditional Chinese Medicine (Social Science)*. 1 (1). pp. 23-28.

9. Hou-Bao Zhang (2000). Taoists' Alchemy and Dan Medicine. *Lishizhen Medicine and Materia Medica Research*. 11(3). pp. 216-217.





Chapter 6 *Medical Science in the Period of Sui, Tang, and the Five Dynasties (from 581 AD to 960 AD)*

Section 1 Historical Background

Politics, economy, medical science, and culture experienced prosperous development in the period of Sui, Tang, and the Five Dynasties when the country was thriving and powerful. As Emperor Xiaowen of the Northern Wei (北魏孝文帝) promoted Chinesization, Han people and people of the five northern barbarian tribes (Xiongnu, Xianbei, Di, Qiang, and Jie; 匈奴、鮮卑、氐、羌、羯) gradually integrated. Jian Yang (楊堅), i.e. Emperor Wen of Sui Dynasty (隋文帝), replaced the regime of the Northern Chou and established Sui Dynasty in 581 AD. In the year of 589 AD, Emperor Wen destroyed the Southern Chen and united the whole country. Flourishing Age of Kaihuang under the rule of Emperor Wen of Sui promoted the fusion and development of both economy and nationalities of the South and the North. However, during the rule of Emperor Yang of Sui Dynasty (隋煬帝), frequent wars and heavy taxes gave rise to extreme public anger, and peasant uprisings occurred one after another, which shook the regime of Sui Dynasty.



In the year of 618 AD, Yuan Li, Emperor Gaozu of Tang Dynasty (唐高祖李淵), abolished the regime of Emperor Gong of Sui (隋恭帝), and established Tang Dynasty. Emperor Taizong of Tang (唐太宗) created the flourishing age of “Rule of Zhenguan” (「貞觀之治」) (from 627 AD to 649 AD). In 641 AD, Emperor Taizong of Tang had Princess Wencheng (文成公主) marry a king in Tubo (吐蕃), a far away country. As a result, hundreds of medical formulas, five diagnosis methods, six medical instruments, four medical works, etc. were brought to the western regions, which promoted important communication between Han nationality and Tibetan nationality. In Potala Palace (布達拉宮) and Jokhang Temple (大昭寺) in Lhasa (拉薩市), China, statues of Princess Wencheng still remain. From the middle stage of Tang Dynasty, the society and political situation became turbulent and the breakout of “An-Shi Rebellion” (「安史之亂」) was the crucial turning point from prosperity to recession. After the rebellion, the situation of military governorship worsened until Tang Dynasty perished and then developed into the situation of separatist regimes in the period of “Five Dynasties and Ten States” (「五代十國」).

Taoism was once regarded as the national religion of Tang Dynasty. Consequently, Alchemy (煉丹術) was popular for some time, and thus a lot of knowledge on pharmacy and chemistry was accumulated. In 1970 AD, four silver pomegranate jars (石榴罐), one agate mortar for grinding medicinals (研藥器瑪瑙臼), and one jade pestle (玉杵) were unearthed from the site of the Palace of Highness Fen in Xi'an (西安汾王府遺址).



A pomegranate jar (the picture shows the up right side) is used as a tool and for materials that people used to apply alchemy (unearthed relics from He Jiacun of Xi'an city in 1970 AD)

A silver medicine box which would have contained materials such as bright and glorious cinnabar, and white agate for applying alchemy (the picture shows the down left side)

Source: A General History of Traditional Chinese Medicine, a volume containing collections of illustrative plates and an atlas of historical relics; page 93 (held at the Shaanxi History Museum)

After examination, they were verified as cultural relics of medical science in Tang Dynasty and are tools for cinnabar sublimation. Si-Miao Sun (孫思邈) once described “the method of heating sulfursulphur” (「硫黃伏火法」)¹ in his alchemy-related work, which was the early formula of gunpowder in China.

The prevalence of Confucianism, Taoism, and Buddhism in Tang



Dynasty had important influences on the development of traditional Chinese medicine. Many medical experts from Tang and Sui Dynasties absorbed medical thoughts in Buddhist sutras, the alchemy and the health cultivation of Taoists, and integrated them into the spirit of traditional Chinese medicine. Si-Miao Sun's idea of health cultivation and senile disease prevention also enriched the theories of health cultivation and longevity of China. In addition, as "woodblock printing" (「雕版印刷」) was invented in this period; the printing technology was widely used in medical work publishing, which increased channels to spread medical knowledge.

Section 2 An Introduction to the History of Traditional Chinese Medicine

Development of Traditional Chinese Medicine

Due to the prosperity of economy and culture and the frequent communication between China and foreign countries in the period of Sui, Tang and the Five Dynasties, the medical field then could easily obtain newly-emerged domestic and foreign medical knowledge, which broke the model that medical knowledge and works could only be spread in local regions and by individuals. With respect to medicine management, Tang Dynasty started to conduct general surveys on medicines. The medical



education system created by Liu Sung Dynasty in the period of the Southern Dynasties tended to become complete in the period of Sui and Tang Dynasties. Both the local and central governments provided medical education. There was the Tai-I Shu (太醫署; Imperial Medical Bureau) under the central government. The studying period and courses for each medical department were clearly specified and records show that there were foreign students coming to China to learn medical science. As in the period of Sui, Tang, and the Five Dynasties, China kept close communication with neighboring countries, medical knowledge and medicinal material exchanges were also frequent. For example, Vietnam offered spice medicines and other types of their local medicines to China for several times. Arab countries also repeatedly offered Myrrha (沒藥), frankincense (乳香), costusroot (木香), and the like to the imperial court of Tang Dynasty.

Following the medical systems of the previous dynasties, Sui and Tang Dynasties set up the Shang Yao Chu (尚藥局; Imperial Drug Bureau) and Yao Tsang Chu (藥藏局). In the period of Sui Dynasty, Shang Yao Chu (Imperial Drug Bureau) was set to serve emperors. During the rule of Emperor Wen of Sui Dynasty, the Shang Yao Chu (Imperial Drug Bureau) was subordinate to the Men Hsia Sheng (門下省; Chancellery, an executive agency in the central government's top echelon), and had positions of Tien Yu (典御; Chief Steward), Shih-Yu-I (侍御醫; Imperial Physician-In-Attendance), Zhi-Chang (直長; Foreman), I-Shih (醫師;



Master Physician), and Chu Yao (主藥; Pharmacist). During the rule of Emperor Yang of Sui Dynasty, the Shang Yao Chu (Imperial Drug Bureau) was changed to be subordinate to the Tien-Nei Sheng (殿內省; Palace Administration), and positions of Shih-I (司醫; Palace Physician) and I-Zuo (醫佐; Medical Assistant) were added. In the period of Tang Dynasty, Shang Yao Chu (Imperial Drug Bureau) was under the jurisdiction of the Tien-Chung Sheng (殿中省; Palace Administration), and had positions including Shang-Ya Feng-Yu (尚藥奉御; Chief Steward of the Imperial Drug Bureau), Zhi-Chang (直長; Foreman), Shih-Yu-I (Imperial Physician-In-Attendance), Chu Yao (主藥; Pharmacist), Yao-Tung (藥童; Apprentice Pharmacist), Shih-I (Palace Physician), I-Zuo (Medical Assistant), An-Mo Shih (按摩師; Master of Massage Department), Zhou-Jin Shih (咒禁師; Master of Exorcism), and He Kou Zhi Jiang (合口脂匠; Medication Maker). In Shang Yao Chu (Imperial Drug Bureau), Tai-Chang (太常; Chamberlain for Ceremonials, in charge of great state sacrificial ceremonies) was responsible for examining tribute medicines. Shang-Ya Feng-Yu (Chief Steward of the Imperial Drug Bureau) was responsible for prescribing and pulse-taking for the emperor. Shang-Ya Feng-Yu (Chief Steward of the Imperial Drug Bureau) and Tien-Chung Chien (殿中監; Palace Directorate) were responsible for supervision. I-Zuo (Medical Assistant) was responsible for tasting medicines, and giving clear indication of names of medicines, their compositions, and producing dates. The procedures for an emperor to take medicine were as follows: Shang-



Ya Feng-Yu (Chief Steward of the Imperial Drug Bureau) and Tien-Chung Chien (Palace Directorate) would taste the medicine first, then the heir apparent would taste it again, and finally the medicine was presented to the emperor. Shih-Yu-I (Imperial Physician-In-Attendance) took charge of diagnosis and health regulation. Shih-I (Palace Physician) was an assistant of Yu-I (御醫; imperial physicians). Chu Yao (Pharmacist) and Yao-Tung (Apprentice Pharmacist) were responsible for the processing of medicines. An-Mo Shih (Master of Massage Department) and Zhou-Jin Shih (Master of Exorcism) had the same status as Tai-I (太醫; imperial physicians).

Yao-Tsang Chu was set for Heir Apparent (太子), and had positions of Yao-Tsang Chien (藥藏監; Directorate of Pharmacy in the Secretariat of the Heir Apparent), Yao Cheng (藥丞; Pharmacist Aide to the Imperial Physician), and Shih-I (侍醫; Attendant Physicians) in the period of Sui Dynasty. It was renamed Zuo-Tsun-Fang (左春坊) in Tang Dynasty. The manning quotas of the Pharmacy included Wei-Yao-Zang-Lang (維藥藏郎; Pharmacist Aide to the Imperial Physician), Yao Cheng (Pharmacist Aide To the Imperial Physician), Shih-I (Attendant Physicians), Dian-Yao (典藥; Pharmacist), Yao-Tung (Apprentice Pharmacist), Zhang-Gu (掌固; Clerk), Shu-Lin Shi (書令史; Clerical Scribe), and Shu-Li (書吏; Clerk). Yao Zang Lang (藥藏郎) was responsible for medicines, and Yao Cheng (Pharmacist Aide To the Imperial Physician) was his assistant. Shih-I (Attendant Physicians) was responsible for diagnosing diseases of Heir Apparent and deciding formulas. Dian-Yao (Pharmacist) and Yao-Tung



(Apprentice Pharmacist) processed medicines, and Gong-Cheng (宮臣; the person who is responsible for tasting the medicines for royal families) tasted the medicines. Dian-I Cheng (典醫丞; Medical Aide) was subordinate to medical affair department, and Zhang-I (掌醫; Medical Attendant) was responsible for treating palace servants of Heir Apparent.

In Sui and Tang Dynasties, medical skills of traditional Chinese medicine were passed on by family inheritance, school education, and apprenticeship training method. Tai-I Lin (太醫令; Director of the Imperial Medical Bureau) was the state medical authority, as well as an important medical education institute. In Sui Dynasty, the Tai-I Shu (Imperial Medical Bureau) was under the jurisdiction of the Tai-Chang Temple, and had Director of the Tai-I Lin (Director of the Imperial Medical Bureau), Tai-I Cheng (太醫丞; Associate Director of the Imperial Medical Bureau), Chu Yao (Pharmacist), I-Shih (Master Physician), I-Shen (醫生; Student of General Medicine), Yao-Yuan Shih (藥園師; Master of Herbal Garden), I Bo Shi (醫博士; Medical Erudite), Zhu-Jiao (助教; Teaching Assistant), An-Mo Bo-Shih (按摩博士; Erudite For Massage), and Zo-Jing Bo-Shih (咒禁博士; Erudite For Exorcism). There were a total of about 330 officers. Emperor Yang of Sui Dynasty further set up the positions of I-Chien (醫監; Imperial Medical Supervisor) and I-Cheng (醫正; Principal Practitioner in Imperial Medical Office). Medical laws and decrees were managed by Director of Tai-I Lin (Director of the Imperial Medical Bureau), and Tai-I Cheng (Associate Director of the Imperial Medical



Bureau) worked as the assistant of the Director. I-Shih (Master Physician) and I-Cheng (Principal Practitioner in Imperial Medical Office) were mainly responsible for treating patients, and erudites and assistants were responsible for teaching medical skills and conducting medical treatment.

Medical education of Sui and Tang Dynasties could be divided into the education of medicine science and pharmacy. The authorized establishment included two erudites, two teaching assistants, 200 I-Shih (Master Physician), 120 I-Xue Shen (醫學生; Students of General Medicine), 20 An-Mo Bo-Shih (Erudite For Massage), 120 An-Mo Shih (Master of Massage Department), 100 An-Mo Shen (按摩生; Students of Massage Department), and two Zo-Jing Bo-Shih (Erudite For Exorcism). In the Department of Pharmacy, there were two Chu Yao (Pharmacist) and two Yao-Yuan Shih (Master of Herbal Garden). The Tai-I Shu (Imperial Medical Bureau) of Tang Dynasty had five departments; medicine, acupuncture, massage, exorcism, and herbal garden, and positions such as Governor, Scribe, I-Chien (Imperial Medical Supervisor), I-Cheng (Principal Practitioner in Imperial Medical Office), and Zhang-Gu (Clerk). The Tai-I Shu (Imperial Medical Bureau) was under the jurisdiction of the Tai-Chang Temple, and its highest officer was Tai-I Shu Lin (太醫署令; Director of Imperial Medical Bureau). The bureau was the world's first medical school established by a state government. It followed the system established in Sui Dynasty, and added some official positions. Under the Department of Medicine of the Tai-I Shu (Imperial Medical Bureau), there



was Department of Physical Exercise, Department of Sores and Swellings, Department of Pediatrics, Department of Ears, Eyes, Mouths, and Teeth, and Department of Horning. The schooling length of the Department of Physical Exercise was seven years, five years for the Department of Sores and Swellings and Department of Pediatrics, four years for the Department of Ears, Eyes, Mouths, and Teeth, and three years for the Department of Horning. Small-class teaching was adopted. I-Bo Shi (Medical Erudite) for general medicine and teaching assistants were responsible for teaching, and medical apprentices and aides of I-Shih (Master Physician) were responsible for assisting the teaching. Monthly, quarterly, and annual examinations were held. The upgrading and degrading of students depend on the results of examinations. The Herbal Garden was the earliest garden of medicinal plants in the history. It had positions of Yao-Tung (Apprentice Pharmacist) and Chu Yao (Pharmacist).

Medical systems of local areas also achieved certain development in Sui and Tang Dynasties. Sui Dynasty set up the position of Physician in Commanderies and Districts, and valued medical affairs and medical education in local areas. The imperial court of Tang Dynasty specified the numbers of teachers and students and their ranks in medical schools of subordinated prefectures. Scholars of medicine were engaged in treating civilians of Jingzhao (京兆) Prefecture and would arrange students to carry out mobile medical service in the prefecture for civilians with the assistance of teaching assistants.



Medical Exchanges

In the period of Sui and Tang Dynasties, Chang'an was the exchange center for cultural, economic, and medical exchanges between China and over 90 countries and regions such as Japan, Korea, India, Vietnam, Arab, HoLing (詞陵), and Sri Lanka (獅子國). Medical knowledge at home and abroad also experienced frequent exchanges, and achieved great progress.

- Korea

In the middle of the seventh century, Silla united the Korean Peninsula. It then sent people to China for study. These Korean students brought medical works of traditional Chinese medicine (*Herbal Foundation Canon* (《本草經》), *Plain Questions* (《素問》), *The Needle Canon* (《針經》), *The Systematized Canon* (《甲乙經》), *Bright Hall Classic* (《明堂經》), *The Pulse Canon* (《脈經》), *The Classic of Difficult Issues* (《難經》), *Newly Revised Herbal Foundation* (《新修本草經》), etc.) and the medical system back to Korea. Medicines from Korea, such as ginseng (人參), kelp (昆布), *zostera marina* (大葉藻), and *Eulalia* (芝草), were also recorded in herbal works of China.

- Japan

Japan was named “Woguo” (「倭國」) in the Western Han Dynasty and renamed “Japan” in Tang Dynasty. In the period of Sui and Tang



Dynasties, Japan sent emissaries to China for more than 30 times. During the rule of Empress Suiko (古天皇時期), the thoughts of Confucianism and Taoism and medical knowledge were directly brought to Japan. In 608 AD, Onono Imoko (小野妹子), the earliest medical student from Japan, brought 300-volume *Four Seas Gathering of Similar Formulas* (《四海類聚方》) to Japan. In this very period, Nanbamegumibi (難波惠日) et al., who lived in China for a long time, brought medical works such as *The Origin and Indicators of Disease* (《諸病源候論》) along with them back to Japan. After spreading knowledge of traditional Chinese medicine in Japan for seven years, they went back to China to study Chinese medicine again. From 630 AD to 654 AD,² Chinese monk Jian Zhen (鑑真和尚) travelled across the sea to Japan in 754 AD. Apart from chanting sutras, he also taught Chinese medicine.³

In 654 AD, Japan copied Tang Dynasty to carry out “Taika Reform” (「大化革新」) and sent a large number of emissaries and knowledgeable monks to China. The warehouse of cultural relics of Japanese royal family still preserve about 60 kinds of traditional Chinese medicines exchanged at that time, including musk (麝香), ginseng, dragon bones (龍骨), and cinnamon bark (肉桂). During the rule of Emperor Mommu (文武天皇) of Japan, Ba Bao Lin (大寶令; Ancient Japanese Law) was issued. It copied the medical system of Tang Dynasty and set up positions such as I-Shih (Master Physician), I Bo Shi (Medical Erudite), Jen Shih (針師; Acupuncture Master), Jen Shen (針生; Student of Acupuncture), Jen Bo



Shih (針博士; Scholar of Acupuncture), An-Mo Bo-Shih (Erudite For Massage), scholar of massage, An-Mo Shih (Master of Massage Department), Students of Massage, Zo-Jing Bo-Shih (Erudite For Exorcism), Zo-Jing Shen (咒禁生; Student of Exorcism), Yao-Yuan Shen (藥園生; Student of Herbal Garden), and Yao-Yuan Shih (藥園士; Master of Herbal Garden) in the palace. Students of general medicine and Jen Shen (Student of Acupuncture) studied different courses. Students of general medicine studied medical works such as *The Systematized Canon*, *The Pulse Canon*, *Small Formulary* (《小品方》), and *Collection of Experimental Prescriptions* (《集驗方》). Jen Shen (Student of Acupuncture) studied medical works such as *The Needle Canon*, *Plain Questions*, *Memory Table for Pulse* (《脈訣》), *Bright Hall* (《明堂》), *Streaming Sore Canon* (《流注經》), *Chiwu Magic Needle Canon* (《赤烏神針經》), and *Yan Ce Tu* (《偃側圖》).

Japan had several outstanding scholars in traditional Chinese medicine. They have published medical works that have significant meanings for clinical practice. In 808 AD, Ezmohiloma (出雲廣真) et al., Shih-I (Attendant Physicians) of Emperor Heizei (平城天皇) of Japan, referred to classic works of traditional Chinese medicine such as *The Yellow Emperor's Inner Canon* (《皇帝內經》), *The Pulse Canon*, *The Needle Canon*, *Small Formulary*, *Newly Revised Herbal Foundation*, and *The Systematized Canon*, and compiled the 100-volume *Classified Formulas of the Daido Period* (《大同類聚方》). So far, Japan has



preserved 163 medical works of traditional Chinese medicine, accounting to a total of 1309 volumes, including some classic works that have been lost in China, such as *Newly Revised Herbal Foundation*, *Small Formulary*, and *Collection of Experimental Prescriptions*.

- Vietnam

The ancient names of Vietnam were Annam (安南) and Linyi (林邑). In the period of Sui and Tang Dynasties, Quan-Qi Shen (沈佺期), Pian Gao (高駢), Yu-Xi Liu (劉禹錫), Chuo Fan (樊綽), et al. all visited Vietnam. Local people of Vietnam honored Si-Miao Sun, a physician of Tang Dynasty, as the God of Medicine, and worshipped him in the Temple of Medicine. In the period of Sui and Tang Dynasties, medicines from Vietnam (amber (琥珀), rhinoceros horns (犀角), lignum aloes (沉香), etc.) were offered by businessmen to China as tributes. Consequently, herbal works of Tang Dynasty such as *Supplement to the Herbal Foundation* (《本草拾遺》) and *Newly Revised Herbal Foundation* record the effects and indication functions of Vietnam medicines such as clove (丁香), trachelospermum (白花藤), imperata (白茅香), Henry's necklace tree (欖木), and sappan (蘇方木).⁴

- India

The ancient names of India were Tianzhu (天竺) and Brahman (婆羅門). Monk Xuan Zang (玄奘) of Tang Dynasty started to call it “India” in



Travelling in Western Region (《大唐西域記》) and *Sanzang Sheng Jiao Xu* (《三藏聖教序》). Due to the prevalence of Buddhism in the period of Sui and Tang Dynasties, the communication between China and India became close. *Travelling in Western Region* records that medical science of India spread to China along with Buddhism. Monk Yijing (義淨) of Tang Dynasty lived in India for 25 years and introduced Chinese medicine (including herbal science, acupuncture and moxibustion, and the theory of pulse examination) to Indians. Medical theories, medical skills, and medicines of India spread to China along with the spread of Buddhist sutras. A large number of medical knowledge and medicines of India (such as dryobalanops (龍腦香) and tulip (鬱金香)) entered China and influenced the medical science of Sui and Tang Dynasties.

- Arab Countries

The Arab Empire is located in the Arabian Peninsula and its ancient name was Dashi (大食). The ancient name of Iran was Persia. In Sui and Tang Dynasties, these two countries had frequent communication with China. They often paid tributes to China, and thus many Chinese medicines, such as camphor (樟腦), cinnamon, ginger (生薑), and aloe (蘆薈) were brought to the Arabian Peninsula⁵. People of Dashi believed in Islam. From 615 AD to 789 AD, it officially sent emissaries to Tang Dynasty. Opium (阿芙蓉), agate (瑪瑙), dragon's blood (麒麟竭), storax (蘇合香), frankincense (薰陸香), Aleppo gall (無食子), clove, chebule (訶



黎勒), etc. mentioned in *Herbal Foundation Compendium* (《本草綱目》) were medicines from Arab.

Merchants from Persia frequently came to China to do business in Tang Dynasty. According to the record (from 647 AD to 762 AD), Persia (波斯) sent emissaries to China carrying their spices and medicines (such as atacamite (綠鹽), pistachio (阿月渾子), litharge (密陀僧), asafetida (阿魏), and Aleppo gall (無石子)). Many descendants of Persians were greatly influenced by Chinese culture, such as Xun Li (李珣) who was an expert in pharmacy in the period of Late Tang Dynasty and the Five Dynasties. He was said to be the descendent of Persian merchant Su-Sha Li (李蘇沙). *Herbal Foundation of Overseas Medicines* (《海藥本草》) written by Xun Li summarized medicines that were brought to China from Persia at that time.⁶

Section 3 Medical Works

Four Seas Gathering of Similar Formulas (《四海類聚方》)

Four Seas Gathering of Similar Formulas is called *Gathering of Similar Formulas* (《類聚方》) for short. The book was compiled under the order of Emperor Yang of Sui Dynasty and was completed in the period from 605 AD to 618 AD. The book has a total of 2,600 volumes. It was first mentioned in *The Book of Sui · Records of Classics and Books* (《隋



書·經籍志》). *Newly Revised Herbal Foundation* written in Tang Dynasty quoted the content of this book. It was once collected by the Institute for the Advancement of Literature of Tang Dynasty. However, as the book had large volumes, which made it difficult to preserve, and also due to the chaos of war at that time, the book was lost after Tang Dynasty. While compiling the *Four Seas Gathering of Similar Formulas*, the government of Sui sorted out simple formulas to compile a 300-volume *Four Seas Gathering of Simple Formulas* (《四海類聚單要方》) which was lost after Tang Dynasty. *Catalog of Existing Books in Japan* (《日本國見在書目錄》) compiled in Kanpyo years (寬平年間) contains a 120-volume *Canon of Similar Formulas* (《類聚方經》). It can be deduced that the book might spread to Japan due to the frequent communication between China and Japan in the period of Sui and Tang Dynasties.

The Origin and Indicators of Disease (《諸病源候論》)

The Origin and Indicators of Disease is called *Chao Shi Origin of Disease* (《巢氏病源》) for short. It is also *Chao Shi Origin and Indicators of Disease* (《巢氏諸病源候論》) or *Pandect of the Origin and Indicators of Disease* (《諸病源候總論》). The book was written in around 610 AD. It is the first book on the origins and indicators of diseases in the history of traditional Chinese medicine. It was also compiled under the order of the imperial court. Following the order of the emperor, medical erudite Yuan-Fang Chao (巢元方) of Sui Dynasty completed the book



together with Jing-Xian Wu (吳景賢) et al. *Booklist of Si Ku Quan Shu* (《四庫全書書目》) honored this book as “the bridge for patterns and treatment” (「證治之津梁」). It was a work of Chinese medicine with the same importance as *The Inner Canon*, *The Classic of Difficult Issues*, and *On Cold Damage and Miscellaneous Diseases* (《傷寒雜病論》).

The Origin and Indicators of Disease is based on theories of *The Inner Canon* and *On Cold Damage and Miscellaneous Diseases*. It has a total of 50 volumes and was divided into 67 categories. The book lists 1,739 disease patterns, covering Internal Medicine, Surgery, Pediatrics, Gynecology, Ophthalmology and Otorhinolaryngology, tooth and mouth diseases department, Osteo-traumatology, etc. It uses diseases as the outline and under each kind of disease, it illustrates the concepts of different disease patterns, causes, pathogenesis, and patterns. The book also contains illustrations of preventive medicine, health cultivation, conduction exercise, external treatment, surgical methods, etc.⁷ In *The Origin and Indicators of Disease*, the article *On Patterns of Incised Wounds and Broken Intestines* (《金瘡腸斷候論》) records the clinical practice of sewing intestines and blood vessel ligation, which proves the existence of surgery in the traditional Chinese medicine.

The Origin and Indicators of Disease preserves much information of medical science of ancient China. Consequently, books such as *Thousand Gold Pieces Formulary* (《千金方》) written by Si-Miao Sun of Tang Dynasty, *Essential Secrets from Outside the Metropolis* (《外台秘要》)



written by Xi Wang (王熹) of Tang Dynasty, and *The Great Peace Sagacious Benevolence Formulary* (《太平聖惠方》) written during Sung Dynasty all quote the content of *The Origin and Indicators of Disease* as the theoretical basis for analyzing disease causes and pathological mechanism. In Sung Dynasty, this book was even listed as one of the mandatory books for medical students. It was also the basis for examination propositions for physicians. The book was later introduced to Japan and Korea, and was listed as one of the mandatory books for medical study.

***Grand Simplicity of the Yellow Emperor's Inner Canon* (《黃帝內經太素》)**

Grand Simplicity of the Yellow Emperor's Inner Canon is called *Grand Simplicity* (《太素》) for short. It has another name of *The Yellow Emperor's Grand Simplicity* (《皇帝太素》). It was compiled by Shang-Shan Yang (楊上善) who was a physician in the period of Sui and Tang Dynasties. The book was the earliest full annotation of *The Inner Canon* preserved till now. Shang-Shan Yang rearranged *The Inner Canon* and gave marginal notes. He subdivided the table of contents of each volume but preserved the original table of contents at the beginning of each volume. However, only articles of the following are preserved till now: health cultivation, yin and yang, combination of human and nature, bowels and viscera, channels, points, construction qi and defense qi, body-inch

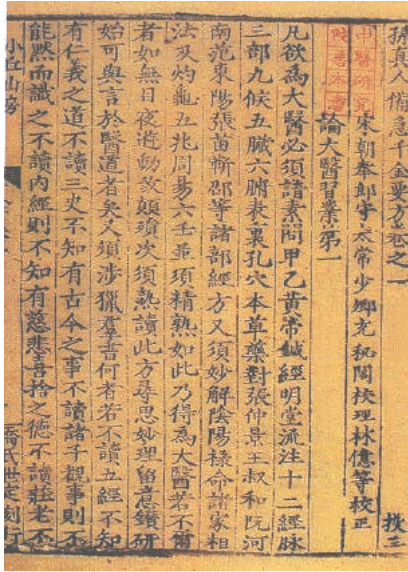


measurement, diagnosing patterns, disease patterns, prescriptions, nine needles, supplementation and drainage, cold damage, cold and heat, evils, wind, qi theory, miscellaneous diseases, etc.⁸

Grand Simplicity classifies and concludes the content of *The Inner Canon*. The texts of *The Inner Canon* quoted by *Grand Simplicity* are considered to be the most similar to the original ones. Consequently, many scholars used these texts to proofread different versions of preserved books such as *Plain Questions* and *Magic Pivot* (《靈樞》), which have significant reference value to the study of *The Yellow Emperor's Inner Canon*.

***A Thousand Gold Pieces Emergency Formulary* (《備急千金要方》)**

A Thousand Gold Pieces Emergency Formulary was written by Si-Miao Sun of Tang Dynasty. It is called *Thousand Gold Pieces Formulary* for short. It has another name of *A Thousand Gold Pieces Prescriptions* (《千金要方》). The book was completed in around the third Yonghui (永徽) Year (652 AD). As life is more valuable than a thousand gold pieces, the book was given such a name. It contains both empirical formulas and classical remedies, and summarizes treatment experience before Tang Dynasty. It is the first medical work in the history of Chinese medicine that contains principles, methods, formulas, and medicinal. The content of the whole book covers medical ethics, herbal foundation, pharmacy, clinical



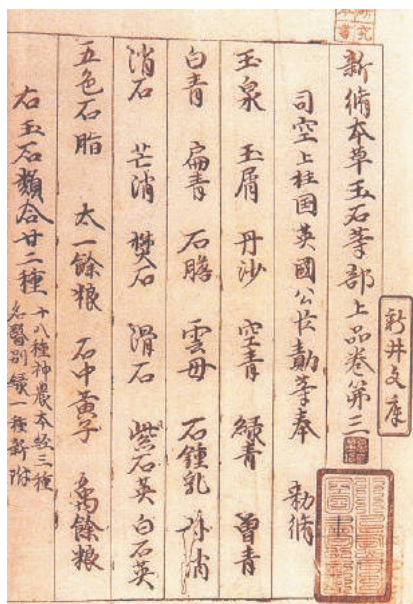
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 87 (A collection held in the library of the Chinese Medicine Research Institute in China)

departments, acupuncture and moxibustion, diet therapy, medicines, prevention hygiene and health. The book also pays attention to medical ethics. And the first volume of *A Thousand Gold Pieces Emergency Formulary, A Physician of Great Virtue and Honesty* (〈大醫精誠〉), has mentioned the two important elements of being a good physician; great virtue and honesty. Great virtue lays emphasis on the physicians' medical techniques and the latter emphasizes on physician's ethics. This argument has been widely spread. In addition, this book also records medical experience among the people and proposes all kinds of treatment methods such as diet therapy, viscera therapy, and urine-abducting by a scallion stalk.



Newly Revised Herbal Foundation (《新修本草》)

Newly Revised Herbal Foundation is also called *Herbal Foundation of Tang Dynasty* (《唐本草》). As *Variorum of the Herbal Foundation Canon* (《本草經集注》) written by Hong-Jing Tao (陶弘景) had quite a few misleads, and types and functions of medicines needed to be added in the 2nd Xianqing (顯慶) Year (657 AD), the imperial government approved the plead by Confucian officials including Jing Su (蘇敬) and many medical officials to revise the book. Based on the *Variorum of the Herbal Foundation Canon*, Jing Su et al. carried out a large-scale general survey on medicinal resources. After two years, in the 4th Xianqing Year (659



Newly Revised Herbal Foundation, the first pharmacopoeia to be edited by a central government worldwide.

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 91 (A collection held in the library of the Chinese Medicine Research Institute in China)



AD), they completed compiling *Newly Revised Herbal Foundation*. As the compiling work was lead by Ji Li (李勣), who was Ying Duke (英國公) of Tang Dynasty, the book was also called *Ying Duke's Herbal Foundation* (《英公本草》). *Newly Revised Herbal Foundation* was issued by the imperial court of *Newly Revised Herbal Foundation* can be divided into three parts, the body, *Drawings of Medicines* (《藥圖》), and *Illustrated Canon* (《圖經》). The body is generally referred to as the *Newly Revised Herbal Foundation*. This part basically reserves the content and layout of the *Variorum of the Herbal Foundation Canon*, and makes some extension and correction. *Drawings of Medicines* has a total of 25 volumes, including one volume of table of contents. An imperial edict was issued to the whole country, inquiring medicines of local areas, and the *Drawings of Medicines* was edited based on color drawings of crude medicines provided by local areas. It had been the color drawing of medicines with the most volumes and the most abundant medicine sources in pre-Tang period. *Illustrated Canon* has a total of seven volumes. It is the literal statement of the *Drawings of Medicines*. It introduces shapes, origins, gathering of medicine to tell the differences from one another.

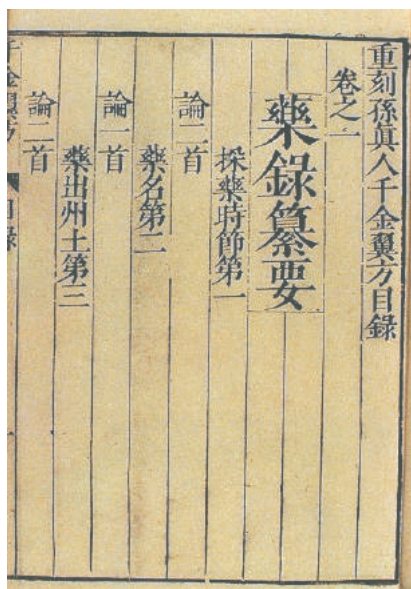
Although the original texts of the body of *Newly Revised Herbal Foundation* have been lost, the content is preserved due to quotations by herbal foundations in later generations. For example, *Classified Materia Medica* (《證類本草》), *Herbal Foundation Compendium, Prescriptions at the Heart of Medicine* (《醫心方》) and *Japanese Name of Chinese*



Materia Medica (《本草和名》) from Japan all quote a large amount of the lost texts. According to *Jiayou Illustrated Canon of Herbal Foundation* (《嘉祐圖經本草序》) of Sung Dynasty, seven volumes of *Drawings of Medicines* had been lost by then. Some parts of *Illustrated Canon* had been lost too. However, some content has been recorded in *Herbal Foundation of Shu* (《蜀本草》) and *Wings of the Thousand Gold Pieces Formulary* (《千金翼方》). The complete editions of *Newly Revised Herbal Foundation* include the *Re-edited Newly Revised Herbal Foundation* (《重輯新修本草》) by Japanese Oganishinalishido (岡西爲人) and *Tang Dynasty Newly Revised Herbal Foundation* (《唐·新修本草》) written by Zhi-Jun Shang (尚志鈞) which was published in 1981 AD by Anhui Science and Technology Publishing House.

***Wings of the Thousand Gold Pieces Formulary* (《千金翼方》)**

Wings of the Thousand Gold Pieces Formulary was completed in around the 2nd Yongchun (永淳) Year (683 AD). It was written by Si-Miao Sun of Tang Dynasty in his later years. The book is the continuation of *A Thousand Gold Pieces Emergency Formulary*. It was compiled based on about 30 years experience of Si-Miao Sun to supplement the shortage of *A Thousand Gold Pieces Prescriptions*, and thus was named “Wings” (「翼方」). *Wings of the Thousand Gold Pieces Formulary* was rich in content and was generally from medical works before Tang Dynasty. The medicines recorded in the book quotes the majority of the content of



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 87 (A collection held in the library of the Chinese Medicine Research Institute in China)

Herbal Foundation of Tang Dynasty. Clinical departments covered in this book include gynecological disease, cold damage, children's diseases, health cultivation and longevity, wind strike, miscellaneous diseases, sores, acupuncture and moxibustion, and the spell canon (containing content of spells and psychotherapy). *Wings of the Thousand Gold Pieces Formulary* and *A Thousand Gold Pieces Emergency Formulary* are regarded as the encyclopedia of the clinical Chinese medicine.

Somaratsa (《月王藥診》)

Somaratsa is the earliest work survived on traditional Tibetan medicine. The content of the book covers the source of the human life, body structure and its functions, disease causes, disease diagnoses,



relationships between diseases and seasonal climate, pulse examination, classification of diseases, symptoms of all kinds of diseases and their causes, nature, flavors, processing, and preparations of medicines, measurement of body cavity, pulse manifestation, and treatment methods of diseases. The book also writes much about the diet therapy and pharmacy.

Somaratsa used Chinese pharmacy as the basis, added theories and experience of the Tibetan medicine, and absorbed the content and theories of the medical science of Tianzhu. The book describes the formation of life. Respect to the physiological structure of human bodies, it mentions the body structure, shape, size, and overlap of brains, and the structures of skeleton, four limbs, vertebra, muscles, and the five viscera and six bowels. With respect to physiological functions, it emphasizes on the three major factors of “long, chiba, and peigen” (「隆、赤巴、培根」) that play the main coordination role in physiology and pathology. In Tibetan language, “long” means “wind or qi”, “chiba” means “fire”, and “peigen” means “water and earth”. The internal factor of the occurrence of a disease is the imbalance of “long, chiba, and peigen”, and the external factors are improper daily life and evil spirits. Besides, two major categories of cold-type diseases and febrile diseases are classified based on the causes and results of diseases. The book also proposes the disease diagnosing methods of inspection, smelling and listening, and palpation, and the treatment methods of the internal and external treatment.



Supplement to the Herbal Foundation (《本草拾遺》)

Supplement to the Herbal Foundation is called *Supplement* (《拾遺》) for short. It has another name of *Zang-Qi Chen's Herbal Foundation* (《陳藏器本草》). The author is Zang-Qi Chen. *Supplement to the Herbal Foundation* has been lost but much content of medicines are quoted by herbal foundation works of the later generations. *Prescriptions at the Heart of Medicine* of Japan, *Classified Materia Medica* of Sung Dynasty, *Herbal Foundation Compendium* of Ming Dynasty, etc. all quotes the texts of the book. Shi-Zhen Li (李時珍) spoke highly of the *Supplement to the Herbal Foundation*. In his opinion, “the book’s author read extensively, verified carefully, corrected errors, and searched the missing. He was the only one who made it since the appearance of the herbal foundation.”

The main purpose of the *Supplement to the Herbal Foundation* is to make up the missing, and thus the book was named after “supplement”. The book uses treatment methods as the basis for classification. It is the first book that classified formulas of Chinese medicine into “diffusion, freeing, supplementing, drainage, light, heavy, lubricating, astringent, dry, and moist”, etc. Such method was developed to the formula classification method of “ten formula types” in later generations. The “supplement” part of the book records a total of 692 kinds of medicines. They are divided into different parts of stones, grasses, woods, animals and birds, fruits, vegetables, and rice, etc. For each medicine, it illustrates the name, nature,



flavor, toxicity, medical effects, major functions, origin, shape, gathering, etc. Zang-Qi Chen wrote the part of “solving disputes” (「解紛」) to solve the disorder and unsystematic problems of medicine types in works of herbal foundation.

Herbal Foundation of Diet Therapy (《食療本草》)

Herbal Foundation of Diet Therapy writes about treating diseases with food. According to the quote of *Jiayou Materia Medica* (《嘉祐本草》), the original version of *Herbal Foundation of Diet Therapy* was *Supplementation Formulary* (《補養方》) written by Shen Meng (孟詵) in Chang’an years of Tang Dynasty. The original book recorded 138 types of herbs. Ding Zhang (張鼎) added 89 pieces, and made it a total of 227 pieces. As the main content of the book talks about using food to treat diseases, it was renamed *Herbal Foundation of Diet Therapy*. The original book has been lost; some content is preserved only in books such as *Classified Materia Medica* and *Prescriptions at the Heart of Medicine*.

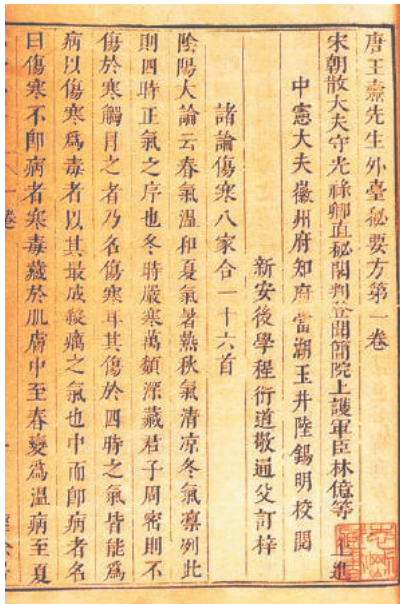
In the 33rd Guangxu (光緒) Year of Qing Dynasty (1907 AD), British archeologist Stein discovered the remains of handwritten copy of this book (the content contains 26 types of medicine varying from pomegranate to taro that are all food) in Mogao Grottoes in Dunhuang (敦煌莫高窟). The remains are now preserved in Britain Museum of London. The current version of *Herbal Foundation of Diet Therapy* is an assembly of quotes from works of herbal foundation and the remains discovered in Mogao



Grottoes in Dunhuang.⁹ *Herbal Foundation of Diet Therapy* is the first book in the work talking about diet therapy. Medicines of diet therapy mentioned in the book are common food, pickles, fruits, and meat. In addition, the book also recorded a number of diet medicines that had not been mentioned in works of herbal foundation before the beginning of Tang Dynasty, as well as dietary contraindication and false food combination, etc.¹⁰

Essential Secrets from Outside the Metropolis (《外台秘要》)

Essential Secrets from Outside the Metropolis is called *Outside the Metropolis* (《外台》) for short. It has another name of *Essential Secret Formulary from Outside the Metropolis* (《外台秘要方》). It was written



Essential Secrets from Outside the Metropolis

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 89 (A collection held in the library of the Chinese Medicine Research Institute in China)



by Tao Wang (王燾) in around the 11th Tianbao (天寶) Year of Tang Dynasty (752 AD). Tao Wang worked in the Institute for the Advancement of Literature (弘文館), which was a national library of Tang Dynasty for many years, and thus had access to a large number of ancient medical works. Consequently, Tao Wang had a good knowledge of medical science. Later, he was degraded to work as Governor in places (地方太守) such as Fangling (房陵) and Daning (大寧). Communicable subtropical diseases prevailed at that time. Tao Wang managed to survive by medical formulas. After that, he spent 10 years collecting medical theories and formulas in the pre-Qin period, the Western and Eastern Han Dynasties, Wei, Jin, and the Southern and Northern Dynasties, Sui Dynasty, and the beginning of Tang Dynasty. He classified, examined and edited them.

Essential Secrets from Outside the Metropolis is a comprehensive medical work completed by literature collection. The book has a total of 40 volumes, and records about 6,000 medical formulas. The content covers cold damage, heaven current epidemics, warm diseases, malaria, cholera, internal medicine diseases, diseases of eyes, ears, noses, teeth, etc., goiters and tumors of the neck, welling-abscess and flat-abscesses, all kinds of dysentery, malignant stroke, incised wounds, malign sores, gathering medicines, pills and powder, face diseases, gynecological diseases, children's diseases, galalith, and Bright Hall acupuncture. The content of the book is rich. For each disease category, it discusses about the disease first and then gives prescriptions. Most of the medical treatises come from



The Origin and Indicators of Disease and most of medical formulas come from *Thousand Gold Pieces Formulary*. The book also absorbs ideas of different schools without considering whether the formulas are ancient ones or current ones. It also boldly records simple formulas and empirical formulas from the civil society. With respect to the quotations, the book gives clear indications of the name and volume number of the sources. Consequently, it preserves a large number of raw materials of medical works in pre-Tang Dynasty. Many books that have been lost, such as *Jin Xiao Fang* (《近效方》), *Effective Formula from Ancient Time to Today* (《古今錄驗方》), *Shan Fan Fang* (《刪繁方》), *Shen Shi Fang* (《深師方》), *Small Formulary*, and *Acupuncture Methods for Steaming Bone* (《骨蒸病灸方》), are preserved due to quotations by *Essential Secrets from Outside the Metropolis*. Such research method of noting the sources and volume numbers of quotations was first used in summarizing medical work by Tao Wang.

***Supplementary Annotation to the Plain Questions of the Yellow Emperor's Inner Canon* (《重廣補注黃帝內經素問》)**

Bing Wang (王冰) of Tang Dynasty annotated *Plain Questions*, and after the revision by Yi Lin (林億) of the Northern Sung Dynasty, the book was renamed *Supplementary Annotation to the Plain Questions of the Yellow Emperor's Inner Canon*. It is the most complete and reliable edition of *Plain Questions* among current versions. The original book of *Plain*



Questions has nine volumes, a total of 81 articles. From Han Dynasty to Tang Dynasty, after supplementing, correction, and copying by handwriting for multiple times, the content had become incomplete by the time of Tang Dynasty. When annotating *Plain Questions*, Bing Wang commented that “circulating versions have errors, articles are repeated, the beginning part does not conform to the ending parts, and the meanings are different.” As a result, based on the *Explanation of The Inner Canon* (《內經訓解》) written by Yuan-Qi Quan (全元起) in the period of the Southern Dynasties, Bing Wang annotated *Plain Questions* again. Therefore, the book was also called “the second annotation” (「次注」). He added the seven grand treaties in Gong Zhang’s Secret Records (「張公祕本」) which was collected by his master, searched canons and theories, and supplemented the missing parts and the places where the meanings were not connected. He also guessed the aims to clarify whether the meanings were unclear. It took him 12 years to complete the book.

Bing Wang was serious about studying. He wrote the original texts in black and marginal notes in red by quoting multiple ancient works. However, due to the copying for circulation, it is difficult to tell the original texts from the annotated part. Yi Lin et al. from the Medical Literature Correction Office of the Northern Sung Dynasty collated the book in the 2nd Jiayou (嘉祐) Year (1057 AD). They also referred to ancient literature and different editions of *Plain Questions*, and indicated the contents of Yuan-Qi Quan’s annotation version one by one. They corrected about



6,000 errors of Bing Wang's annotation version, supplemented over 2,000 pieces of notes, and named the book *Supplementary Annotation to the Plain Questions of the Yellow Emperor's Inner Canon*. Despite the separation or combination of later editions, they were all developed based on this very version.

Four Great Medical Classics (《四部醫典》)

Four Great Medical Classics was completed in about the 8th century. It is also called *Yi Fang Si Xu* (《醫方四續》), and the Tibetan name is (*Ju Xi*) (《據悉》; *rGyud-bzhi*) for short. It was written by famous Tibetan medicine experts gYu-thogrNying-ma Yon-tan mGon-po (宇陀寧瑪·元丹貢布) et al. The book has four parts and over 240,000 characters (a total of 156 chapters). It records 443 formulas and lists 1,002 medicines. The book proposes that there are close relationships between the growth, nature and flavors of medicinal plants and the five phases (earth, water, fire, wind, and empty). For thousands of years, *Four Great Medical Classics* has been considered as the guidebook for medical practice of Tibetan medicine. Its academic status rivals that of *The Yellow Emperor's Inner Canon* of Han nationality. During the compiling, *Four Great Medical Classics* integrated existing medical theories of Tibetan nationality and absorbed the essence of medical science of Han nationality, Dashi, and ancient India. After the correction and collation by experts of Tibetan medicine from later generations, the book gradually becomes complete.



Spreading Reliable Formulas (《傳信方》)

Spreading Reliable Formulas was completed in the 13th Yuanhe (元和) Year of Tang Dynasty (818 AD). It was written by Yu-Xi Liu (劉禹錫) of Tang Dynasty. Yu-Xi Liu collected effective formulas from individuals empirical folk formulas, and together with empirical formulas that his friend Jing-Hui Xue (薛景晦) gave him, he compiled this book. It has about 50 medical formulas. As each formula has solid proof, Yu-Xi Liu named the book *Spreading Reliable*. It is a pity that the book has been lost since Yuan Dynasty. Although works such as *Prescriptions at the Heart of Medicine* and *Classified Emergency Herbal Foundation Based on Historical Classics (《政類本草》)* have quoted about 40 medical formulas of this book, some of their content was deleted. The content of *Spreading Reliable Formulas* is rich, covering departments of Internal Medicine, Surgery, Gynecology, Pediatrics, Sores, Emergency Medicine, etc. The medication is convenient, simple, and cheap. The book proposes proficient medication and does not advocate supplementing formulas of ginseng and astragalus.

Surgical Care of the Injured (《理傷續斷方》)

Surgical Care of the Injured was completed in between 841 AD and 846 AD. It is also called *Immortal's Secret Surgical Care of the Injured (《仙授理傷續斷秘方》)* or *Lin Dao-Ren's Surgical Care of the Injured*



(《蘭道人仙授理傷續斷方》). It was written by Lin Dao-Ren of Tang Dynasty and is the earliest Chinese medical work survived now on Chinese osteo-traumatology. *Surgical Care of the Injured* records about 40 formulas of Tibetan medicine, including decoction, powder, elixir, pill, medicines for external application, wash formula, and medicines for oral administration. The book is consisted of three parts, *Organization of Treatment Supplementing One after Another Formula in Rhyme* (《醫治整理補接次第口訣》), *On Formulas* (〈方論〉), and *On Formulas for the Second Treatment of Injuries* (〈又治傷損方論〉). The medical theories of this book are originated from *The Inner Canon* and *The Classic of Difficult Issues*. It uses the theory of blood and qi as the theoretical basis and the method of quickening the blood and transforming stasis (活血化癥法). The book does not only emphasize the disease cause of static blood, but also systematically summarizes the academic connotation on osteo-traumatology in works such as *Handbook of Prescriptions* (《肘後方》) and *Essential Secrets from Outside the Metropolis*. With respect to complicated bone fracture, it advocates surgical restoration, and with respect to open fracture, it emphasizes the importance of wound debridement and suture.

Surgical Care of the Injured elaborates six major principles of the treatment of bone damage, including anesthesia, debridement, restoration and fixation, practice, and medicine usage. It emphasizes the medical ideas of wound debridement and re-disinfecting and re-fixation after a few days.¹¹



The book created “the method of restoration by chair back” (「椅背重定法」) for the treatment of dislocation of shoulder joints, which is the origin of “method of restoration by ladder” (「架梯重定法」) proposed by Yi-Lin Wei (危亦林) of Yuan Dynasty and the “improved method of Wei’s” (「改良危氏法」) for the treatment of old joint dislocation that is still used nowadays in clinical practice. Also, the book emphasizes that after fixation, proper exercise can greatly help to speed up the healing, prevent the stiffening of joints, and reduce iatrogenic diseases.¹²

Jing Xiao Precious Book on Childbirth (《經效產寶》)

Jing Xiao Precious Book on Childbirth is also called *Precious Book on Childbirth (《產寶》)*. It is the earliest Chinese medical work survived on obstetrics. It was written by Yin Zan (昝殷) in 852 AD. Yin Zan gathered discussions of previous physicians on childbirth, collected empirical folk formulas, and integrated with his own clinical experience to complete this book. The content of the book covers the treatment methods for diseases related to pregnancy, delivery, and postpartum, especially for dystocia. Following the compiling structure of *A Thousand Gold Pieces Prescriptions*, for each pattern, the book first states the medical treatise, and then formulas and medicines. The treatment methods stress on regulating qi and blood, and supplementing spleen and kidney.

The content of the book covers dietary contraindication during the pregnancy, nourishing the fetus, quieting the fetus, fetus-safeguarding,



malign obstruction, fetal bleeding, body swelling and abdominal distention, stirring fetus, dystocia, etc. Furthermore, at the end of the book, it extracts content of many famous obstetric works in pre-Sung period, such as “Eighteen Postpartum Formulas” (「產後十八論方」), “On Twenty-One Patterns” (「論二十一證」) by Shi-Zhong Li (李師中) and Ji-Zhong Guo (郭稽中), and *Formulas for Emergency Use* (《傳授濟急方論》) by Ting Zhou (周頌), which has significant reference value.

***Heart Mirror of Diet Therapy* (《食醫心鑑》)**


Heart Mirror of Diet Therapy was written by Yin Zan in around the mid-9th century about diet therapy. It mainly discusses the use of food to treat diseases, and is a book specialized in diet therapy. The book records treatment methods for wind strike, beriberi, dispersion-thirst, gonorrhoea, and diseases of gynecology and pediatrics. It introduces the medical usage of food such as thick soup, decoction, Chinese dumpling, cake, tea and wine. For each formula, the book narrates the cause, pathogenesis, and symptoms of the disease first, and then formulas and medicines for diet therapy and the indication. Each treatment formula contains the materials, quantity, preparing method, and eating method, and is easy for use. Materials of the diet therapy mentioned in this book are generally easy to acquire and are cheap and effective. This book made much contribution to the research of diet therapy in later generations, and also influenced the medical development of Japan, Korea, etc. For example, when Korean Ye-



Mong Kim (金禮蒙) was compiling *Classified Compilation of Medical Prescriptions* (《醫方類聚》) in 15th century, he extracted 15 medical treatises and 209 medical prescriptions from *Heart Mirror of Diet Therapy*.

***Cranial Fontanel Canon* (《顱凶經》)**

The name of *Cranial Fontanel Canon* comes from the fact that the cranial fontanel is not closed when a baby is born. The author is unknown. It is the earliest Chinese medical work survived on pediatrics. *The History of Song · Fang Ji Zhuan* (《宋史·方伎傳》) and *Literature Catalog* (《藝文志》) first mentioned *Wu Shi's Cranial Fontanel Canon* (《師巫顱凶經》). *General Table of Contents of Si Ku Quan Shu* (《四庫全書總目》) states that the author should have borrowed the name of Shi Wu (師巫) and that the book was completed in late Tang Dynasty or early Sung Dynasty, and has been lost since Ming Dynasty. Most of the circulating versions nowadays of *Cranial Fontanel Canon* come from *Yongle Encyclopedia* (《永樂大典》) when compiling *Si Ku Quan Shu* (《四庫全書》) in Qing Dynasty. In addition, *A New Book of Pediatrics* (《幼幼新書》) and *The Level-Line of Pediatrics* (《幼科準繩》) contain a lot of content of this lost book. *Cranial Fontanel Canon* discusses the patterns, pulses, and treatment of children's diseases, and the treatment of diseases such as epilepsy, gan, withdrawal diseases, dysentery, fright, and fire cinnabar. The idea of “transmutation and steaming” (「變蒸」) proposed





in this book influenced the theoretical development of pediatrics in later generations.

Historical Materials of Medical Science in Dunhuang Cultural Relics

The sutra cave of Mogao Grottoes of Dunhuang was discovered in 1900 AD. The cultural relics had been sealed in the cave for over 900 years. There are about 50,000 volumes. They belong to the period of the Six Dynasties, Sui, Tang, and the Five Dynasties, and have great academic values. They are called “Dunhuang Manuscripts”, and provide important materials for the collation of canons and books of Chinese medicine. For example, three volumes of the early manuscripts of *Newly Revised Herbal Foundation* are the earliest manuscripts discovered so far. Some medical works had never been discovered before, such as *Xuan Gan's Pulse Canon* (《玄感脈經》), *Newly Collected Canon of Emergency Moxibustion Remedies* (《新集備急灸經》), and *Bright Hall Treatise on the Five Viscera* (《明堂五臟論》). “Dunhuang Manuscripts” can generally be divided into the following categories: medical canon, acupuncture and moxibustion, medical formulas, herbal foundation, and Tibetan medicine. There are about 10 volumes of medical canons, including the remains of *The Inner Canon*, *On Cold Damage*, and *The Pulse Canon*, as well as *Xuan Gan's Pulse Canon*, *A Brief Outline of Normal Pulses* (《平脈略例》), *Bright Hall Treatise on the Five Viscera* (《明堂五臟論》) and *On Five*



Viscera (《五臟論》). Among the “Dunhuang Manuscripts”, there are a total of six volumes of remains of acupuncture and moxibustion works, including some illustrative drawings for moxibustion treatment and *Newly Collected Canon of Emergency Moxibustion Remedies* (《新集備急灸經》), and two moxibustion works of which are the earliest acupuncture and moxibustion drawings written in Chinese. *Newly Collected Canon of Emergency Moxibustion Remedies* first mentions the moxibustion treatment on ear tip point (耳尖穴) and glabella point (印堂穴), which is 700 years earlier than *The Great Compendium of Acupuncture and Moxibustion* (《針灸大成》).

Section 4 Biographies of Medical Experts

Yin-Zong Xu (許胤宗)

Yin-Zong Xu (536 AD - 626 AD) was a native of Yising, Changzhou (now Yixing County, Jiangsu Province). He served successively as Governor of Yising (義興太守) of Chen State in the period of the Southern Dynasties, Shang-Ya-Feng-Yu (Chief Steward of the Imperial Drug Bureau) of Sui Dynasty, and Sun Chi Shi Lang (散騎侍郎; Gentleman Cavalier Attendant) of Tang Dynasty. He was also a famous doctor in the period of Sui and Tang Dynasties. In the period of the Southern Dynasty, Yin-Zong Xu once adopted the method of fuming and steaming to treat



Queen Mother Liu (柳后). The Queen Mother was unable to speak and take medicine at that time. Yin-Zong Xu put astragalus saposchnikovia decoction (黃芪防風湯) under the bed of the Queen Mother and implemented fuming and streaming to let the Queen Mother breathe in the medicinal steam. On the very night the treatment was conducted, the Queen Mother was able to talk. Yin-Zong Xu was famous for his medical skills and was especially proficient in pulse examination. He valued palpation very much and proposed careful medication during the treatment. He believed that merely using a single medicine to attack the disease source could cure the disease. It is a pity that he did not leave any works to be handed down.

Zhi-Cang Xu (許智藏)

Zhi-Cang Xu (537 AD - 617 AD) was a famous doctor in the period of the Southern and Northern Dynasties and Sui Dynasty. His family worked as doctors for generations. According to *The Book of Sui* (《隋書》), during the ruling of Emperor Wen of Sui, King Xiao of Qin (秦孝王) fell ill. The emperor called in Zhi-Cang Xu immediately. King Xiao of Qin dreamed of the late Consort Cui (妃崔氏). She was crying that if Zhi-Cang Xu arrived, she was not able to take King Xiao of Qin away with her. After diagnosis, Zhi-Cang Xu confirmed that the disease was severe and incurable. Just as Zhi-Cang Xu had predicted, King Xiao of Qin died a few days later. The emperor was surprised at Xu's accurate diagnosis, and



granted generous reward. Until the ruling of Emperor Yang of Sui, his every diagnosis and prescription for the emperor was correct. He passed away at home at the age of 80.

Xia Song (宋俠)

Xia Song was a doctor in the period of Sui and Tang Dynasties, birth and death time unknown. He was a native of Qingzhang, Mingzhou (now Hebei Province). He was famous for his medical skills. He once served as Chao Sun Da Fu (朝散大夫; Grand Master for Closing Court) and Yao-Tsang Chien. He wrote a 10-volume *Jing Xin Lu* (《經心錄》) (also called *Jing Xin Fang* (《經心方》)). The original book has been lost, but some content is handed down due to the quotations by other medical works of Tang Dynasty, such as *Essential Secrets from Outside the Metropolis* and *Prescriptions at the Heart of Medicine*.

Quan Zhen (甄權)

Quan Zhen (541 AD - 643AD) was a famous doctor in Fugou County, Xuzhou (now Fugou County, Henan Province). He was proficient in medical skills and acupuncture. He also studied remedy books. He practiced medicine all his life and saved a lot of people. According to *The Old Book of Tang* (《舊唐書》), Inspector of Luzhou (魯州刺史) then suffered from stroke and was unable to string a bow. He asked for Quan Zhen's treatment, and merely one acupuncture worked. Quan Zhen was a



master in keeping fit. He promoted not to pursue the taste of food and advised people to practice inhaling and exhaling to clear and deplete lung, and thus to prolong life. In the 17th Zhenguan (貞觀) Year (643 AD), Emperor Taizong of Tang visited Quan Zhen by himself and asked about the idea of life cultivation. He granted him the title of Chao Sun Da Fu (Grand Master for Closing Court), a longevity stick and clothes. In that very year, Quan Zhen passed away at the age of 103.

Quan Zhen wrote many works, such as three-volume *Needle Canon* (《針經鈔》), one-volume *Bright Hall Chart of Human Body* (《明堂人形圖》), one-volume *Acupuncture Methods* (《針方》), four-volume *On Nature and Medicines* (《藥性論》), and one-volume of *On Pulse* (《脈訣賦》). However, all of them have been lost and only some of the content has been preserved in *Wings of the Thousand Gold Pieces Formulary*, *A Thousand Gold Pieces Emergency Formulary*, and *Essential Secrets from Outside the Metropolis*.

Li-Yan Zhen (甄立言)

Li-Yan Zhen (545 AD - 643 AD) was the younger brother of the famous doctor Quan Zhen. He was proficient in herbal foundation, and was good at treating parasitic diseases. All works written by Li-Yan Zhen have been lost, including three-volume *Medicinal Nature of Herbal Foundation* (《本草藥性》), seven-volume *Annotation of Herbal Foundation* (《本草音義》), two-volume *Collection of Herbal Foundation* (《本草集



錄》), and 50-volume *Effective Formula from Ancient Time to Today*. Some content can be found in *Essential Secrets from Outside the Metropolis* and *A Thousand Gold Pieces Prescriptions*. Among the content of *Essential Secrets from Outside the Metropolis* quoted from *Effective Formula from Ancient Time to Today*, there is the earliest recording of diabetes mellitus in China.

Yuan-Fang Chao (巢元方)

Yuan-Fang Chao (550 AD - 630 AD) was a native of Huayin County, Jingzhao (now Shaanxi Province). He was a famous doctor in Sui Dynasty and once served as Medical Erudite. According to *Kai He Ji* (《開河記》), in 609 AD, Shu-Mou Ma (麻叔謀) who was in charge of the canal construction was unable to sit up due to the disease caused by wind evil. All of his joints hurt very much. Doctors did not know what to do. The



The Origin and Indicators of Disease written by Yuan-Fang Chao



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)



emperor ordered Tai-I (Imperial Physicians) Yuan-Fang Chao to treat him. After diagnosis, Yuan-Fang Chao thought the wind invaded the waist, and the disease was in the chest. He instructed to steam fresh and fertile lamb leg, blend in medicines and eat it to cure the disease. Shu-Mou Ma followed his instructions and the long wind-damp gradually healed before he finished the medicines.

Yuan-Fang Chao followed the order to compile *The Origin and Indicators of Disease*. He wrote about 1,739 pieces of disease patterns, including causes, pathology, and symptoms of diseases of facial features, Internal Medicine, Surgery, Gynecology, Pediatrics, etc. The content of this book was quoted by *Essential Secrets from Outside the Metropolis* written by Xi Wang of Tang Dynasty, *Thousand Gold Pieces Formulary* written by Si-Miao Sun of Tang Dynasty, and *The Great Peace Sagacious Benevolence Formulary* written in Sung Dynasty.

Bao-Zang Zhang (張寶藏)

Bao-Zang Zhang, style name of Dan (澹), was a native of Liyang (now Lintong, Shaanxi Province) in Tang Dynasty, birth and death time unknown. During the Zhenguan (貞觀) years of Tang Dynasty, Emperor Taizong suffered from qi dysentery. As the treatment of Tai-I (Imperial Physicians) did not work, the emperor issued an imperial edict for prescriptions. Bao-Zang provided the prescription of decocting long pepper with human milk (乳汁煎畢撥) and cured Emperor Taizong. As a



result, he was granted the title of the Third Rank Official of Chief Minister of the Court of State Ceremonial (三品鴻臚卿).

Shang-Shan Yang (楊上善)

Shang-Shan Yang was a famous physician at the beginning of Tang Dynasty. He compiled *Grand Simplicity of the Yellow Emperor's Inner Canon* and *The Yellow Emperor's Inner Canon Bright Hall* (《黃帝內經明堂類成》). He re-classified and noted the sutras of *Magic Pivot* and *Plain Questions* to complete the 30-volume *Grand Simplicity of the Yellow Emperor's Inner Canon*. He was the pioneer in marginal noting medical canons and his medical ideas were shown in annotation of the *Grand Simplicity* (《太素》). Shang-Shan Yang valued “health cultivation”. He recorded the health cultivation related content of *Plain Questions* and *Nine Volumes* (《九卷》) in the beginning part of the *Grand Simplicity*. He emphasized the importance of conforming to four seasons, avoiding cold and heat, neutralizing happy and anger, and harmonizing the five favors of food in health cultivation.

Si-Miao Sun (孫思邈)

Si-Miao Sun called himself Tai-Bai Chushi (太白處士) or Zhen-Ren (真人). He was a native of Huayuan, Jingzhao (now Yao County, Shaanxi Province). He died at the age of 101. He was smart and had good memory. He had read numerous canons and books of different schools by the time



he was 20. He was proficient in theories of Lao-Zi (老子) and Zhuang-Zi (莊子), and preferred classic annotation. Si-Miao Sun had no interest in fame or fortune. He rejected the edicts from the emperor for three times and was determined to practice medicine for the public. He absorbed the advantages of different schools of treatment, and was not limited to ancient methods or ancient formulas and medicines. Works written by Si-Miao Sun include *Wings of the*



Si-Miao Sun (孫思邈)
A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

*Thousand Gold Pieces Formulary, A Thousand Gold Pieces Emergency Formulary, Essence of the Silver Sea (《銀海精微》) by Tuo-Ming-Shuo (托名所), A Thousand Gold Pieces Health Cultivation Formulary (《千金養生方》), and Drawings of Bright Hall Canon (《明堂經圖》), which have all been handed down till now. Among these books, *A Thousand Gold Pieces Emergency Formulary* summarizes the medical and pharmaceutical knowledge in pre-Tang period and integrates the clinical experience of his own. In the aspect of acupuncture, this book mentioned the famous clinical theory of “Ouch Point” (「阿是穴」). The importance of theory of Ouch Point is that the needle does not need to be pricked into the traditional*





A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

assigned acupoints. The physicians only have to press the points which the patients feel painful or have disease syndromes. Theory of Ouch Point creates a new perspective - “the acupoint is just the point that patients feel painful” (「有痛便是穴」). While *Wings of the Thousand Gold Pieces Formulary* supplements the shortages of *A Thousand Gold Pieces Emergency Formulary*, these two books have a great impact on the development of traditional Chinese medicine. They even spread to Japan, and were highly praised by Japanese physicians, and were honored as “Origin of Remedy Books” (「方書之祖」).

Jing Su (蘇敬)

Jing Su (599 AD - 674 AD) is also called Gong Su (蘇恭). He lived in Sung State (now Hebei) in Tang Dynasty. He once served as Chao Yi



Lang Yo Chien Men Fu Chang Shi Chi Du Wei (朝議郎右監門府長史騎都尉; Gentleman for Court Discussion, Administrator of Right Palace Gate Guard, and Commandant of Cavalry). Considering that Variorum of the Herbal Foundation Canon written by Hong-Jing Tao had many errors, Jing Su submitted a request for compiling the book. Emperor Gaozong of Tang (唐高宗) approved his request and appointed over 20 persons including Wu-Ji Zhang-Sun (長孫無忌), Xiao-Chong Xu (許孝崇), and Chun-Feng Li (李淳風) to compile a new herbal foundation together. Following the principle of “sticking to the rules of the heaven and listening to ideas of the masses” (「上稟神規，下詢眾議」), the book was completed in the 4th Xianqing Year (659 AD), and was named *Newly Revised Herbal Foundation*, i.e. *Herbal Foundation of Tang Dynasty* circulated nowadays. It is the world’s first medical dictionary issued by a state government.

Zhi-Ti Cui (崔知悌)

Zhi-Ti Cui (about 615 AD - 685 AD) was a physician of Tang Dynasty. He was a native of Yanling County, Xuzhou (now Yanling County, Henan Province) and died at the age of 70. Zhi-Ti Cui was born in a family of government officials. He was good at acupuncture and moxibustion, and had a good knowledge of tuberculosis. He was creative in diagnosing and prescribing. *Acupuncture Methods for Steaming Bone* (《骨蒸病灸方》) is the most famous work of his and is included in



Essential Secrets from Outside the Metropolis. Moxibustion Drawings for Tuberculosis (「灸骨蒸法圖」), i.e. “Moxibustion Methods of Chancellor Cui” (「崔丞相灸法」) circulating in the later generations proposes to adopt moxibustion to treat tuberculosis, which is the origin of moxibustion treatment for tuberculosis.

Xuan-Cao Yang (楊玄操)

Xuan-Cao Yang was a physician in the beginning of Tang Dynasty. His life story is unknown. He was born in around 7th century. He once served as District Defender of Shehou (now She County, Anhui Province). Xuan-Cao Yang was proficient in annotation and Dao of healing. He had deep understanding of the main ideas of acupuncture and moxibustion, and explanations and meanings of channels and points. He valued clinical experience of acupuncture and moxibustion, and emphasized the importance of regulating qi by acupuncture. He had unique understanding on supplementation and drainage by needle insertion, moxibustion, diseases of extraordinary vessels, and changes of acupuncture. His works include *Annotated Elementary Questions* (《素問釋音》), *Annotated Needle Canon* (《針經音》), *Annotation of Yellow Emperor’s Classic of 81 Difficult Issues* (《黃帝八十一難經注》), *Annotated Herbal Foundation* (《本草注音》), and *Annotated Bright Hall* (《明堂音義》). However, none of them has been handed down. Another work of his, *The Yellow Emperor’s Canon of Bright Hall* (《黃帝明堂經》), has some



remains survived.

Ming-He Qin (秦鳴鶴)

Ming-He Qin was born in around 7th century, native place unknown. He had excellent medical skills and was proficient in acupuncture and moxibustion. There was another famous doctor Wen-Zhong Zhang (張文仲) at that time. Both of them were palace physicians. Many historical materials of Tang Dynasty record the incident that Ming-He Qin cured the eye disease of Emperor Gaozong. Emperor Gaozong suffered from wind dizziness. Shih-I (Attendant Physician) Ming-He Qin believed that it was caused by counter flow ascent of wind qi. He suggested acupuncture to the head to have slight bleeding. Hearing this behind the curtain, Empress Wu (皇后武氏) said angrily, “Make the emperor bleed is a capital crime.” Emperor Gaozong did not agree with her and ordered Ming-He Qin to conduct acupuncture. The method worked.

Wen-Zhong Zhang (張文仲)

Wen-Zhong Zhang was a native of Luoyang, Luozhou (now Luoyang, Henan Province). He was born in the 3rd Wude Year of Tang Dynasty (620 AD) and died in the 3rd Shengli Year of Tang (700 AD). He was a famous physician in Tang Dynasty. He once served as Shih-Yu-I (Imperial Physician-In-Attendance) and then promoted to be Shang-Ya Feng-Yu (Chief Steward of the Imperial Drug Bureau). Wen-Zhong Zhang was



proficient in principles of medicine, especially in the study of wind and qi. He believed that there were 124 types of wind diseases and 80 types of qi diseases. It was important to distinguish them from each other. Otherwise, severe confusion might cause death. As Wen-Zhong Zhang was good in treating “wind diseases”, Wu-Ze-Tian (武則天) ordered Wen-Zhong Zhang to summon famous doctors of the whole country to write down all kinds of prescriptions for the treatment of wind diseases. Based on the season that a disease occurred in and the severity of the disease, Wen-Zhong Zhang wrote 18 common prescriptions to present to Wu-Ze-Tian. He also wrote a three-volume *Take-away Emergency Prescriptions* (《隨身備急方》) and one-volume *On Natural Phenomena* (《法象論》). Both of them have been lost and some content can be found in *Essential Secrets from Outside the Metropolis*.

Shen Meng (孟詵)

Shen Meng (621 AD - 713 AD) came from Ruzhou County of Liang State (now Linru County, Henan Province). He was Presented Scholar of Tang Dynasty. He was the 33rd generation of Meng-Zi (孟子). In 674 AD, he formally acknowledges Si-Miao Sun as his master, and studied medical treatment and food supplementing. According to *The Book of Tang* (《唐書》), *The Book of Tang Catalog of Classics* (《唐書經籍志》), and *New Book of Tang Literature Catalog* (《新唐書藝文志》), apart from *Jia Ji Li* (《家祭禮》), *Principles of Sang Fu* (《喪服正要》), and *Bi Xiao*



Fang (《必效方》), Shen Meng also compiled *Supplementation Formulary*, *Herbal Foundation of Diet Therapy*, etc. based on his own experience in disease treatment. *Herbal Foundation of Diet Therapy* is the representative work of diet therapy.

Xun Wei (韋訊)

Xun Wei (644 AD - 741 AD) came from Metropolitan Prefecture of Tang Dynasty (now Guanzhong, Shaanxi Province). He was once a Taoist priest and his Taoist monastic name was Ci-Zang (慈藏). He was proficient in medical skills. He enjoyed equal popularity with Wen-Zhong Zhang and Qian-Zong Li (李虔縱) who were famous physicians then. During the rule of Wu-Ze-Tian, he served as Shih-Yu-I (Imperial Physician-In-Attendance). He once treated Liang-Si Su (蘇良嗣) together with Wen-Zhong Zhang under an imperial edict. During the Jinglong (景龍) years of Emperor Zhongzong (唐中宗), he served as Chief Minister of Court of Imperial Entertainments, in charge of catering for the imperial household. He was in his 70s then and resigned. He was often accompanied by a black dog when he was touring around to treat ordinary people and give out medicines.

Tao Wang (王燾)

Tao Wang (670 AD - 755 AD) was a native of Meixian, Shaanxi Province. He died at the age of 86. He was a famous physician of Tang



Dynasty, and writer of classic remedy books. Tao Wang was born in a family of Confucian officials. His grandfather Gui Wang (王圭) was Grand Councilor of Tang Dynasty and his father Jing-Zhi Li (李敬直) was the husband of Princess Nanping (南平公主). Tao Wang was in poor health when he was young. Later, in order to cure his mother's disease, he worked hard to study medicine. Tao Wang once worked in the Institute for the Advancement of Literature for about 20 years, and thus had access to a large number of ancient medical classics. In the Tianbao (天寶) year, he was degraded to work in Fangling. Tao Wang found that people there suffered from miasmatic qi, and thus used formulas and medicines he had collected to treat them. He saved numerous people. Later, he spent the rest of his life completing *Essential Secrets from Outside the Metropolis*.

Tao Wang believed that diseases were caused by ill diet that damaged spleen and stomach, excessive sex that damaged original qi, or external



Tao Wang

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 88 (From a collection at the Museum of the History of Traditional Chinese Medicine located in Shanxi University of Chinese Medicine)



contraction of wind evil that resulted in cold and heat, etc. *Essential Secrets from Outside the Metropolis* covers diseases of all kinds of departments of Internal medicine, Surgery, Orthopedics, Obstetrics and Gynecology, Pediatrics, Skin, facial features, and Veterinary Medicine. It also contains content of toxin strike, emergency treatment, animal or insect bite, etc., and gives excellent illustration on warm epidemic, malaria, vacuity consumption, etc. “Removal of cataracts with needles” (「金針撥障術」) recorded in this book is the earliest record of cataracts treatment in the history of traditional Chinese medicine.

Zang-Qi Chen (陳藏器)

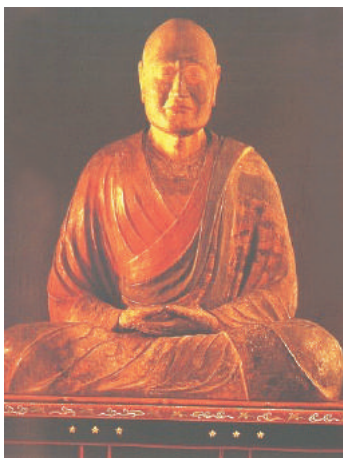
Zang-Qi Chen (685 AD - 757 AD) was a native of Siming (Yinzhou, Zhejiang Province) in Tang Dynasty. He was interested in Dao of healing and concentrated on pharmacy study. He preferred to read books like *Herbal Foundation* (《本草》). Zang-Qi Chen thought *The Divine Husbandman's Herbal Foundation Canon* had much missing content. Therefore, he searched materials for supplement; widely collected remedy books of different schools and new medicines used then, and classified these materials by cold, warm, nature and flavor, grasses and woods, and animals to complete *Supplement to the Herbal Foundation* in the 27th Kaiyuan (開元) Year (739 AD). Medicines recorded in *Supplement to the Herbal Foundation* are more than six times of that recorded in *Herbal Foundation of Tang Dynasty*. According to their functions, these



medicines are divided into categories of breaking qi, resolving toxin, treating warmth, governing spleen, rectifying wind, etc. It is the origin of classifying medicines by functions.

Zhen Jian (鑒真)

Zhen Jian's (688 AD - 764 AD) surname was Chun-Yu (淳于). His monastic name was Zhen Jian. His native place was Jiangyang, Guangling. He was a great Buddhist scholar in Tang Dynasty, the founder of RitsugakuSect (律宗) in Japan, and also a pioneer for medical exchanges between China and Japan. He died at the age of 76. Zhen Jian was born in a poor family. When he was 14, he became a monk at Dayun Temple (大雲寺) in Yangzhou. He followed Dao-An (道岸) and Hong-Jing (弘景) who were eminent monks of RitsugakuSect (律宗高僧) to receive "Bodhisattva Precepts" (「具足戒」) and "Upasampadā" (「菩薩戒」).



The statue of Zhen Jian, a Buddhist monk of the Tang dynasty
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 101 (A collection of Toshodai Temple located in Nara of Japan)



Zhen Jian read all kinds of works regardless of their categories. He was edified and instructed by many eminent monks of Tang Dynasty. Afterwards, he visited all temples in Luoyang and Chang'an, and made greater efforts to study precepts. Although he had obtained profound achievement in Buddhism, Zhen Jian never slacked off in his study. He also studied language philology, philosophy, history, mathematics, calligraphy, etc., and gained a good knowledge. He was proficient in medicine and pharmacy, dried lacquer modeling, and temple architecture as well. He was a really learned and eminent monk. He often prepared medicines to treat ordinary people and enjoyed a high reputation among the public.¹³


Zhen Jian created Ritsugaku Sect of Buddhism in Japan. Zhen Jian and his entourage carried a large number of Chinese medicines and medical works along with them to Japan, which promoted the development of medical science of Japan. Zhen Jian not only brought the processing skills, formula compositions, identification, application, and storage methods of Chinese medicines to Japan, but also treated Emperor Shomu (聖武天皇) and ordinary Japanese. He has high prestige in medical and pharmaceutical field of Japan. Although Zhen Jian went blind later in his life, he was able to identify categories and authenticity of medicinal herbs by strong sense of smell. Therefore, he was regarded as Father of Kampo Medicine and the Divine Husbandman of Japan by Japanese. Zhen Jian wrote *Jian Shang Ren's Secret Formulas* (《鑿上人祕方》) which was



also called *Zhen Jian's Secret Formulas* (《鑒真祕方》). The book has been lost and some content can be found in *Prescriptions at the Heart of Medicine*.

Bing Wang (王冰)

Bing Wang (710 AD - 805 AD) called himself Qi Xuan Zi (啟玄子) which was also spelled as Qi Yuan Zi (啟元子). He once worked as Tai Pu Lin (太僕令; Director of Palace Stables), and thus was also called Tai-Pu Wang (王太僕). Bing Wang considered *The Yellow Emperor's Inner Canon Plain Questions* (《黃帝內經素問》) as the bridge for studying medical science and health cultivation. The book deserved intensive study for subtle knowledge. However, existed copies then were incomplete, and there were many errors. Therefore, Bing Wang made efforts to collect different versions, and based on *Quan Shi's Annotation of the Yellow Emperor's Inner Canon - Plain Questions* (《全氏注黃帝素問》) and volumes collected by his master Gong Zhang (張公), he re-compiled the book and added seven treaties of *Great Treatise on the Origins and Principles of Heaven* (《天元紀大論》), *Treatise on Movements of the Five Periods* (《五運行大論》), *Great Treatise on the Subtleties of Six* (《六微旨大論》), *Great Treatise on Mutations at the Qi Intersections* (《氣交變大論》), *Great Treatise on the Five Normal Rules* (《五常政大論》), *Great Treatise on the Regular Principles of the Six Origins* (《六元正紀大論》), and *Great Treatise on the Essentials of Supreme Truth* (《至





真要大論》). After 12 years of effort, he completed the *Supplementary Annotation of the Yellow Emperor's Inner Canon - Plain Questions*. It has a total of 24 volumes and 81 articles. The seven supplementary treatises mainly narrate the ideas of movement and qi theory. It discusses five movements and six qi, climates, weather, phenology, human diseases and treatment, etc. in detail, which established the foundation for the movement and qi theory developed in later generations.

Bing Wang not only made great contribution to Chinese medical work review, but also had unique ideas on clinical practice. In the annotation of *Supplementary Annotation of the Yellow Emperor's Inner Canon Plain Questions Great Treatise on the Essentials of Supreme Truth* (《次注黃帝內經素問·至真要大論》), with respect to the treatment of vacuity of original yang, he proposed to “supplement kidney yang to disperse yin evil” (「益火之源，以消陰翳」). With respect to the treatment of insufficiency of true yin, he proposed to “supplement kidney yin to restrict hyperactivity of yang” (「壯水之主，以制陽光」). In addition, he wrote another work called *Xuan Zhu* (《玄珠》). However, it has been lost since Sung Dynasty.

Yu-Xi Liu (劉禹錫)

Yu-Xi Liu, style name of Meng-De (夢得), was a native of Pengcheng. As he once served as Adviser to the Heir Apparent (太子賓客), he was called Bin-Ke Liu (劉賓客). Yu-Xi Liu's health was weak and



he needed to take medicines frequently. Therefore, he knew much about principles of medicine. After studying medicine for 30 years, he became a good doctor. He used medicines stressing on actual effects. He was not stubborn in using ancient methods. He valued disease prevention and was good at using simple formulas and empirical formulas. He once was ordered to assist the compiling of herbal foundation and classic remedies. He wrote a book named *Spreading Reliable Formulas*. The content of the book covers different clinical departments and emergency treatment. The medication recorded is simple, convenient, and cheap. The book was widely spread at that time, but was lost afterwards. However, many effective formulas have been quoted by other medical works. Most of the formulas in *Spreading Reliable Formulas* are tested empirical folk formulas. The book records a total of about 50 formulas, and each one has their basis. Thus, the book was named after reliable formulas.

Lin Dao-Ren (蘭道人)

Lin Dao-Ren (790 AD - 850 AD). There is no record on his name or life story. As he was a monk, he was called Lin Dao-Ren. He was a native of Chang'an (now Xi'an, Shaanxi Province). Lin Dao-Ren mastered theories of bone damage and had excellent medical skills. He cultivated himself and treated poor people and those who suffered from bone injuries at the same time. He wrote *Surgical Care of the Injured* which was also named *Immortal's Secret Surgical Care of the Injured* 《仙授理傷續斷秘



方》.

Yin Zan (昝殷)

Yin Zan (797 AD - 859 AD) was a famous doctor in Tang Dynasty. He was a native of Chengdu, Shu Zone (now Chengdu, Sichuan). Yin Zan was proficient in principles of medicine and was especially good at treating diseases of the department of obstetrics. He had a good knowledge of pharmacy. During Dazhong (大中) years of Tang Dynasty, based on several tens of years' clinical experience on common diseases of the department of obstetrics and existing experience in and effective formulas for treating diseases related to menstruation, vaginal discharge, fetus, delivery, and postpartum, he referred to the form of *Thousand Gold Pieces Formulary* written by Si-Miao Sun, and compiled a total of 378 formulas into *Jingxiao Precious Book on Childbirth*.

Bo-Zong Gan (甘伯宗)

Bo-Zong Gan was a medical historian in Tang Dynasty. His life story and birth place is unknown. He compiled biographies of 120 medical experts from the period of Fuxi (伏羲) to Tang Dynasty. The book was named *Biographies of Famous Physicians* (《名醫傳》). It was called *Compendium of Famous Physician* (《名醫大傳》) or *Records of Famous Physician* (《名醫錄》) by later generations. The book has a total of seven volumes. It is the earliest work of Chinese medicine writing about



biographies of medical experts. *Biographies of Famous Physicians* has been lost and some content of it can be found in *Records of Famous Physicians of Passed Dynasties* (《歷代名醫蒙求》) of Sung Dynasty.

Xun Li (李珣)

Xun Li had a style name of De-Run (德潤). His birth and death time is unknown. He was probably born between 9th and 10th century. He was a famous poet and an expert in herbal foundation in the period of the Five Dynasties. His ancestors were Persians. They lived on selling spice medicines for generations. Later, they came to China through the Silk Road and changed their family to Li which was the national surname of Tang Dynasty. They moved to Shu Zone to settle down in Zizhou when An-Shi Rebellion broke out. Xun Li's younger sister Shun-Xian Li (李舜絃) was a Lady of Bright Department of Yan Wang (王衍) who was the King of Shu State. His younger brother Xuan Li (李玪) used to be Heir Apparent (太子率官) of Yan Wang and was very fond of alchemy.

Xun Li understood the principles of medicine and knew much about pharmacy. He used to travel to south of the Five Ridges and saw medicines brought in from overseas countries. His work *Herbal Foundation of Overseas Medicines* (《海藥本草》) is the first herbal foundation book about overseas medicines in the history of traditional Chinese medicine. The book records 124 types of overseas medicines that were brought to China in the period of Tang and the Five Dynasties. Among these



medicines, 96 types were noted with their foreign origins. Therefore, this book has wide-ranged materials and detailed content. It describes the appearance, origin, authenticity, rating, nature, flavor, main treatment function, and usage of each medicine. Another feature of this book is that it has detailed description of folk prescriptions. At the end of the description of each medicine, it states folk prescriptions, which makes it more applicable for clinical use. It is a pity that the book has been lost since the Southern Sung Dynasty. Some content of the book can be found in works such as *Classified Emergency Herbal Foundation Based on Historical Classics* (《政類本草》) and *Herbal Foundation Compendium*.¹⁴

Bao-Sheng Han (韓保升)

Bao-Sheng Han came from Later Shu State in the period of the Five Dynasties. There is no record on his life story or birth place. Bao-Sheng Han was proficient in Dao of healing. He served as Hanlin Academician in the time of Later Shu (from 934 AD to 965 AD). He was ordered to revise the *Herbal Foundation* (《本草》). Using *Newly Revised Herbal Foundation* as the chief source, he carried out proofreading, annotation, supplementing, and revision. He carefully examined the shapes of medicines and studied the functions of them. In this way, he compiled the *Chongguang Yinggong's Herbal Foundation of Shu* (《蜀重廣英公本草》) which was called *Herbal Foundation of Shu* (《蜀本草》) for short by later generations. *Herbal Foundation of Shu* contains *Illustrated Canon*.



Its content is more detailed than that of *Newly Revised Herbal Foundation* written by Jing Su. It is a pity that the book has been lost. Both *Classified Materia Medica* (《證類本草》) written by Shen-Wei Tang (唐慎微) of Sung Dynasty and *Herbal Foundation Compendium* written by Shi-Zhen Li of Ming Dynasty quote the content of this book.

References

1. Hou-Bao Zhang (2000). Taoists' Alchemy and Dan Medicine. *Lishizhen Medicine and Materia Medica Research*, 11 (3). pp. 216-217.
2. Matsuo Toyo (1936). *A Collection of Imperial Chinese Medicine, Vol. 14-Prospects of the History of Imperial Chinese Medicine*. World Journal Book Store, Shanghai. pp. 10.
3. Ji Pen (2002). *A Brief Description of the Medical Exchange Between China and Japan During the Sui and Tang Dynasties*. *Medicine and Society*. 15 (1). pp. 37-38.
4. Guang-Hui Duan, Zhi-Jun Guo, Xiu-Mei Gao, Bo-Li Zhang, Ming-Chuang Pei, & Ming-De Chen (2005). Comparative Study on the History and Current Situations of Traditional Medicine in China and Vietnam, *Tianjin Traditional Chinese Medicine Press* 22(1): pp. 74-76.
5. Xing-Lang Zhang (1977). A Compilation of the Historical Resources of Communication Between China and the West (4). *Zhonghua Book Company, Beijing*. pp. 196.
6. Jie Chen (2004). *Medical Communication Between China and Arabic*



- Countries During the Tang, Song and Yuan Dynasties. Journal of Nanjing University of Traditional Chinese Medicine (Social Science).* pp. 86-89.
7. Fang-Sheng Peng (2012). On the Contribution of *General Treatise on the Causes and Manifestations of Diseases* to Etiological Symptomatology of Toxic Evil Diseases, *Guiding Journal of Traditional Chinese Medicine and Pharmacy*. 18 (6). pp. 17-19.
 8. Jie Shen (2007). *Characteristics and Achievements of Great Simplicity of Internal Classic Composed and Annotated by Shang-ShanYang*. *Journal of Emergency in Traditional Chinese Medicine*. 16 (4). pp. 18-20.
 9. Xiao-Ping Fu (2004). Meng Shen and a Dietetic Materia Medica. *Journal of Henan University of Chinese Medicine*. 19 (1): pp. 75-76.
 10. Meng-Jie Xi (2010). Meng Shen and Dietotherapy Science. *Chinese Literature and History*. 11. pp. 120-123.
 11. Da-Peng Han & Guan-Tong Shi (2007). Comments on Secrets of *Treating Wounds and Bone-setting*. *Shanghai Journal of Chinese Traditional Medicine*. 41 (2): pp. 55-56.
 12. Wei-Wen Liu (2002). Therapy and Prescription Features of Treating Wounds and Bone-Setting. *Journal of Fujian College of Traditional Chinese Medicine*. 12 (2). pp. 57-58.
 13. Da-Ren Song (1979). Examination of the Records of Monk Zhen Jian's Medical History-In the Memorial of the 1226th Anniversary of the





Eastern Journey of Monk Zhen Jian. *Journal of Zhejiang College of Traditional Chinese Medicine*. 2. pp. 65-68, 1979.

14. Zhi-Jun Shang (1982). *Textual Research on Xun Li and His Herbal Foundation of Overseas Medicines*. *Jiangsu Journal of Traditional Chinese Medicine*. 5. pp. 45.





Bao Sheng Da Di Temple
(photographed by Pei-Chi Chou at the Hsin Chi Temple in Tainan, Taiwan)



Chapter 7 *Medical Science in the Period of
Song, Liao, Jin and Yuan
Dynasties*
(from 960 AD to 1368 AD)

Section 1 Historical Background

In 960 AD, Kuang-Yin Zhao (趙匡胤) of the Later Zhou Dynasty dethroned Emperor Gong-Di (周恭帝) and established the Northern Song Dynasty, ending the feudal federation of the Five Dynasties and Ten Kingdoms period. In 1115 AD, the Jurchen tribes founded the Jin Dynasty. In 1125 AD, Emperor TaiZu of the Jin Dynasty (金太宗) declared war against the Song Dynasty and then rapidly conquered much of northern China. In 1127 AD, the Northern Song Dynasty came to an end. In the same year, Zhao Gou (趙構) (Emperor GaoZong of the Song Dynasty), Prince of Kang (康王) escaped to Ying-Tian-Fu (應天府) (now Shangqiu County of Henan Province), establishing the Southern Song Dynasty. In 1206 AD, Temujin (鐵木真; Genghiz Khan) founded the Mongol Empire (蒙古汗國). Over 65 years, the Mongols destroyed Western Xia Dynasty and Jin Dynasty one after another, controlling Tibet and Southwestern China. In 1271 AD, Kublai changed the state title to “Yuan”, and he was



known as Emperor Shizu (元世祖). In 1279 AD, he reunified China by eliminating the Southern Song Dynasty, thus ending the long-term coexistence and separation of Song, Liao, Jin, and Western Xia Dynasties. As the Yuan Dynasty adopted the policies of ethnic discrimination and oppression, which caused political corruption and destitution, peasants rose up in the end of Yuan Dynasty. Since they all worn red turbans, they were also known as The Red Turbans. Finally, Yuan-Zhang Zhu (朱元璋) (leader of one of the rebellious forces) captured Dadu, the capital of Yuan Dynasty, ending the Yuan administration.

From 960 AD to 1368 AD, China was governed by various dynasties, so the regional economic development varied from dynasty to dynasty. In the Song Dynasty, agricultural production increased significantly due to water conservancy projects, improvements in farm management and farming technologies, and the change of rental payment from presenting labor rent to land rent. The economic base gradually stabilized thus, promoting the development of science, technology, and culture. The invention of the compass, gunpowder, and printing was an important milestone for the development of the science and technology in the Song Dynasty. In the Northern Song Dynasty, compasses, made of magnetic iron needles by striking them with natural lodestones, were adapted for navigation and promoted China's marine industry. The development of marine industry made it possible for China to export a great number of teas and china and at the same time import a large quantity of spice and



medicine from Central and Southern Asia, thus facilitating foreign exchanges. In terms of gunpowder, the Northern Song had a munitions factory for gunpowder in Kaifeng while the Southern Song had gunpowder weapons such as iron cannons and firearms. In addition, the *Complete Essentials From the Military Classics* (《武經總要》) written by Gong-Liang Zeng (曾公亮) not only discussed gunpowder weapons in ancient times but also included three gunpowder formulas.

The development of cultural industry in the Song Dynasty was attributed to the invention of papermaking technology and engraving typography. As China was abundant in raw materials for making paper-bamboo and Bisheng invented movable type printing in the middle of Northern Song Dynasty, works of prestigious writers were handed down. A case in point was *The Dream Pool Essays* (《夢溪筆談》) of Kuo Shen (沈括), which included some medical and scientific knowledge. Shen was highly praised by Dr. Joseph Needham (李約瑟), a British scientist, historian, and sinologist, as “the most interesting character in all Chinese scientific history”.

Printing technology made great progress in Yuan Dynasty when Zhen Wang (王禎) created wooden movable type printing and revolving table typecase. In the middle of the thirteenth century, movable type printing was first introduced to Korea and then to Europe from the Western Regions. In terms of philosophy and literature, Xi Zhu (朱熹) of the Southern Song Dynasty synthesized neo-Confucian thought. Zhu's



comprehensive explanation of vital force (qi), principle (li), and the Supreme Ultimate was well-received he was thus accepted as Confucian orthodox. In the end of Yuan Dynasty, physician Zhen-Heng Zhu (朱震亨), who studied neo-Confucianism, advocated “the yang hyperactivity and yin deficiency theory” and the ministerial fire theory. Both theories came from neo-Confucianism and significantly promoted the development of theories on traditional Chinese medicine.

Section 2 An Introduction to the History of Traditional Chinese Medicine

Development of Traditional Chinese Medicine

During the Song and Yuan periods, a set of administrative management system and government organizations for medicine and health were established. They include Han-Lin Yi-Guan (翰林醫官; Hanlin Medical Official), Tai-I Ju (太醫局; Imperial Medical Bureau), Yu-Yao Yuan (御藥院; Imperial Dispensary), Shang-Yao Ju (尚藥局; Palace Medical Service) during the Song Dynasty, as well as other drug administrations and healthcare institutions. At the same time, decrees on medicine and health were issued. In the Jin and Yuan periods, the medical system of the Song Dynasty was still adopted but improved. The Tai-I Yuan (太醫院; Imperial Academy of Medicine) was the highest central organ for medicine and



health then. Bans on charlatan, adulterant, and narcotics were placed.

In terms of medical education, the Northern Song Administration paid much attention to the development of medical industry and theories as well as the cultivation of medical professionals. The Tai-I Ju (Imperial Medical Bureau) became a specialized institution for medical education. The term “Shi Ren Zhi Yi” (「世人知醫」; well known physicians) was first used in the Song Dynasty when knowing medicine well was a fashion for scholars. Well-known “Confucian physicians” (「儒醫」) included Gong Zhu (朱肱) and Shu-Wei Xu (許叔微) of the Song Dynasty, Wu-Ji Cheng (成無己) and Wan-Su Zhang (張元素) of the Jin Dynasty, and Zhen-Heng Zhu of the Yuan Dynasty, to name a few. During the Jin and Yuan period, years of wars and chaos caused widespread epidemics, so popular dispensaries and classical prescriptions could not meet the demands for treating diseases at that time. Various schools of medicine thus emerged, such as “He-Jian School” (「河間學派」) with the representative of Wan-Su Liu (劉元素), “Yi-Shui School” (「易水學派」) with the representative of Wan-Su Zhang, “Purgation School” (「攻下派」) with the representative of Cong-Zheng Zhang (張從正), “Earth Invigorating School” (「補土派」) with the representative of Gao Li (李杲), and “Yin Enriching School” (「滋陰派」) with the representative of Zhen-Heng Zhu. Purgation School was developed from He-Jian School while Earth Invigorating School was originated from Yi-Shui School. These medical theories summarized the different medical experience in



various social environments, significantly influencing the later development of traditional Chinese medicine.

As Kuang-Yin Zhao had a good knowledge of medicine, he ordered to edit *Kaibao Materia Medica* (《開寶本草》) when he founded the Northern Song Dynasty. However, Kuang-Yin Zhao, Emperor Taizu's brother, began to collect prescriptions before the Song Dynasty. When Kuang-Yin Zhao was enthroned, he ordered Huai-Yin Wang (王懷隱) to compile *Peaceful Holy Benevolent Prescriptions* (《太平聖惠方》). In the reign of Emperor Renzong (宋仁宗) Zhao Zhen (趙禎), the Bureau for Proofreading and Correcting Medical Books (校正醫書局) was set up to proofread and correct medical books before Song Dynasty, such as *Plain Questions* (《素問》), *On Cold Damage and Miscellaneous Diseases* (《傷寒雜病論》), *The Pulse Canon* (《脈經》), *The Origin and Indicators of Disease* (《諸病源候論》), *A Thousand Gold Pieces Formulary* (《千金要方》), and *Supplement to the Thousand Gold Pieces Formulary* (《千金翼方》). Meanwhile, Emperor Renzong asked Wei-Yi Wang (王惟一) to compile *Illustrated Manual of Acupoints of the Bronze Figure* (《銅人腧穴針灸圖經》), and cast a bronze acupuncture figure on which acupoints were calibrated so that the Imperial Academy of Medicine could use it for teaching or a test.

Emperors in the Northern Song Dynasty believed in Daoism. Emperor Taizong called in Bo Chen (陳搏), a Daoist in Mount Hua-Shan (華山), and gave him a courtesy name Xi-Yi (希夷); Emperor Zhenzong

(宋真宗) built many Daoist temples; and Emperor Hui Zong Zhao Ji (徽宗趙佶) called himself as Taoist emperor. Daoist Ma Zhi (馬志) took part in the editing of *Kaibao Materia Medica*. Huai-Yin Wang, the editor of *Peaceful Holy Benevolent Prescriptions*, used to be a Daoist as well. Many Daoists were summoned up by Emperor Zhenzong to compile *Collected Taoist Scriptures* (《道藏》). In the Northern Song Dynasty, not only the Emperors but also the ministers paid attention to medicine. For example, ministers Kuo Shen, Su Shi (蘇軾), Yong-He Sun (孫用和), and Yao-Sou Chen (陳堯叟) were keen on collecting medical works. And other ministers participated in the compilation of medical books. They were Ouyang Xiu (歐陽脩), Yu-Xi Zhang (掌禹錫), Gong-Liang Zeng, An-Shi Wang (王安石), Qi Han (韓琦), Bi Fu (富弼), Yu-Wen Xu (宇文虛), and Song Xia (夏竦).

Emperors of the Song Dynasty drew up and issued a large number of laws and decrees on medicine and health. These documents can be found in *Compilation of Important Documents of the Song Dynasty* (《宋會要輯稿》), *History of the Song Dynasty* (《宋史》) and *Song Repertory of Penal Law* (《宋刑統》). In the Northern Song Dynasty, more than 200 imperial decrees on medical industry were issued, and most of these decrees were made for sending physicians to prevent and cure diseases. In addition, the issued medical documents were about: collecting, correcting and compiling medical books; starting social charities and hospitals; popularizing medical education and reforming the system of medical

education; improving the social status of medicine and physicians; reforming old conventions; prohibiting wizards from practicing medicine; opening drug stores especially for imported medicine; revising or publishing monographs on materia medica; or appointing Daoist physicians and grassroots physicians.

Song Repertory of Penal Law was a principal law book in the Song Dynasty and also the first statute law in Chinese history. It adopted the style and most content of *Tang Code* (《唐律》). This book stipulated that medical accidents due to negligence should be distinguished from those due to technology in case that the accused physician was executed for poor judgment. It also specified what medical rights servants, craftsmen, and soldiers could have. The written law book mentioned how to deal with ill prisoners, providing proper medical treatment for them and protecting them from beating, particularly pregnant prisoners to protect the fetus.

The Song Dynasty followed the medical system of the Tang Dynasty where Han-Lin Yi-Guan Yuan (翰林醫官院; Hanlin Institute) was in charge of medical administration and treatment, and Tai-I Ju (Imperial Medical Bureau) was responsible for medical education. Han-Lin Yi-Guan Yuan (Medical Institute) was a superior administration in the central government for palace medicine and the treatment for imperial family, courtiers, officers, and civilians. In 1078 AD, the Han-Lin Yi-Guan Yuan (Medical Institute) was renamed as Han-Lin Yi-Guan Ju (翰林醫官局; Hanlin Medical Bureau). A Han-Lin Yi-Guan (Hanlin official) was



selected among physicians who were over 40 years old. The candidates must pass an exam and scored more than 67 before an appointment. In 1188 AD, military and civilian officials were asked to recommend talented folk physicians to take part in the preliminary examination for medical officials. Anyone who passed the first test had an access to the state exam in which one of five candidates were selected for the second round of the state exam. One was chosen among five. Only those who passed these two state tests could be recruited into Han-Lin Yi-Guan Yuan (Medical Institute).

In the Song Dynasty, Shang-Yao Ju (Palace Medical Service) and Yu-Yao Yuan (Imperial Dispensary) were set up for medical management. Shang-Yao Ju (Palace Medical Service) was responsible for imperial medicine, mediating recipe, and diagnosis and treatment of diseases; Yu-Yao Yuan (Imperial Dispensary), which was mostly controlled by eunuchs, served as emperor's pharmacy. Dian-Zhong Sheng (殿中省; Palace Administration) had Shang-Yao Ju (Palace Medical Service), Shang-Shi Ju (尚食局; Food Service), Shang-Yi Ju (尚衣局; Clothing Service), Shang-Yun Ju (尚醞局; Wine Stewards Service), Shang-Nian Ju (尚輦局; Sedan-Chair Service), and Shang-She Ju (尚舍局; Accommodations Service). Shang-Yao Ju (Palace Medical Service) was staffed with two Dian-Yu (典御; Pharmacists), four or six Feng Yu (奉御; Chief Stewards), two Jian-Men (監門; Gate Guards), or one physician. Shang-Shi Ju (Food Service) had four Shi-Yi (食醫; Dietetic Officers) who took care of emperor's diet.



In 997 AD, Yu-Yao Yuan (Imperial Dispensary) was established which was subordinate to Nei-Shi Sheng (內侍省; Palace Domestic Service). In 1026 AD, the pharmacy was staffed with nine of Shang Yu-Yao (上御藥; Upper Palace Pharmacist) and Shang Yu-Yao Gong-Feng (上御藥供奉; Attendant on the Upper Palace Pharmacist). In 1103 AD, Shang-Yao Ju (Palace Medical Service) was ordered to take charge of imperial herb tea supply and at the same time, four Feng Yu (Chief Stewards) were added to administer imperial medicine. Yu-Yao Yuan (Imperial Dispensary) was responsible for examining tributary reagent, drugs, and secret recipes, purchasing medical materials, and keeping and processing tributary drugs. Officials of the Imperial Dispensary were often sent on a mission to frontier passes or affected areas to give away medicine.

In the Song Dynasty, drugs were only sold in specific stores. In 1076 AD, the first official drug store, which was also known as Tai-I Ju Shou-Yao Suo (太醫局熟藥所, Finished Drug Office under the Imperial Medical Service), was set up to supervise and sell processed drugs. The ready-made medicines sold in Shou-Yao Suo (熟藥所; Finished Drug Office) were popular with physicians and patients for they were much easier to use than crude drugs. In 1148 AD, the Shou-Yao Suo (Finished Drug Office) was renamed as Tai-Ping Hui-Min Ju (太平惠民局; Bureau of Peaceful Benevolence) whose routine duties included selling drugs lower than the market price, wholesaling medical substances to the local pharmacies and exchanging medicine with them. In addition, the Tai-Ping



Hui-Min Ju (Bureau of Peaceful Benevolence) created the system for giving free medical treatment, dispensing medicine, inspecting medicine, and rotating shifts in summer and winter and at the rampant period of epidemic diseases. The Shou-Yao Suo (Finished Drug Office) was one of the characteristics of the medical development in the Song Dynasty and helped popularize *Prescriptions of the Dispensary* (《和劑局方》) and ready-made medicine, thus, making it easy for the people to cure diseases. The Liao Dynasty was governed by two parallel governments; the Northern Administration following traditional Khitan (契丹) practices and the Southern Administration governed adopting traditional Chinese governmental practices. Thus, two sets of civil service system were adopted. So were the medical system and institutions. The Northern Administration set up Tai-Yi Ju (Imperial Medical Bureau) which was renamed as Tai-I Yuan (Imperial Academy of Medicine). Subordinate to Xuan-Hui Yuan (宣徽院; Palace Provisions Commission), Tai-I Yuan (Imperial Academy of Medicine) was staffed with Ti-Dian (提點; Superintendent), Yuan-Shi (院使; Commissioner), Fu-Shi (副使; Vice Commissioner), and Pan-Guan (判官; Aide) to keep charge of medicine. Furthermore, Tai-I Yuan (Imperial Academy of Medicine) offered other positions such as Guan-Gou (管勾; Clerk), and Zheng-Feng Shang Tai-I (正奉上天醫; Chief Upper Imperial Physician) which had as many as 25 ranks.

In the Yuan Dynasty, the Tai-I Yuan (Imperial Academy of Medicine)



was the top medical administration taking charge of the palace medical management. Medical officials enjoyed higher ranks than those in previous dynasties with Rank 4, upper grade, and the highest rank Subordinate to Zhan-Shi Yuan (詹事院; Household Administration of the Heir Apparent), Dian-Yi Jian (典醫監; Directorate of Medicine), who led the physicians in the Eastern Palace, was responsible for the medical tributes to the Prince. In 1282 AD, the Office of Dian-Yi Shu (典醫署; Imperial Physician) (Rank 5) was set up. Still, other central institutions were staffed with medical officials for medical and health care. For example, the Zhong-Shu Sheng (中書省; Secretariat) was staffed with three physicians, the Shu-Mi Yuan (樞密院; Palace Secretariat) with two Yu-Shi Tai (御史臺; Censorate) two Jian-Nan Zhu-Dao Xing-Yu Shi-Tai (江南諸道行御史臺; Branch Censorates for Circuits in the Southern Yangtze River) and one Da-Zong Zheng-Fu (大宗正府; High Court of Justice).

In the Liao Dynasty, the Northern Administration set up Cheng-Ying Xiao-Di Ju (承應小底局; Palace Domestic Service) to deal with daily court affairs. The institution was Zhu-Zhang Husi (著帳戶司; subordinate to Department of Slave Management) which controlled those Khitan offenders who did not serve the royal family. It was also Tang-Yao Xiao-Di (湯藥小底; Staffed with Decoction Officials) who took care of the court medicine. In the Southern Administration, Nei-Shi Sheng (Palace Domestic Service) offered positions such as Gou-Dang Tang-Yao (勾當湯



藥; Manager of Decoction) and Du Ti-Dian (都提點; Chief Superintendent).

In the Jin Dynasty, Shang-Yao Ju (Palace Medical Service) and Yu-Yao Yuan (Imperial Dispensary) both belonged to Xuan-Hui Yuan (Palace Provisions Commission). The Shang-Yao Ju (Palace Medical Service) was staffed with Ti-Dian (Superintendent), Ju-Shi (局使; Commissioner), Du-Jian (都監; Director-in-chief), Zhi-Zhang (直長; Foreman), Guo-Zi Bu-Jian (果子部監; Supervisor of the Fruit Service), Fu-Shi (Vice Commissioner), and Tong-Jian (同監; Vice Director-in-chief) to take care of court herb tea and refreshment. The Yu-Yao Yuan (Imperial Dispensary) was set up in 1194 AD to serve herb tea for the Emperor.

In the Yuan Dynasty, each region producing herbal medicine was annually required to supply drugs that the court needed. In 1269 AD, Yu-Yao Yuan (Imperial Dispensary), a medical administration under the control of Tai-I Yuan (Imperial Academy of Medicine), was set up to deal with medical tributes and drugs production. In addition, Xing-Dian Yao-Ju (行典藥局; Branch Pharmacy) was established to supply medical substances for the Eastern Palace while Xing-Dian Yao-Ju (Branch Pharmacy) was founded to process drugs for the Eastern Palace. In 1308 AD, Yu-Xiang Ju (御香局; Imperial Perfume Service), staffed with a Ti-Dian (Superintendent) and a Si-Ling (司令; Director), was set up to condition medical perfumes.

Medical education in the Song Dynasty, medical administration and



medical education were separated. A medical school was a local organ specially for cultivating medical professionals. In 1044 AD, Tai-I Ji (Imperial Medical Bureau), the top authority for medical education, was set up under the control of Tai-Chang Si (太常寺; Court of Imperial Sacrifices). At the same time, medical officials were selected from Han-Lin Yuan (翰林院; Han-Lin Academy) to help teach medicine. In the reign of Shenzong (神宗), An-Shi Wang replaced imperial examination with school education and reformed medical education. In 1076 AD, Tai-Yi Ju (Imperial Medical Bureau) was independent of Tai-Chang Si (Court of Imperial Sacrifices) and became a special organ for medical education. Pan-Ju (判局; Deputy Executive) and Ti-Ju (提舉; Supervisor) were offered for management, and each subject was taught by a Jiao-Shou (教授; Professor). This started the independent medical education.

Tai-I Ju (Imperial Medical Bureau) recruited three hundred students in every spring. According to An-Shi Wang's Three College Method (三舍升試法), two hundred were admitted to the Outer College, sixty to the Inner College, and forty to the Superior College. Tai-I Ju (Imperial Medical Bureau) offered three disciplines: Recipes and Pulse Manifestations, Acupuncture, and Study of Ulcer. In addition to the basic facts of their own major, students were required to understand the knowledge of other disciplines. This was so called "learning 13 subjects over three disciplines". The courses students must take were *Classic of Difficult Issues* (《難經》), *Plain Questions*, *Supplemented and*



Annotated Materia Medica (《補注本草》), The Origin and Indicators of Disease, and A Thousand Gold Pieces Prescriptions.

Students were entitled to take a Si Shi (私試; mock examination) monthly, a Gong Shi (公試; unified examination) and Hui Shi (會試; metropolitan examination) annually. Students of the Outer College could enter the Inner College if they had an excellent academic record in the Si Shi (mock examination). If trainees at the Inner College were qualified for the Hui Shi (metropolitan examination), they were graded as Excellent, Good, and Fair before being sent to the Superior College. In addition to classroom learning, trainees were required to practice diagnosis and treatment by attending those who studied in Lv Xue (律學; Law School), Tai Xue (太學; Imperial College), or Wu Xue (武學; Military School). Their clinical performance was rated as Excellent, Good, or Fair. If someone made too many mistakes, they would be punished; if their mistakes were serious, they would be ordered to leave. However, the Three College Method was abolished after An-Shi Wang's reform failed.

In order to improve the humanistic attainments and the social status of physicians, Emperor Huizong decreed in 1103 AD that the Guo-Zi Jian (國子監; Directorate of Education) should readopt the Three College Method and establish Yi Xue (醫學; Medical School) to enroll Confucian physicians. If the applicants passed the Gong Shi (unified examination), some of them with excellent skills would be appointed as officials whose ranks were lower than the physicians in the Palace Medical Service, and



others would serve as Zheng Lu (正錄; Principal Physician) or Ben-Xue Bo-Shi (本學博士; Erudite), or sent to other prefectures outside the capital city as Medical Instructors.

Few historical data were found on the medical education in the central government of the Yuan Dynasty. Tai-I Yuan (Imperial Academy of Medicine) in the Yuan Dynasty only served as an administrative authority to issue regulations, not as an educational organization. In the Jin Dynasty, medical science was comprised of ten disciplines, but relevant historical records were few. In the Yuan Dynasty, medical science was subdivided into 13 disciplines: adult medicine, children's medicine, miscellaneous diseases, wind diseases, ophthalmology, obstetrics, stomatology and dentistry, bone setting, sores and wounds, throat diseases, acupuncture and moxibustion, psychic explanation, and incantations. The Yuan Administration cared about medical education and developed a comprehensive system for it. In 1272 AD, the Government set up Yi-Xue Ti-Ju Si (醫學提舉司; Supervisorate of Medical School) to manage medical education, assess students' performance and instructors' teaching results, collate the works of well-known physicians, identify herbal medicine, instruct disciples of imperial physicians, and head local medical schools. The Ti-Ju-Si (Supervisor) was staffed with a Ti-Ju (Supervisor) and a Fu Ti-Ju (Vice Supervisor). In the Jin Dynasty, prefectures were furnished with medical schools but these schools did not enroll many students. Da-Xing Fu (大興府; Daxing Prefecture) only recruited 30



learners while other Jing-Fu (京府; Capital Prefectures) had less than 20.

When Emperor Shizu of the Yuan Dynasty (元世祖) ascended the throne, he restarted all kinds of medical schools in the Lu (路; Circuits) and staffed each school with a Jiao-Shou (Professor), a Xue Lu (學錄; Provost) and a Xue Zheng (學正; instructor second-class). Medical schools in large, medium, and small prefectures would appoint a Xue Zheng (instructor second-class) by Tai-I Yuan (Imperial Academy of Medicine), while those in each Xian (縣; District) were staffed with a Xue-Yu (學諭; Instructor) chosen by the Professors from each circuit. *Classic of Difficult Issues*, *Plain Questions*, and *The Divine Husbandman's Herbal Foundation Canon* (《神農本草經》) were required courses for all medical students. Furthermore, *Sages' Salvation Records* (《聖濟總錄》), *Treatise on Cold Damage Diseases* (《傷寒論》) and *Supplement to the Thousand Gold Pieces Formulary* were selected courses for different majors. Besides medical theories, medical students were required to learn the Four Books and the Five Classics that were added to the curriculum in 1305 AD. Any medical graduates were not allowed to practice medicine if they failed to understand the classics of their major very well.

Medical Exchanges

- Korea

When Yuan Guo (郭元) and Zuo Han (韓祚), two envoys of Gaoli (now Korea), returned home, Emperor Renzong of the Song Dynasty



personally gave them one thousand volumes of *Peaceful Holy Benevolent Prescriptions*, which later became an important medical formulary in Gaoli. In 1101 AD, Emperor Huizong presented Gaoli envoys Yi Ren (任懿) and Ke-Xin Bai (白可信) with one thousand volumes of *Peaceful Holy Benevolent Prescriptions* and one thousand and one volumes of *Highly-Skilled Physician's Prescriptions for Universal Relief* (《神醫普救方》). Many rare editions of Chinese medical books were collected in Gaoli as a result of the frequent cultural exchange. In 1093 AD, Emperor Xuanzong of the Gaoli sent Zong-Que Huang (黃宗懃) to China to present nine volumes of rare edition of *The Yellow Emperor's Inner Canon* (《黃帝針經》). At that time, the book had been lost in China. The Song Medical Book Bureau then published it again based on the edition rendered by the envoy of Gaoli. In 1068 AD, Xiu Shen (慎修), who was born in Kai-Feng (門封) and adept in medical skills, passed the imperial examination in Gaoli during the reign of Wen-Zong. His son An-Zhi Shen (慎安之) was also good in medical skills, holding a post during the reign of Ruizong and Renzong. When Emperor Wenzong of Gaoli suffered from wind arthralgia in 1078 AD, Emperor Shenzong of the Song Dynasty sent 88 Han-Lin Yi-Guan (Han-Lin officials) to Gaoli to treat him.

In 1058 AD, Zhou-Mu Zhong (忠州牧) from Gaoli re-engraved matrices and printed *The Yellow Emperor's Classic for 81 Difficult Issues* (《黃帝八十一難經》) and other Chinese medical books. In 1059 AD, An-Xi Du-Hu Fu (安西都護府; Protectorate for the Western Region)



ordered the Wai-Lang (外郎; Outer Gentleman) Shan-Zhen Yi (異善貞) to re-engage *Handbook of Prescriptions* (《肘後方》) and two other books. Furthermore, Gaoli put many Chinese medical books in the list of textbooks for medical schools. In 1226 AD, Zong-Jun Cui (崔宗峻), a Gaoli physician, wrote *Court Physician's Essential Formulas* (《御醫撮要方》) in reference of *Herbal Foundation Canon* (《本草經》), *Thousand Gold Pieces Formulary* (《千金方》), *Plain Questions*, *Peaceful Holy Benevolent Prescriptions* and *Sages' Salvation Records*, establishing the theoretical system of Korean medicine.

Gaoli copied the medical system of the Tang Dynasty thus, providing medical education and implementing imperial medical exam. Three metropolitans and ten circuits were Yi-Xue Bo-Shi (醫學博士; Medical Erudite) to instruct medical learners. Chinese medical books such as *Plain Questions*, *The Systematized Canon* (《甲乙經》), *Bright Hall Classic* (《明堂經》), *The Pulse Canon*, *Canon of Acupuncture* (《針經》), *Liu Juan-Zi Remedies* (《劉涓子方》), *Treatise on Carbuncles and Subcutaneous Ulcer* (《癰疽論》), *Herbal Foundation Canon*, and *Prescriptions of the Dispensary* were all subjects of examination. In addition, Gaoli set up the Bureau of Peaceful Benevolent Dispensary to deal with the health care of civilians by following the medical system of the Song Dynasty.

During the Song period, a large number of medicinal materials were introduced to Gaoli, including bamboo sugar (天竺黃), benzoin (安息香),



aquilaria (沉香), costusroot (木香), myrrha (沒藥), rhinoceros horn (犀角), ivory (象牙), and some other species growing in Southern China. Also, many Gaoli medicinal substances were brought into China such as sesame oil (香油; sesami oleum), ginseng (人參), pine nut (松子; pini semen), mercury (水銀), musk (麝香), hazelnut (榛子), abalone shell (石決明; haliotidis concha), lacebark pine cone (松塔子), saposhnikovia (防風), typhonium (白附子; typhonii rhizoma), and poria (茯苓). Over ten Gaoli crude drugs were included in *Classified Materia Medica* (《證類本草》) of the Song Dynasty.

In the Yuan Dynasty, China and Gaoli had more frequent and intensive medical exchange. In 1275 AD, Xin De (德新) and other Chinese physicians were sent to the Court of Gaoli. In 1293 AD, the King of Gaoli dispatched General Shi Gao (高世) to China for physicians, and Emperor Chengzong of the Yuan Dynasty then sent Imperial Physician Yao-Sheng (姚生). In 1297 AD, Imperial Physicians De-Zhong Wang (王得中) and Geng Guo (郭耕) were ordered to Gaoli. In the end of the Yuan Dynasty, Min-Dao Li (李敏道) from Hejian of China was appointed by the Court of Gaoli as Dian-Yi Zheng (典醫正; Principal Practitioner) and Shang-Shan Jun (尚山君; Chief of Shangshan) when he stayed there. In March 1285 AD, Emperor Shizi was so seriously ill that he asked Gaoli for help. Jing-Cheng Xue (薛景成), attending physician of Gaoli, was thus sent to China twice to treat him. To thank Xue, Emperor Shizi “gave him rich largess” (「賞賜甚厚」). In addition, following the medical system of the Yuan



Dynasty, Gaoli placed two Ti-Dian (Superintendent) in Si-I Shu (司醫署; Office of Medication) and offered them silver official seals. At one time, Gaoli physicians held a post in Yi-Xue Ti-Ju Si (Supervisorate of Medical School) of Zheng-Dong Xing Sheng (征東行省; Branch Zhengdong).

The two sides also had a lot of exchange of medicinal materials in the Yuan Dynasty. According to *The History of Gaoli* (《高麗史》), during the 1264 AD-1370 AD period, Emperors Zhonglie (忠烈王) and Gongmin (恭潛王) had sent envoys to China eight times to present medical materials including ginseng, pine nut (pini semen), ford manglietia fruit (木果), and torreyia (榧實). In return, China gave wine and medical perfume to the King of Gaoli.

- Japan

In the Northern Song, the Sino-Japanese medical exchange had stagnated, which was radically different from the widespread communication in the Tang Dynasty. In the Southern Song Dynasty, merchants and monks resumed the medical exchange between China and Japan but the exchange was only restricted to Zhejiang Province. According to the historical record, Hui-Qing Song (宋惠清) went to Japan to practice medicine in 1041 AD when Fujiwara Kiyoken (藤原清賢) was ordered to the Song Dynasty for his eye trouble. However, official records of mutual accreditation were never found.

Among the goods imported from Japan to China, sulfur and pearl





A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

could be served as medicine. Medical perfumes were the major medicine that exported to Japan, including musk, clove (丁香), lignum aloes (沉香), frankincense (薰陸香), chebule (訶黎勒), Lapis chloriti (石金青), and cinnabar (光明硃砂). Between 1185 AD and 1333 AD, monk Rong-Xi (榮西) brought tea seeds from China to Japan. The customs of tea drinking was then spreading from temples. In 984 AD, Tanba Yasuyori (丹波康賴) completed *Formulary from the Heart of Medicine* (《醫心方》), the extant earliest medical book in Japan. The book integrated all of the Chinese medicine in Japan at that time, covering various branches of medicine. It was said that the ancestor of Tanba Yasuyori was King Aliu (阿留王), the lineal fifth descendant of Han Emperor Ling (漢靈帝), who



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

was made Military Commissioner of Hinokuma Prefecture in Japan when he arrived in Japan. Zhi-Nu (志努), son of King Aliu, was given the surname Tanba when he moved to the state of Tanba. Yasuyori was the lineal eighth descendant of King Aliu.

In 1303 AD, Kajiwara Shozen (梶原性全), a distinguished Japanese monk physician, compiled *Essentials of Medicine* (《頓醫抄》). In 1315 AD, he completed *Formulary for Absolute Safety* (《覆載萬安》), a typical book of Kampo medicine from 1185 AD to 1333 AD, which is comparable to *Formulary from the Heart of Medicine* during the 794



AD-1185 AD period. *Formulary for Absolute Safety* mainly quoted Chinese medicine books published before the Song Dynasty, adding strange disease names, and exploring the theory of five circuits and six qi. From 1362 AD to 1368 AD, monk Yu-Rin (禪僧有鄰) referred to more than 100 kampo works and compiled *Fukuden Formulary* (《褐田方》).

- Southeast Asia

In the Song Dynasty, Cochin kingdom (交趾國; in the North of Vietnam) introduced to China medical materials such as rhinoceros horn, hawkbill shell (玳瑁), frankincense (乳香), aquilaria, borneol (龍腦), sandalwood (檀香), and pepper (胡椒). Champa kingdom (占城; in the South of Vietnam) also brought a large number of medicines to China like Katsumada's galangal seed (豆蔻). Annam kingdom (安南國; around Vietnam) not only paid such medical tributes as storax (蘇合香), cinnabar, aquilaria, and sandalwood but also sent physicians to China to learn how to produce medicine and then take the technology back.

In 977 AD, the Borneo kingdom (渤泥國; now Kalimantan, Java, Sumatra, and Malaysia Peninsula) sent the envoy Shi-Nu (施努) to present borneol and marshweed. In 1001 AD, Tambralinga (丹眉流國; now Thailand or Malay Peninsula) sent envoy Tajima (打吉馬) to China to present a kilo of costusroot, ten thousand kilos of sappan (蘇木), arnebia (紫草; lithospermum), ivory, and picrorhiza (胡黃連; picrorhizae rhizoma).



- Arab

In the Song Dynasty, China had a medical exchange with Arab mainly through seaway. In 1973 AD, a Song ship was excavated in Quanzhou Bay (泉州灣), Fujian Province of China. And most of the medicinal materials found in the cabin came from Arabian area. Pharmaceutical trade with Arabian countries accounted the majority of China's seaborne trade during that period. Medical perfumes were the main category of medicine imported. Some scholars called the business route from China to Arab in the Song Dynasty as "Road of Medical Perfume" because the introduction of medical perfume helped physicians of the Song Dynasty to better understand Arabian medicine, which affected the prescription at that time.

According to *Canon of Medicine* (《醫典》), which was a famous book written by distinguished Arabian physician Avicenna in about 11th century, the medical perfumes imported from Arab to China were all made into pills covered with gold or silver foils for these coatings could not only prevent pills from corrosion and degeneration but also enhance their effects. The book also recorded the methods and experiences of diagnosis and treatment which had a close relation with Chinese medicine.

When Arabian medicine was imported to China, Chinese medicine was also brought into Arabian regions by Dashi businessmen. According to *Compilation of Important Documents of the Song Dynasty* (《宋會要輯稿》), over 60 kinds of Chinese medicines were shipped out via Shi-Bo Si (市舶司; Maritime Trade Supervisorate), including 47 herbal medicines



such as chuanxiong (川芎), aconite (附子; *aconiti radix lateralis praeparata*), ginseng, cinnamon bark (肉桂), poria, and 13 mineral medicine such as cinnabar and realgar.

In the Yuan Dynasty, Muslim medicine was not only heavily imported but also widely and increasingly used. *Principles of Correct Diet* (《飲膳正要》) included such Muslim medicine as frankincense and pist. In the reign of Kublai (忽必烈), he set up six organizations especially for Muslim medicine: Xi-Cheng Yi-Yao Si (西城醫藥司; West Supervisorate of Medicines), Jing-Shi Yi-Yao Yuan (京師醫藥院; Capital Academy of Moslem Medicine), Guang-Hui Si (廣惠司; Moslem Medical Office), Hui-Hui Yao-Wu Yuan (回回藥物院; Moslem Pharmacy), and Hui-Hui Yao-Wu Ju (回回藥物局; Moslem Drug Bureau) in Capital Dadu. According to the *History of the Yuan Dynasty* (《元史》), Isa (愛薛) was the only Muslim physician who had a special biography. In addition to heading specific Moslem medical institutions, Muslim physicians also held key posts in Tai-I Yuan (Imperial Academy of Medicine) and Dian-Yi Jian (Directorate of Medicine). This showed that Muslim physicians were most influential people in the medical institutions of the Yuan Dynasty.

- Europe, India, and Africa

In the Song and Yuan period, China's trade with Arabian countries and Mongolian battles with European enhance frequent medical exchange activities between European countries. During that period, western



countries also sent missionaries to China. These preachers established churches and appointed bishops in Peking. In a sense, the medical exchange between China and western countries was due to war and trade. William of Rubruk (盧白魯克), a French priest, was ordered by French King Saint Louis (聖路易) to visit Mongolian Royal Courts. In his book *The Journey of William of Rubruk to the Eastern Parts* (《紀行書》), he described China's medical situations and the local conditions and customs. As he was adept in medicine, he often helped treat the diseases of the people in his church.

Section 3 Medical Works

Medical books in the Song Dynasty were mainly involved in formulary, acupuncture and moxibustion, and materia medica. In terms of formulary, the Song Administration had summoned medical officials four times to compile large size prescription books. In terms of acupuncture and moxibustion, the medical authority casted bronze acupuncture figure and compiled illustrated cannon of acupuncture points, which promoted the popularization of acupuncture. In terms of materia medica, the central government had called up medical officials and pundits seven times to edit and proofread large size pharmacopeia, which laid a solid foundation for the future study of materia medica.

In 1057 AD, Emperor Renzong accepted the proposal of Shu-Mi Shi



(樞密使; Palace Secretary) Qi Han (韓琦) for setting up the Bureau for Proofreading and Correcting Medical Books to proofread and correct all important medical books in previous dynasties. This is the first correcting institution for medical books established by the government in the history of traditional Chinese medicine. At that time, whenever a book was revised, a preface would be written to introduce the correcting method and give an appraisal before the book was presented to the Emperor who would read it in person. Finally, it would be handed to Guo-Zi Jian (Directorate of Education) for block printing. During the period from 1068 AD to 1078 AD, a great many medical books on the verge of disappearance were edited and published. It was due to the official correcting institution as well as the printing and papermaking innovation that those endangered books survived to the present.

The medical books that were proofread, revised, and published by the Bureau for Proofreading and Correcting Medical Books were as follows: *Supplementary Annotation to the Plain Questions of the Yellow Emperor's Internal Classic* (《重廣補注黃帝內經素問》), Shu-He Wang's *Pulse Classic*, Si-Miao Sun's (孫思邈) *A Thousand Gold Pieces Formulary for Emergencies* (《備急千金要方》), and *Supplement to the Thousand Gold Pieces Formulary*, Yu-Xi Zhang's (掌禹錫) *Supplementary Annotation to Sheng Nong's Classic of Materia Medica* (《補注神農本草》), Song Su's (蘇頌) *Illustrated Materia Medica* (《圖經本草》), Tao Wang's (王燾) *Essential Secrets from Outside the Metropolis* (《外台秘要》), Huang-Fu



Mi's (皇甫謐) *The Systematized Canon of Acupuncture and Moxibustion*, and Zhong-Jing Zhang's (張仲景) *Treatise on Cold Damage Diseases* and *Synopsis of Prescriptions of the Golden Chamber* (《金匱要略方論》).

In addition to official edition, the medical books above-mentioned also have home edition and copies. The official edition referred to the edition engraved by either central government or local government. The central government edition was more common in the Northern Song Dynasty while the local government edition was typical in the Southern Song Dynasty. However, the most well-known official edition was published by Guo-Zi Jian (Directorate of Education) who not only engraved classics and historical books, but also medical books.

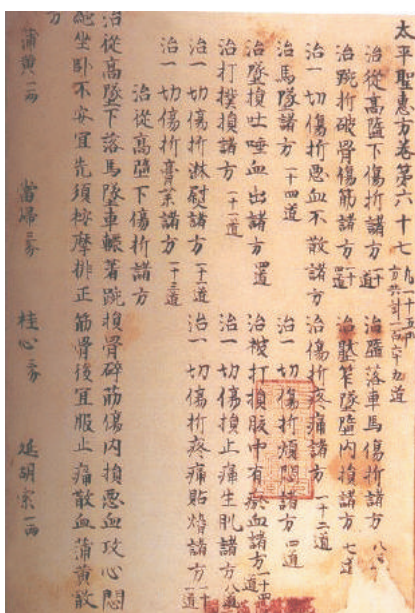
Peaceful Holy Benevolent Prescriptions (《太平聖惠方》)

Peaceful Holy Benevolent Prescriptions, Holy Benevolent Prescriptions (《聖惠方》) for short, was the first large-sized official formulary book in the history of Chinese medicine. The 100-volume book was compiled in the Northern Song Dynasty by Huai-Yin Wang and other medical officials under the order of the emperor based on a lot of empirical prescriptions. These officials collected formularies and then classified them into 1,670 categories. Published in 992 AD, the book first expounded how to feel the pulse and distinguish yin from yang, deficiency from excess. It also listed prescriptions, then explained the fundamentals of medication, drug dosages, compatibility and incompatibility of drugs, and





finally described the pathogen, pathology, symptom, and treatment of various diseases according to the branches of medicine. The formulary was rich in content, involving pediatrics, gynecology, obstetrics, five viscera diseases, acupuncture and moxibustion, internal medicine, external medicine, bone fracture, incised wound, vermilion pill, dietetic therapy, and tonification. Pathology, diagnostic methods, prescriptions, and medication were all included. In a sense, it integrated TCM clinical medicine and science of prescription.



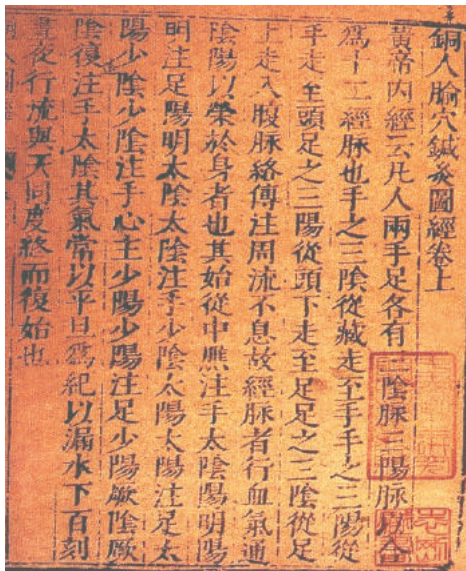
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 109 (A collection held in the library of the Chinese Medicine Research Institute in China)





Illustrated Manual of Acupuncture Points of the Bronze Figure (《銅人腧穴針灸圖經》)

Illustrated Manual of Acupuncture Points of the Bronze Figure, also named *The Newly-Bronze Statue Illustrated Canon of Acupuncture Points* (《新鑄銅人針灸圖經》), or *A Bronze Figure* (《銅人》), was a three-volume written by Wei-Yi Wang (王惟一) in the Song Dynasty. The book included 657 acupoints in total. Based on *The Systematized Canon of Acupuncture and Moxibustion*, Wang added such acupoints as Qingling (青靈), Jueyinshu (厥陰俞), Gaomangshu (膏盲俞), Lingtai (靈台), and Yangguan (陽關). Referring to *The Systematized Canon of Acupuncture and Moxibustion* and *Thousand Gold Pieces Formulary*, the physician



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 109 (A collection held in the library of the Chinese Medicine Research Institute in China)



arranged the acupoints on the extremities in terms of twelve meridians, and the acupoints on the trunk in terms of fourteen meridians.

Book for Nourishing the Elderly and Serving Parents (《養老奉親書》)

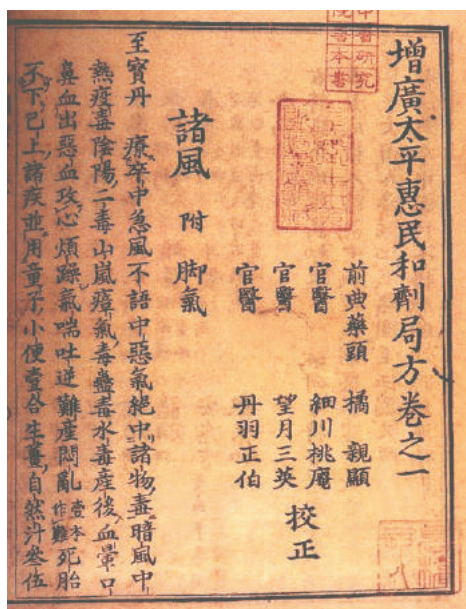
Book for Nourishing the Elderly and Serving Parents, also known as *Book for Serving and Nourishing the Elderly (《奉親養老書》)*, or *Complete Works of Nourishing the Elderly (《養老全書》)*, or *Book for Prolonging the Life-Span of Parents and Seniors (《壽親養老書》)*, was a one-volume monograph on the health cultivation of the elderly written by Zhi Chen (陳直) (or Zhen Chen (陳真)). The book was comprised of two parts. The first part included dietetic therapies for common otopathy, oculopathy, and internal problems that the elderly might have. Most of these simple and practical therapies were selected from *Materia Medica for Diet Therapy (《食療本草》)*, *A Thousand Gold Pieces Prescriptions, Commentary on Essential of Diet Therapy (《詮食要法》)*, *Dietetic Understandings (《食醫心鑒》)*, *Compilation of Various Diet Therapies (《諸家法撰》)* and *Peaceful Holy Benevolent Prescriptions*. The second part introduced geriatric theory, philosophy of elderly health cultivation, treatment of infirmities, and the key points of nursing sick elderly person. In addition, the book had two appendices: “Supplement to the Book of Nourishing the Elderly and Serving Parents” and “Simple and Efficient Prescriptions for Emergent Infirmities”, which introduced advice for the



elderly, suitability of medication, and prescriptions for emergency.

Prescriptions of the Peaceful Benevolent Dispensary (《太平惠民和劑局方》)

Prescriptions of the Peaceful Benevolent Dispensary, also named *Prescriptions of the Dispensary* (《和劑局方》), was the first official pharmacopeia for processed medicine in the history of Chinese medicine.¹ The book was based on the formularies of processed medicine compiled by Tai-Yi Ju (Imperial Medical Bureau). The ten-volume book was first published in 1078 AD. Because of many mistakes, it was then revised by well-known physicians such as Cheng Chen (陳承), Zong-Yuan Pei (裴宗



Source: General History of Traditional Chinese Medicine, a Volume of collections of illustrative plates and atlas of historical relics, page 109 (A collection held in the library of the Chinese Medicine Research Institute in China)



元), and Shi-Wen Chen (陳師文) from 1107 AD to 1110 AD. The current version was the result of revisions, additions, and adjustments, containing 767 prescriptions where pills and powder accounted for the majority. As these dose forms were easy to carry and take and active principle was easy to release, these pills or powder medicine were used to trifling ailments and chronic diseases. Different types of medical pills had different treatments.²

Classified Materia Medica for Emergencies (《經史證類備急本草》)

Classified Materia Medica for Emergencies, Classified Materia Medica (《證類本草》) for short, was compiled by Shen-Wei Tang in about 1082 AD. The draft was finalized in 1098 AD to 1108 AD when it was revised and supplemented for several times.

Based on Song Su's (蘇頌) *Illustrated Canon of Materia Medica (《本草圖經》)* and Yu-Xi Zhang's *Jiayou Materia Medica (《嘉祐本草》)*, Shen-Wei Tang collected folk empirical prescriptions and other data of material medica included in the works of famous physicians, in the classic or historical biographies, or in the Buddhist or Taoist Scriptures, and then rearranged them into the current version. In the book, herbal medicine was divided into thirteen categories: human, animals, birds, insects, fish, jade, grass, wood, fruit, vegetable, rice, and cereal. Each category was then subdivided into top grade, middle grade, and low grade. The book had been popular for over five hundred years before



Compendium of Materia Medica (《本草綱目》) was published.

Shizai's Prescriptions (《史載之方》)

Shizai's Prescriptions, also known as *A Handbook of Prescriptions* (《指南方》), was written by Kan-Shi (史堪) in 1068 AD and published in 1085 AD. The book dealt with both gynecological diseases and internal diseases. In the first part, it discussed the normal pulse conditions in seasons and how the movement of qi caused diseases, described the symptoms of the following diseases: general fever, large intestinal constipation, large intestinal diarrhea, distention and fullness, headache, and asthma, explored cold damage diseases and how to feel the pulse of virgin and married women, how to diagnose jaundice, seminal emission, night sweat, and gave relevant remedies. In the second part, it continued to discuss how to feel the stomach meridian and treat stomach trouble, gave a general view of treatment, talked about the therapy for diarrhea and ptyalism, introduced the theory of five elements motion and six natural factors, and finally attached over ten remedies.

Commentary on the Essential of Cold Damage Diseases (《傷寒微旨論》)

Commentary on the Essential of Cold Damage Diseases, also known as *Essential of Cold Damage Diseases* (《傷寒微旨》), was a two-volume compiled by Zhi-He Han (韓祗和). First volume was comprised of eight



chapters: cause of cold damage, pulse conditions of cold damage, pulse differentiation, yin-yang vicissitude, prescription adjustment to symptoms, reverse administration, diaphoresis, and purgation. Second volume consisted of seven chapters: general diaphoresis and purgation, efficacy differentiation of diaphoretic and purgative medicinal, middle energizer warming, urine and excrement, blood accumulation syndrome, yin jaundice syndrome, over-strained relapse syndrome, and an appendix on the discussion of prescriptions. Quoting little from the original of *On Cold Damage and Miscellaneous Diseases*, Han recorded his own clinical experience in the book.

General Treatise on Cold Damage Diseases (《傷寒總病論》)

General Treatise on Cold Damage Diseases was a six-volume written by An-Shi Pang (龐安時) in the Northern Song Dynasty based on his 30-year research on *Treatise on Cold Damage Diseases*. The first three volumes were concerned about the symptoms of six-meridian diseases and the diagnosis and treatment of other cold damage diseases; the rest dealt with summer diseases, seasonal cold epidemics, variolar macule, warm epidemics, cold damage, and the dangerous symptoms of febrile and warm diseases, and focused on the warm diseases. Pang distinguished cold damage from warm diseases and pointed out that the treatment of these two diseases should consider seasons and regions. He discussed the diagnosis, treatment, and prevention of warm diseases in these chapters: *On Summer*



Diseases, On Seasonal Cold Epidemics, On Warm Epidemics, and Five Seasonal Warm Diseases, and established the clinical rules. He highlighted the aftercare of patients who had recovered from warm diseases, and pointed out that dietary contraindication was the key to successful treatment.³

***Book of Nanyang for Life Saving* (《南陽活人書》)**

Book of Nanyang for Life Saving, originally known as *Wuqiuzi's Hundred Questions about Cold Damage Diseases* (《無求子傷寒百問》), was written by Gong Zhu (朱肱) who studied Zhong-Jing Zhang's *Treatise on Cold Damage Diseases* for twenty years. Organized in questions and answers, the book analyzed the lines of *Treatise on Cold Damage Diseases*, classified syndromes with prescriptions, and discussed the pathogenesis, syndrome differentiation, treatment, and prescriptions of cold damage diseases. In addition, it enriched the *Treatise on Cold Damage Diseases* by adding formularies selected from *A Thousand Gold Pieces Prescriptions*, *Essential Secrets from Outside the Metropolis*, and *Peaceful Holy Benevolent Prescriptions*. In terms of pathogenesis, the book applied the meridian and collateral theory to analyze the symptoms of three yin meridians and three yang meridians, explained how these diseases spread, transformed, and developed along the pathway of meridians and collateral, and described the clinical manifestation in physiological conditions. In terms of syndrome differentiation, it proposed



to diagnose and predict diseases based on pulse manifestation. In terms of therapy, it agreed with An-Shi Pang (龐安時), claiming that diet therapy could assist treatment, but patients must adjust their diets with seasons and climates.

Elucidation of Materia Medica (《本草衍義》)

Elucidation of Materia Medica was written by Zong-Shuang Kou (寇宗奭) in 1116 AD and was collated by his nephew Yue Kou (寇約) before its publication. The book has 20 volumes in total, of which the last seventeen volumes dealt with herbal medicine. All medical herbs were arranged in order of jade, grass and trees, birds and beasts, insects and fish, vegetables and fruit, rice and cereal. In addition, the book discussed medical principles of prevention and treatment, described the nature, flavor, and action of medical herbs, and explained how to differentiate and use them. The book was later revised and added by Dan-Xi Zhu (朱丹溪), a physician in the Yuan Dynasty, who compiled a volume of *Supplement to Elucidation of Materia Medica (《本草衍義補遺》)*.⁴

Sages' Salvation Records (《聖濟總錄》)

Sages' Salvation Records, also known as *Zhenghe Sages' Salvation Records (《政和聖劑總錄》)*, was compiled from 1111 AD to 1118 AD. Following the example of Emperor Taizong who ordered to compile *Peaceful Holy Benevolent Prescriptions*, Emperor Huizong summoned



imperial physicians in Sheng-Ji Dian (聖濟殿; Imperial Dispensary) to sort out a number of prescriptions collected from folk people or presented by physicians. These imperial physicians then put the sorted prescriptions and the secret recipes in the Nei-Fu (內府; Palace Storehouse) together to form the entire book. It does not only referred classic medical works such as *The Inner Canon* (《內經》) and *Treatise on Cold Damage Diseases*, but it also quoted other discourses for further explanation. In addition, most of its prescriptions were comprised of reliable folk empirical prescriptions and physicians' secret recipes. In also discussed the theory of five circuits and six qi.

***Key to Therapeutics of Children's Diseases* (《小兒藥證直訣》)**

Key to Therapeutics of Children's Diseases, also known as *Yi Qian's Prescriptions for Children's Diseases* (《錢氏小兒方》), or *Yi Qian's Therapeutics of Children's Diseases* (《錢氏小兒藥證》), or *Yi Qian's Key to Therapeutics of Children's Diseases* (《錢氏小兒藥證直訣》), was a three-volume written by Yi Qian (錢乙) of the Song Dynasty and revised by Ji-Zhong Yan (閻季忠). Volume 1 mainly dealt with the physiological and pathological characteristics of children and the treatment of common children's diseases in meridians, including chapters such as Five Viscera Diseases, Visceral Dominations, Infantile Pulse-Taking Method, and Infantile Feverish Perspiration. Volume 2 recorded the clinical cases of Yi Qian's patients. Volume 3 listed over 110 prescriptions



given by Yi Qian, of which Powder for Treating Dark Yellow Urin (「導赤散」) and Rehmaniae Bolus (「地黃丸」) were two famous prescriptions that are still used by today's doctors.

Empirical Prescriptions for Universal Relief (《普濟本事方》)

Empirical Prescriptions for Universal Relief, also named *Classified Empirical Prescriptions for Universal Relief (《類證普濟本事方》)*, or *Empirical Prescriptions (《本事方》)*, was written by Shu-Wei Xu (許叔微) in the Song Dynasty and was published in 1132 AD. The book recorded the clinical cases and effective prescriptions proven by Xu's practice. It described Xu's understanding of medicine and first-hand experience. That is why it was named "Empirical Prescriptions" (「本事」).

Jifeng's Formulary for Universal Relief (《雞峰普濟方》)

Jifeng's Formulary for Universal Relief was a thirty-volume of the Song dynasty with its author unknown. Under the major headings in each volume lies only the word "REVISION". The current edition does not have the editor and the date of the first edition. It only states "Revised by Yi-Jia Feng (馮翊賈)". The book was involved in internal medicine, external medicine, gynecology, and pediatrics, including over 3,000 prescriptions. The original was lost. The extant version is a copy of the Southern Song edition duplicated by Shi-Zhong Wang (汪士鍾) in 1828 AD.



Commentary on the Treatise on Cold Damage Diseases (《注解傷寒論》)

Commentary on the Treatise on Cold Damage Diseases, the first annotated edition of *Treatise on Cold Damage Diseases*, was written by Wu-Ji Cheng (成無己) in the Jin Dynasty. The contents of the book were nearly the same as that of *Treatise on Cold Damage Diseases* in the Song Dynasty except for some additions and deletions. An appendix of Figure of Five Circuits and Six Qi was added at the end of the first volume. In addition, an item of “Pronunciation” was supplemented at the end of each volume. Only one of repeated prescriptions remained.

New Book of Pediatrics (《幼幼新書》)

New Book of Pediatrics was a monograph on pediatrics written by Fang Liu (劉昉; Fang-Ming) in the Song Dynasty. The book discussed how to conceive, recuperate an infant, administer drugs and diagnose children, nurse a newborn baby, and treat common children diseases. It explored congenital diseases, mental diseases, wind-cold and seasonal diseases, cough, malaria, and other diseases; and talked about medicine and prescriptions. In each section, the book first dealt with the pathology and symptom of a disease by referring to books such as *The Origin and Indicators of Disease* before presenting prescriptions of various physicians. The sources of data quoted in the book were all given for



clinical sake.

Syndrome Verse from Treatise on Cold Damage Diseases
(《傷寒百證歌》)

Syndrome Verse from Treatise on Cold Damage Diseases was written by Shu-Wei Xu in the Song Dynasty who first made an analytical study of *Treatise on Cold Damage Diseases* in terms of “pathological symptom”. Organized in seven-word verse, the book included 37 categories of diseases and 53 symptoms, gathering the prescription that can treat the same diseases together for analysis, compare and contrast. In addition, the book suggested diagnosis and prediction of diseases according to the manifestation of yin pulse and yang pulse. Yang pulse referred to superficial pulse, large pulse, throbbing pulse, rapid pulse, and slippery pulse while yin pulse was comprised of deep pulse, choppy pulse, weak pulse, wiry pulse, and faint pulse.⁵

Effective Prescriptions of Kuo Shen and Shi Shu (《蘇沈良方》)

Effective Prescriptions of Kuo Shen and Shi Shu, also known as *Effective Prescriptions of Hanlin Academicians Kuo Shen and Shi Shu* (《蘇沈內翰良方》), was a combination of Kuo Shen’s *Good Prescriptions* (《良方》) (also named *Effective Prescriptions* (《得效方》), or *Kuo Shen’s Good Prescriptions* (《沈氏良方》), or *Chun-*



Zhong Shen's Good Prescriptions (《沈存中良方》) and Shi Shu's *Academician Shi Shu's Prescriptions* (《蘇學土方》), also named *Various Opinions on Medicine* (《醫藥雜說》).

***Treatise on the Three Categories of Pathogenic Factors and Prescriptions* (《三因極一病證方論》)**

Treatise on the Three Categories of Pathogenic Factors and Prescriptions, *Three Categories of Pathogenic Factors and Prescriptions* (《三因方》) for short, originally known as *Treatise on the Essence of the Three Categories of Pathogenic Factors* (《三因極一病源論粹》), was written by Yan Chen (陳言) in the Southern Song Dynasty. The book was involved in internal medicine, external medicine, gynecology, pediatrics, ophthalmology, and otorhinolaryngology. It stressed that “the cause of a disease must be identified before giving treatment” (「凡治病，先須識因」), dividing the cause of disease into three categories: Endogenous pathogenic factors (including seven emotions: anger, joy, anxiety, thought, sorrow, fear, and fright), exogenous pathogenic factors (including six excesses: wind, cold, summer heat, dampness, dryness, and fire), and non-endo-exogenous pathogenic factors.

***Exploration to Mysterious Pathogenesis and Etiology Based on the Plain Questions* (《素問玄機原病式》)**

Exploration to Mysterious Pathogenesis and Etiology Based on the



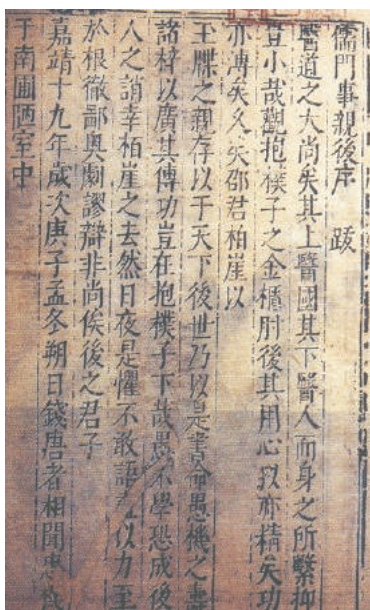
Plain Questions was written by Wan-Su Liu (劉完素) in the Jin Dynasty. It discussed how to use the theory of five circuits and six qi to analyze pathogeneses and give treatment. The book summarized 19 pathogeneses from *Inner Canon: Discussion on the Most Important and Abstruse Theory* (《內經·至真要大論》), suggesting that given the “pathogenesis of the fire-heat syndrome” (「火熱病機」), heat-draining and yin-tonifying medicinals should be used to release the exterior, which started the School of Cold Medicine (寒涼派) and influenced the foundation of the School of Warm Medicine (溫病派).

***Anecdotes of Famous Physicians* (《歷代名醫蒙求》)**

Anecdotes of Famous Physicians was a medical history written by Shou-Zong Zhou (周守忠) Zhou in the Southern Song Dynasty. Zhou collected all historical data and medical books ahead of the Song Dynasty before selecting the records of famous physicians’ deeds and anecdotes, and arranging them into the current edition.

***Confucian’s Duties to Their Parents* (《儒門事親》)**

Confucian’s Duties to Their Parents was written by Cong-Zheng Zhang (張從正) in the Jin Dynasty who proposed the theory of excessive pathogen. He held that all diseases in the world were caused by six excesses: wind, cold, summer heat, dampness, dryness, and fire, and that these diseases must be treated with diaphoretic, emetic, or purgative



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 127 (A collection held in the library of the Chinese Medicine Research Institute in China)

medicinal. He was thereby regarded as reprehensive of the School of Purgation. As it was very popular to take tonics at that time, Zhang proposed that five cereals, five vegetables, five fruits, and five domestic animals could nourish the human body and eliminate six excesses.

The Canon of Nourishing Life with Acupuncture and Moxibustion (《針灸資生經》)

The Canon of Nourishing Life with Acupuncture and Moxibustion, also known as *Classic for Saving Life (《資生經》)*, was written by Zhi-Zhong Wang (王執中) in the Southern Song Dynasty. The contents of the book were almost the same as those of Wei-Yi Wang's *Illustrated Manual*



of *Acupoints of the Bronze Figure* except for the addition of acupoints such as Dushu (督俞), Qihai (氣海), Fengshi (風市), Meichong (眉衝), Mingtang (明堂), Dangyang (當陽), Bailao (百勞), and others. This book showed a unique insight into point selection, moxa use, nursing after moxibustion, contraindications of acupuncture and moxibustion, and the relationship between acupuncture and medicine. It defined one *cun* as “the distance between two transverse creases of Neiting: the second segment of a man’s left hand or a woman’s right hand”. This was called Body *cun* measurement that is still used today.

The Revelation of Medicine (《醫學啟源》)

The Revelation of Medicine was a three-volume written by Wan-Su Zhang. The book mainly discussed visceral pattern identification, various treatments, meridian tropism, and channel conduction, covering clinical symptom identification, medication, and prescription selection.

Illustration of Yin Syndrome (《陰證略例》)

Illustration of Yin Syndrome was a monograph on yin syndrome written by Hao-Gu Wang (王好古) in the Yuan Dynasty. Wang believed that cold damage with yin pattern is a type of acute syndrome of medical condition, which is hard to be distinguished and treated. Therefore, he wrote this book to record his experiences in treating the disease of cold damage with yin pattern.



Compendium of Effective Prescriptions for Women (《婦人大全良方》)

Compendium of Effective Prescriptions for Women, also known as *Essential Effective Prescriptions for Women (《婦人良方集要》)*, or *Effective Prescriptions for Women (《婦人良方》)*, was written by Zi-Ming Chen (陳自明) in the Southern Song Dynasty. Born in a physician family, Chen was adept in gynecology and obstetrics. Referring to medical books before the Song Dynasty, mainly *The Inner Canon* and *The Origin and Indicators of Disease*, the book was the earliest monograph on gynecology and obstetrics in the history of traditional Chinese medicine.

Treatise on Clarification of Perplexities about Internal and External Damage (《內外傷辨惑論》)

Treatise on Clarification of Perplexities about Internal and External Damage was written by Gao Li in the Jin Dynasty who paid much attention to spleen and stomach. In the book, he pointed out that the exuberance and debilitation of spleen and stomach was closely related to the occurrence, development and prediction of internal and external damage and systematically discussed the diagnosis, treatment, and medication of spleen-stomach syndrome caused by food and drink or fatigue.



Records of Washing Away Injustice (《洗冤集錄》)

Records of Washing Away Injustice, the extant earliest monograph on forensic medicine in the world, was written by Ci Song (宋慈). It dealt with the ordinance of the Song Dynasty on necropsy, postmortem methods, postmortem precautions, postmortem phenomena, postmortem exhumation, mechanical asphyxia, blunt trauma, sharp instrument injury, traffic accidents, poisoning, death from high temperature, death from diseases, sudden death, and other aspects related to forensic medicine. Summarizing all the experience on forensic medicine prior to the Song Dynasty, the book profoundly affected the development of forensic medicine in other countries such as Korea, Japan, and Vietnam, all took it as the textbook of necropsy.

Treatise on the Spleen and Stomach (《脾胃論》)

Treatise on the Spleen and Stomach was written by Gao Li in the Jin Dynasty in 1249 AD. Referring to *The Inner Cannon* and *Classic of Difficult Issues*, the book dealt with the physiological characteristics and pathological change of the spleen and stomach, holding that “stomach qi was the root of human being” and that “diseases developed from the internal damage to the spleen and stomach”. It proposed that tonifying spleen earth and downbearing yin fire can be the principle of treatment.



Prescriptions for Saving Lives (《濟生方》)

Prescriptions for Saving Lives, also known as *Yan's Prescriptions for Saving Lives (《嚴氏濟生方》)*, was written by Yong-He Yan (嚴用和) in the Song Dynasty. The book recorded Yan's clinical experience and his understanding of famous prescriptions and empirical prescriptions during the period from 202 BC to 1253 AD. Organized in accordance with the class of miscellaneous disease, the book first listed the pathogen and pathogenesis of a disease before giving the common prescription and then expounded the indication, ingredients, preparation, and administration of each prescription.

Essentials of External Medicine (《外科精要》)

Essentials of External Medicine, also known as *Precious Mirror of External Medicine (《外科寶鑒》)*, was compiled by Zi-Ming Chen in the Southern Song Dynasty. The book pointed out that the cause and pathogenesis of carbuncles and gangrene must be decided to predict the possible course and results before giving a treatment, and that inward attack was not the only treatment for heat toxin pattern, suggesting trying cold medicinal. Zi-Ming Chen believed that the only treatment for carbuncles and gangrene was moxibustion plus tonifying qi and blood on the basis of precise diagnosis.



Ode to the Essentials of Flow (《標幽賦》)

Ode to the Essentials of Flow was written by Han-Qing Dou (竇漢卿), a well-known acupuncture and moxibustion expert in the Jin and Yuan Dynasties. In the title, “biaoyou” (標幽) means explaining abstruse principles of acupuncture and moxibustion clearly while “fu” (賦) is a literary style in ancient China to state the contents of acupuncture and moxibustion. In over a thousand Chinese characters, the book covered meridians and collaterals, acupoints, needling, moxibustion, treatments, and theories related to acupuncture and moxibustion. Furthermore, written in the form of verse, it was easy to read loud and recite.⁶

Principles of Correct Diet (《飲膳正要》)

Principles of Correct Diet, compiled by Si-Hui Hu (忽思慧), was the extant earliest illustrated materia medica of the Yuan Dynasty and also the first monograph on the history of traditional Chinese medicine. It recorded dietary and medical culture of various ethnic groups in the Yuan Dynasty.

Essence of External Medicine (《外科精義》)

Essence of External Medicine was written by De-Zhi Qi (齊德之) in the Yuan Dynasty. It was published in 1335 AD and was included in *A Collection of Ten Medical Books (《東垣十書》)* during the period from 1522 AD to 1567 AD. The compilation included the discussion of such



famous physicians as Bian Que (扁鵲), Zhong-Jing Zhang, and Hua Tuo (華佗) on external medicine, ancient medical books such as *The Inner Canon*, *Classic on Difficult Issues*, and the editor's own clinical experience.

Effective Formulas Handed Down from Generations (《世醫得效方》)

Effective Formulas Handed Down from Generations was a comprehensive medical book written by Yi-Lin Wei (危亦林) in the Yuan Dynasty. It dealt with the symptoms of internal, external, gynecological, pediatric, ophthalmological and otorhinolaryngological, and traumatological diseases, and treatment and prescriptions for these diseases. Particularly, records related to traumatology had the greatest influence on the later medicine. It was the first medical book to record the fracture of spine. In the book, Yi-Lin Wei originally adopted suspending reduction and immobilization to treat fracture. Before giving treatment, he prepared “Wild Aconite Powder” (「草烏散」) for general anesthesia thus, developing anesthetic.

An Elucidation of the Fourteen Meridians (《十四經發揮》)

An Elucidation of the Fourteen Meridians was written by Shou Hua (滑壽) in the Yuan Dynasty. In the book, Shou Hua first distributed a total of 657 points on the body to fourteen meridians that consisted of twelve

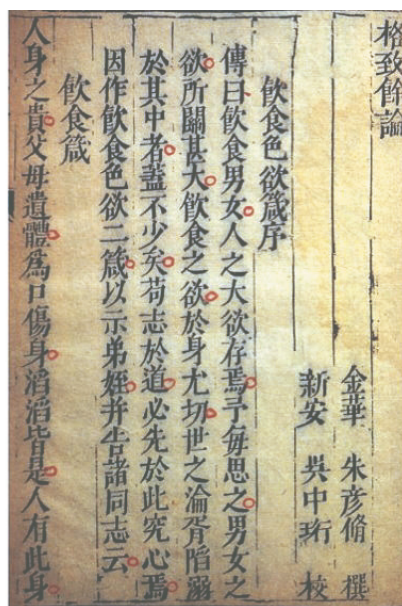
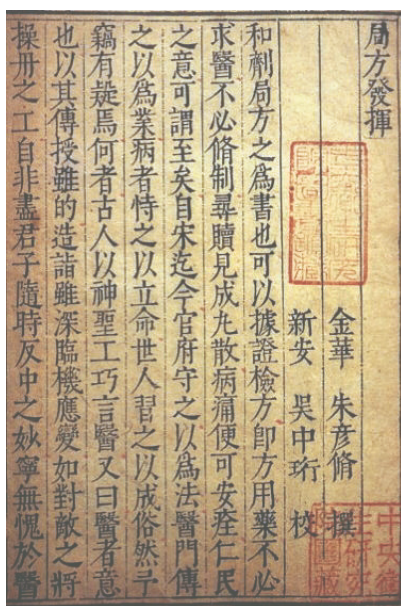




regular meridians and Ren and Du meridians, and proposed selecting points along the meridians. This point selection later became the standard of clinical acupuncture and moxibustion, and influenced the development of meridian and collateral theory.

Treatise on Inquiring the Properties of Things (《格致餘論》)

Treatise on Inquiring the Properties of Things was a symposium on medicine written by Zhen-Heng Zhu in the Yuan Dynasty. The book covers



Works of Zhen-Heng Zhu

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 130 (A collection held in the library of the Chinese Medicine Research Institute in China)





a wide range of aspects of medicine, but the contents were not arranged in order, just like random notes. However, Zhen-Heng Zhu showed some new thinking in the book.

Section 4 Biographies of Medical Experts

Wei-Yi Wang (王惟一)

Wei-Yi Wang, also known as Wei-De (惟德), was born circa 987 AD and died in 1067 AD. Adept in acupuncture and moxibustion, he once served as a Han-Lin Yi-Guan (Hanlin Medical Official) and Dian-Zhong Sheng Shang-Yao Feng-Yu (殿中省尚藥奉御; Chief Medical Stewards of Palace Administration), and taught medicine at the Tai-Yi Ju (Imperial Medical Bureau). He was the author of *Illustrated Manual of Acupoints of the Bronze Figure*, *Bright Hall Classic*, and *Mingtang Miraculous and Quintessential Classic in Verse* (《明堂玄真經訣》).

By order of Emperor Renzong, Wei-Yi Wang started to examine proved clinical experience, collect and correct works of acupuncture and moxibustion, thus compiling the three-volume *Illustrated Manual of Acupoints of the Bronze Figure*. He adopted frontal and lateral human figures in the book to illustrate the exact location of 657 acupoints according to the course of meridians and collaterals and the parts of body. In order to help locate the acupoints for diagnosis and treatment, Wei-Yi



Wang casted two bronze figures of adult man. The body of these bronze figures had two parts: front and back coated with yellow wax while its inside has viscera and bowels. On the surface of the figure, twelve meridians of viscera and bowels can be clearly seen while the position of each acupoint on the meridians was marked with bold dots beside which the names of acupoints were craved. Each acupoint was connected to the inside where water or mercury was poured. If you insert a needle at the very location of a point, liquid would issue. If you cannot locate the point, you would not insert the needle into the figure. For this reason, physicians can use the figure to practice needling, teach acupuncture, or test students. In 1027 AD, the Song Administration published *Illustrated Manual of Acupoints of the Bronze Figure* along with the bronze figure throughout the country. In 1030 AD, Wei-Yi Wang was ordered to crave the contents of *Illustrated Manual of Acupoints of the Bronze Figure* on the stone wall of Da-Xiang Guo-Si (大相國寺; Grand Xiangguo Temple), the place was known as the Stone Wall Hall with Acupuncture Figures (「針灸圖石壁堂」) which was then renamed as Ren-Ji Hall (「仁濟殿」).

Xi Xu (許希)

Xi Xu was born in Kaifeng, Henan Province, with his date of birth unknown. He was famous for his acupuncture skills in Kaifeng and once served as Han-Lin Yi-Xue (翰林醫學; Hanli Medical Scholar). In 1034 AD, Emperor Renzong was suffering from a severe illness. Although the



Emperor had seen many imperial physicians, he did not seem to get better. When all imperial physicians had no idea, Princess of the Ji State who knew of Xu's fame recommended Xi Xu to come to the court to treat Emperor Renzong. After diagnosis, Xu believed that "needling the acupoints between pericardia could cure Your Majesty immediately" (「針心下包絡之間可急愈」). However, all imperial physicians never heard the point Xu mentioned, they warned Xu against a rash action in case of hurting the emperor. Xu did not perform the acupuncture before he proved the safety of his treatment by needling the point on young eunuchs. When Xu gave the needling for three times, Emperor Renzong was getting better. For this reason, Xu was appointed as a Han-Lin Yi-Guan (Hanlin Medical Official). In addition, the emperor founded a Bian Que Temple in the west of Kaifeng for him to practice medicine and teach medical students.

Yu-Xi Zhang (掌禹錫)

Yu-Xi Zhang, styled Tang-Qing (唐卿), was born in Yancheng, Xuzhou (now Yancheng County, Henan Province) in 992 AD and died in 1068 AD. He was a well-known physician and proofreader in the Northern Song Dynasty. A Jin-Shi (進士; Presented Scholar) during the period from 1017 AD to 1021 AD, he served as Zhou Si-Li Can-Jun (州司理參軍; Prefectural Administrator for Public Order), Shang-Shu Tun-Tian Yuan-Wai-Lang (尚書屯田員外郎; Vice Director of State Farms), Jing-Zhou



Tong-Pan (井州通判; Assistant Prefect of Jing Prefecture), Ji-Xian-Yuan Jiao-Li (集賢院校理; Subeditor of the Academy of Scholarly Worthies), Cong-Wen-Yuan Jian-Tao (崇文院檢討; Examining Editor of the Institute for the Veneration of Literature), Guang-Lu Qing (光祿卿; Director of the Banqueting Court), and Zhi-Bi-Ge Xue-Shi (直秘閣學士; Scholar of Imperial Archives). Later he was promoted as Tai-Zi Bin-Ke (太子賓客; Adviser to the Heir Apparent). Studious and knowledgeable, he read widely and had a great interest in *The Book of Change* (《易經》), geography, and medicine. He was ordered to compile *Jiyou Supplementary Annotation to Sheng Nong's Classic of Materia Medica* (《嘉祐補注神農本草》).⁷

Lin Yi (林億)

Lin Yi, with his birth and death date unknown, was a skillful physician in the Northern Song Dynasty. He once served as Cao-San Dai-Fu (朝散大夫; Grand Master for Court Audiences), Guang-Lu Qing (光祿卿; Director of the Banqueting Court), and Zhi-Bi Ge (直秘閣; Imperial Archives). *The History of Song* did not record a biography for him. He was one of the principal proofreaders of the Jiao-Zheng Yi-Shu Ju (Bureau for Proofreading and Correcting Medical Books), who had participated in the compilation of *Supplementary Annotation to Sheng Nong's Classic of Materia Medica*. Together with Bao-Heng Gao (高保衡), Qi Sun (孫奇), Zhao Sun (孫兆) and others, he proofread and published a number of



important medical works before the Tang Dynasty such as *The Plain Questions of the Yellow Emperor's Internal Classic* (《黃帝內經素問》), *Treatise on Cold Damage Diseases*, *Classic of the Golden Chamber and Jade Sheath* (《金匱玉函經》), *Pulse Canon* (《脈經》), *The Systematized Canon of Acupuncture and Moxibustion* (《針灸甲乙經》), *The Origin and Indicators of Disease*, *A Thousand Gold Pieces Prescriptions*, *Supplement to the Thousand Gold Pieces Formulary* (《千金翼方》), and *Essential Secrets from Outside the Metropolis*.⁸

Guo Yong (郭雍)

Guo Yong, styled Zi-He (子和), was born in 1106 AD and died in 1187 AD. He studied Confucianism in his early life and was familiar with *The Book of Change* and medicine. In his late life, he involved himself in medical books, of which he loved *Treatise on Cold Damage Diseases* best. As a master researcher of Zhong-Jing Zhang's theories, he thought *Treatise on Cold Damage Diseases* was incomplete. He thus wrote the twenty-volume *A Supplement Explanation to the Treatise on Febrile Diseases* (《傷寒補亡論》) which was on the basis of Zhang's statement, referring to *Plain Questions*, *Classic of Difficult Issues*, *Thousand Gold Pieces Formulary*, *Essential Secrets from Outside the Metropolis*, *A Classified Book on Treating Exogenous Febrile Diseases* (《類證活人書》), and works of Gong Zhu, An-Shi Pang, Qi-Zhi Chang (常器之), and other physicians to complete the lost parts of *Treatise on Cold Damage*



Diseases. In the book, he showed his own understanding.⁹

Shen-Wei Tang (唐慎微)

Shen-Wei Tang, styled Shen-Yuan (審元), was a well-known herbalist and folk mycologist. Born in a family of physicians, he had great medical skills and rich clinical experiences. He was the author of *Classified Materia Medica for Emergencies* (*Classified Materia Medica* for short). According to historical records, he “did not make any mistakes in his medical career” (「治病百不失一」).

An-Shi Pang (龐安時)

An-Shi Pang, style name An-Chang (安常), literary name Taoist Qi-Shui (蘄水道人), was a distinguished physician in the Song Dynasty. He was raised in a physician family where his father Zhi-Qing Pang (龐之慶) was a scholar physician who learned medicine from his grandfather. He thus practiced medical skills from his father at his early age. He had an in-depth study on medical classics, pulse-taking methods, and herbal medicine and was famous as a great physician of cold damage diseases. Wu-Shu (蘇武) praised him for “his proficiency in cold damage diseases and his good understanding of profound meaning of *Treatise on Cold Damage Diseases*” (「精於傷寒，妙得長沙遺旨」). In his late years, he wrote *General Treatise on Cold Damage Diseases* based on his clinical experiences and reference to various other theories. In the book, he held



that cold diseases and warm diseases were different in nature. He emphasized that *General Treatise on Cold Damage Diseases* was to explain what Zhong-Jing Zhang did not mention and record prescriptions that Zhang did not include. In addition, he highly praised *Treatise on Difficult Issues* and wrote *Differentiation on Classic of Difficult Issues* (《難經辨》) which was unfortunately not handed down.¹⁰

Gong Zhu (朱肱)

Gong Zhu, style name Yi-Zhong (翼中), literary name Qiu-Zi Wu (無求子), was born in an official family. His birth and death dates were unknown. When he did not want to be an official any more, he resigned and lived in Dayin Street by the West Lake in Hangzhou to practice medicine and write. That is why he called himself old Mr. Dayin (大隱翁). He was a famous physician, good at treating cold damage diseases. Having intensively studied *Treatise on Cold Damage Diseases* for about ten years, he showed insight into cold damage diseases induced by exopathogen without limiting himself to the statements of the *Inner Canon* and *Treatise on Cold Damage Diseases*. He was the author of *Qiu-Zi Wu's Hundred Questions about Cold Damage Diseases*, which was later renamed to *Book of Nanyang for Life Saving*, or *Classified Book on Treating Exogenous Febrile Diseases*. In 1111 AD, his son Yi-Zhi Zhu (朱遺直) presented the book to the court which praised it highly. At that time, the Administration was keen to develop medicine and eagerly sought after talented physicians.



Gong Zhu was thus appointed as Yi-Xue Bo-Shi (Medical Erudite). Many years later, he proofread *Classified Book on Treating Exogenous Febrile Diseases*, correcting over hundred mistakes, and finally naming it as *Revised Classified Book on Treating Exogenous Febrile Diseases* (《重校證活人書》).¹¹

Yi Qian (錢乙)

Yi Qian, styled Zhong-Yang (仲陽), was born in Qiantang in the Northern Song Dynasty and later settled in Danzhou (now Dongping, Shangdong Province). His mother died when he was a little boy. His father was a great physician who loved wine and travel. When he was three years old, his father visited the East China Sea and never returned. Thus his aunt adopted him. When he grew a little older, he studied medicine with his uncle and specialized in pediatrics. He was appointed as a Han-Lin Yi-Guan (Hanlin Medical Official) during the period from 1078 AD to 1085 AD due to his healing the elder princess. He was later promoted as the Imperial Medical official because he cured Prince Zhao Tong of infantile convulsion with Decoction of baked yellow earth (黃土湯). He was the author of *Key to Therapeutics of Children's Diseases*.

Jie Yang (楊介)

Jie Yang, whose birth and death dates were unknown, styled Ji-Lao (吉老), was born in a medical family in Sizhou (now Xuyi, Jiangsu



Province). He enjoyed great prestige for his effective prescriptions. It was said that he was called in the court to treat Emperor Hui-Zong (宋徽宗) who was suffering from severe abdominal pain when all imperial physicians did not know what to do. After diagnosis, Yang found out that the emperor's pain due to overconsumption of ice products, so he then cured Hui-Zong with Major Center-Rectifying Decoction (大理中湯) boiled with Ice Cake. As he was good at discovering the cause of diseases, he was thus able to treat serious and prolonged illness. He was the author of *Charts of Viscera, Bowels, Channels and Collaterals* (《存真環中圖》) (also known as *Pictures of Reserving the True* (《存真圖》)), *General Treatise on Seasonal Cold Damage Diseases* (《四時傷寒總病論》) (also known as *Sphygmus Secret of Treatise on Cold Damage Diseases* (《傷寒論脈訣》)), but these two books were lost.¹²

Zhi-Zhong Wang (王執中)

Zhi-Zhong Wang, styled Shu-Quan (叔權), was a famous physician in the Southern Song Dynasty. His birth and death dates were unknown. He was adept in moxibustion and fire needling. He held that acupuncture, moxibustion, and medication should be given together. In addition, he created “middle finger cun” (「中指同射」) to locate points, and wrote *Acupuncture and Moxibustion Classic for Saving Life*.



Yan Chen (陳言)

Yan Chen, style name Wu-Zi (無擇), literary name Daoist He-Xi (鶴溪道人), was a distinguished physician in the Song Dynasty. His birth, death dates and life story were unknown. He was familiar with prescriptions and pulse manifestation and his treatment worked miracles. He wrote *Treatment Based on Pathogenic Factors* (《依源指治》) but it was not published, unfortunately. Later, he compiled *Treatise on the Three Categories of Pathogenic Factors and Prescriptions*.

Ci Song (宋慈)

Ci Song, styled Hui-Fu (惠夫), was a famous medicolegal physician in Jianyang, Fujian Province in the Southern Song Dynasty. As a Ti-Xing Guan (提刑官; Judicial Officer), he had been appointed as senior criminal officer for several times. He hated those murders who did not treasure life, so he was meticulous in spot inspection to avoid case of injustice. Given that postmortem was involved not only with ethnics but also with excellent medical skills, Ci Song read a lot of books about forensic medicine and criminalistics and delved into pathology and pharmacology. Later, based on his own experience and the essence of various medical works, he compiled *Records of Washing Away the Injustice*, which was generally known as the extant earliest book on forensic medicine in the world.¹³



Zi-Ming Chen (陳自明)

Zi-Ming Chen, styled Liang-Fu (良甫), was also known by his literary name old Yao-Yin (藥隱老人). He was the author of *Compendium of Effective Prescriptions for Women*, which was the first systematic monograph on obstetrics and gynecology in the history of traditional Chinese medicine. He agreed with previous physicians on fetal education that the emotional state of pregnant women would influence the function of *qi* and blood which indirectly affect the development of fetal health, mentality, and even disposition. Thus, Chen spared a special category of fetal education in the book. He held that parturient environment should be good, articles for childbirth should be well-prepared, and the would-be mother should maintain sufficient physical strength to guarantee normal delivery.

Zi-Ming Chen was not only an expert gynaecologist and obstetrician, but he was also very interested in external medicine. In his work *Essentials of External Medicine*, he suggested a holistic therapy for an injury or wound, which does not just pay attention to counteract toxic substances partially, but considers the changes of viscera, bowels, *qi*, and blood. He also created prescriptions for expelling pus by internal expression.¹⁴

Wu-Ji Cheng (成無己)

Wu-Ji Cheng was a well-known physician in the Jin and Yuan period.



Born in a physician family, he had an intensive study on *Treatise on Cold Damage Diseases*. He was the author of *Commentary on the Treatise on Cold Damage Diseases* which was the extant earliest annotated edition of the entire *Treatise on Cold Damage Diseases*.

Wan-Su Liu (劉元素)



Wan-Su Liu
A collection from the
Exhibition Room on Li-Fu
Chinese Medicine located at
China Medical University,
Taiwan (Photographed by Dr.
Jaung-Geng Lin)

Wan-Su Liu, style name Shou-Zhen (守真), literary name Scholar Tong-Xuan (通玄處士), Zhen-Zi Song (宋真子) or Buddhist He-Jian (河間居士), was born in Hejian in the Jin Dynasty. That is why the later generations called him “He-Jian Liu” (「河間劉」) and his school as “The School of Hejian”. His family was very poor in his childhood. When his mother died of an illness, he determined to study medicine to save people. He was good at treating

febrile diseases. In terms of therapies, he stressed on acupuncture and moxibustion besides tonifying yin to abate yang, draining heart fire, and tonifying kidney water. Emperor Zhangzong Yan- Jing Wan (完顏璟) had recruited him to the court for three times, but he insisted not to hold office.



Admiring his honesty and simplicity, the Emperor honored him “Mr. Nobility” (「高尚先生」).


Among the many medical books he studied, he loved the *Plain Questions* best. He carefully examined 19 pathogeneses in *Inner Canon: Discussion on the Most Important and Abstruse Theory* (《素問·至真要大論》) and applied the theory of five circuits and six qi to classify diseases. He proposed that “six qi could all form fire” (「六氣皆從火化」) and “five circuits could all turn into fire” (「五志化火」). He strongly opposed applying pungent-warm or fire-heat decoctions that were included in *Prescriptions of the Peaceful Benevolent Dispensary* compiled by the Song Administration to cold damage diseases because he believed that symptoms of cold damage diseases were all related to fire and heat according to the fire-heat theory. In terms of treatment, he advocated using cold medicinal to attack exogenous factors based on the regularity of diseases, the characteristics of the environment and climate in the Northern China, and people’s eating habits and constitution. He also created Saposhnikovia Sage-Inspired Powder (防風通聖散) and Double Resolution Powder (雙解散) that could release the exterior with pungent-cool or release both the exterior and interior. Thanks to his contribution in using cold medicine, he was later regarded as a representative of the School of Cold Medicine. His works included *Formularies and Explanations of the Yellow Emperor’s Plain Questions* (《黃帝素問宣明論方》), *Etiology Based on Plain Questions, Classified Experimental*



Therapy for the Pathogeny and Syndrome of Cold Damage Diseases (《傷寒標本心法類萃》), *A Straight Study of the Treatise on Cold Damage Diseases* (《傷寒直格》), and *On Diabetes Mellitus* (《三消論》). All his works were compiled into Six Books of Hejian or Ten Books of Hejian by later generations.

Wan-Su Zhang (張元素)

Wan-Su Zhang, styled Jie-Gu (潔古), was born in Yishui in the Jin Dynasty. He was very smart since his childhood. He passed the imperial examination for children at eight. At 27, he took the examination for the Jing-Yi Jin-Shi (經義進士; Presented Scholar candidate who studied Confucian classics) and failed because his surname was same as one of the royal family, which was not allowed at that time. Thus he abandoned his official career and started to study medicine. He had a profound study of many classic medical works like *The Inner Cannon*, and esteemed Zhong-Jing Zhang's theory very much. Absorbing the essence of *Classic of Apoplexy Involving the Viscera* (《中藏經》) and the works of Shu-He Wang, Si-Miao Sun and Yi Qian, he created the School of Yi-Shui. His works included *The Revelation of Medicine, The Pearl Bag* (《珍珠囊》), *Medication for Visceral Patterns Based on Pathogeny-Syndrome, Cold-Heat and Deficiency-Excess* (《臟腑標本寒熱虛實用藥式》), and *Jie-Gu's Methods of Acupuncture for Treating Pains* (《潔古刺諸痛法》). It was said that he was the author of *Formularies* (《醫方》), *Annotated*





Classic of Difficult Issues (《藥注難經》), and *Jie-Gu's Materia Medica* (《潔古本草》) that were all lost.

According to *The History of the Jin Dynasty* (《金史》), Jie-Gu Zhang (張潔古) had close contact with Wan-Su Liu. At one time when Liu had suffered from cold damage for many days and his own treatment did not work, Zhang came to Liu's home for diagnosis. After feeling Liu's pulse and taking his history, Zhang told Wan-Su the pathology and gave him a prescription. Only taking one dose, Liu recovered. Wan-Su highly praised Jie-Gu's medical skills and Jie-Gu became even more famous for his curing Liu of cold damage.

Cong-Zheng Zhang (張從正)

Cong-Zheng Zhang, style name Zi-He (子和), literary name Dai-Ren (戴人), was born in Kaocheng District of the State of Juzhou in the Jin Dynasty. He once learned from Cong-Yi Liu and Wan-Su Liu. In the reign of Xunzong of the Jin Dynasty, he was recruited to Tai-I Yuan (Imperial Academy of Medicine) but he did not like the atmosphere of medical officials so he resigned and returned to his hometown to practice medicine. Since then, he often communicated with well-known figures of that time such as Zhi-Ji Ma (麻知幾) and Zhong-Ming Chang to talk about medical issues. Under their assistance, Zhang wrote *Confucian's Duties to Their Parents* of which the first three volumes were written by Zhang himself and the other twelve volumes were polished by Ma and Chang. Trying hard to



correct the quack's abuse of warm tonification, he held that "diseases should be treated with offensive purgative medicinal and life should be nurtured with food". Theoretically, he proposed dissipating pathogenic factors; therapeutically, he was adept in purgation. He was later regarded as the representative of The School of Purgation.

Gao Li (李杲)



Gao Li

A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

Gao Li, style name Ming-Zhi (明之), literary name old Dong-Yuan (東垣老人), was the author of *Treatise on Clarification of Perplexities About Internal and External Damage*, *Treatise on the Spleen and Stomach*, *Secret Records of the Chamber of Orchids* (《蘭室秘藏》), *General Medication*(《用藥法象》), and *Elucidation on Medicine* (《醫學發明》). He was very kind and charitable. Li studied medicine because of his mother who died of

diseases. He did not know what diseases took his mother's life even though he consulted a lot of physicians. He then studied medicine from Wan-Su Zhang, and many years later he acquired all of Zhang's medical skills. At



the time when pestilence (疫癘; i.e. massive head cold damage) was rife, Li created a formula for the epidemic. After creating a drug using the formula, his fellow townsmen were getting better gradually. Thus, they called it a miracle drug, making it spread widely.

Li believed that one's spleen and stomach functions influenced their health. Referring to Wan-Su Zhang's theory of nurturing stomach qi, Li summarized his clinical experience of many years and created the Theory of Spleen and Stomach Internal Damage. He suggested that "diseases developed from the internal damage to the spleen and stomach". He also created formulas such as "Middle-Tonifying and Qi-Replenishing Decoction" (「補中益氣湯」), and "Yang-Upraising and Fire-Dissipating Decoction" (「升陽散火湯」) for spleen and stomach diseases. As he knew better how to warm and tonify spleen and stomach, he was regarded as the representative of Earth Invigorating School.

Hao-Gu Wang (王好古)

Hao-Gu Wang, with his birth and death dates unknown, served as Zhao-Zhou Yi-Xue Jiao-Shou (趙州醫學教授; Medical Professor of Zhao Prefecture) and Ti-Ju Nei-Yi-Xue (提舉內醫學; Supervisor of Internal Medicine). When he was young, he and Gao Li were both the students of Wan-Su Zhang. After Zhang was gone, he came to Hejian and continued to study medicine under Gao Li. He had an insight into such medical classics as *Treatise on Cold Damage Disease* and *The Divine*



Husbandman's Herbal Foundation Canon which were the sources of his academic thought. He also absorbed the essence of Wan-Su Wang's and Gao Li's theories.¹⁵ He was a prolific physician. Many of his books survived including *Brief Illustration of Yin Syndrome*, *Materia Medica for Decoctions* (《湯液本草》), *Medical Masters* (《醫壘元戎》), and *This Matter Is Hard to Know* (《此事難知》). Still, others were lost including *Collected Best Treatise on Rash* (《痲論萃英》), *Treatise on Clarification of Perplexities about Cold Damage Diseases* (《傷寒辨惑論》), *Detailed Study of Zhong-Jing's Works* (《仲景詳辨》), *Essentials of Prescriptions in Verse* (《治人節要歌括》), *Illustrated Medication for Twelve Meridians* (《十二經藥圖解》), *Compilation of Treatise on Three Requirements* (《三備集》), *Treatise on Guangming* (《光明論》), *Treatise on Chronic Infantile Convulsion* (《小兒吊論》), *Treatise on Differentiation of Pure Mental Tranquilization* (《辨守真論》), and *Collection of Zhong-Jing's Works* (《仲景一集》).

Zhen-Heng Zhu (朱震亨)

Zhen-Heng Zhu, styled as Yan-Xiu (彥修), was a native of Dan-Xi (丹溪). He was thus respected by the later generation as “old Dan-Xi” (「丹溪翁」) and his school was known as “Dan-Xi School” (「丹溪學派」). When he was thirteen years old, his mother suffered from splenalgia, but no physician could write her a prescription. Since then, he determined to study medicine. He intensively studied *Plain Questions* and



Adopted from the pedigree of the Zhu clan (provided by Han-Long Fong of Chi-An Township, Yiwu, Zhejiang province)
Source: General History of Traditional Chinese Medicine, a Volume of collections of illustrative plates and atlas of historical relics, page 129

other medical classics. Five years later, he finally cured his mother of her pertinacious illness. At 36, he went to Bahuashan, Dongyang County to learn the doctrines of way, virtue, nature, and fate from Qian Xu (許謙), the fourth generation disciple of Xi Zhu (朱熹). As Xu ardently expected him to learn medicine, he then decided to give up Confucianism and resumed studying *Plain Questions* extensively. He even left his hometown to visit famous physicians. When he knew that Zhi-Ti Luo (羅知悌) was adept in medical principles, he called at Luo's house many times, the physician was so moved that he accepted Dan-Xi as his disciple and taught him the academic thought and clinical experience of Wan-Su Liu, Cong-Zheng Zhang, and Gao Li. When Zhu acquired the medical skills, he then



devoted all his attention to treat Qian Xu of the inveterate disease. It worked very well, so his fame spread and a great number of patients continuously came to him for a prescription. He became one of the well-known physicians in the Jin and Yuan period.

He was the author of *Treatise on Inquiring the Properties of Things*, *Elucidation of Dispensary Formulas* (《局方發揮》), *Differentiation on Complicated Cold Damage Diseases* (《傷寒辨疑》), and *A New Thinking on Essentials of External Medicine* (《外科精要新論》). He once adopted warm drugs included in *Prescriptions of the Peaceful Benevolent Dispensary* to treat patients, but the curative effects were not ideal. Referring to Wan-Su Liu's theory of heat fire, he proposed nursing yin essence for he thought "in the human body there was excessive yang and insufficient yin" (「陽有餘陰不足」). He explored the essence of ministerial fire physiologically and pathologically, describing the syndromes of yin deficiency with effulgent fire. In terms of therapy, he advocated nourishing yin to downbearing fire and he was good at the treatment, so he was regarded as the representative of The School of Nourishing Yin.

Si-Hui Hu (忽思慧)

Si-Hui Hu, or Si-Hui He (和斯輝), was a Mongolian (or a Muslim). His birth and death dates were unknown. He served as Gong-Ting Yin-Shan Tai-I (宮廷飲膳太醫; Imperial Dietarian) for a long time, in charge



of dietary therapy, medication, and life nurturing. An outstanding dietician, he was the author of *Principles of Correct Diet*.

Yi-Lin Wei (危亦林)

Yi-Lin Wei, styled as Da-Zhai (達齋), with his birth and death dates unknown, was born in a medical family. His great-great-grandfather Yun-Shan Wei (危雲山) learned adult medicine (internal medicine) from Jing Dong (董京), grandson of the twenty-fifth generation of Feng Dong's (董奉) family. His father's uncle Zi-Mei Wei (危子美) was a specialist in bone setting, battle surgery, and gynecology. His grandfather Wei-Bi Wei (危碧崖) was proficient in pediatrics and ophthalmology, able to treat tuberculosis, and had an in-depth study of medical principles. He was very smart and studious since his childhood, and started to practice medicine at 20. He not only carried the ancestral medicine, but also delved into gynecology, pediatrics, pharyngology, stomatology, and swollen sore, and he was especially good at orthopedics. He was the author of *Effective Formulas Handed Down for Generations*.

Shou Hua (滑壽)

Shou Hua, style name Bo-Ren (伯仁), literary name Ying-Ning Sheng (櫻寧生), was a well-known physician in the late Yuan Dynasty and early Qing Dynasty. He learned verse since his childhood. As he was clever and studious, he was well versed in classics, histories, and various schools of



thought during the period from pre-Qin to the early Han Dynasty. He had an insight into *Plain Questions* and *Classic of Difficult Issues*, thus compiling *Plain Questions with Selected Commentaries and Notes* (《讀素問抄》) and *The Genuine Meaning of the Classic of Difficult Issues* (《難經本義》). Later he devoted himself to the theories of Zhong-Jing Zhang, Shou-Zhen Liu (劉守真), and Dong-Yuan Li. He then moved to Dongping (now Dongping County, Shandong Province) to study acupuncture under Dong-Yang Gao (高洞陽). Intensively studying meridian and collateral and referring to other theoretical books such as *Inner Cannon*, he composed *An Elucidation of the Fourteen Meridians, Essentials for Diagnosticians* (《診家樞要》), *Treatise on Cold Damage Diseases With Selected Commentaries and Notes* (《讀傷寒論抄》), *Medicine in Verse* (《醫韻》), and *On Hemorrhoid and Fistula* (《痔瘡篇》). However, it is a pity that two of them were lost.

Qian-Sun Ge (葛乾孫)

Qian-Sun Ge, styled as Ke-Jiu (可久), was born in a physician family in Pingjiang Route (now Suzhou, Jiangsu Province) in the Yuan Dynasty. His father Ying-Lei Ge (葛應雷), styled as Zhen-Fu (震父), was a well-known physician who wrote *Collection of Medicine* (《醫學會同》) and once served as a Yi-Xue Jiao-Shou (醫學教授; Medical Professor) of Pingjiang Route, and later was transferred as Medical Supervisor for Zhejiang Yi-Xue Ti-Ju (江浙醫學提舉; Jiangsu and Zhejiang Provinces).



Ying-Lei contributed to the publication of Wan-Su Liu's and Wan-Su Zhang's medical theories in the South China. His uncle Ying-Duo Ge (葛應澤) was also proficient in medicine who served as superintendent of the medical official in Ping-Jiang Route.

At the very beginning, he just showed a deep interest in medical books with no intention to be a physician. However, he could understand these books very well and often wrote prescriptions which were proved to be effective. For this reason, more and more patients came to him for a treatment; he then started to practice medicine. He was cautious about diagnosis and treatment, and treated all patients the same, whether they were rich or poor. Sometimes, he even did not charge any money. Therefore, he was greatly respected by the people at that time. With his fame spreading over north and south, he enjoyed equal popularity with Zhen-Heng Zhu, a famous physician of that time. In addition, Xiang Xin (項昕), a well-known physician in the Yuan Dynasty, was his disciple. Ge was the author of *The Enlightenment of Medicine* (《醫學啟蒙》) and *On the Twelve Meridians and Collaterals* (《經絡十二論》) (coauthor with his father), and *A Miraculous Book of Ten Prescriptions* (《十藥神書》). The first two had been lost while the third was a monograph on tuberculosis. *A Miraculous Book of Ten Prescriptions* discussed the symptoms of tuberculosis, expounded each prescription in terms of components, dosage, administration, and indications, and attached prescriptions in rhymes and variations. In the book, these ten prescriptions



were arranged in the order of the heavenly stems, including Limestone Powder (石灰散), Opicalcite Powder (花石散), Pure Ginseng Decoction (獨參湯), Harmony-Preserving Decoction (保和湯), True-Safeguarding Decoction (保真湯), Pacific Pill (太平湯; or Cough-Quieting Gold Pill), Aquilaria Digestion-Assisted Pill (沉香消化丸), Flesh-Moistening Paste (潤肺膏), Black-Beak White Duck Paste (白鳳膏), and Marrow-Tonifying Pill (補髓丹). It also appended two other formulas: Stomach-Calming Powder (平骨散方) and Four Gentlemen Decoction (四君子湯). Tian-Shi Ye (葉天士), Xiu-Yuan Chen (陳修園), and other well-known physicians in the Qing Dynasty highly praised the book.

References

1. Jun Lu (2011). The Primary Study on the Characteristics of Prescriptions Based on the Volume for Treatment of the Woman Various Diseases in Taiping Benevolent Dispensary Bureau Prescriptions. *Journal of Yunnan University of Traditional Chinese Medicine*. 34(2). pp. 57.
2. Chun-Qiao Li & Tao Han (2012). Excipient Application Principles of Traditional Chinese Medicine Pills in *Taiping Benevolent Dispensary Bureau Prescriptions*. *Guide of China Medicine*. 10(27). pp. 268.
3. Shi-Qiang Zhao & Cheng-Jun Zhang (2006). Trial-Discussion of Influence of An-Shi Pang Treatise on Cold-Induced Total Disease on



- Warm Diseases. *Journal of Traditional Chinese Medicinal Literature*. 4. pp. 14.
4. Yi Wang & Jun-Shuang Guo (1998). Preliminary Exploration on the Edition History of Herbalism. *Journal of Traditional Chinese Medicinal Literature*. 2. pp. 14.
 5. Ling Li (2011). Shu-Wei Xu and His *One Hundred Symptoms of Febrile Diseases*. *Traditional Chinese Medicinal Research*. 24(2). pp. 78.
 6. Yong-Chen Zhang (2011). Preliminary Exploration on the Acupuncture Taboos of Ode to the Elucidation of Acupuncture Principles. *Journal of Clinical Acupuncture and Moxibustion*. 27(4). pp. 9-10.
 7. Hui-Song Sun and Wei-Hua Ma (1993). Brief Comment on the Contribution of Song Chen's Editing *Inner Canon*. *Jilin Journal of Traditional Chinese Medicine*. 3. pp. 7.
 8. Chun-Bo Xu (1992). On the Academic Contribution of Yi-Xin Lin's Revising *Plain Questions*. *Acta Chinese Medicine and Pharmacology*. 1. pp. 10-11.
 9. Lei Zhang (2006). Discussion of Yong Guo's Research Methods of Cold-Induced Disease. *Journal of Traditional Chinese Medicinal Literature*. 4. pp. 27-29.
 10. Shi-Qiang Zhao & Cheng-Jun Zhang (2006). Discussion of the Influence of An-Shi Pang *Treatise on Cold-Induced Total Disease on Warm Diseases*. *Journal of Traditional Chinese Medicinal Literature*. 4. pp. 14-16.



11. Hua Guo (2010). On the Academic Features of Exogenous Febrile Diseases in the *Huo Ren Shu* by Zhu Gong. *Journal of Beijing University of Traditional Chinese Medicine*. 1. pp. 17-19.
12. Kui-Fung Chong (2012). Clinical Practices of Famous Doctor Jie-Qiao Yang. *Journal for Beneficial Readings Drug Information and Medical Advices*. 11. pp. 48-49.
13. Rui-Ting Huang (2004). Collected Cases of Injustice Rectified and Ci Song's Legal Academic Theory. *The Journal of Law and Medicine*. 11 (2). pp. 123-126.
14. Guo-Hua Yu, Jian-Zhang Chen & Lai-Yong Zou (2010). Analysis on the Academic Characteristics of Surgical Essentials Written by Xujiang's Doctor Zi-Ming Chen. *Journal of Traditional Chinese Medicinal Literature*. 6. pp. 35-36.
15. Wen-Hwa Lee (2012). Discussion on the Characteristics of Yin-Syndrome of Hao-Gu Wang. *China Medical Herald*. 9 (26). pp. 108.



Shi-Zhen Li. A collection of the Exhibition Room of Chinese Medicine located inside China Medical University, Taiwan (Photographed by Pei-Chi Chou)



Chapter 8 *Medical Science in Period of Ming Dynasty* (from 1368 AD to 1644 AD)

Section 1 Historical Background

After establishing the Ming Dynasty, Yuan-Zhang Zhu (朱元璋), Emperor Taizu of Ming (明太祖), adopted the policy of centralization and separated the powers of Grand Councilor to six ministries: Personnel, Revenue, Rites, War, Justice, and Works. The six ministries were subordinate to the emperor and directly governed by the emperor. The Ming Dynasty set up the Imperial Bodyguard and the Eastern Depot which were subject to the control of eunuchs. These two organizations were created to punish the corrupted government officials who violated laws by monitoring and interrogating them. For the governance of local areas, the *Law of the Ming Dynasty* (《大明律》) and the system of Li and Jia (「里甲制度」) were created. People under the governance of Li and Jia should support and supervise each other, which guaranteed the centralized management of citizens and enhanced the efficiency of taxation. Emperor Chengzu of Ming (明成祖) continued the policy of centralization, set up the Grand Secretariat to manage all kinds of government affairs, and



decreased the potential threat by reducing vassals' fiefs and powers. In terms of foreign communication, the emperor sent He Zheng (鄭和) to travel through the West Pacific Ocean and the Indian Ocean to trade with foreign countries with porcelain, silk, ironware, etc. During that period, spices, rare and exotic animals, among others, were brought to China. In that way, the Ming Dynasty established close economic and cultural exchanges with foreign countries and built a defense alliance in Southeast Asia, South Asia, and West Asia, which also promoted the development of traffic. Doctors could travel with merchants to other places to learn new medical knowledge. Thus, new medicines and knowledge were brought, which drove the exchanges and development of traditional Chinese medicine.

With respect to agriculture, the Ming Dynasty encouraged farming, renovated lakes and pools, and promoted the planting of cotton, mulberries and hemp. During the rule of Emperor Shenzong (神宗), Ju-Zheng Zhang (張居正) paid much attention to irrigation works. He ordered the renovation of the Grand Canal and the management of the Yellow River. He also improved the saline and alkaline lands, and adopted the methods of intercropping, relay intercropping, and mixed cropping to improve the agricultural production. In the middle stage of the Ming Dynasty, corn, sweet potato, and tobacco were introduced, which increased the variety of crops. The *Book on Agricultural Administration* (《農政全書》) written by Guang-Qi Xu (徐光啟) records the planting skills needed to grow crops



in details, as well as related tools, policies, and systems, among others. The improvement of agricultural techniques helped in growing medicinal plants during that time.

Apart from the innovation in navigation technologies, the Ming Dynasty has also left many profound scientific books. The innovation of the printing technology is related to the medical science. The Ming Dynasty inherited the movable-type printing technique invented in the Yuan Dynasty and developed the technology of chromatic printing which leads to the flourishing of the publishing industry during the Ming Dynasty. The printing and releasing of medical works resulted to the circulation of many medical works among the ordinary people.

Section 2 An Introduction to the History of Traditional Chinese Medicine

Development of Traditional Chinese Medicine

Confucianism was popular in the Ming Dynasty and it valued loyalty, filialness, benevolence, and righteousness. The Confucians held the idea that “one could either be a good grand councilor or a good physician”. Practicing medicine was regarded as a way to realize the filialness for parents and love for brothers, sisters, and friends. For example, physicians like Shi-Zhen Li (李時珍), Ji Wang (汪機), and Zhong-Zi Li (李中梓)



started as Confucian scholars. The household identities of the Ming Dynasty were divided into civilians, soldiers, doctors, Confucian scholars, salt producers, monks, Taoists, craftsmen, etc. Following the policy of the Yuan Dynasty, it was mandatory for a son to inherit his father's career. If it was a family of doctors, the descendants should be doctors. Doctors in the Ming Dynasty did not have high social status and struggled to make a living. Their social status was equal to craftsmen, musicians, and cooks. Therefore, escaping the household identity happened frequently or they would bribe officials to change their identity. The government once set tough conditions for exemptions; either become disabled or exceed 70 years old to make practicing medicine impossible.

With respect to the cultivation of doctors, apart from the inheritance within families, the medical education provided by governments also played an important role. Tai-I Yuan (太醫院; Imperial Academy of Medicine) was the highest official medical institute in the Ming Dynasty. The institute was set to teach medicine and serve the royal family. Doctors in the institute were selected from families of doctors in local areas. The selected doctors were called Yi Ding (醫丁; Junior Physician) at the beginning. They were approved to practice only after completing three years of study at Tai-I Yuan (Imperial Academy of Medicine) and pass the examinations. The families of doctors must send descendants borne by their principal wife to become a Yi Ding (junior physician). If there was no eligible candidate, they should apply to send a doctor who was a younger



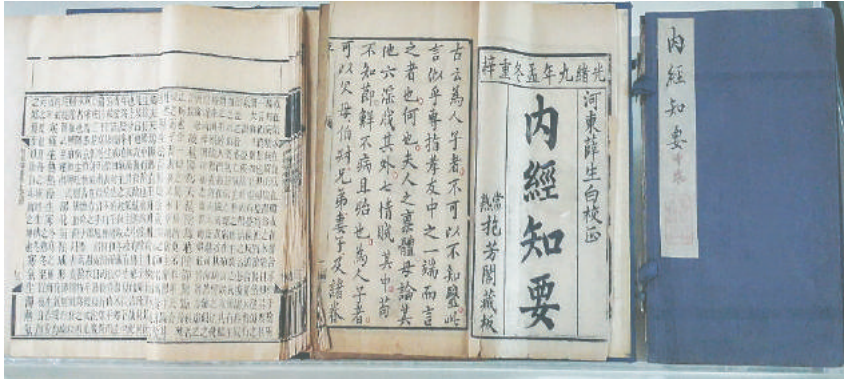
brother born by a concubine or a nephew to take the examination for entering the academy. Besides, recommended physicians and medical officials could also join the Tai-I Yuan (Imperial Academy of Medicine). If a physician recommended by a superior prefecture, a prefecture, or a district qualified for the work of the medical official. The Ministry of Rites (禮部) would send him to take part in the examination at Tai-I Yuan (Imperial Academy of Medicine). Those who passed the examination would become candidates for the Ministry of Personnel (吏部). Those who were not chosen would be sent back as a civilian. Attention was given to the medical education in local areas of the Ming Dynasty. In the 17th Hongzhi Year (弘治; 1504 AD), the government of the Ming Dynasty ordered to set up medical institutes in governments, states, counties, and districts to take charge of the medical education and medical administrative affairs. The medical officials at the prefecture and district levels do not have official status at the beginning and were granted the ninth rank at the middle stage of Wanli years (萬曆) while a superior prefecture set a post of Principal of the medical institute that has the ninth rank from the very beginning. The local institutes of medical education established all over the country comprehensively promoted the development of medical science in local areas.

The master, the apprentice and the family inheritance were the main approaches to medical education. Due to the tradition of inheritance from generation to generation, many families of physicians would compile their



experiences in medical practice into simple but functional medical books for teaching. In the 17th century, a large number of medical books were published, which greatly helped in spreading and popularizing medical knowledge. As the career was inherited within the family, many private medical works published were completed by a father and a son successively, such as *Elaboration of Pediatric Diseases* (《幼科發揮》) by Quan Wan (萬全) and *The Great Compendium of Acupuncture and Moxibustion* (《針灸大成》) by Ji-Shi Yang (楊濟時).

The medical science also benefitted from the prosperous economy and convenient traffic during the Ming Dynasty. Famous doctors gathered in regions to the south of the middle and lower reaches of the Jiangnan (江南) which greatly enhanced the clinical practice and promoted the study of classic works. The traditional Chinese medicine experienced a rapid progress and growth due to several beneficial factors. A large number of medical books were published and had profound influences, such as *Essentials of the Inner Canon* (《內經知要》) by Zhong-Zi Li and *The Copy of Yellow Emperor's Plain Questions* (《黃帝素問鈔》) by Ji Wang. In this period, more and more people wrote annotations for classic medical books. For example, *The Classic of Difficult Issues* (《難經》), *The Inner Canon* (《內經》), *The Herbal Foundation Canon* (《本草經》), *The Pulse Canon* (《脈經》), and *On Cold Damage* (《傷寒論》) were all studied, proofread, and noted. A great many books on classified topics and books of complete compendium were also published. With respect to the



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

recording of clinical medicine, there was a detailed discussion on the ways of writing medical records, the norms for inspection, pulse-taking, and medical ethics. To summarize, the medical knowledge in this period gradually reach towards specialization and theory systematization.

Medical Exchanges

- Korea

During the Ming Dynasty, the Korean government often employed Chinese doctors to go to Korea for treatment or teaching medical knowledge, and also sent Korean doctors to China for study. In this period, Korea was promoting “the popularization of rural medicines” (「鄉藥化」), and the medical exchanges with China became very frequent. During Hongwu years (洪武), Chinese Taoist Zong-Zhen Yang (楊宗真)



went to Korea to work as a doctor. In the 12th Hongwu Year, the Korean government appointed him as Dian-Yi (典醫; Palace Physician). In the 5th Yongle Year (永樂), the Prince of Korea visited China. His entourage included Hong-Da Yang (楊弘達) who was Pan-Dian-Yi Jian-Shi (判典醫監事; Supervisor of Palace Physicians). During Hongxi years (洪熙), the Ming Dynasty sent emissaries to Korea, and the entourage included the Yi-Ren (醫人; physician) Rang He (何讓) from East of Liao River and the Tai-I (太醫; Imperial Physicians) Ben-Li Zhang (張本立). They went to treat King Sejong (世宗王) and taught treatment methods. In the 2nd Xuande Year (宣德), doctor Xian Wang (王賢) from the emissaries of the Ming Dynasty diagnosed King Sejong. Due to his extensive knowledge of medical formulas, Quan from Dan was appointed to be Nei-Yi-Yuan Zhu-Bu (內醫院主簿; Recorder of the Imperial Hospital), and later took the position of Dong-Cao Pan-Shu (工曹判書; Director of the Ministry of Works). In the 26th Wanli Year, King Xuanzu (宣祖王) of Korea invited medical official Ji Pan (潘繼) and others from the Ming Dynasty to visit Korea for medical purpose. In the 19th Yongle Year, Zi-Hou Huang (黃子厚) from Korea arrived in China and started a large-scale collection of medicinal materials that were not produced in Korea. In the 21st Yongle Year and 5th Xuande Year, Korea sent a representative, Doctor Zhong-Li Lu (盧重禮), and other physicians to China, and asked physicians Wen-Zhong Gao (高文中) and Yong-Zhong Zhou (周永中) from Tai-I Yuan (Imperial Academy of Medicine) to identify the authenticity of the herbal



foundation classics in Korea. According to *Medical Doubts* (《醫學疑問》), Korean doctor Shun-Li Cui (崔順立) arrived in China in 1617 AD to consult medical science, and the questions and answers were recorded by Mao-Xian Fu (傅懋先) to complete *Medical Doubts*.

At that time, Korea reproduced many medical works from China. According to *Kao Ban Cuo Yao* (《考班撮要》) by Zhao-Xuan Li (李朝宣) more than 70 books were published from 1430 AD to 1585 AD, including *The Magic Pivot* (《靈樞》), *The Yellow Emperor's Plain Questions* (《黃帝素問》), *Classic of 81 Difficult Issues* (《八十一難經》), *The Orthodox Tradition of Medicine* (《醫學正傳》), *The Pulse Canon*, *Classified Book on Cold Damage* (《傷寒類書》), *Effective Prescriptions* (《得效方》), *Expanded Herbal Foundation* (《衍義本草》), and the *Sagacious Benevolence Formulary* (《聖惠方》).

During the period of the Ming Dynasty, Korea paid great attention to the “popularization of rural practice” of Chinese medicine and sorting and researching of works on Chinese medicine. Books published during this period included *Classified Compilation of Health Cultivation Book Series* (《壽養叢書類聚》), *Classified Compilation of Medical Prescription* (《醫方類聚》), and *Precious Mirror of East Medicine* (《東醫寶鑑》). *The Compendium of Rural Medicines* (《鄉藥集成方》) edited by Xiao-Tong Yu (俞孝通), Zhong-Li Lu (蘆重禮), and Yuan-De Piao (朴元德) took *The Compendium of Rural Medicines and Medical Help* (《鄉藥濟生集成方》) as its basis and adopted medical books from China as the



meridian and classic medical books of Korea as weft, and referred to medical books from China, such as *Simple Formulary* (《直指方》), *The Great Peace Sagacious Benevolence Formulary* (《太平聖惠方》), *Good Remedies for Women* (《婦人良方》), and *Sages' Salvation Records* (《聖濟總錄》). The *Classified Compilation of Medical Prescription* written by Li-Meng Jin (金禮蒙) had quotations from 152 medical books of China and also referred to the Korean medical book *Yu Lin Tsuan Yao* (《御林纂要》). Jun Xu (許浚), the Palace Physician of Korea, followed the order of King Xuanzu, sorted 71 medical books of China and three medical books of Korea, and compiled the *Precious Mirror of East Medicine*. The book was divided into five parts of acupuncture and moxibustion, miscellaneous diseases, appearance, decoctions, and internal medicine, comprehensively integrating Chinese and Korean medicine and pharmacy.

- Japan

After the establishment of the Ming Dynasty, Yuan-Zhang Zhu once sent emissaries to Japan and thus, started a mutual communication. With respect to medical skills, Japanese Jukjeon Changqing (竹田昌慶) arrived in China in 1370 AD and studied medicine from Taoist Weng Jin (金翁). Weng Jin valued his talent and let him marry his daughter. Jukjeon Changqing once performed a difficult delivery of the empress of Emperor Taizu and saved the lives of both the mother and the baby boy. Thus, he



was ennobled as An-Guo Duke (安國公). Jukjeon Changqing returned to Japan in 1378 AD and brought back books of Chinese medicine and diagrams of a bronze statue. This set of bronze statue diagrams was confirmed by Danbo Yuanjian (丹波元簡) to be the duplicate of Tiansheng Bronze (天聖銅人) Statue produced in the Yuan Dynasty. It was the first bronze statue that had ever reached Japan. Famous doctor Tashiro Sanki (田代三喜) arrived in China when he was 23. At that time, Japanese monk Yuehu (月湖) lived in Qiantang (錢塘) and practiced medicine. Tashiro Sanki formally acknowledged him as his master. After 12 years of living in China, he went back to Japan to practice medicine and saved countless lives. He also wrote a lot of books, including *Zhu Yao Shi Jian* (《諸藥勢剪》), *Jie Shu Da Cheng Yin Ke Ji* (《捷術大成印可集》), *Songs of Medical Cases* (《醫案口訣》), *Names of Medicines* (《藥種穩名》), *Ye Du Yi* (《夜讀義》), *Dang Liu He Ji Ji* (《當流和極集》), *Zhi Zhi Pian* (《直指篇》), and *San Xi Shi Juan Shu* (《三喜十卷書》).

- Europe

During the period of the Ming Dynasty, western missionaries arrived in China and started the exchanges between Chinese medicine and western medicine. After the discovery of the New World in the 15th century, a trend of overseas colonization emerged in Europe. The Vatican also actively initiated overseas missionary activities. Thus, some Catholic missionaries arrived in China. Some of them have technological talents and were doctors.



When missionaries arrived in China, they also did translation work apart from carrying out their missionary activities, mainly translating books about western science and religions. They also took part in palace activities and helped servicemen and grand masters of China revise the calendar. Some missionaries were doctors. One of those missionaries was Ma-Dou Li (利瑪竇; Matteo Ricci) from Italy who was the first to work in the western medicine. Together with some Confucian scholars of China, he translated many works about scientific technologies of the Western. *A Treatise on Mnemonics* (《西國紀法》) and records the neural theory. It was the first time that western neurology and psychology had been introduced to China. In addition, Italian missionary Yi-Zhi Gao (高一志; Alfonso Vagnoni), called himself Feng-Su Wang (王豐肅) at the beginning, mentioned four elements of Greece and some knowledge of anatomical physiology in his work *Kong Ji Ge Zhi* (《空際格致》). He also mentioned the knowledge of blood physiology in *Xiu Shen Xi Xue* (《修身西學》).

Italian missionary San-Ba Xiong (熊三拔; Sabbathinus de Ursis) arrived in China in the 34th Wanli Year. He lived in Beijing and was engaged in revising the calendar, studying irrigation works, and compiled the *Tai Xi Shui Fa* (《泰西水法》). The book contains knowledge of Digestion Physiology. *Xing Xue Cu Shu* (《性學祖述》) was written by Italian missionary Ru-Lue Ai (艾儒略; Giulio Aleni) and talks a lot about western pathology and physiology. It argues that diseases, senility, and



death are caused by the imbalance of four body fluids.

Italian missionary Kuang-Guo Wei (衛匡國; Martino Martini) discussed the physiological functions and the number of the human skeleton in his work *Allah Intelligence Theory* (《真主靈性理論》). Additionally, *Zhu Zhi Qun Zheng* (《主制群證》) written by German missionary Ruo-Wang Tang (湯若望; Johann Adam Schall von Bell) discusses the number and functions of the human skeleton and the formation of the blood. It also introduces main cardiac artery, main cardiac vein, veins, hepatic vein, and hepatic portal vein, and mentions brain physiology and cranial nerve physiology. Most of the books referred to Galenus's anatomical physiology theory. In *Ming Li Tan* (《名理探》) and *Huan You Quan* (《寰有詮》), Portugal missionary Xun-Ji Bo (博汛際; P. Francisus Furtado) mentioned the functions of the heart and the vision sense, discussed the relationships between humans and the four body fluids, and argued that the brain had functions such as controlling knowledge, memory, willpower, and emotions.

Swiss missionary Yu-Han Deng (鄧玉涵; Johann Schreck) was a doctor, mathematician, and philosopher. He had excellent medical skills and was favored by the royal family and nobles. He left Lisbon in the 46th Wanli Year, traveled through India and Cochin (交趾), and arrived in China. During his journey, he collected a large number of minerals, animals, and plant samples, studied the ethnology and climatology, and wrote about them in his traveling notes. He arrived in Macau in the 1st



Tianqi Year (天啟) and worked as a doctor there. On August 26th of the same year, he wrote a letter to the Institute of Lincei and mentioned that he anatomized a Japanese priest. He said the priest smoked too much in his life and often felt hot, dry, and ill. After his death, the anatomy showed that the livers of the priest were dry like a sponge and there were a lot of blue spots. This is the earliest record of a western doctor dissected a corpse in China. After his arrival in the capital city, he devoted himself to the study and revision of *Chongzheng Calendar* (《崇禎曆法》). In his later years, he introduced the western anatomy to China. He once translated *Ren Shen Tu Shuo* (《人身圖說》) and *Ren Shen Shuo Gai* (《人身說概》).

- Southeast Asia

Due to He Zheng's (鄭和) travel to the west, the medical culture exchanges between China and Southeast Asia became frequent. From 1405 AD to 1433 AD, the Ming Dynasty sent He Zheng to lead a fleet of ships to travel across the Western Pacific Ocean and the Indian Ocean for seven times. For each travel, there were more than 180 accompanying medical officials and doctors. Additionally, pharmacists who were good at distinguishing medicinal materials also traveled along with the fleet to identify medicinal materials during the trade with different countries. The fleet brought along Chinese medicines such as ginseng (人參) and musk (麝香) that were welcomed in Southeast Asia and brought back medicines from local areas, such as rhinoceros horn (犀角), antelope horns (羚羊角),



asafetida (阿魏), myrrh (沒藥; myrrha), clove (丁香), costusroot (木香), aloe (蘆薈), frankincense (乳香), and momordica (木鱉子).

Medical exchanges between China and Indonesia started during Hongwu years (from 1370 AD to 1378 AD) under the rule of Emperor Taizu of Ming when King Ma Ha Ci Za Ba Ci Bu (馬哈刺札八刺卜) and King Tan Ma Sa He (怛麻沙阿) of Srivijaya Kingdom (三佛齊國王) sent emissaries to China six times and paid tributes such as nutmeg (肉豆蔻), clove, and a considerable amount of medicinal spices. King Suo Dan Nan He Bi Jen (鎖丹難阿必鎮) of Sumatra (蘇門答臘) led the emissaries to visit China in the 7th Yongle Year (1409 AD) under the rule of Emperor Chengzu of Ming and stayed there for three years. After that, Sumatra continued to send emissaries to the Ming Dynasty. The medicinal tributes paid by Sumatra included sappan (蘇木), clove, costusroot, dalbergia (降真香), aquilaria (沉香), and ambergris (龍涎香). The medical culture exchange with Java (爪哇) was recorded in *Code of Great Ming Dynasty* (《大明會典》). According to the code, about 10 medicinal materials were introduced from Java to China, including rhinoceros horns, nutmeg, and cardamom (白豆蔻). Also during this period, many people from Guangdong and Fujian Provinces settled down in Indonesia and spread the Chinese medical culture to Indonesia.

Borneo (婆羅; now the Kalimantan Island) sent emissaries to China in the 3rd and 4th Yongle Years (1405 AD to 1406 AD) respectively and brought along medicinal materials such as hawksbill turtle (玳瑁), pearls,



and dalbergia. Burni (渤泥國; now Brunei) sent official emissaries at first and sent borneol (龍腦), and dalbergia as gifts. Later, in a non-governmental business trade, borneol, dalbergia, aquilaria, sandalwood (檀香), clove, nutmeg, rhinoceros horns, etc. were brought to China. Pahang (彭亨國; now Eastern Malaysia) also sent emissaries to China for several times and sent medicinal materials such as borneol (片腦), frankincense, sandalwood, and sappan. As a consequence, Emperor Chengzu of Ming sent He Zheng to visit the country and brought them gifts. According to *Ming Wen · Xian Luo Zhuan* (《明文·暹羅傳》), Siam (暹羅; now Thailand) paid tributes to the Ming Dynasty for several times. The tributes included over 10 kinds of medicinal materials such as rhinoceros horns, borneol, and multiflora rose (薔薇). Merely in the 23rd Hongwu Year (1390 AD), the amount of medicinal materials such as sappan, pepper (胡椒), and dalbergia reached 85,000 kilograms.

Section 3 Medical Works

Universal Salvation Formulary (《普濟方》)

According to Summary of General Contents of Si Ku Quan Shu (《四庫全書總目提要》), the Universal Salvation Formulary was compiled under the charge of Di Zhou (朱棣) who was Prince Zhouding (周定王) and the fifth son of Emperor Taizu of Ming. It is the largest remedy book



in the history of traditional Chinese medicine and has the most abundant content. The book records the treatments for many diseases, including decoction, massage, acupuncture, and moxibustion. The book collects a large scope of recipes and Pulse Manifestations, nature of medicines, movement and qi, bowels and viscera (pandect and manifestations of diseases), cold damage, miscellaneous diseases, sores, departments of orthopedics, gynecology, and pediatrics, acupuncture and moxibustion, and herbal foundation. It has over 100 classes in total. It does not only quotes all kinds of remedy books, empirical formulas, and simple formulas among ordinary people but also contains biographies, miscellaneous theories, and materials from collected Taoist scriptures and Buddhist scriptures.

Collected Experience of Famous Physicians in Ming Dynasty
(《明醫雜著》)

The *Collected Experience of Famous Physicians in Ming Dynasty* was compiled by Lun Wang (王綸). He integrated the academic experience of Dan-Xi Zhu (朱丹溪) and Dong-Yuan Li (李東垣) and referred to his own opinions and clinical experience to compile this book. The book discusses the treatment of miscellaneous diseases of the internal medicine such as fever, tuberculosis, diarrhea, dysentery, cough, and phlegm-rheum, the identification of patterns and administration of treatment in the departments of gynecology and obstetrics, ophthalmology and otorhinolaryngology. It also



analyzes the treatments and remedies of Dong-Yuan Li and Dan-Xi Zhu.

Concise Herbal Foundation Compilation (《本草品匯精要》)

The *Concise Herbal Foundation Compilation* was a national book on the herbal foundation which was compiled by Wen-Tai Liu (劉文泰) and Tai-I Yuan (Imperial Academy of Medicine) et al. under the order of Emperor Xiaozong of Ming (明孝宗). The preface of the book was written by Emperor Xiaozong himself. The explanation of medicines followed the classification in *The Divine Husbandman's Herbal Foundation Canon* (《神農本草經》), the style of text-diagram-contrast in *Herbal Foundation of Tang Dynasty* (《唐本草》), and the compiling method in *Classified Materia Medica* (《證類本草》). It has 1,358 diagrams and is classified into ten parts of humans and animals, poultry, insects and fishes, rice and grains, vegetables, jade and stones, grasses and trees, and fruits. Each part is further divided into the top grade, the medium grade, and the low grade. It was the official pharmacopeia of the Ming Dynasty. It also emphasizes on the identification of medicines. The medicines featured in this book were mainly sourced from *Foundation Canon* (《本經》), *Bie Lu* (《別錄》), *Supplement to the Herbal Foundation* (《本草拾遺》), and the herbal foundation works of the Tang and Sung Dynasties. The book collects a total of 1,815 medicines. For each medicine under each class, the content from *Foundation Canon* was written in red, then the content from *Bie Lu* in black, and finally followed the explanations of 24 subjects,



including the name, sprout, origin, time, harvest, usage, quality, color, flavor, nature, smell, malodor, governance, movement, support, clash, processing, treatment, connection, contraindication, substitute, suitability, and resolution.¹

The Orthodox Tradition of Medicine (《醫學正傳》)

The Orthodox Tradition of Medicine was compiled by Tuan Yu (虞搏). It is a comprehensive medical book on clinical medicine. Tuan Yu combined what he had learned from ancient medical works and theories of other doctors with his own opinions and clinical experience to complete this book. It narrates the sources of medical science and records about one thousand formulas for nearly hundred diseases in the departments of internal medicine, surgery, gynecology, pediatrics, and mouth-tooth. It discusses the common disease patterns of different departments. For each pattern, it illustrates the pattern first, then the pulse method, and the formulas. It adopts the main ideas from *The Inner Canon* as the outline and follows Shu-He Wang's (王叔和) pulse methods, Zhong-Jing Zhang's (張仲景) treatment of cold damage, Dong-Yuan Li's treatment of internal damage, and Yi Qian's (錢乙) treatment of pediatric diseases. For other diseases, Tuan Yu mainly referred to the methods of Dan-Xi, selected formulas of He-Jian Liu (劉河間), Zhi-He Zhang (張子和), Dong-Yuan Li, etc, and combined them with his own experience and the experience handed down within his family.



Gathered Blooms of Acupuncture and Moxibustion (《針灸聚英》)

Gathered Blooms of Acupuncture and Moxibustion is also referred as *Gathered Blooms of Acupuncture and Moxibustion and the Development (《針灸聚英發揮》)*. It was written by Wu Gao (高武). The book collects different works on acupuncture and moxibustion before the 16th century. It mainly discusses bowels and viscera, channels and network vessels, points and indication. It introduces the point selection for the treatments of different diseases and explains the basic skills of acupuncture and moxibustion, including boiling of needles, fire needling, warm needling, removing of the needle, needle sickness, supplementation and drainage manipulation. It discusses the points of the fourteen channels, network points, source points, alarm points, stream points, eight meeting points, special points, and midday-midnight point selection. It also contains questions and answers on needling treatments of different schools. The content of the book is sourced from different acupuncture and moxibustion theories, principles of medicine, and songs in comprehensive medical works.

Jie Wei Yuan Sou (《解圍元藪》)

Jie Wei Yuan Sou is a book on leprosy. It was compiled by Zhi-Wen Shen (沈之問). The book writes that leprosy is infectious (「傳染所襲」).



It clearly points out that the routes of transmission are physical contact and saliva sprays, and whether a person will be infected depends on the level of Zheng Qi (deficiency or fullness of qi). The book emphasizes on the spread of the disease within a family by contact, especially for young children. It proposes to adopt the treatment principle of preventive medication (「預常服藥」) before the disease occurs.

The Complete Compendium of Medical Works, Ancient and Modern (《古今醫統大全》)

The Complete Compendium of Medical Works, Ancient and Modern is also called *The Complete Compendium of Medical Works* (《醫統大全》), and *The Compendium of Medical Works* (《醫統》) for short. It is a complete compendium of medical science and was compiled by Chun-Fu Xu (徐春甫). The book has 100 volumes in total. During the compilation, Chun-Fu Xu summarized and classified about 280 medical works and referred to a large amount of folk literature. The content includes brief biographies of physicians over the ages, medical treatises of different schools, *Essentials of the Inner Canon* (《內經要旨》), *Yi Yi Tong Kao* (《翼醫通考》), *Pulse Patterns of the Inner Canon* (《內經脈候》), *Browse of Movement and Qi* (《運氣易覽》), health cultivation, conduction exercise, herbal nature and formulas, pulse methods, movement and qi, clinical cases, empirical and secret formulas, pharmacy, channels, points, acupuncture and moxibustion, and patterns and



treatments of different clinical departments of internal medicine, surgery, gynecology, pediatrics, orthopedics, and facial features, as well as senile diseases. There is a total of about 400 diseases. For each disease, the book records the pathomechanism, pulse manifestations, formulas, medicines, simple treatments, moxibustion, conduction exercise, etc. The book also has a chapter that illustrates empirical and secret formulas, and health cultivation. The book takes the theory from *The Inner Canon* as the main idea. It also contains brief biographies of physicians over the ages and medical treatises of different schools. Based on the pathomechanism, the book systematically records the disease patterns, prescriptions, and the use of medicines.²

***Compendium of Medicine* (《醫學綱目》)**

The *Compendium of Medicine* was compiled by Ying Lou (樓英). The book mainly discusses miscellaneous diseases of internal medicine and also mentions disease patterns in the departments of facial features, gynecology, surgery, etc. Referring to medical canons such as *The Inner Canon* and *The Classic of Difficult Issues*, the book takes yin and yang as the outline and disease patterns as the class, traces the sources of the diseases, and carries out narration and analysis in order to clearly present the sources of medical science to the world. Thus, the book was named “The Compendium of Medicine” (「醫學之綱目」).³ The first part of the book is about yin, yang, bowels and viscera. It also discusses the disease



inspection, examination, medication, acupuncture and moxibustion, health care, contraindications, etc. in details. The second part is about liver and gall. It records diseases such as strokes, epilepsy, and tetanic reversal, among others. The third part is about small intestine and records diseases like heart pain, chest pain, vexation and agitation, and delirious raving. The fourth part is about spleen and stomach. It records internal food damage, diseases caused by phlegm, glomus, etc. The fifth part is about lung and large intestine, which records the diseases such as cough, rapid panting, and tendency to sorrow. The sixth part is about kidney and bladder. It records diseases like tinnitus, deafness, bone disease, and toothache. The seventh part is about cold damage. It mainly records content relating to the cold damage like syndromes, and yin and yang toxin. It also records diseases such as warm diseases, summer heat diseases, and warm epidemic. The eighth part is about women. It discusses common gynecological diseases, menstruation, vaginal discharge, fetus, labor, etc. The ninth part is about pediatrics, which records common diseases of children and correspondences between diseases and five viscera. The tenth part is about movement and qi.⁴

Apart from introducing the disease patterns and treatments related to bowels and viscera, the book also includes the diseases related to different bowels and viscera based on the features of the disease patterns, treatments, formulas, and medicines, and discusses them by class. For example, strokes, epilepsy, tetanic reversal, wind taxation, tugging, anger,



tetanus, epilepsy of pregnancy, and eye diseases are included in the part of liver and gall. The classification of treatment methods is further divided into the top grade, the medium grade, and the low grade. The top grade refers to the original treatments from *The Inner Canon*, and the low grade refers to the subsequent treatment methods developed by famous physicians. They are narrated in details for the reference of later generations.

The Gateway to Medicine (《醫學入門》)

The Gateway to Medicine was compiled by Chan Li (李梴). The book is divided into the internal collection and the external collection. It says that “if a physician can understand these two collections and then tries to cure diseases, he is unlikely to give a prescription that harms the life of the patient”. Therefore, the book was named *The Gateway to Medicine*. The preface of the book records brief theories of medicine, brief biographies of physicians over the ages, diagrams and illustrations of channel points, movement and qi, health care, conduction exercise, etc. The first volume is about channels and network vessels, bowels and viscera, examinations, and acupuncture and moxibustion. The second and third volumes are about the herbal foundation, six qi, medication, dietary therapy, etc. The fourth to eighth volumes discuss the patterns and treatments of diseases in the departments of internal medicine, surgery, gynecology, and pediatrics, as well as emergency treatments. The final part of the book is the



“Specification of Medicine Learning”. It states the connotations of medical ethics cultivation and the required learning attitude of medicine learners, and encourages doctors to acquire solid theoretical foundation and a wide range of professional knowledge, and stick to professional ethics in practicing medicine.

The book has two features. First, it integrates several ancient works, classifies them, and includes the essential parts. Second, it uses *Yi Jing Xiao Xue* (《醫經小學》) as the chief source and adopts the form of songs and verses which were popular and easy to read. The form of songs and verses was widely used. They were not only applied to basic theories of the herbal foundation, formulas, four examinations, channels, network, bowels, and viscera but also were used to describe the internal damage, external contraction, cold damage, miscellaneous diseases, and diseases in the departments of internal medicine, surgery, gynecology, and pediatrics. To ensure that readers understand the book, it includes annotations under the main bodies.⁵ *The Gateway to Medicine* contains not only theories of physicians in previous dynasties but also the author’s own opinions.

***Collected Works of Mysterious Pearl of Red Water* (《赤水玄珠全集》)**

Collected Works of Mysterious Pearl of Red Water is called *The Mysterious Pearl of Red Water* (《赤水玄珠》) for short, and has another name of *Sun’s Three Medical Books* (《孫氏醫書三種》). It was written



by Yi-Kui Sun (孫一奎). The author widely referred to *The Inner Canon* and over 170 medical works afterward, and integrated with his own experience to complete this book. *Yi Zhi Zhu Yu* (《醫旨緒餘》) is the continuation of *The Mysterious Pearl of Red Water*. The first half of the book has 44 articles and the second half has 26 articles. The book gathers theories of different schools and mainly discusses bowels and viscera, qi and blood, channels and network vessels, and points. It narrates ideas on taiji, yin and yang, and the five phases, explains the meanings of life gate, ministerial fire, and triple burner, and comments on the theories of previous physicians. Yi-Kui Sun's sons Tai-Lai (泰來) and Ming-Lai (明來) and his disciple Huang Yu (余煌) summarized his medical cases to complete the *Sun's Medical Cases* (《孫氏醫案》) which was also named *Wen-Yuan Sun's Medical Cases* (《孫文垣醫案》). The content of the book was compiled in a sequence of the places where Yi-Kui Sun practiced medicine and was divided into *Treatment Experience in Sanwu* (《三吳治驗》), *Treatment Experience in Xindu* (《新都治驗》), and *Treatment Experience in Yixing* (《宜興治驗》). The book collects over 300 medical cases and each case was written in time sequence with less content on medical theories but more on patterns and treatments. This book and the previous two books supplement each other.



Herbal Foundation Compendium (《本草綱目》)

Herbal Foundation Compendium was compiled by Shi-Zhen Li (李時珍). He spent his lifetime on this significant medical work. The book has a total of 52 volumes and records 1,892 medicines, including 1,094 plant medicines, 798 mineral and animal medicines and others, in which 374 medicines were newly discovered by Shi-Zhen Li. The book contains 1,109 diagrams and 11,096 pieces of formulas. The content recorded covers different clinical departments. More than 8,000 formulas were from medical works over the ages and empirical formulas from the folk. For each medicine, the book states the name, the process of gathering, explaining its correctness, processing, qi and flavor, indication, elucidation, attached formulas, etc.

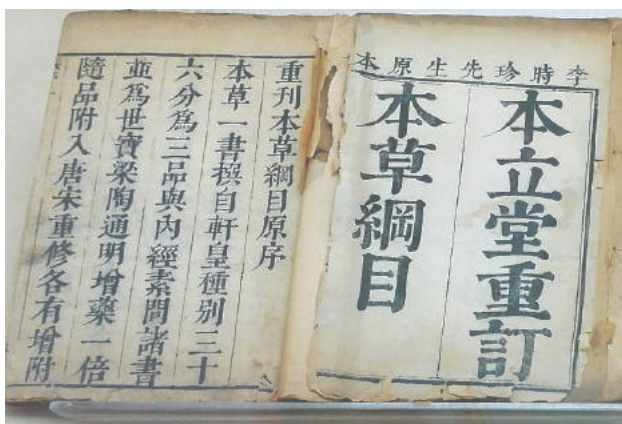


Herbal Foundation Compendium

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 148 (A collection held in the library of the Chinese Medicine Research Institute in China)

The publishing of the *Herbal Foundation Compendium* promoted research on herbalism and biology. The *Selections of Herbal Foundation* (《本草選》) and the *Collected Statements on the Herbal Foundation*





A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

(《本草匯言》) published afterward were practical works on herbalism that simplified the choices of medicines and were compiled based on the information provided in *Herbal Foundation Compendium*. The books contain medicines, drawings, and formulas, and are applicable to clinical practice. Additionally, some extension and supplement works were also published, such as *Supplement to the Herbal Foundation Compendium* (《本草綱目拾遺》) and *Plants and Their Names Illustrated* (《植物名實圖考》). The publishing of the *Herbal Foundation Compendium* promoted research on herbal foundation and biology in China, Korea, and Japan.



Return of Spring for All Diseases (《萬病回春》)

The *Return of Spring for All Diseases* was compiled by Ting-Xian Gong (龔廷賢). It is a book on clinical Chinese medicine and is widely distributed. The book mainly refers to classical medical works such as *The Inner Canon* and *The Classic of Difficult Issues*, and medical works of famous physicians over the ages, including the four great physicians of the Jin and Yuan periods. It draws on the academic essentials of predecessors and contains the clinical experience of the author. Among the books compiled by Ting-Xian Gong, this book has comparatively significant influence. The book was named *Return of Spring for All Diseases* based on the belief that “after the treatment, patients with severe diseases get better soon, just like the grass growing in spring time”. The book mainly concentrates on elaborating basic theories of traditional Chinese medicine and the diagnosis and treatment of diseases in the departments of internal medicine, surgery, gynecology, pediatrics, and facial features. The diagnosis and treatment methods are stated in details and are practical. For example, the method of “blocking dredge” (「通塞」) for preventing stroke proposed the idea of prevention which is better than treatment. The book ends with two articles; *10 Do's of Physicians* (〈醫家十要〉) and *10 Do's of Patients* (〈病家十要〉) which emphasize on issues of concern during the clinical treatment, including medical psychology, medical ethics, and medical sociology.⁶



Classified Case Histories of Famous Physicians (《名醫類案》)

Classified Case History of Famous Physicians was compiled by Guang Jiang (江瓘) and his son. The book widely summarized several medical works and cases of famous physicians before the Ming Dynasty and referred to biographies and historical works such as *Record of the Grand Historian* (《史記》), *The History of the Three Kingdoms* (《三國志》), *Bao Pu Zi* (《抱樸子》), and *Yi Jian Zhi* (《夷堅志》). The content mainly covers all kinds of diseases in clinical practice. The book also mentions materials related to the ancient literature on Confucianism, history, philosophy, etc. It mainly discusses diseases of internal medicine, cold damage, warm diseases, miscellaneous diseases, and diseases in the departments of surgery, facial features, gynecology, and pediatrics. About 2,000 medical cases were recorded; the earliest can be traced back to Yue-Ren Qin (秦越人) and physicians in Ming Dynasty for the latest. All medical cases recorded have accurate and detailed identification methods and special effects. The book records the name, age, constitution, syndromes, diagnosis, and treatment for each case, and completely narrates the principles, methods, formulas, and medicines. In some cases, the author added his own opinions.



A Complete Collection of Orthodox Medical Works, Ancient and Modern (《古今醫統正脈全書》)

A Complete Collection of Orthodox Medical Works, Ancient and Modern is also named *Orthodox Medical Works (《醫統正脈》)*. It is a collection of medical works and was compiled by Ken-Tang Wang (王肯堂) of the Ming Dynasty. This series of books include medical works from *The Inner Canon* to the works published in the Ming Dynasty, especially those published in Sung, Jin, and Yuan Dynasties. Ken-Tang Wang verified medical works over the ages and abstracted valuable content to complete this book series. The author selected representatives and famous medical and academic works in clinical practice, including *Supplementary Annotation to the Plain Questions of the Yellow Emperor's Internal Classic (《補注黃帝內經素問》)*, *The Genuine Meaning of the Classic of Difficult Issues (《難經本義》)* by Shou Hua (滑壽), *Commentary on the On Cold Damage (《注解傷寒論》)* and *The Clear Rationale of Cold Damage (《傷寒明理論》)* by Wu-Ji Cheng (成無已), *Memory Table for Pulse (《脈訣》)* by Jia-Yan Cui (崔嘉彥), *A Classified Book on Treating Exogenous Febrile Diseases (《類證活人書》)* by Gong Zhu (朱肱), *Exploration to Mysterious Pathogenesis and Etiology Based on the Elementary Questions (《素問玄機原病式》)*, *Formularies and Explanations of the Yellow Emperor's Elementary Questions (《黃帝素問宣明論方》)*, *A Straight Study of the on Cold Damage (《傷寒直格方*



論》), *Classified Experimental Therapy for the Pathogeny and Syndrome of Cold Damage Diseases* (《傷寒標本心法類萃》) and *Life Saving Collection Regarding Pathomechanism and Qi of Plain Questions* (《素問病機氣宜保命集》) by Wan-Su Liu (劉完素), *Mind Mirror of Cold Damage* by De Chang (常德), *Essentials of Cold Damage* (《傷寒心要》) by Hong Liu (緇洪), *Confucian Filiality* (《儒門事親》) by Cong-Zheng Zhang (張從正), *Clarification of Perplexities about Internal and External Damage* (《類外傷辨惑論》), *On the Spleen and Stomach* (《脾胃論》), *Secret Treasure of the Orchid Chamber* (《蘭室秘藏》) and *Mai Jue Zhi Zhang Bing Shi Tu Shuo* (《脈訣指掌病式圖說》) by Gao Li (李杲), *Medical Masters* (《醫壘元戎》), *This Matter Is Hard to Know* (《此事難知》) and *Herbal Foundation for Decoctions* (《湯液本草》) by Hao-Gu Wang (王好古), *Further Treatises on the Properties of Things* (《格致餘論》), *Elaboration of Dispensary Formulas* (《局方發揮》), *Elucidation of Dispensary Formulas* (《活法機要》), *Jin Kui Gou Xian* (《金匱鉤玄》), *Dan-Xi's Heart-Approach* (《丹溪心法》) and *Elucidation on Medicine* (《醫學發明》) by Zhen-Heng Zhu (朱震亨), *Essentials of External Medicine* (《外科精要》) by De-Zhi Qi (齊德之), *Review of Medical Classics* (《醫經溯洄集》) by Lü Wang (王履), *Shang Han Yi Jian* (《傷寒醫鑒》) by Zong-Su Ma (馬宗素), and *Essential Rhymes for Patterns and Treatment* (《證治要訣》) and *Classified Essential Rhymes for Patterns and Treatment* (《證治要訣類方》) by Yuan-Li Dai (戴原禮).⁷



The Great Compendium of Acupuncture and Moxibustion (《針灸大成》)

The Great Compendium of Acupuncture and Moxibustion is also called *The Complete Compendium of Acupuncture and Moxibustion (《針灸大全》)*. It was written by Ji-Zhou Yang (楊繼洲) and revised by Xian Jin (靳賢). Based on his early work *Secret Essentials of Mystery of Health and Acupuncture and Moxibustion (《衛生針灸玄機秘要》)*, Ji-Zhou Yang assembled theories and works of physicians over the ages, and combined with his own practical experience to complete this book on acupuncture and moxibustion. The book has a total of 10 volumes and proposes to use acupuncture, moxibustion, medicines, and massage properly. It values qi regulation and spirit treatment, and emphasizes on the combination of acupuncture, moxibustion and conduction exercise.⁸ The book contains theories, songs, diagrams of sizes of people facing forwards and backward, needle insertion, supplementation and drainage, contraindications of acupuncture and moxibustion, five transport points of ying, stream, source, river, and uniting, “midday-midnight point selection” (「子午流注」) and “eightfold method of the sacred tortoise” (「靈龜八法」). The book discusses acupuncture and moxibustion as treatment for 23 classes of diseases in the departments of internal medicine, surgery, facial features, gynecology, and pediatrics. The book also contains 31 medical cases of the author. *The attached Massage Cannon for Children*



(《小兒按摩經》) by Chen (陳氏; anonymous) was its only preserved version.

A lot of content of *The Great Compendium of Acupuncture and Moxibustion* was handed down within Ji-Zhou Yang's family and was created by them. The book contains rich information and was properly arranged and compiled. As the book has high practical value, it is widely circulated. It has many versions and has been translated into German, French, English, Japanese and other languages. The book has unique academic arguments, rich clinical experience on patterns, and believes that acupuncture and moxibustion are as important as medicines for disease treatment, in order to decide the treating patterns for different diseases, so that people in serious sickness can be well healed. As Ji-Zhou Yang identified patterns and administered treatment, the book stresses on the correlation between pulse and signs, assesses the patterns, seeks the causes and closely combines the theory of channels and network. It proposes the idea that "it's better to miss the points rather than the channels and network" (「寧失其穴，勿失其經」). Only in such way, a physician can "select the right points, and cure the disease" (「穴無不正，疾無不除」).

With respect to clinical operations, the book emphasizes on the supplementation and drainage manipulation of acupuncture, especially the "twelve-character sequence method" (「十二字次第手法」), i.e. "nail-press, holding by finger, warming with mouth, needle insertion, freeing channels by finger, freeing channels by nail, needle withdrawing, rubbing

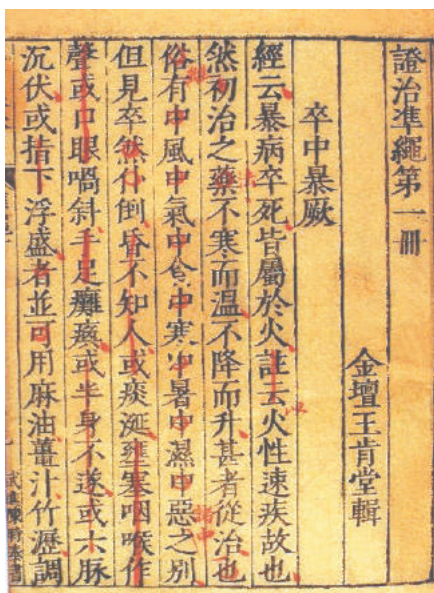


with fingers, twisting with fingers, stopping for a while before pulling out the needle, needle wobbling, and removing by finger”, and “eight methods of manipulation” (「下手八法」), i.e. judging, nail, fouflage, flicking, wagging, palpate, freeing, and rotating. Ji-Zhou Yang also promoted acupuncture through acupuncture points. The book introduces compound supplementation and drainage methods such as burning mountain fire method (燒山火), heaven-penetrating cooling method (透天涼), black dragon wagging tail method (蒼龍擺尾), red phoenix shaking head method (赤鳳搖頭), dragon and tiger fighting method (龍虎交戰), and dragon and tiger upbearing and down bearing method (龍虎升降) which are still used by modern clinical physicians in performing acupuncture.⁹

The Level-Line of Pattern Identification and Treatment (《證治準繩》)

The Level-Line of Pattern Identification and Treatment is also named *The Level-Line of Pattern Identification and Treatment of Six Departments (《六科證治準繩》)*, *The Level-Line of Six Departments (《六科準繩》)*, or *The Level-Line (《準繩》)* for short. It was compiled by Kentang Wang. The work contains six books of *The Level-Line of Miscellaneous Disease Pattern Identification and Treatment (《雜病證治準繩》)*, *Classified Miscellaneous Disease Pattern Identification and Treatment (《雜病證治類方》)*, *The Level-Line of Cold Damage Pattern Identification and Treatment (《傷寒證治準繩》)*, *The Level-Line of*





Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 150 (A collection held in the library of the Chinese Medicine Research Institute in China)

Surgical Pattern Identification and Treatment (《瘍醫證治準繩》), *The Level-Line of Gynecological Pattern Identification and Treatment* (《女科證治準繩》), and *The Level-Line of Pediatric Pattern Identification and Treatment* (《幼科證治準繩》). It presents theories and methods, formulas and medicines. The information collected is abundant, the discussion is clearly stated, the accompanying diagrams are clear to understand, and the song format is easy to memorize.¹⁰ Apart from the focus on pattern identification and treatment of clinical practice, the work also reflects incisive and original academic opinions and clinical experience of famous physicians over the ages, and is famous for its “most detailed statement on patterns and most accurate treatments”. The work generated rules for doctors based on the “Five Don’ts of Doctors” (「醫



家五戒」) and “Ten Do’s of Doctors” (「醫家十要」), and proposed standards of behaviors from the perspective of medical ethics and medical skills. *The Level-Line of Pattern Identification and Treatment* collected a wide range of materials and was compiled rigorously and precisely. It was one of the most widely circulated medical works in the 17th century.

Wai Ke Qi Xuan (《外科啟玄》)

Wai Ke Qi Xuan was written by Dou-Yuan Shen (申斗垣). It is a book on surgery. It summarizes the causes, pathology, key points of diagnosis, features of patterns, and treatments of surgical diseases. The book discusses over 190 common surgical diseases such as painful and swelling sores, intestine pain, lung pain, hemorrhoids and fistulas, leprosy, syphilis, bone flat-abscess, incised wound, and knocks and falls. For each pattern, the book states the position and location on the channels, and then discusses the chief signs and the treatment methods. The book contains 197 diagrams of diagnosis and disease treatment and illustrates the treatment methods in details, including medicines, acupuncture, and external treatment.

Orthodox Manual of External Medicine (《外科正宗》)

Orthodox Manual of External Medicine was written by Shi-Gong Chen (陳實功). It is a book on external medicine of traditional Chinese medicine. The book contains all kinds of external diseases and divides



them into different categories. It discusses the origins of a disease, diagnosis, common external diseases, and pathology of different physicians over the ages, symptoms, treatment, especially the suitability for surgical operation, etc. The book also discusses other topics from a specific symptom to the composition of the formula. It gives comparatively detailed and practical elaboration on skin diseases as large as swelling and flat abscesses or as small as scab and lichen. The book introduces diseases in the branches of dermatology, gynecology, pediatrics, and otorhinolaryngology. It gives detailed content and clear diagrams and emphasizes on nursing and regulating of the patients' diet.¹¹

Compendium Yin Means Female (《濟陰綱目》)

Compendium Yin Means Female was written by Zhi-Wang Wu (武之望). The book was compiled and rewritten based on *The Level-Line of Gynecological Pattern Identification and Treatment* and was divided into two parts; medical treatise and medical formulas. It is a book on gynecology and obstetrics in the traditional Chinese medicine. It contains regulation of menstruation, menstrual block, flooding, red and white vaginal discharge, vacuity-taxation, gatherings, praying for children, puffy swelling, genital diseases, antepartum, parturient, postpartum, breast diseases, etc. It discusses the diagnoses and treatments of all kinds of diseases of gynecology and obstetrics.¹²



Jing-Yue's Complete Compendium (《景岳全書》)

Jing-Yue's Complete Compendium was compiled by Jie-Bin Zhang (張介賓). It is a comprehensive medical work and was completed in the 4th Tianqi Year (天啟; 1624 AD). Jie-Bin Zhang referred to the theories of different physicians and combined with his own opinions and clinical experience to complete this book. It covers internal medicine, external medicine, gynecology, pediatrics, formula study, and Chinese pharmacy. The author created a new classification method of medicines, i.e. by supplementation, harmonizing, attacking, dissipating, cold, heat, securing, and cause, which were called the “New Eight Tactical Arrays of Formulas” (「新方八陣」).

Secret Record for Syphilis (《霉瘡秘錄》)

Secret Record for Syphilis is also called *Secret Record* (《秘錄》) for short. It was compiled by Si-Cheng Chen (陳司成) and was the first book on syphilis in the history of traditional Chinese medicine. The book clearly points out that the main spreading route is sexual intercourse. It describes the symptoms of the primary and secondary syphilis, such as hard chancre, condyloma, syphilitic maculopapular eruption, annular papules, white macules, scales damage, symptoms of bones, joints, and nervous system, and the special clinical symptoms of congenital syphilis. With respect to the treatment principles, it emphasizes on the prevention of the disease and



the prevention of relapse and proposes the treatment methods of resolving toxin, clearing, and killing of worms. It firstly proposed to use of inorganic, arsenic and mercury to treat syphilis. The book also records 29 cases and 55 formulas and describes the preparation and usage of medicines. In terms of *The Suitability of Medication*, it illustrates six wrongly treated cases and analyzes the contraindication of medicines and diet.¹³

Indispensable Medical Reading (《醫宗必讀》)

Indispensable Medical Reading was compiled by Zhong-Zi Li. It is a comprehensive medical work that discusses the principles of medicine, pharmacy, remedy books, symptoms, diagnosis, and cases. The book is divided into four parts: medical theories, pulse methods, herbal foundation and patterns, treatment and formulas. It elaborates the basic theories related to diseases of internal damage and their clinical application. It pays attention to bowels and viscera in the discussion of the disease name, disease cause and pathology, pulse and signs, formula and medication, and emphasizes on the pattern identification methods of bowels and viscera.

On Scourge Epidemic (《瘟疫論》)

On Scourge Epidemic was written by You-Xing Wu (吳有性). It is a book on scourge epidemic. The first half has 50 articles and discusses the causes, pathology, patterns, and treatment of scourge epidemic, and the differences between scourge epidemic and cold damage in different



aspects. The second half has 36 articles that mainly discuss the concurrent patterns of scourge epidemic. You-Xing Wu believed that scourge epidemic was caused by pestilential qi between the heaven and ground which could make people sick. It enters human bodies from the mouth and nose. Those who were significantly influenced would be attacked by the disease, and those who were slightly influenced would experience the blocking of the movement of construction qi and defense qi by evils, and the depression will then transformed into heat. The pestilential qi could be divided into several types which have their “best fit” (「特適」) and “favorite” (「偏中」). Visceral organs might be invaded by different kinds of pestilential qi depending on their specificity. Also, each kind of pestilential qi had different levels of infectivity in humans and animals.¹⁴

You-Xing Wu proposed to strictly distinguish scourge epidemic from cold damage and it was better to adopt the methods of coursing and disinhibiting to treat epidemics. He believed that although both warm heat and scourge epidemics were heat diseases, they were different in nature. One is infectious and the other is not. He concluded that scourge epidemic was different from common external contraction. The scourge epidemic invaded the human body through mouth and nose, and the invasion paths included airborne transmission, water-borne transmission, food-borne transmission, and contact transmission, i.e. “air-borne infection” (「自天受」) and “contact infection” (「傳染受」). The book proposes the treatment principles of “membrane-source-opening” (「達原」) and



“three dispersion-thirsts” (「三消」). The book presents a set of original and complete theories on the causes, onset, and patterns of the disease, which has been proved to have good clinical effects.

Jade Case of Perspicacity (《審視瑤函》)

Jade Case of Perspicacity is also named *A Complete Compendium of Eye Disease Department* (《眼科大全》), *Fu's Jade Case of Perspicacity of Eye Disease Department* (《傅氏眼科審視瑤函》), or *Jade Case of Perspicacity, A Complete Compendium of Eye Disease Department* (《審視瑤函眼科大全》). It was compiled by Ren-Yu Fu (傅仁宇), and is a book on ophthalmology. The author referred to previous medical works, quoted essences of eye disease treatment from medical works such as *The Level-Line of Pattern Identification and Treatment* and *Yuan Ji Qi Wei* (《原機啟微》), and combined his own clinical experience in eye disease treatment to complete this book. As diagrams on the book have been added and revised for many times, there are about 40 versions preserved nowadays.

The book has a total of six volumes. The first volume introduces 24 medical cases of famous physicians on eye disease treatment and the theories of eye disease such as Five Wheels and Eight Belts, movement and qi theory. The medical treatises recorded elaborate the basic theories and significant clinical issues of the Chinese ophthalmology from different perspectives. The book integrates the experience in clinical diagnosis and



treatment of eye diseases and proposes many original academic views. The second volume records 18 medical treatises from *Yuan Ji Qi Wei*. The third to sixth volumes discuss the diagnoses and treatments of 108 patterns of eye diseases. The book gives a specific description on the application of acupuncture as a treatment of eye diseases, accompanied by text-and-diagram introduction of important eye points. The book also gives a detailed explanation on ophthalmic operations such as removal of cataracts with needles, hooking, cutting, insertion, cauterizing, pointing, washing, applying, and blowing, which greatly improves the clinical effects and the inheritance of medical skills of Chinese ophthalmology.¹⁵

Section 4 Biographies of Medical Experts

Si-Gong Dai (戴思恭)

Si-Gong Dai (from 1324 AD to 1405 AD) had a style name of Yuan-Li (原體) and called himself Su-Zhai (肅齋). He was a native of Pujiang, Wuzhou (婺州浦江; now Zhuji County, Zhejiang Province). He was a famous medical scientist and Master Physician of Palace. Si-Gong Dai's father, Shi-Yao Dai (戴士堯), was a famous doctor whose younger brother Liang Dai (戴良) was a litterateur. Si-Gong Dai's younger brother Si-Wen (思溫) was also famous for his medical skills. In the third Zhizheng Year (至正; 1343 AD) of the Yuan Dynasty, Shi-Yao Dai, along with his sons



Si-Gong and Si-Wen, formally acknowledged Dan-Xi Zhu as their master. They were smart and favored by their master. They learned everything from their master and were very famous in Jiangsu and Zhejiang Provinces. The Dai family also studied medicine from Zhi-Ti Luo (羅知悌). They understood the ideas of different medical schools and were well-known for their excellent medical skills.

Si-Gong Dai was meticulous in diagnosis. He was able to identify patterns by the pulse. His prescriptions showed an accurate and brilliant use of medicines. With respect to medical opinions, he mainly elucidated the medical statement of his master Dan-Xi Zhu made a supplement for his unsaid meaning and extended the statement. Si-Gong Dai conducted precise diagnosis and treatment for six depressions, including qi depression, damp depression, phlegm depression, blood depression, heat depression, and food depression. He pointed out that the abnormal conveyance and transformation were the key reasons for depression, and most of the depression patterns originated from the center burner. He flexibly applied the six depressions theory of Dan-Xi and inherited Dan-Xi's academic idea that "yang was often sufficient, while yin was often insufficient" (「陽常有餘，陰常不足」). He proposed a theory of qi and blood exuberance and debilitation, indicating "yang was hyperactive and the blood was depletive" (「陽易亢，血易虧」), and emphasized on the threat of fire. With respect to the treatment of miscellaneous diseases, Si-Gong Dai was especially proficient in depression pattern and phlegm-



rheum. Although he learned from Dan-Xi, he also studied theories of Wan-Su Liu, Zhi-He Zhang, and Dong-Yuan Li. He would choose proper ideas and was not confined to any single theory.¹⁶

Si-Gong Dai wrote *Essential Rhymes for Patterns and Treatment* (《秘傳證治要訣及類方》) to mainly discuss patterns and treatment of miscellaneous diseases of the internal medicine, and *Speculation of Ideas of the Master* (《推求師意》) to elucidate ideas that his master implied. He also wrote *Selection of Herbal Foundation* (《本草摘抄》) and *Medication of Classified Patterns* (《類證用藥》). *Jin Kui Gou Xuan* (《金匱鉤玄》) was written by Dan-Xi Zhu, and corrected and supplemented by Si-Gong Dai.

Lü Wang (王履)

Lü Wang had a style name of An-Dao (安道) and called himself Ji-Sou (畸叟), Qi-Weng (奇翁) or Bao-Du Mountain Man (抱獨山人). He was a native of Kunshan, Jiangsu Province. He was a physician and a painter in the periods of Yuan and Ming Dynasties. He read extensively and not only studied medicine but also worked on poetry and painting. In the 4th Hongwu Year (1371 AD), Lü Wang went to Chang'an, and worked as Principal Practitioner at the Place of Qinwang for about 10 years. He studied medicine from Dan-Xi Zhu. He wrote many works, such as *Review of Medical Classics* (《醫經溯洄集》), *Bai Bing Gou Yuan* (《百病鉤元》), *Yi Yun Tong* (《醫韻統》), *Xiao Yi Fu* (《小易賦》), and *A Study*



on Twelve Channels (《十二經絡賦》), but only *Review of Medical Classics* has been handed down till now. *Review of Medical Classics* was Lü Wang's masterpiece. Su Hui (溯洄) in the book title means to trace the origin of medical science. The book discusses several medical works including *The Inner Canon*, *The Classic of Difficult Issues*, *The Divine Husbandman's Herbal Foundation Canon*, and *On Cold Damage and Miscellaneous Diseases*, and proposes the clinical theory based "on Zhong-Jing's ideas on external contraction, Dong-Yuan's ideas on internal injuries, and Dan-Xi's ideas for miscellaneous diseases".

Lü Wang believed that things in the nature were changing all the time. Only the harmony between humans and the nature could guarantee the normal functioning of the human body. With respect to diagnosis and treatment, he emphasized the use of clinical symptoms to identify patterns and deduce causes. He proposed the idea of "seeking causes based on diseases" (「因病知原」). Lü Wang believed that cold damage and warm diseases should be diagnosed and treated differently. He thought warm diseases were caused by the "infection of evil and abnormal qi" (「感天的惡毒異氣」). He never use six channels for cold damage to treat warm, summer heat and seasonal cold epidemics, warm malaria, wind warmth, and warm toxin. He proposed that the treatment of cold damage should focus on the exterior resolution and the treatment of warm diseases should focus on clearing the interior heat. With respect to the theoretical study, he honored *The Inner Canon* and *On Cold Damage* as classical works. His



clinical practice was influenced by the ideas of He-Jian Liu, Dong-Yuan Li, and Dan-Xi Zhu.¹⁷

Ying Lou (樓英)

Ying Lou (from 1332 AD to 1402 AD) was named Gong-Shuang (公爽), had a style name of Quan-Shan (全善) and called himself Quan-Zhai (全齋). He was a native of Xiaoshan (蕭山; now Xiaoshan, Zhejiang Province). He was born in a family of doctors and once worked as Imperial Physician. He was smart and started to read medical works such as *The Inner Canon* when he was a teenager. He read extensively and had a good knowledge of poetry. When he was practicing medicine, his diagnoses varied with the person, place, and time. His treatment had amazing effects and was honored as “Immortal Father” (「神仙太公」). Ying Lou studied existing literature and remedy books and combined his own clinical experience to complete the *Compendium of Medicine*. The book clearly classifies miscellaneous diseases into five categories by yin and yang, and the governing bowels and viscera. The book has rich materials and clear outline. Ying Lou valued the essential ideas of *The Inner Canon* and was good at integrating the advantages of different physicians. He emphasized that “ever-changing diseases were all rooted in yin, yang, and five phases”.



Zong-Li Xiong (熊宗立)

Zong-Li Xiong (from 1415 AD to 1487 AD) had a given name of Jun (均), a style name of Dao-Xuan (道軒), and called himself Wu Ting Zi (勿聽子). He was a native of Jianyang (建陽; now Jianyang County, Fujian Province). He was a famous doctor and printing carver in the Ming Dynasty. Zong-Li Xiong was born in a family of doctors. His ancestor, Yan-Ming Xiong (熊彥明), was a famous doctor in the Yuan Dynasty. Zong-Li Xiong was in poor health and often fell ill when he was young. He liked reading and studying medical works. Influenced by his family and doctors of Sung and Yuan Dynasties such as Wen-Shu Liu (劉溫舒) and Wan-Su Liu (劉完素), Zong-Li Xiong followed them by studying medicine. He later studied proofreading, book carving, yin and yang, medicine and divination from Yan Liu (劉剡), and obtained the essential ideas. He thought highly of the five movements and six-qi theory. He inherited his family tradition of practicing medicine. Because of his excellent medical skills and ability to cure severe diseases, he became more and more famous.

Zong-Li Xiong studied medicine for 37 years. He combined years of his own clinical experience with medical skills handed down within his family to write medical books. He took part in the correction, annotation, carving, and printing, and publishing as many as 20 medical works in total, which indirectly promoted the booming of the book carving industry.



Medical books compiled and carved by Zong-Li Xiong's Zhong De Tang (「種德堂」) not only had different forms but also contains illustrations and drawings, were easy to understand, and were practical. Zong-Li Xiong conformed to the historical trend and focused on the editing and carving of medical works. Medical works produced by him were circulated both at home and abroad. He made many contributions to the development of traditional Chinese medicine. He was the person who compiled and carved the most medical works by himself in the history of the Fujian Province. He did not only actively promoted the treatment and prevention of diseases in remote mountain areas of North Fujian but also was a pioneer in popularizing medical science during the Ming Dynasty.

The Compendium of Famous Formulas and Systematized Pattern Medical Works (《名方類證醫書大全》) (1447 AD) was Zong-Li Xiong masterpiece of book carving. The book has a total of 24 volumes. It has spread to Japan and was considered as the “Treasure of Doctors” (「醫家之寶」). Japanese doctor Zhenchang (真長蘭軒; literary name: Lanxuan) once studied medicine from him. He also wrote the *Supplement to Annotations of Movement and Qi of the Yellow Emperor's Inner Canon, Plain Questions and Magic Pivot* (《黃帝內經素問靈樞運氣音釋補遺》), Wu Ting Zi's *Explanation of the Classic of 81 Difficult Issues* (《勿聽子俗解八十一難經》) (also named *Newly Compiled Explanation to the Classic of 81 Difficult Issues* (《新編俗解八十一難經圖要》)), *Compendium of Movement and Qi of Cold Damage* (《傷寒運氣全書》)



(also named *Finger and Palm Diagram Illustrations of Cold Damage* (《傷寒活人指掌圖論》), *Origins of Medicine* (《醫學源流》), *Supplement to Songs of Herbal Foundation* (《增補本草歌括》), *Convenient Formulas for Life in Mountain* (《山居便宜方》), *Emergency Formulas on the Sea* (《備急海上方》), *Compendium of Supplement to Good Remedies for Women* (《婦人良方補遺大全》), and *Annotation of Qian's Remedies of Pediatrics* (《類證注釋錢氏小兒方訣》). He also annotated *The Children's Diseases: Remedies and Sources* (《小兒病源方論》) written by Wen-Jong Chen (陳文中) of the Sung Dynasty.¹⁸

Tuan Yu (虞搏)

Tuan Yu (from 1438 AD to 1517 AD) had a style name of Tian-Min (天民) and called himself Hua-Xi Heng-De Lao Ren (華溪恒得老人). He was a native of Yiwu, Zhejiang Province. He was born in a family of doctors. He was determined to study medicine because of his mother's disease and devoted himself to medical works. Following his grandfather, Tuan Yu thought highly of *The Inner Canon* and *The Classic of Difficult Issues*, and especially admired the theories of Dan-Xi. He also integrated the essences of theories of Si-Miao Sun (孫思邈), An-Shi Pang (龐安時), Shu-Wei Xu (許叔微), Shou Hua (滑壽), etc. He aimed to learn and absorb medical theories as much as he can. For example, he praised highly of Zhong-Jing's theory of cold damage, Dong-Yuan's theory of internal damage, and Yi Qian's theories, as well as He-Jian's and Zhi-He's



discussion on pediatrics.

Tuan Yu believed that during the clinical practice, a doctor should not be confined by ancient formulas. He created the sesame oil enema therapy to treat constipation in children and proposed the theories of “two kidneys dominantly governing the life gate” (「兩腎總號命門」) and “three burners and cavities” (「三焦腔子說」). He was opposed to sorcery and the theory of movement and qi. He criticized the superstitious spirits and believed that the idea of ghosts and gods was used to threat people and cheat them money. He reminded people not to be fooled. In his later years, Tuan Yu decided to “collect the treatment experience of famous doctors over the ages to compile a book” (「采歷代名醫治驗總成一書」) and named it *Medical Cases of Famous Doctor Ancient and Modern* (《古今諸賢醫案》). It was a shame that he died before completing the book. His works include *The Orthodox Tradition of Medicine*, six-volume *Elucidation of Formulas and Pulse Manifestations* (《方脈發微》), and *Cang Sheng Si Ming* (《蒼生司命》). The books preserved include *Hundred-Character Chants* (《百字吟》) and *Ban Zhai Gao* (《半齋稿》).

Mao Han (韓懋)

Mao Han (from 1441 AD to 1522 AD) was a famous doctor in the Ming Dynasty. He had a style name of Tian-Jue (天爵). He also had another given name of Bai Zi Xu (白自虛) and a style name of Fei Xia Zi (飛霞子) or Fei-Xia Dao Ren (飛霞道人). People also called him Bai Fei



Xia (白飛霞). He was a native of Luzhou, Sichuan. Mao Han was born in a family of government officials. As he was born with poor health, his parents were getting old and often fell ill, and he failed the Imperial Examination for several times. He then started to learn medicine. He formally acknowledged his uncle Heng-Qian Hua (華恒岍), Jinhua Wang Mountain Man (金華王山人), He Huang, who was regarded as Wuyi Immortal (武夷仙翁黃鶴老人), as his masters. He also acquired the secret skills of Dou-Nan Chen (陳斗南) who was a talented person in Emei (峨眉高人). He had superior medical skills and frequently traveled. In Zhengde years (正德), Emperor Wuzong (武宗) awarded him the name of Bao Yi Shou Zheng Zhen Ren (抱一守正真人). Mao Han had a good knowledge of *The Book of Changes* (《易經》) and thought *Plain Questions* and *The Classic of Difficult Issues* were as valuable as the six classics of Confucianism. He believed that Dan-Xi “had absorbed essences of famous doctors” (「能集名醫之大成」). Mao Han valued harmony qi of the spleen and the stomach. He created the Three-Seed Filial Devotion Decoction (三子養親湯), Huanghe Elixir (黃鶴丹), and beef paste (霞天膏) which were all well-known. He only used two or three medicines in a formula, but could achieve an obvious effect. His formulas were simple but essential and are still commonly used in today’s clinical practice.¹⁹ His works included *Han’s Clear View of Medicine* (《韓氏醫通》), *Treatment Formulas for Syphilis* (《楊梅論治方》), and *Overseas Odd Formulas* (《海外奇方》). Only *Han’s Clear View of Medicine* has been handed



down till now.

Lun Wang (王綸)

Lun Wang (from 1465 AD to 1521 AD) was a physician in the period of Ming Dynasties. He had a style name of Ru-Yan (汝言) and called himself Jie-Zhai (節齋). He was a native of Cixi, Zhejiang Province (浙江慈溪; now Cixi Town, Ningbo City). His ancestors lived in Tongchuan, Shaanxi Province (陝西銅川), and moved to Cixi, Zhejiang Province in the period of the Five Dynasties. Lun Wang was born in a family of government officials. He was righteous, easy-going, and was not vulgar. As his father often fell ill and there was no good doctor in the rural area, so he considered learning medicine which not only kept his father healthy but also helped others. He worked hard to study medical theories of Qi Bo and the Yellow Emperor (岐黃之術). Lun Wang learned from Dan-Xi and benefited a lot. Later, he became government official and often treated civilians in his spare time.

Lun Wang proposed to “take *The Inner Canon* as the basis of his works and refer to the ideas of four famous doctors” (「宜專主《內經》，而博觀乎四子」). He believed that the books of four famous doctors; Zhong-Jing, Dong-Yuan, He-Jian, and Dan-Xi, “invented one theory each” and “constituted a compendium of medicine” (「斯醫道之大全矣」). Therefore, he followed the ideas of Dan-Xi and referred to the ideas of other doctors such as Dong-Yuan. Apart from absorbing the



academic thoughts of doctors in the Jin and Yuan Dynasties, he relied on his own clinical experience to achieve flexible application of medical skills and developed a school of his own. During the disease treatment, Lun Wang emphasized on the regulation of seven affects and developed the affect-mind theory (情志學說) of the traditional Chinese medicine. During his clinical practice, he would investigate the causes of the disease, and find the source. For the treatment of phlegm symptoms, he emphasized that the disease was rooted in the spleen and kidney. It was better to clear fire and dissipates depression as fire and water help each other, supplement the spleen and boost the kidney, or balance the regulation of qi. He also proposed many principles for selecting medicines based on different areas and climate.²⁰ Lun Wang wrote quite a lot of books. His *Collected Experience of Famous Physicians in Ming Dynasty* elaborates the treatments of miscellaneous diseases and was his masterpiece. He also wrote *Essentials of Herbal Foundation* (《本草集要》), *Questions and Answers of Medical Treatises* (《醫論問答》), *Jie Zhai's Medical Treatise* (《節齋醫論》), *Jie Zhai's Medical Work on Pediatrics* (《節齋小兒醫書》), and *Medical Cases of Childbirth* (《胎產醫案》).

Ji Wang (汪機)

Ji Wang (from 1463 AD to 1539 AD) had a style name of Xing-Zhi (省之) and was a native of Qimen, Anhui Province. As he lived in Shi-Shan of Qimen, he called himself Shi-Shan Ju Shi (石山居士). People also



A portrait and works of Ji Wang

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 146

(A collection in the library of Nanjing University of Chinese Medicine)

called him Shi-Shan Wang (汪石山). His family had been doctors for generations. In his early years, he studied Confucian, and worked hard but failed the Imperial Examination for several times. His father Wei Wang (汪渭) was a famous doctor in the local area and persuaded him to study medicine. Therefore, he gave up Confucianism and studied medicine instead. Ji Wang studied medical works of famous doctors over the ages and absorbed their essences, which helped develop his medical skills. Later, he cured his mother's headache and vomiting which she had suffered from for years and became more determined to work as a doctor. Ji Wang paid attention to rectifying qi. He developed Dan-Xi's theory of "insufficiency of yin" and proposed the "construction and defense theory"



(「營衛論」). He emphasized that regulating and supplementing qi and blood was the foundation for disease treatment. He valued original qi, and favored the “theory of the spleen and the stomach for internal damage” (「脾胃內傷學說」) proposed by Dong-Yuan Li, and made good use of Shenqi (參耆), a kind of traditional Chinese medicine. He argued that using sweetness and warmth to support and nourish the spleen and stomach could expel disease evil. Ji Wang’s disciple Wei-Yi Chen (陳惟宜) collected his formulas in clinical practice and compiled *The Shi-Shan’s Medical Cases* (《石山醫案》). Ji Wang wrote *Principles and Identification of Poxes* (《痘疹理辨》), *Selection of Plain Questions* (《讀素問鈔》), *Question and Answers about Acupuncture and Moxibustion* (《針灸問對》), *Selection of Cold Damage* (《傷寒選錄》), *Principles of Cases of External Medicine* (《外科理例》), *Principles of Medicine* (《醫學原理》), etc.

Ji Xue (薛己)

Ji Xue (from 1488 AD to 1558 AD) had a style name of Xin-Fu (新甫) and called himself Li-Zhai (立齋). He was a native of Wu County, Jiangsu Province (江蘇吳縣; now Suzhou City, Jiangsu Province). His father Kai Xue (薛鎧) was a student of Prefectural School, had a good knowledge of medicine, especially the pediatrics and external medicine, and was a famous doctor at that time. Ji Xue was edified by the family atmosphere and studied medicine with passion. He was intelligent and was



a sore doctor at the beginning before he became a famous doctor of internal medicine. He had quite achievements in internal medicine, external medicine, gynecology, pediatrics, and osteo-traumatology etc. He was once appointed Yu-I (御醫, Imperial Physicians) and resigned later.

Ji Xue wrote quite a number of medical works which could be divided into three categories. The first category contains books written by him, including *Summary of Internal Medicine* (《內科摘要》), *Essentials of Gynecology* (《婦科撮要》), *Guo Ting Xin Lu* (《過庭新錄》) (also named *Golden Mirror Record for Infants* (《保嬰金鏡錄》)), *Elaboration of External Medicine* (《外科發揮》), *New Treatments of External Medicine* (《外科新法》), *Pivot of External Medicine* (《外科樞要》), *Zheng Ti Lei Yao* (《正體類要》) (book about bone righting department), *Kou Chi Lei Yao* (《口齒類要》) (book about stomatology and laryngology), *Essentials of Leprosy and Sores* (《痢瘍機要》), and *Empirical Formulas of External Medicine* (《外科經驗方》). The second category contains books annotated and supplemented by Ji Xue, including *Summary for Infant Treatment* (《保嬰撮要》) by Kai Xue (薛鎧), *Yuan Ji Qi Wei* by Wei-De Ni (倪維德), *Compendium of Good Remedies for Women* (《婦人良方大全》) and *Essentials of External Medicine* (《外科精要》) by Zi-Ming Chen (陳自明) of the Sung Dynasty, *Collected Experience of Famous Physicians in Ming Dynasty* by Lun Wang, *Key to Diagnosis and Treatment of Children's Diseases* (《小兒藥證直訣》) by Yi Qian of the Sung Dynasty, and *On Formulas for Children's Poxes* (《小



兒痘疹方論》) by Wen-Jong Chen (陳文中) of the Sung Dynasty, among others. Ji Xue often added his own opinions and medical cases when he revises books. For example, he added two classes of pregnancy and sores and attached his own treatment experience and formulas to *Compendium of Good Remedies for Women*. He also supplemented the *Yuan Ji Qi Wei*. The third category contains book proofread by him, including *Elaboration of the Fourteen Channels* (《十四經發揮》) by Shou Hua, *ao's Golden Mirror Record of Cold Damage* (《敖氏傷寒金鏡錄》) by Ben Du (杜本), *Elaboration of Herbal Foundation* (《本草發揮》) by Yong-Cheng Xu (徐用誠), and *Secret Empirical Formulas for Welling and Flat Abscesses* (《癰疽神秘驗方》) by Hua Tao (陶華), among others.

Ji Xue valued the spleen, stomach, and kidney life. He proposed that the spleen and stomach were essential for humans and their regulation was crucial for disease treatment. During his clinical practice, he mainly used the sweetness and warmth to supplement center qi, earth, and original qi. His medical arguments were inherited from the spleen and stomach theories proposed by Wan-Su Zhang and Dong-Yuan Li. In addition, he developed the academic idea that the spleen and the stomach were equally important as the kidney life inspired by the theory of kidney governing water and fire by Bing Wang (王冰) and Yi Qian. Eight-Ingredient Pill (八味丸) was one of the most commonly used formulas he created.²¹



Quan Wan (萬全)

Quan Wan (from 1495 AD to 1580 AD) was also named Quan-Ren (全仁). He had a style name of Shi (事) and called himself Mi-Zhai (密齋). He was a famous doctor in the Ming Dynasty. He was a native of Dahean, Luotian, Hubei, and his ancestors came from Yuchuan (豫 竄; now Nanchang City, Jiangxi Province). He was born in a family of doctors. His grandfather, his father, and he were all doctors. His grandfather Xing-Po Wan (萬杏坡) was famous for treating pediatric diseases. His father Ju-Xuan Wan (萬菊軒) wrote the *Essentials of Poxes* (《痘疹心要》), which enjoyed the fame of “Wan’s Pediatrics” (「萬氏小兒科」). Quan Wan failed the Imperial Examination and became determined to study medicine instead. He studied from his father. He not only had excellent medical skills but also had noble medical ethics. He treated patients like families and tried his best to cure them. He practiced medicine for about 50 years. Quan Wan had abundant clinical experience. He extensively read medical books. Based on *Plain Questions* and *The Classic of Difficult Issues*, he deeply studied *The Pulse Canon* and *Herbal Foundation*. He absorbed the essences of the theories of Zhong-Jing Zhang, He-Jian Liu, Dong-Yuan Li, and Dan-Xi Zhu. He was open-minded, diligent in studying ancient works, and strict with learning. Therefore, he widely gathered the essential ideas of his predecessors and combined them with his own clinical experience. In this way, he inherited the theories of previous doctors (先賢之學) and



developed them.

Quan Wan also wrote books. His books are rich in content, covering the identification and treatment of common diseases in pediatrics, gynecology, and internal medicine, the health cultivation, giving a good birth and good care. He wrote the *Summary of Songs for Saving Life* (《保命歌括》), *Selection of Treatment of Cold Damage* (《傷寒摘錦》), *Four Do's for Health Cultivation* (《養生四要》), *Essentials of Internal Medicine* (《內科要決》), *Elaboration of Pediatric Diseases, Secrets for Baby Caring* (《育嬰秘訣》), *Heart-Approach to Poxes* (《痘疹心法》), *New Book of Pian Yu* (《片玉新書》), *Pian Yu Poxes* (《片玉痘疹》), and *Summary of Abundant Offsprings* (《廣嗣紀要》), which were associated to *Mi-Zhai Wan's Ten Medical Books* (《萬密齋醫書十種》).

Quan Wan was proficient in theories and practice. He had a good knowledge of different departments, especially gynecology, pediatrics, and internal medicine. He also valued health cultivation. He was especially good at treating pediatric diseases. He was honored as “medical sage” (「醫聖」) and enjoyed the reputation of “King of Children's Diseases” (「小兒王」) and “Magic Doctor” (「神醫」). Quan Wan's theory on pediatrics came from Yi Qian but had his own understanding. Based on the idea of nourishing yin proposed by Dan-Xi Zhu, he proposed the disease cause theory that children were “often sufficient in yang and insufficient in yin, sufficient in the liver and insufficient in the spleen, and sufficient in the heart and insufficient in the lung and kidney”. These “three-sufficient”



(「三有餘」) and “four-insufficient” (「四不足」) theories could greatly help in the care of children and disease prevention. Quan Wan emphasized on the equal significance of four examinations during the diagnosis. With respect to treatment, he emphasized on the regulation of the spleen and stomach. His formulas were flexible and changed a lot. Formulas of Bovine Bezoar Heart-Clearing Pill (牛黃清心丸), Jade Axis Elixir (玉樞丹), and Worm-Quieting Pill (安蟲丸) are still commonly used today.²²

Wu Gao (高武)

Wu Gao called himself Mei-Gu (梅孤). He was a native of Yin County (鄞縣; now Ningbo, Zhejiang Province) with dates of birth and death unknown. He was a famous acupuncture and moxibustion specialist in the Ming Dynasty. He was learned and capable. He was fond of reading and had a good knowledge of astronomy, music, art of war, riding, and shooting. He once was a successful military candidate in the imperial provincial examination in the Jiajing years (嘉靖). In his later years, he focused on studying medicine. Wu Gao had excellent medical skills and was especially proficient in acupuncture and moxibustion. He once complained that there were too many errors in the practice of acupuncture and moxibustion. In order to correct point errors, he forged three bronze acupuncture figures, one female, one male, and one child, as the standard for point locating. With respect to academic study, Wu Gao learned from different schools and honored several medical works such as *The Inner*



Canon and *The Classic of Difficult Issues*. He absorbed the essences of the arguments of He-Jian Liu, Dong-Yuan Li, Dan-Xi Zhu, etc., and admired the academic achievements and experience of his predecessors. Although he learned from his predecessors, he was not constrained by their theories but created his own school. He inherited the basis of theories and experience of his predecessors and believed that “one could be called a doctor only after he mastered acupuncture, moxibustion, and medicine”. He proposed that doctors should have well-rounded skills so that they could conduct treatment by case with maximum effects.

Wu Gao’s masterpiece is *Gathered Blooms of Acupuncture and Moxibustion*. The book proposes to “acupuncture different points at different time” (「定時用穴」) and emphasizes on streaming sores of channels, network, qi, and blood. He even created the “directional supplementation and drainage for treating the disease that arises when this was stirred” (「十二經是動所生病補瀉迎隨」). He also praised the academic ideas of Dong-Yuan on acupuncture and moxibustion and valued the theory on spleen and stomach. Another feature of the *Gathered Blooms of Acupuncture and Moxibustion* is that it collects about 80 songs on acupuncture and moxibustion before the Ming Dynasty. He recorded them in the book even when some songs carried different ideas. He also selected acupuncture and moxibustion related texts of *The Inner Canon* and *The Classic of Difficult Issues* and reclassified them to complete the work *Zhen Jiu Jie Yao* (《針灸節要》) (also called *Zhen Jiu Su Nan Yao Zhi* (《針灸



素難要旨》)). He also wrote *Orthodox Manual of Poxes* (《痘科正宗》), *Guide to Shooting* (《射學指南》), *Identification of Tones* (《律呂辨》), and *Fa Hui Zhi Zhi* (《發揮直指》)²³ among others.

Shi-Zhen Li (李時珍)

Shi-Zhen Li (from 1518 AD to 1593 AD) had a style name of Dong-Bi (東璧) and called himself Bin-Hu Mountain Man (瀕湖山人). He was a native of Qizhou. He was born in a family of doctors. When he was a teenager, he started to read medical works and followed his father Yan-Wen Li (李言聞), who was a famous



Shi-Zhen Li
A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

doctor in the local area, in diagnosing diseases and transcribing prescriptions. At that time, doctors had low social status. Yan-Wen Li hoped his son



practice of medicine, he discovered that there were many errors in existing herbal foundation works. He thought it was a matter of life and death so he decided to compile a book on the herbal foundation. He referenced the experience of his predecessors, consulted farmers cultivating or collecting herbs, woodcutters, hunters, fishermen, etc, and went deep down to the mountains to observe and collect samples of all kinds of plants, animals, and minerals. In order to acquire the correct knowledge on plants, he planted mint (薄荷) and carthamus (紅花), and tasted datura (曼陀羅) (datura flower (洋金花)), flowery knotweed (何首烏; Polygoni Multiflori Radix), etc. He took *Classified Emergency Herbal Foundation* (《經史證類備急本草》) by Shen-Wei Tang (唐慎微) as the basis, referred to over 800 books, combined his own discoveries and opinions, revised them for thrice, and finally completed the *Herbal Foundation Compendium* in 27 years.

The *Herbal Foundation Compendium* has 52 volumes and includes 1,892 medicines. The book corrected errors in previous herbal foundation works. It gave up the classification method of three grades “top, medium, and low grades” which had been used for long and established the new classification method of “three kingdoms and 16 classes” (「三界十六部分類法」). Based on the classification method for dominant medicines proposed by Hong-Jing Tao, he created the “method of classifying by medicinal function” (「藥物歸經分類法」). The book systematically records all kinds of medicinal knowledge, such as names, history, shapes,



identification, collection, functions, and formulas, etc. In addition, Shi-Zhen Li also collected and introduced traditional medicine and inventions of different nationalities. For example, the Mongolians (蒙古族) put a patient into the enterocoelia of a cow to treat external injuries. Ancient Qidan nationality (古契丹族) used skins and bones of sheep to practice divination and write about folkways. Shi-Zhen Li also wrote *Pin-Hu's Pulse Theory* (《瀕湖脈學》), *Eight Extraordinary Vessels Researched* (《奇經八脈考》), etc.

Chun-Fu Xu (徐春甫)

Chun-Fu Xu (from 1520 AD to 1596 AD) had a style name of Ru-Yuan (汝元) and called himself Dong-Gao (東皋), Si-Min (思敏), or Si-He (思鶴). He was a native of Qimen (祁門; now She County, Anhui Province). His family lived by the teachings of Confucianism for generations. His father, He-Shan Xu (徐鶴山), once worked as Xiang-Yang-Fu Dian-Shan (襄陽府典膳; Manager of Foods of Xiangyang Prefecture). His father died when he was young and he called himself Si-He when he grew up to memorize his father. Chun-Fu Xu was a Confucian scholar at first and worked hard for the Provincial Examination. However, as he was in poor health, he decided to study medicine and learned from Huan Wang (汪宦) who was a famous doctor in the local area. Huan Wang had a sound understanding of *The Inner Canon* annotated by Bing Wang and wrote *Medical Doubts* (《醫學質疑》). Chun-Fu Xu read medical



works of all dynasties, absorbed experience from medical cases recorded and used it with flexibility. He had a good knowledge of internal medicine, gynecology, and pediatrics. Because he had excellent medical skills and noble medical ethics, he became well-known and many people went to him for medical help. He once worked in Tai-I Yuan (Imperial Academy of Medicine).

In the 2nd Longqing Year (隆慶; 1568 AD), Chun-Fu Xu founded the “Yi Ti Tang Zhai Society of Doctors” (「一體堂宅仁醫會」). It was the first non-governmental academic organization in medicine made a great contribution in promoting medical development and started the academic exchanges. Apart from practicing medicine, Chun-Fu Xu also spent his spare time in writing and completed many books. He spent 30 years in compiling *The Complete Compendium of Medical Works, Ancient and Modern* which had 100 volumes. He also wrote the six-volume *Shortcut to Medicine Field* (《醫門捷徑》) (also called *Six Books of Essentials for Entering Medicine Field* (《醫學入門捷要六書》) *Information on Medical Books* (《醫籍考》), or *Six Books of Shortcut to Enter Medicine Field* (《醫學入門捷徑六書》)), and *Essentials of the Inner Canon, Hear Mirror for Gynecology* (《婦科心鏡》), *Zhong Si Guang Yu* (《蠡斯廣育》), *A Collection of Pediatrics* (《幼幼匯集》), *Secrets of Poxes* (《痘疹泄密》), etc. which were included in *The Complete Compendium of Medical Works, Ancient and Modern*.

Chun-Fu Xu believed that a good doctor should be proficient in



medicine, acupuncture and moxibustion. The usage of medicines should not be confined to ancient formulas. He emphasized that during the treatment, the nature of medicines is the most important and a doctor should be capable of flexible application and can properly increase or reduce flavors in clinical practice. With respect to health cultivation, he believed in the principle of disease prevention. Academically, he thought highly of the theories of Gao Li and proposed that the treatment of internal damage should focus on supplementing the spleen and stomach, and uplifting of the yang qi.²⁴

Chan Li (李梴)

Chan Li had a style name of Jian-Zhai (健齋) and was a native of Nanfeng, Jiangxi Province. He lived in the Ming Dynasty with dates of birth and death unknown. He was a famous Confucian doctor at that time. Chan Li had a wide range of knowledge and rich clinical experience. He once practiced medicine in Jiangxi Province and Fujian Province. He was famous for both his outstanding medical skills and noble moral character. Chan Li was especially proficient in treating impediment patterns. Impediment diseases had different patterns and each pattern had a dominant formula. He was also good in external treatment. Chan Li felt that there were no proper medical works which could be easily understood by beginners of medical study so he wrote *The Gateway to Medicine*. The book has two features. First, it incorporated several ancient works,



classified them, and abstracted the essential parts. Second, it used *Yi Jing Xiao Xue* as the chief source and adopted the form of songs and verses, which is more effective in reading and memorizing. The author also added plenty of annotations to help readers understand the text. The book ends with an article entitled “Specification of Medicine Learning” (「習醫規格」). It records the medical ideas of Chan Li and his opinions on medical education. It also proposes specific requirements on medical ethics, medical work reading, and psychology of learners of medicine. It encourages medical students to think for the sake of the patients and handle the relationships between doctors and patients in a proper manner.²⁵

Ting-Xian Gong (龔廷賢)

Ting-Xian Gong (from 1522 AD to 1619 AD) was a famous doctor in the Ming Dynasty. He had a style name of Zi-Cai (才子). He once lived in seclusion at the Yun Lin Mountain in Jinxi County, and thus called himself Yun-Lin Mountain Man (雲林山人). He also called himself Wu Zhen Zi (悟真子). He was a native of Jinxi, Jiangxi Province. He was born in a family of doctors. His father was Xin Gong (龔信) who worked in the Tai-I Yuan (Imperial Academy of Medicine) and compiled the *Gu Jin Yi Jian* (古今醫鑒) with the help of Ting-Xian Gong who added supplementation. When Ting-Xian Gong was young, he prepared for the Imperial Examination. Later, he inherited his father’s career and made a great effort to study medical skills and medical classics such as *The Inner Canon* and



The Classic of Difficult Issues. He practiced medicine for about 60 years. He absorbed the essences of other doctors and was proficient in internal medicine, external medicine, gynecology, and pediatrics. Ting-Xian Gong valued the regulation of qi and blood. He believed that the original qi was rooted in the spleen and stomach, the treatment of clinical patterns should safeguard the stomach and the treatment should be conducted based on supplementation. He also discussed the mechanism of aging and invented several kinds of prescriptions to fortify the spleen, boost the stomach, and to prolong life.

Ting-Xian Gong once worked as Li Mu (吏目; Clerk) of Tai-I Yuan (Imperial Academy of Medicine) of the Ming Dynasty. As he cured the inflation of Consort Zhang of King of Lu (魯王張妃), he was praised as “Head of All Doctors” (「天下醫之魁首」) and received a plaque saying “Number One Doctor” (「醫林狀元」). His works include *Immortal Formulas of Apricot Planting* (《種杏仙方》), *Return-of-Spring for All Diseases, A Complete Compendium of Amazing Formulas for Restoring Light of External Medicine* (《復明眼方外科神驗全書》), *Yun Lin Shen Gou* (《雲林神殼》), *Secret Formulas of Lu Prefecture* (《魯府禁方》), *A Compendium of Medical Formulas, Pulse Manifestation, and Massage Manipulation for Children* (《小兒推拿方脈全書》) (it introduces the diseases and main massage manipulation, and has accompanying drawings), *Prolonging Life and Preserving the Origin* (《壽世保元》), etc. Some books assumed Ting-Xian Gong’s name, such as *The Level Line*



of Medicine (《醫學準繩》), *Qing Shi Quan Shu* (《經世全書》), *Records of Doubt Identification of Poxes* (《痘疹辨疑全幼錄》), and *Ben Cao Pao Zhi Yao Xing Fu Ding Heng* (《本草炮製藥性賦定衡》). Among the above-mentioned works, the *Return-of-Spring for All Diseases* and the *Prolonging Life and Preserving the Origin* are the most widely circulated ones.

Yi-Kui Sun (孫一奎)

Yi-Kui Sun (from 1522 AD to 1619 AD) had a style name of Wen-Yuan (文坦) and called himself Dong-Su (東宿) or Sheng Sheng Zi (生生子). He was a native of Xiuning, Anhui Province. He was one of the well-known doctors in the county of Xin'an in the Ming Dynasty. He acknowledged Gu-Tan Huang (黃古潭) as his master and was the disciple of the famous doctor Ji Wang. He was a representative of the warming and supplementing school (溫補學派) of Xin'an medicine. His works include *Mysterious Pearl of Red Water*, *Yi Zhi Zhu Yu* (《醫旨諸余》), and *Sun's Medical Cases*. The above three works were compiled to become *The Collected Works of Mysterious Pearl of Red Water*. The *Sun's Medical Cases* was also called *Wen-Yuan Sun's Medical Cases*. It was compiled by his sons Tai-Lai and Ming-Lai and his disciple Huang Yu (余煌) based on the clinical experience of Yi-Kui Sun.

Yi-Kui Sun paid considerable attention to the phlegm-rheum. In this book, the discussion on phlegm-rheum took up one-third of the total



medical cases. He also quoted the opinions of Dan-Xi Zhu, Zhi-He Zhang, Dong-Yuan Li, Yong-He Yan (嚴用和), etc. in his books, gave his own elaboration, and proposed unique ideas. *Sun's Medical Cases* records a lot of successful cases of phlegm-rheum treatment.²⁶

You-Zhi Fang (方有執)

You-Zhi Fang (from 1523 AD to 1593 AD) had a style name of Zhong-Xing (中行) and called himself Jiu-Long Mountain Man (九龍山人). He was a native of She County, Anhui Province. There was not many recording about You-Zhi Fang's life. He was devoted to medicine all his life. He lost his wives twice and his five sons all died because of wrong diagnoses of a vulgar healer. Also, he suffered from a severe disease himself. Therefore, he worked hard and spent all his life studying medicine. He had a profound understanding of *On Cold Damage*. He wrote *Detailed Annotation of on Cold Damage* (《傷寒論條辨》) with an adherence to *Copy of Herbal Foundation* (《本草鈔》), *Huo Wen* (《或問》), and *Jing Shu* (《瘡書》).

You-Zhi Fang spent all his life studying *On Cold Damage*. He admired Zhong-Jing Zhang very much and thought “his words could be rules for people, and his behaviors could be examples for people”. His thoughts *On Cold Damage* had been passed down for a long period and had already lost its original texts. Although Shu-He Wang had sorted and summarized the work, the content had been altered. The sequence of the



text had been changed and a lot of errors occurred during the circulation. He tried to recover the original appearance of *On Cold Damage*. Inspired by the arranging methods of his predecessors, he finally completed the *Detailed Annotation of On Cold Damage* in about 20 years after he revised the draft for seven times. The completion of the book started the blooming of different schools of cold damage. Therefore, the school established by You-Zhi Fang was called the School of Rebinding of Disordered Bamboo Slips (錯簡重訂派).

Detailed Annotation of On Cold Damage mainly divided the greater yang diseases of cold damage into three categories: “wind damaging defense qi” (「風傷衛」), “cold damaging construction qi” (「寒傷營」), and “wind and cold damaging both defense and construction qi” (「風寒兩傷營衛」), which were the rudiments of the theory of “Confrontation of Three Outlines” (「三綱鼎立」). It clearly explained the rules of onset, shift, and outcome of cold damage diseases. This was a huge extension of Zhong-Jing’s theory. You-Zhi Fang broke the traditional idea, altered it, and made innovation. He not only made the book more systematic and ordered but also provided many incisive opinions. For example, “*On Cold Damage* was applicable to diseases other than cold damage” and “practicality was important in practicing medicine”. The book made it more convenient for beginners to understand the original content and made a great contribution to the academic study on cold damage.²⁷



Ji-Shi Yang (楊濟時)

Ji-Shi Yang (from 1522 AD to 1620 AD) had a style name of Ji-Zhou (繼洲). He was a famous doctor in the Ming Dynasty and died when he was 98. He was a native of Sanqu (三衢; now Quxian, Zhejiang Province). His family practiced medicine for generations. His grandfather once was a Yu-I (Imperial Physicians) in the Tai-I Yuan (Imperial Academy of Medicine) and took part in compiling of *Ji Yan Yi Fang* (《集驗醫方》). When Ji-Shi Yang was young, he studied Confucianism for the Imperial Examination but failed for several times. Therefore, he decided to study the theories of Qi Bo and the Yellow Emperor from Confucianism to medicine. He took out all medical books collected by his family and worked hard on his medical study. He had a good knowledge of internal medicine, external medicine, pediatrics, and especially acupuncture and moxibustion. Ji-Shi Yang was once a physician for Prince Chu's family (楚王府良醫) and a Yu-I (Imperial Physicians) in the Tai-I Yuan (Imperial Academy of Medicine). He traveled across Fujian Province, Jiangsu Province, Hebei Province, Henan Province, Shandong Province, and Shanxi Province to practice medicine. He was an outstanding expert on acupuncture and moxibustion in the Ming Dynasty. Based on the book *Secret Essentials of Mystery of Health and Acupuncture and Moxibustion* (《衛生針灸玄機秘要》), which was passed on within his family, Ji-Shi Yang referred to a large number of books and combined his own clinical experience to





A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

complete *The Great Compendium of Acupuncture and Moxibustion*.²⁸

Shi Ma (馬蒔)

Shi Ma had a style name of Zhong-Hua (仲化) and called himself Xuan-Tai Zi (玄台子). He was a famous physician in the Ming Dynasty. He was a native of Shaoxing Prefecture, Zhejiang Province (now Shaoxing City, Zhejiang Province). He studied Confucianism during his early years. As he did not perform well in the Imperial Examination and was not in good health, he gave up Confucianism and started to study medicine instead. He spent his lifetime studying *The Inner Canon*. When he was working in the Tai-I Yuan (Imperial Academy of Medicine), he spent over 10 years annotating *Plain Questions* and *Magic Pivot* volume by volume,

and finally completed the nine-volume *Pattern Annotation and Hidden Essential Disclosure of Plain Questions of the Yellow Emperor's Inner Canon* (《黃帝內經素問注證發微》), and nine-volume *Pattern Annotation and Hidden Essential Disclosure of Magic Pivot of the Yellow Emperor's Inner Canon* (《黃帝內經靈樞注證發微》). According to *Information of Medical Books of China* (《中國醫籍考》), he also wrote *True Meaning of the Classic of Difficult Issues* (《難經正義》) and *True Meaning of Pulse Songs* (《脈訣正義》). Both of the two books were mentioned in *The Booklist of Medical Works* (《醫藏目錄》) but have been lost. Shi Ma's work was characterized by a detailed and rigorous explanation of the text and emphasized on clinical application. He was the first person to annotate chapter names, which made the outline clear at a glance.

Pattern Annotation and Hidden Essential Disclosure of Magic Pivot of the Yellow Emperor's Inner Canon is the first annotation edition for the full text of *Magic Pivot*, and the annotations on channels and points are especially complete. The book is divided into sections. The purpose and abstract are arranged at the beginning of the book and the annotations followed. Articles have clear structure and purposes are obvious. In particular, the annotations are fine and comprehensive. The book provides a clear and complete explanation to difficult texts of the canon. The author was good at using a canon to explain another canon. For example, he quoted the meaning of a chapter from *Plain Questions* to testify this book,

or quoted from *Magic Pivot* to testify the content of *Plain Questions*, which made the original text easy to understand. If further explanation was needed, he would revise the annotations. He also quoted the ideas of other doctors to annotate the article names in the *Plain Questions*. Doctor Ang Wang (汪昂) of the Qing Dynasty commented, “*Magic Pivot* did not have any annotation until the annotation by Xuan-Tai Ma (馬玄台) was published. He summarized and explained the channels and points in details, which is a great contribution for later generations”.²⁹

Xi-Yong Miao (繆希雍)

Xi-Yong Miao (from 1546 AD to 1627 AD) had a style name of Zhong-Chun (仲淳), and called himself Mu-Tai (慕台). He was a famous physician in the Ming Dynasty. He was a native of Changshu, Jiangsu Province and later moved to Jintan. Xi-Yong Miao had poor health when he was young, and his family was poor. When he was 17, he suffered from malaria and did not recover after a long period of treatment. Afterward, he read the *Essential Secrets from Outside the Metropolis* (《外台秘要》) and discovered a formula. He recovered after taking the formula. Therefore, he decided to study medicine. He read all kinds of books and made significant progress. His academic skills were quite excellent. Xi-Yong Miao was forthright and upright. He kept contact with a lot of famous doctors. They exchanged opinions and made progress. He also collected folk knowledge of medicines, effective medicines, and empirical formulas.



He would carry out clinical verification by himself and recorded effective ones. He was not only proficient in medical skills but also good at collecting medical formulas. He was famous as a doctor for 40 years. Xi-Yong Miao even believed that a doctor should observe carefully before using medicines. The nature of medicines would change as the soil changed. He knew much about medicinal processing and believed that the functions of decoction, powder, paste, fluids, and pills were completely different. He proposed that some medicines be steeped in alcohol to assist the development of the effects. Some medicines should be grounded by a file, then boiled in the alcohol, and sealed to gradually develop the effects. Xi-Yong Miao once edited *The Pulse Canon* written by Shu-He Wang and attached the *Mai Ying Tu Shuo* (《脈影圖說》). His works include *Annotation of the Divine Husbandman's Herbal Foundation Canon* (《神農本草經疏》), *Xian Xing Zhai Medical Notes* (《先醒齋醫學廣筆記》), *Supplement to Annotation of the Divine Husbandman's Herbal Foundation Canon* (《續神農本草經疏》), *Suitability of Formulas and Medicines Researched* (《方藥宜忌考》), *Zhong-Chun's Medical Cases* (《仲淳醫案》), and *Simple Formulas of Herbal Foundation* (《本草單方》).

Xian Xing Zhai Medical Notes recorded Xi-Yong Miao's experience in the practice of internal medicine, external medicine, gynecology, and pediatrics. It was recorded by his disciple Chang-Ru Ding (丁長孺). The content is detailed, clear, and suitable for practical use. For example, it



proposes that the root of infection in externally contracted diseases, either by cold damage or scourge epidemics, is the “invasion of evil qi from mouth and nose” (「凡邪氣之入必從口鼻」). The three principles for treating blood ejection recorded in the book is to move blood but not stanch bleeding (「宜行血不宜止血」), to supplement the liver but not quell it (「宜補肝不宜伐肝」) and to downbeat qi but not to downbeat fire (「宜降氣而不宜降火」). With respect to pharmacy, Xi-Yong Miao was proficient in the theory of herbal foundation. He spent about 30 years revising and annotating *Herbal Foundation Canon* (《本草經》) article by article and supplementing based on *Classified Materia Medica* (《證類本草》) to finally complete the *Annotation of the Divine Husbandman's Herbal Foundation Canon* (《神農本草經疏》).

Kun Wu (吳崑)

Kun Wu (from 1551 AD to 1620 AD) had a style name of Shan-Fu (山甫) and called himself He-Gao (鶴皋) or Cen Huang Zi (參黃子). He was a native of Chengtang, She County, Anhui Province. He was a famous doctor in Xin'an area in Ming Dynasty. Kun Wu was born in a family of scholars, as well as doctors. According to the records, both his grandfather Yuan-Chang (元昌) and his father Zhi-Tao (之韜) cultivated themselves with high moral standards, and his granduncle Zheng-Lun Wu (吳正倫) and his uncle Xing-Jian Wu (吳行簡) were famous doctors in the local area. Born in such a family, Kun Wu was rectified by the family culture.



When he was 15, he failed the Imperial Examination. This led him to consider that “if one could not serve the country, he could serve the people” (「不能兼善天下，然欲拯民於沉痾」) so he concentrated on studying medicine. As his family had numerous books, Kun Wu spent a lot of time reading. He formally acknowledged the famous doctor Wu-Ting Yu (余午亭) at that time as his master. He also traveled around and made friends with a lot of famous people. He traveled to Sanwu, Jiangsu, Zhejiang, Jingxiang, Yanzhao, etc. He visited and consulted talents of medicine and people who were better than him. As a consequence, his medical skills progressed significantly and he obtained a sound understanding of medical classics. Kun Wu not only had abundant knowledge and good memory but he was also diligent in studying. For decades, he studied medical works and absorbed in the experiences of his predecessors. Therefore, he acquired a good knowledge of both medical skills and medical theories. He clearly stipulated the writing format of medical cases. Kun Wu’s works include *Medical Remedies Researched* (《醫方考》), *Words on Pulse* (《脈語》), *Wu’s Annotation of Plain Questions of the Yellow Emperor’s Inner Canon* (《黃帝內經素問吳注》), and *Six Volumes on Acupuncture* (《針方六集》). He also wrote *Patterns and Treatment of Thirteen Branches of Medicine* (《十三科證治》), *Cen Huang’s Treatise* (《參黃論》), *On Pharmacy* (《藥纂》), and *Stone Needle Burning Researched* (《砭燭考》) which all have been lost.

Medical Remedies Researched is divided into 24 classes by disease



pattern and each class contains a few formulas. The book has a total of about 700 formulas. It is very convenient to search formulas by disease. When collecting formulas and medicines, the author made some screening and reserved the essences. Therefore, the formulas presented in the book are superior. The principles for diagnosis and medication value the prevention and treatment equally, and flexibly adopt oral administration and external application. The book focuses on clinical practice and has rich content. *Wu's Annotation of Plain Questions of the Yellow Emperor's Inner Canon* was the fourth annotation of *Plain Questions* after those from Yuan-Qi Quan (全元起), Bing Wang, and Shi Ma. First, it describes the meaning briefly and then annotates paragraph by paragraph. The book influenced the later generations greatly.³⁰

Si-Cheng Chen (陳司成)

Si-Cheng Chen had a style name of Jiu-Shao (九韶) and was a native of Haining (now Haining, Zhejiang Province) with dates of birth and death unknown. He was born in a family of doctors and was famous in the local area for treating sores. He had been fond of medicine since he was young. When he was 20, he took part in the Imperial Examination and failed. Therefore, he gave up Confucianism and started his career as a doctor. Si-Cheng Chen read all kinds of classics on medicine and took good care of his patients. He was skilled in treating diseases of the old, women, infants, and was especially good at external medicine. It was often heard that



syphilis occurred in south of the Five Ridges. However, none of the ancient medical books recorded this disease. Si-Cheng Chen studied it carefully and went to different areas of Jiangsu and Zhejiang to carry out an investigation. After 20 years, he gained abundant experience in treating syphilis. He created the treatment method of toxicity-reduced inorganic arsenic and wrote the *Secret Record for Syphilis* (《霉瘡秘錄》) which was the first work that systematically discussed syphilis. The book mentions that “the transmission of syphilis is not limited to sexual intercourse. Using the same toilet or talking to patients sometimes will result in infection, either the old or the young” (「梅毒傳染非止交媾一途，稟薄之人，或入市登園，或與患者接談，偶中毒氣，不拘老幼，或即病，或不即病。」). The sentence explains the transmission routes of syphilis. With respect to prevention, he proposed to adopt the method of separation. In terms of treatment, he proposed to use toxicity-reduced inorganic arsenic (減毒無機砷劑) and adopt the methods of clearing heat, resolving toxin, and killing insects to treat the disease.

Zhi-Wang Wu (武之望)

Zhi-Wang Wu (from 1552 AD to 1628 AD) had a style name of Shu-Qing (叔卿) and called himself Yang-Xing Mountain Man (陽行山人). He was a native of Lintong County, Shaanxi Province in the late Ming Dynasty. Zhi-Wang Wu studied Confucianism when he was young, focusing on classical works. When he got a little older, he started to read



medical works and often consulted his uncle Dai-Chuan Wu (武帶川) who was a famous doctor in the local area and learned a lot from him. Zhi-Wang Wu read extensively and carefully studied many medical works. He had excellent medical skills, especially in gynecology. Frustrated with his pursuit of a career as a government official, he returned to his hometown and started teaching. In his spare time, he either studied medicine or treated patients. He was diligent in writing. He enjoyed the same fame with Ken-Tang Wang (王肯堂) who was also a famous doctor at that time. In 1606 AD, an acute epidemic prevailed in his hometown. Zhi-Wang Wu followed the treatment method recorded in *Bao Chi Quan Shu* (《保赤全書》) and used the formula to save people in the local area. He was praised and loved by local people. Zhi-Wang Wu's works include *Compendium Yin Means Female* (《濟陰綱目》), *Zhen Ke Lei Bian* (《疹科類編》), *Compendium of Male Diseases* (《濟陽綱目》), *Dou Ke Lei Bian* (《痘科類編》), *Ci You Gang Mu* (《慈有綱目》), *Flag of Doctors* (《醫幟》), *Hai Fang Shu* (《海防疏》), *Miscellaneous Chapters* (《雞肋篇》), etc.

Compendium Yin Means Female is Zhi-Wang Wu's masterpiece. It discusses the diagnosis, principles and methods of gynecological diseases. The book is based on *The Level-Line of Gynecological Pattern Identification and Treatment* written by Ken-Tang Wang and is added with essences of other doctors during the recompilation. The book includes several medical cases for discussion. It comprehensively quoted the experience of different doctors of gynecology and demonstrated it. The



author divided the gynecological diseases of menstruation, vaginal discharge, pregnancy, and labor into 14 classes such as regulation of menstruation, menstrual block, flooding and spotting, and vaginal discharge. These theories have well analyzed and discussed the disease patterns, causes, logics, reasons, and treatments for diseases of gynecology in an organized ways with fine classifications. It has a reference value for clinical practice in the aspect of treating principles or prescription and medication.

Ken-Tang Wang (王肯堂)

Ken-Tang Wang (from 1549 AD to 1613 AD) had one style name of Yu-Tai (宇泰), and another of Sun-Zhong (損仲), and called himself Sun-An (損庵) or Nian-Xi Ju Shi (念西居士). He was a native of Jintan, Jiangsu Province. He studied Confucianism at first. When his mother fell ill, he decided to study medicine. After he cured his dying younger sister, he gradually became famous. More and more people came to seek his medical help. He stopped practicing medicine for about 20 years when he was working as a government official. When he was about 43, he returned to the medical field. Ken-Tang Wang had a wide circle of friends and a wide range of knowledge. He had certain knowledge of astronomy, calendar, calligraphy, painting, and Zen idea (禪學). He once discussed statecraft (數緯) with Dan Guo (郭澹), painting with Qi-Chang Dong (董其昌), calendar calculation with Ma-Dou Li (利瑪竇), and the Zen idea with Master Zeng-





Ken-Tang Wang
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 150 (From a collection at the Museum of the History of Traditional Chinese Medicine)

Bo (曾柏大師). Therefore, his works cover a wide scope, mainly including *The Level-Line of Pattern Identification and Treatment*, *Medical Treatise* (《醫論》), *Medical Identification* (《醫辨》), and *Medical Mirror* (《醫鏡》).

Ken-Tang Wang extensively read important medical works over the ages. Yin Gao (高隱) recorded and summarized ancient and modern formulas collected by Ken-Tang Wang and Wang's personal opinions and experience to compile *The Level-Line of Pattern Identification and Treatment*. It was divided into six parts: *The Level-Line of Miscellaneous Disease Pattern Identification and Treatment*, *Classified Miscellaneous Diseases Pattern Identification and Treatment*, *The Level-Line of Cold Damage Pattern Identification and Treatment*, *The Level-Line of Surgical Pattern Identification and Treatment*, *The Level-Line of Pediatrics Pattern Identification and Treatment*, and *The Level-Line of Gynecological Pattern Identification and Treatment*. The content of the book was clearly structured. It also gives the correct and detailed description of the shapes and anatomical positions of human skeletons. It records diseases such as



the measles, child fright, the wind, and anthrax. It recorded the first male carcinoma of the breast, as well as tumor removal, thyroidectomy, an operation for anal atresia, replanting of detached ear, and the formulas for miscellaneous diseases. Therefore, this book has high value in clinical medicine.

Shi-Gong Chen (陳實功)

Shi-Gong Chen (from 1555 AD to 1636 AD) had a style name of Yu-Ren (毓仁) and called himself Ruo-Xu (若虛). He was a native of Chongchuan, Donghai (東海崇川; now Nantong City, Jiangsu Province). He was a doctor of external medicine in the Ming Dynasty. Shi-Gong Chen was in poor health and often fell ill when he was young. He started to study medicine when he was a teenager. He extensively read medical books such as *Plain Questions* and *The Classic of Difficult Issues*. He was devoted to the study of external medicine for about 40 years. He was very experienced in clinical pattern identification. He could not only identify the patterns precisely but also used medicines accurately. He was proficient in using surgical tools, and each attempt produced a surprising effect. He saved numerous lives. He even created many methods and tools for surgical operations. Shi-Gong Chen collected empirical formulas from the Tang Dynasty to the Ming Dynasty and combined his years of clinical experience to complete the *Orthodox Manual of External Medicine* (《外科正宗》) which was a work on external medicine of traditional Chinese



medicine.³¹

Shi-Gong Chen valued medical ethics very much. In *Orthodox Manual of External Medicine*, he proposed “Five Don’ts and Ten Do’s of Doctors” (「醫家五戒十要」). He argued that doctors should treat patients equally even if they were rich or poor, and should respect them. Especially when treating female patients, doctors should protect their privacy and reputation, even if they were prostitutes. As a doctor, he was diligent in learning medicine, select formulas and medicines carefully, and live a simple life. In terms of medical expertise, Shi-Gong Chen paid special attention to the application of the spleen and stomach theory in sore treatment. He proposed to “open the door to drive the theft out” (「開戶逐賊」) and believed that “the No. 1 issue was to drive out the toxin” (「使毒外出為第一」). In surgical operations, he focused on the manipulation of knives, needles, and the erosion by medicine. For internal treatment, he emphasized that the spleen and the stomach were key points and proposed the use of methods of drawing and supplementing and to choose from internal treatment or the combination of internal and external treatment depending on actual situations of diseases.

You-Xing Wu (吳有性)

You-Xing Wu had a style name of You-Ke (又可) and was a native of Dongting Dongshan, Wu County, Jiangsu Province (now Suzhou, Jiangsu Province). He was a famous physician and an expert on warm diseases in



the later period of the Ming Dynasty and in the early stage of the Qing Dynasty. He had unique opinions on epidemic and obtained great achievements. He was proficient in medical skills, especially in treating warm diseases. You-Xing Wu lived in a disordered era and experienced the outbreak of epidemic diseases for several times. Thus, he paid great attention in observing and studying, recording and summarizing the causes, pathology, transmission paths, changes, and treatments of the epidemics occurred. Combined with his new opinions, he broke through the traditional boundary and completed the book *On Warm Epidemics* (《溫疫論》) in 1642 AD. He also wrote another volume for supplementation. The book is an important medical work on epidemic and has profound influences on experts in warm diseases in later generations. He had another work entitled *Record of Cold Damage* (《傷寒實錄》) which has been lost.

You-Xing Wu created the theory of pestilential qi (「癘氣」) for the etiology of epidemics. He realized that the diseases were not caused by wind, cold, summer heat or damp, but an abnormal qi between the heaven and the ground. He called such “abnormal qi” (「異氣」) as “pestilential qi”. He believed that the pestilential qi was substantial, and could be cured by medicine. He argued that different types of pestilential qi would cause different diseases and invade different visceral organs. He thought the occurrence of epidemic diseases depends on the strength of the pestilential qi, and more importantly, the exuberance and debilitation of the right qi of



human bodies. Also, different constitutions would demonstrate different clinical symptoms. Therefore, You-Xing Wu prescribed medicinal formulas based on the constitution.³²

Jie-Bin Zhang (張介賓)

Jie-Bin Zhang (from 1563 AD to 1640 AD) had a style name of Hui-Qing (會卿) and called himself Jing-Yue (景岳) and Tong Yi Zi (通一字). He was a native of Kuaiji, Shanyin. He studied *The Inner Canon* in his early years and read all kinds of books. When he was 14, he went along with his father to the capital city and learned medical skills from the famous physician Ying Jin (金英). After several years, he finished his apprenticeship. When he was young, he joined the army. As he did not realize his ambition, his family suffered from poverty and his parents got old. He returned to his hometown to focus on medicine. His works include *The Classified Canon* (《類經》), *The Illustrated Wings of the Classified Canon* (《類經圖翼》), *Wings to the Classified Canon* (《類經附翼》), *Jing-Yue's Complete Compendium* (《景岳全書》), *Record of Doubts* (《質疑錄》) and etc.

Although Jie-Bin Zhang was proficient in warming and supplementing, he was also an expert on the treatment method of cold. He mastered the theories of *The Book of Changes* and was able to combine philosophy with medicine. He also valued the close connections between medical theories and clinical medicine. Therefore, the yin and yang theory



and life gate theory proposed by him had inseparable connections with physiology, pathology, diagnosis, and treatment fields of medical science. With respect to diagnosis and treatment, he emphasized on pattern identification and proposed the theories of “two classes” (「二綱」) and “six transmutations” (「六變」). The two classes refer to yin and yang and the six transmutations refer to exterior and interior, vacuity and repletion, cold and heat. According to him, one can understand the disease conditions only by mastering the six transmutations. Because he was good at using cooked Rehmannia (熟地) and emphasized on root-securing with warmth and sweetness (甘溫固本), he was also called “Cooked Rehmannia Zhang” (「張熟地」) by later generations.

Xian-Ke Zhao (趙獻可)

Xian-Ke Zhao had a style name of Yang-Kui (養葵) and called himself Yi Wu Lü Zi (醫巫閭子). He was a famous physician in the Ming Dynasty and a native of Yin County (鄞縣; now Ningbo, Zhejiang Province). He never got tired of studying. He not only had excellent performance in medicine but also had a quite deep understanding of *The Book of Changes*. He once traveled to Qin, Jin, and Youzhou (幽州). He was diligent in writing medical works. He had noble medical ethics and treated the poor and the rich equally. He did not care about payment. People called him The Noble One (逸士) or the Travelling Immortal (遊仙). Xian-Ke Zhao wrote *Thorough Knowledge of Medicine* (《醫貫》),

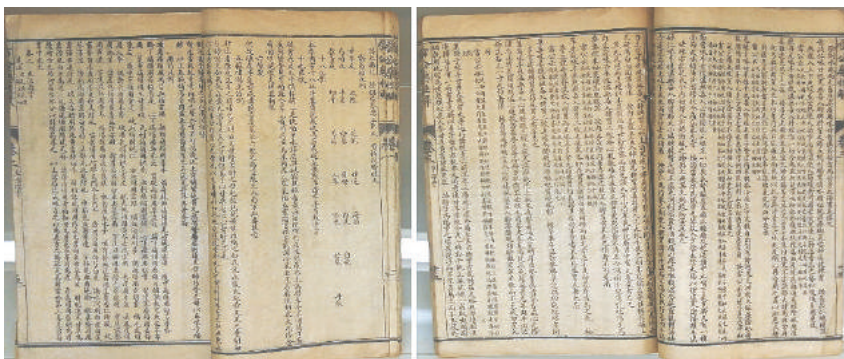


Copy of the Inner Canon (《內經鈔》), *Copy of the Plain Questions* (《素問鈔》), *Channels and Network Researched* (《經絡考》), *Orthodox Theory of Pulse* (《正脈論》), *Er Ti Yi Li* (《二體一例》), etc. The *Thorough Knowledge of Medicine* was his masterwork. Xian-Ke Zhao honored Dong-Yuan and Ji Xue (薛己). Admiring the warming and supplementing theories proposed by Ji Xue and influenced by *The Book of Changes* (《周易》) and *On Taiji Diagram* (《太極圖說》), he believed that earlier heaven fire was the root of life and health cultivation and treatment was based on consistency “practicing with the same principles all the time” (「一經貫之」). Thus, he named the work *Thorough Knowledge of Medicine*.³³ This book extended the theory of “life gate” (「命門」), gave detailed statement on the location, function, and significance of the life gate, established the water and fire theory of the life gate, created the theory of kidney water and life fire, proposed the theory that “strong fire leads to good survival chance, decreased fire lead to weak survival chance, and people died when the fire went out” (「火強則生機壯，火衰而生機弱，火滅則人亡。」) It also emphasized that the physiological functions of the human body depended on the fire of the life gate.

Zhong-Zi Li (李中梓)

Zhong-Zi Li (from 1588 AD to 1655 AD) had a style name of Shi-Cai (士材) and called himself Nian-E (念莪). He was a native of Huating,

Jiangsu Province (now Songjiang County, Shanghai City). He was a famous physician in the late Ming Dynasty and early period of the Qing Dynasty. His father was a government official who died when he was young. Edified by his family tradition, Zhong-Zi Li studied Confucianism in his early years and made a living with it. As he was in poor health and his families were wrongly treated by a vulgar healer, he decided to study medicine. Zhong-Zi Li studied classical medical works such as *The Inner Canon* and *On Cold Damage* and also absorbed the ideas of Zhong-Jing Zhang, Dong-Yuan Li, Wan-Su Zhang, etc. He studied medicine for nearly 50 years. Zhong-Zi Li wrote the *Indispensable Medical Reading* which summarized his previous experience in treating diarrhea. He also proposed the famous nine approaches to treat diarrhea in this book, including bland percolation, upraising, cool and clearing, coursing and disinhibiting, sweet relaxation, sour contraction, spleen drying, kidney the warming, and securing and astringency. *Essentials of the Inner Canon* (《內經知要》) was the most concise and pointing version of the selection and annotation of *The Inner Canon*, which was popular among beginners. *Shang Han Kuo Yao* (《傷寒括要》) recorded his experience in treating externally contracted heat diseases and illustrated his unique ideas on the changing rules of such diseases. He also wrote *Thunder God Medicinal Nature* (《雷公藥性解》), *Ben Cao Tong Xuan* (《本草通玄》), *Bing Ji Sha Zhuan* (《病機沙篆》), *Zhen Jia Zheng Yan* (《診家正眼》), *Shan Bu Yi Sheng Wei Lun* (《刪補頤生微論》), *Zhong-Zi Li's Medical Cases* (《李中梓醫



Explanation of the Properties of Drugs Made by Lei Gong
A collection from the Exhibition Room on Li-Fu Chinese Medicine
located at China Medical University, Taiwan (Photographed by Dr.
Jaung-Geng Lin)

案》), etc. Among which, *Zhen Jia Zheng Yan*, *Ben Cao Tong Xuan*, and *Bing Ji Sha Zhuan* were compiled together to become the book series named *Shi Cai San Shu* (《士材三書》).³⁴

Zhi-Wen Shen (沈之問)

Zhi-Wen Shen, with dates of birth and death unknown, called himself Hua Yue Wu Wei Taoist (花月無為道人). He combined the secret formulas of his family and the clinical experience of his grandfather Yi-Mei Shen (沈怡梅), his father Shi-Xuan Chen (沈史軒), and himself to complete the *Jie Wei Yuan Sou* which was a work on leprosy. Zhi-Wen Shen had an abundant clinical experience. The book presents some original opinions on the causes, diagnoses, treatment, and prevention methods of leprosy. It proposes 36 names of leprosy patterns and lists about 80 medicines. It is



flexible in the usage of medicines and is opposed to using one formula to treat different patterns. Zhi-Wen Shen followed the traditional ideas in academic study but was not confined by them. He proposed that “people should not be constrained by knowledge in paper” (「隨集隨證」). He was strict in academic study. He would “widely test medicines and only record those with special functions” (「旁搜考試驗而奇異者始錄。」).

Guan Jiang (江瓘)

Guan Jiang (from 1503 AD to 1565 AD) had a style name of Min-Ying (民瑩) and was a native of the She County (歙縣; now Anhui Province) in the Ming Dynasty. The *Classified Case Histories of Famous Physicians* written by him is the first classified work on medical cases. Guan Jiang was not determined to be a doctor at the very beginning. As he failed the imperial examinations for several times, and was not in good health, he gave up pursuing a career as a government official and decided to study medicine instead. He lived his life as a physician, as well as a Confucian scholar. The first draft of the *Classified Case Histories of Famous Physicians* was completed in the 31th Jiajing Year (1552 AD) but was not published. Afterward, his son Ying-Su (應宿) traveled in half of China's territory and collected empirical formulas of famous physicians. After spending 19 years revising the draft for five times, the *Classified Case Histories of Famous Physicians* was finally published. The content of the book was divided into 205 classes. It records the medical cases of



Guan Jiang and Ying-Su. The treatment methods recorded include external treatment for internal diseases, internal treatment for external diseases, and the combination of external and internal treatment. The book also records special treatments such as acupuncture, moxibustion, medicinal paste, medicinal wine, medicinal bath, nasal insufflation, ear drop, laryngeal insufflation, mouthwash, tooth rub, ejection, and umbilical compress, their suitability, and the accurate mastery of patients' conditions. The book is the first medical work that summarizes medical cases of past dynasties.

Guan Jiang believed that classics were connected with the history. Classic medical works such as *The Inner Canon* and *The Classic of Difficult Issues*, and the medical cases of Bian Que (扁鵲), Cang Gong (倉公) and other famous physicians in the history would yield better results and advantages if they could verify each other. Rather than indulging in an empty talk of medical theories, it's better to conclude and summarize medical cases of previous famous physicians for the reference of later generations. Therefore, in the spare time of his clinical career, Guan Jiang collected biographies of philosophers and unofficial history to compile this book from anyone he could, whether be it from noblemen or ordinary people.³⁵



References

1. Xiang-Ping Chen (1994). Stylistic Rules and Layout of *Collected Essentials of Species of Materia Medica*. *Journal of Traditional Chinese Medicine*. 35(4). pp. 241-243.
2. Jing Wu (2003). Inspiration from Chun-Fu Xu's Gathering Reference Books When Editing *Great Collection of Ancient and Modern Medicine*. *Journal of Jiangxi University of Traditional Chinese Medicine*. 15(3). pp. 71-73.
3. Ding-Hua Zhu (2007). The Academic Features of *Compendium of Medicine* Written by Ying Lou. *Journal of Traditional Chinese Medicine*. 48(8). pp. 88-89.
4. Wang Shan (2002). On the Editing Methods and Academic Features of *Compendium of Medicine*. *Journal of Practical Traditional Chinese Medicine*. 18(10). pp. 50-51.
5. Zheng-Qi Pu (1995). *Preliminary Exploration on the Introduction to Medical Science* by Yan Li. *Jiangxi Journal of Traditional Chinese Medicine* (1). pp. 2-3, 5.
6. Ping Meng, Jing Wang & Jian-Zhang Chen (2012). Contribution of *Curative Measures for All Diseases* to Traditional Chinese Medicine Psychology. *Jiangxi Journal of Traditional Chinese Medicine*. 43(3). pp. 3-4.



7. Ying-Ao Yu (2008). Introduction of Two Medical Series by Ken-Tang Wang Editing, *Journal of Traditional Chinese Medicinal Literature*. 26 (6). pp. 1-4.
8. Xin-Rong Guo & Xiao-Wei Ma (2012). Analysis of Academic Thoughts of Ji-Zhou Yang and His Book *Compendium of Acupuncture and Moxibustion*. *Journal of Guiyang College of Traditional Chinese Medicine*. 34(5). pp. 1-2.
9. Xiao-He Wang (2000). Ji-Shi Yang's Contribution to the Science of Acupuncture and Moxibustion. *Journal of Shanxi College of Traditional Chinese Medicine*. 1(4). pp. 15-17.
10. Ri-Yang Gao (2006). Literature Review and Digitalization of the Classified Formula of *Standards for Diagnosis and Treatment*. *Research of Chinese Medicine*. 19(7). pp. 52-54.
11. Chun-Yan Li (2011). Exploration on the Food Nursing Thoughts of *Orthodox Manual of External Medicine*. *Guiding Journal of Traditional Chinese Medicine and Pharmacy*. 17(6). pp. 116-117.
12. Li Su (2006). Guide of *Synopsis of Treating Women's Diseases*. *Journal of Traditional Chinese Medicinal Literature*. 24(3). pp. 46-48.
13. Hui Che & Ying Jing (2007). Contribution of *Secret Record for Syphilis* to Syphilis Treatment. *Journal of Changchun University of Traditional Chinese Medicine*. 23 (1). pp. 6.
14. Zhi-Ming Wu & Yu Shyr (2004). On Pestilence's Understanding of *Epidemic Diseases*. *Journal of Yunnan College of Chinese Medicine*.



- 27(1). pp. 11-12.
15. Zhi-Hong Liu (2012). *On Examining Yaohan's Treatment of Eye Diseases. China Practical Medicine. 7(33). pp. 242.*
16. Ling Long (2012). Si-Gong Dai's Academic Thoughts About the Treatment of Melancholia and Phlegm-Fluid Retention Syndrome. *Journal of Shanxi College of Traditional Chinese Medicine. 13(3). pp. 22-23.*
17. Er-Liang Wang & Pan-Ji Cheng (2010). Lü Wang's Academic Thoughts of Externally Contracted Heat Disease. *Shanghai Journal of Traditional Chinese Medicine. 44 (12). pp. 13-16.*
18. Guo-Dai Chen (2003). Introduction of Medical Works Block-Printed by Zong-Li Xiong, *Chinese Journal of Medical History. 33(1). pp. 27-29.*
19. Yan Cao (1998). On Mao Han's Dietary Therapy. *Oriental Medicated Diet (1). pp. 4.*
20. Bo Xie, Chu-Chieh Chen, Hua-Feng Pan, Xin-Liang Zhang & Yi-Chong Feng (2007). Lun Wang's Opinions on Essence in Treatment of Phlegm Syndrome. *Jiangsu Journal of Traditional Chinese Medicine 39(12). pp. 13-15.*
21. Wen-Xuan Yao & Gui-Rong Liu (2012). Textual Research on Ji Xuei's Applying Eight-Ingredient Pills to Tonify Kidneys. *Journal of Sichuan of Traditional Chinese Medicine. 30 (7). pp. 30-31.*
22. Ying-Juan Wen & Gui-Juan Pan (2011). A Confucian Doctor Quan



- Wan in Ming Dynasty. *Negative*. 2 (5). pp. 22-24.
23. Jun-Ling Zhao (1992). Wu Gao's Contribution to Science of Acupuncture and Moxibustion. *Tianjin Journal of Traditional Chinese Medicine* (1). pp. 39.
24. Jun Zhao (2012). Chun-Fu Xu's Study on Internal Injuries. *Journal of Gansu College of Traditional Chinese Medicine*. 29 (4). pp. 16-17.
25. Xiang-Kun Ai (2008). Analysis of Yan Li's Treating Paralysis. *Guangming Journal of Chinese Medicine*. 23 (2). pp. 149-151.
26. Li Xiao, Yu-pang Cheung & Yu Zheng (2012). Analysis of the Experience of Yi-Kui Sun's Treating Phlegm Syndrome. *Journal of Traditional Chinese Medicine*. 53 (23). pp. 86-87.
27. Shin-Jih Wang (2008). Introduction the Viewpoint of You-Zhi Fang to *On Cold Damage*. *Journal of Fujian College of Traditional Chinese Medicine*. 18 (5). pp. 53-54.
28. Xiao-He Wang (2000). Ji-Shi Yang's Contribution to Science of Acupuncture and Moxibustion. *Journal of Shanxi College of Traditional Chinese Medicine*. 1 (4). pp. 15-17.
29. Yu-Jun Yang (2000). Features of the Annotations in *Magic Pivot* by Shi Ma. *Zhejiang Journal of Traditional Chinese Medicine*. 35 (1). pp. 28-29.
30. Meng-Xi Luo & Jian Wang (2011). Academic Features of *Medical Formulae Investigations* by Kun Wu. *Journal of Anhui Traditional Chinese Medical College*. 30 (6). pp. 14-16.



31. Ping Wang (2011). On Acupuncture Therapy Techniques of *Orthodox Manual of External Medicine* by Shi-Gong Chen. *Journal of Sichuan of Traditional Chinese Medicine*. 29 (1). pp. 39-40.
32. Yan Zhao & Hua-Yun Yu (2011). On You-Xing Wu's Formula for Treating Epidemic Diseases. *Journal of Liaoning University of Traditional Chinese Medicine*. 13 (8). pp. 150-151.
33. Yong-Nan Wang (2010). A Discussion on *Thorough Knowledge of Medicine* by Xian-Ke Zhao. *Guangming Journal of Chinese Medicine*. 25 (6). pp. 1083-1084.
34. Bei-Bei Wang (2011). Textual Research in the Existing Works and Their Versions Written by Zhong-Zi Li. *Yunnan Journal of Traditional Chinese Medicine and Materia Medical*. 32 (7). pp. 93-94.
35. Zhen-Lian Jiao (2009). Comments on Huan Jiang's Life Stories. *Journal of Anhui Traditional Chinese Medical College*. 28 (1). pp. 12-14.





Chapter 9 *Medical Science in the Early and Middle Period of Qing Dynasty* (from 1644 AD to 1840 AD)

Section 1 Historical Background

During the period of late Ming Dynasty, the politics was dysfunctional, and people suffered from poverty. Zi-Cheng Li (李自成) led a peasant uprising, and made their entrance into Beijing. This forced the Emperor Sizong of Ming (明思宗) to hang himself. Ming Dynasty existed only in name since then. Afterwards, San-Gui Wu (吳三桂) allowed the soldiers of Qing to pass through the Shanhai Pass. The army of Manchu (滿族) seized Beijing, and established the Qing Dynasty which was later called “Man Qing” (「滿清」). The imperial court of Qing suppressed the volunteer armies in local areas and the armed forces of South Ming Dynasty; it also summoned the minority groups in Mongolia (蒙古), Xinjiang (新疆), and Tibet (西藏) to surrender, gradually seizing the whole China. During the Kangxi years (康熙), the central government settled the revolts of the three feudatories (三藩之亂), sent army to Taiwan, and further unified the whole China.

The central government of the Qing Dynasty firmly implemented the



feudal centralization, and set up the “Conference of Princes and Grand Ministers” (「議政王大臣會議」) which was later called “Council of State” (「軍機處」). Since the Conference was the highest decision-making body of the government, its decisions preceded over that of the Grand Secretariat (中央內閣); it also reported directly to the emperor and was responsible for assisting him on making decisions regarding various policies. Its members were all nobles of Manchu. With respect to the local governing bodies, a hierarchy of officials were set up, including Zong-Du (總督; Governor-General), Xun-Fu (巡撫; Grand Coordinators), and Bu-Zheng (布政; Commissioner). Either Manchu or Han people were appointed to these positions; however, the Han people were generally appointed to positions under the level of Prefect of a Superior Prefecture. In addition, the Qing Government closely watched the general public. It implemented the “Security Groups and Tithing System” (「保甲制度」) to guarantee local security. The system involved ten neighboring households clustered together to constitute a registration unit (Pai); ten registration units, then constituted a tithing (Bao-Jia), and ten tithings constituted a security group (Tou-Pai). A local Di-Zhu (地主; landlord) and Zu-Zhang (族長; clan leader) acted as the head of the tithing and security group respectively. Both were responsible for monitoring and supervising their respective groups. The Qing Government also revised laws, including law codes of previous dynasties, and added the measures of “Ten Do’s and Ten Don’ts” (「十從十不從」). An example of a portrayal of such policy



is the “keep your hair or head, choose one” (「留頭不留髮，留髮不留頭」). In order to solve the long-standing abuse of land separation, the imperial court of Qing discontinued the hereditary system of the aboriginal offices, and implemented the policy of “changing hereditary office to circulating office” (「改土歸流」). As a result, the central government was able to strengthen the direct governance of the minority groups, and thus guaranteed the full development of the country’s economy and the cultures of all nationalities in the early and middle period of Qing Dynasty; which was beneficial for the establishment of a unified empire.

With regards to the social economy, during the rule of Emperor Shunzhi (順治), Manchu nobles seized land and captured Han people to be their slaves. It caused great resentment from the Han people, and those who escaped became fugitives. A short while after, Emperor Kangxi (康熙皇帝) took the throne; he forbade the illegal seizing of land. It was not until the rule of Emperor Yongzheng (雍正皇帝) that the government had abolished the inferior citizen system, and finally converted the slavery system of Manchu to feudal system. The imperial court of Qing sanctioned corrupt officials, encouraged land cultivation, reduced free labor obligations and taxes, and constructed irrigation works. As a consequence, the society gradually stabilized, and began to prosper. Since the population expanded greatly in the beginning of Qing Dynasty, it became difficult to manage the changes in the population. In 1712 AD, Emperor Kangxi issued the order of “never increasing the household tax” (「丁稅永不增



加」) to reduce the cost of levy. Consequently, when Emperor Yongzheng took the throne, he implemented the policy of “merging household tax into land tax” (「攤丁入畝」). It combined the poll tax to feudal land tax and were then, levied together. This did not only guarantee the revenue of the country, but also relieved the people of the burden of paying taxes. As a consequence, the national population increased significantly, and the social economy developed smoothly. From the ruling of Emperor Kangxi to the middle period of the ruling of Emperor Qianlong (乾隆皇帝), Qing Dynasty experienced its flourishing age.

During the middle period of Emperor Qianlong rule, corruption prevailed. This is because the Qing emperor Gaozong (清高宗) craved for greatness and success, lived an extravagant life, and trusted his favored official He-Xen (和珅) for 20 years; who would later be known as most corrupt Chinese official. The rampant corruption gradually led to the bankruptcy of the national treasury, and to the decline of the country’s prosperity. When Emperor Jiaqing (嘉慶皇帝) took over the throne, he confiscated over 800 million Liang silver from the greedy official He-Xen. However, the reigning emperor kept the fortune for himself rather than returning it to the national treasury. As a consequence, managing the national finances became difficult. The depletion of the national budget, inadequate food production, and increased in the population resulted in poverty amongst the general public which deepened the gap between the rich and the poor, and worsened the social conflicts.



Between the late period of Ming Dynasty and the beginning of Qing Dynasty, due to the social turmoil, several free-thinkers emerged. Some of these were Yi-Zhi Fang (方以智), Fu-Zhi Wang (王夫之), Yan-Wu Gu (顧炎武), and Zong-Yi Huang (黃宗羲); all were determined to change the society. Their aspiration did not change and continued under the Qing Dynasty. They promoted “rebellion against Qing” (「反清」), and valued the idea that “knowledge should be beneficial for national affairs” (「經世致用」). They explicated the physical principle of “qi”, and objected to the Taoist of Sung and Ming Dynasties which indulged in empty talks of “heart, principles, nature, and life”. However, as Qing Dynasty implemented strict literary inquisition, the academic development stopped, and thinkings and cultures also ceased to develop. Emperor Kangxi greatly promoted the Taoist of Sung and Ming Dynasties to consolidate the ruling, and wrote an “imperial decree” (「聖諭」) by himself to advocate his ideas and to worship Confucian scholars such as Confucius (孔子) and Xi Zhu (朱熹). Further, Emperor Yongzheng greatly promoted the book *Allocation of Imperial Decrees* (《聖諭廣訓》), and stipulated that everyone should be able to recite it. As a result, Confucian officials were assigned in important government positions. In addition, the imperial court issued several books widely such as *A Complete Collection of Xi Zhu's Works* (《朱子全書》) and *Xing Li Jing Yi* (《性理精義》). Cruel literary inquisition policy was implemented to punish scholars who rebelled against the Qing Dynasty. This greatly hindered the development of



academic thinking and cultures of modern China. Due to the dire situation of the literary world, most of the scholars devoted themselves to reading books, and kept distance from politics; this resulted in the emergence of “Qian Jia Textual Research School” (乾嘉考據學派). On the other hand, during the rule of Emperor Yongzheng and Emperor Qianlong, the government revised the two great literary works entitled, *A Collection of Ancient and Modern Books* (《古今圖書集成》) and *Si Ku Quan Shu* (《四庫全書》), as a way of drawing over scholars and constraining them. The government of Qing confiscated a large amount of literature to counter and prevent the spread of the idea that “knowledge should be beneficial for national affairs”. The Qing Dynasty wanted to obtain “thinking unification” and so, the books, along with other literary works, were confiscated and destroyed after their contents were deleted and revised.

During the middle period of Qing, the government implemented the policy of isolationism which hindered the exchange of culture between China and foreign countries. Emperor Shunzhi (順治皇帝) and Emperor Kangxi once gave courteous reception to missionaries who came to China, such as Ruo-Wang Tang (湯若望) and Huai-Ren Nan (南懷仁), during the period of late Ming Dynasty.. Emperor Kangxi even invited missionaries to give lectures in the palace making him the emperor with the most scientific knowledge. Later, the missionaries were driven out of China due to their internal disputes with Emperor Kangxi. At the time of Emperor Qianlong’s rule, the country was secluded from the outside world and the citizens were



forbidden to travel abroad for trade and investigation. This is because the emperor was concerned that foreign ideas would obscure the country's existing system and to also avoid conflicts in the frontier land. Anyone who violated the rule, whether from the general public or government officials, will be decapitated. In addition, apart from confiscating goods and assets, the heads of the tithing and security group to which the accused was associated with, might be punished. The seclusion policy, which aimed at protecting sovereignty, limited the opportunities for foreign exchanges, and hindered all opportunities for cultural and economic exchanges resulting in China being left behind in scientific advancements by western countries.

The development of traditional Chinese medicine was a complicated situation in the early and middle period of Qing Dynasty. The development of traditional Chinese medicine from previous dynasties was mostly concentrated on the progression of overall medical theories and on the clinical treatment and practice of different medical branches. Acquiring academic ideas from previous dynasties, Qing Dynasty had shaped a unique system of combating warm-heat disease and epidemic diseases. The government widely promoted smallpox inoculation, which significantly reduced death rate, and successfully prevented the spread of infection. Through China's medical exchanges with foreign countries, anatomy, pharmacology, bovine vaccination, and surgical operation of the western medicine were introduced to the country, and started a massive interchange of ideas between Chinese medicine and western medicine.



Section 2 An Introduction to the History of Traditional Chinese Medicine

Development of Traditional Chinese Medicine

Before the opium war, Qing Dynasty followed the medical education system of Ming Dynasty. Teachers were divided into internal and external teachers, two for each position, and were selected from Yu-I (御醫; Imperial Physicians) and Li-Mu (吏目; clerks); they are expected to exhibit excellence in both character and academic learning. Internal teachers were responsible for medical book study of eunuchs in the pharmacy, while external teachers were responsible for teaching new recruits of the Tai-I Yuan (太醫院; Imperial Academy of Medicine), who were children of medical officials, and undergraduate students. Students were divided into Manchu and Han people. The former need to be recommended by a Zuo-Ling (佐領; Commander), and guaranteed by a medical official from the Tai-I Yuan (Imperial Academy of Medicine); while the latter need to be recommended by an official, who has above level 6 ranking and came from the same place as the student, and be tested by Shou-Ling-Guan (首領官; Staff Supervisor). Those who had prior knowledge of medical theories and spoke the Beijing language would be admitted to study, and will then be called I-Shen (醫生; Physician). The main teaching materials were



Essential Prescriptions of the Golden Coffer (《金匱要略》), *The Inner Canon* (《內經》), *On Cold Damage* (《傷寒論》), and *Herbal Foundation Compendium* (《本草綱目》). Later, *The Golden Mirror of Medicine* (《醫宗金鑒》) and other relevant medical works were also added. Generally, those who were called I-Shi-Zhe (醫士者; Physician) were undergraduates who passed the exam by the Li-Bu-Tang-Guan (禮部堂官; Senior Official of the Ministry of Rites) after three years of study, but were not chosen for service. They would need to take another exam after another set of study years. If they had finished the study for over one year, took the seasonal exams for three times, and gained exceptional scores, they were allowed to report to the Ministry of Rites to fill-in the Shi-Liang-I-Shen (食糧醫生; Food Physician) position.

During the Qing Dynasty, apart from the medical education provided by the central government, medical education institutions were also present in local areas. Although these institutions were small, an examination system was also generated for them. Officials in these institutions include the Principal of a Prefectural Medical School, Principal of a Departmental Medical School, and Principal of a District Medical School which were all positions under level 9. In 1723 AD, Emperor Yongzheng issued an imperial decree to ensure that every Xun-Fu (巡撫; Grand Coordinators) of each province would carefully examine their I-Shen (Physician). Each province could recommend any physician who has proficiency in *Annotation of the Inner Canon* (《內經注釋》), *On Cold*



Damage, and Herbal Foundation Compendium, to become an I-Xue-Guan (醫學官; official medical teacher). Benefits included three years' worth of government salary and promotion to Yu-I (Imperial Physicians) to serve in the Tai-I Yuan (Imperial Academy of Medicine), if they worked hard, acted cautiously, and showed righteous character.

The Warm Disease Theory (溫病學說) was commonly studied during the period of Qing Dynasty. After You-Xing Wu (吳有性), more and more physicians started to study warm diseases. Most were familiar with the causes, symptoms, and treatments of warm diseases., but there was absence of an established agreement on the pathologic mechanism of these diseases. Several theories have been suggested such as the *General Ideas on Epidemics* (《廣瘟疫論》) written by Bei-Shan Dai (戴北山), Epidemic Theories of Jia-Yan Yu (喻嘉言) and Ping-Bo Chen (陳平伯), Warm and Heat Epidemic Theory of Yang-Jun Zhou (周揚俊), and the Epidemic Theory of Shi-Yu Yu (余師愚). Four Experts of warm diseases in the period of Qing Dynasty surfaced which were: Ju-Tong Wu (吳鞠通), Tian-Shi Ye (葉天士), Meng-Ying Wang (王孟英), and Sheng-Bai Xue (薛生白). They were outstanding doctors who were representatives of schools specializing in warm diseases. Centered by Suzhou, Jiangsu Province and Zhejiang Province fostered many experts in warm diseases during the period of Ming and Qing Dynasties. It was mainly because this area had a well-developed economy and culture, science advancement, dense rivers, convenient traffic and high population. Also, all these factors had the



capacity to contribute to the occurrence of epidemics. During this period, the Warm Disease Theory developed its own medical formulas, methods, principles and systems. It supplemented the Cold Damage Theory (傷寒學說) greatly enhancing the clinical effects of traditional Chinese medicine.

Another major medical development during the Qing Dynasty was the flourishing of medical works such that publications and annotations increased. A large amount of annotated editions of classic medical works appeared. Many physicians at that time were also engaged in the publication of several editions of medical book series, and unabridged, and classified books. Several formula books and medical books of enlightenment were also published. Among them was the *Lectures of Doctors in Wu* (《吳醫彙講》) which started the age of open academic discussion in the medical field. It was also the first medical journal in the history of traditional Chinese medicine and was characteristic of modern journals. At that time, in Changzhou (長洲) area, the academic atmosphere was sound; talents gathered, culture was developed, and there were many talented physicians. The *Lectures of Doctors in Wu* was created by Da-Lie Tang (唐大烈) in order to discover individuals with excellent medical skills. He believed that the best way to improve such skills was to discuss medicine and share the experiences publicly.



Medical Exchanges

- Korea

In the 61st Kangxi Year of Qing Dynasty (1722 AD), Emperor Kangxi sent several imperial physicians to Korea to treat King Gyeongjong (景宗王) of his illness; however, the king's condition did not improve. In October of the same year, interpreter Xia-Chen Huang (黃夏成) of Qing Dynasty gave them fifty-one copies of *Mysterious Pearl of Red Water* (《赤水玄珠》) as gifts before he returned from Korea. In the early and middle period of Qing Dynasty, Chinese medical works such as *The Gateway to Medicine* (《醫學入門》), *The Orthodox Tradition of Medicine* (《醫學正傳》), and *Return-of-Spring for All Diseases* (《萬病回春》) greatly influenced the medical developments of Korea. *The Golden Mirror of Medicine* (《醫宗金鑒》) which was published in the late 18th century during the Qing Dynasty was also distributed to Korea. In addition, China's introduction of the smallpox vaccination to Korea started the development of the latter's preventive medicine. *Conclusions of Smallpox* (《痘疹定論》) written by Chun-Gu Zhu (朱純嘏) and *Assembly of Ideas on Smallpox* (《痘疹會通》) written by Xiang-Tian Zeng (曾香田) were also printed and circulated in Korea, which highlighted China's skills in human variolation, and promoted its popularity and development.

Korean medical books were also introduced in China during the Qing



Dynasty. One example is the 25-volume *Precious Mirror of East Medicine* (《東醫寶鑑》) which was given by Korea as a gift to the emissaries of the Qing Dynasty during the 3rd Qianlong Year (1738 AD). Other medical works from Korea that were distributed in China include *Guang Ji Mi Ji* (《廣濟秘笈》) compiled by Jing-Hua Li (李景華), *Ji Zhong Xin Bian* (《濟眾新編》) written by Ming-Ji Kang (康命吉), and *Yi Zong Sun Yi* (《醫宗損益》) written by Du-Yuan Huang (黃度淵). Forensic books of China such as *Records of Evening Injustice* (《平冤錄》), *Records for Washing Away Injustice* (《洗冤錄》), and *Records of No Injustice* (《無冤錄》), have been supplemented and revised by Korean medico legist Shi-Kui Ju (具實奎) to create the *Supplement to Records of No Injustice* (《增修無冤錄》).

In the middle of the 19th century, Korea came into contact with western medicine through China. The information was brought from China to Korea by Han-Qi Cui (崔漢綺) who was an expert in Substantial Theory. Early Chinese versions of western medicine books included *New Theory on Women and Infants* (《婦嬰新說》), *Quan Ti Xin Lun* (《全體新論》), *Bo Wu Xin Bian* (《博物新編》), *Brief Introduction to the Western Medicine* (《西醫略論》), and *New Theory on Internal Medicine* (《內科新論》). These books were the first to enlighten Koreans with western medicine.



• Japan

The medical exchanges between China and Japan showed no significant difference from the Ming Dynasty to Qing Dynasty. However, there were still a number of Chinese medical doctors going to Japan to practice or teach medicine during the Qing Dynasty. One of whom was Rong-Yu Ma (馬榮宇) who was a Tang-Tong-Shi (唐通事; Interpreter), and naturalized himself to become a Japanese in 1627 AD. His son, Shou-An (壽安) practiced medicine in Osaka, Japan, and was a well-known Beishan Taoist (北山道長). Shou-An wrote almost ten medical books including *Bei-Shan's Medical Record* (《北山醫案》). Another was Li Dai (戴笠), who had a style name of Man-Gong (曼公); he was a famous doctor during the period of late Ming and Early Qing (from 1596 AD to 1672 AD). He was a disciple of Ting-Xian Gong (龔廷賢) and was especially proficient in treating smallpox. On the 10th Shunzhi Year (順治; 1653 AD), Li Dai realized there was no hope rebuilding the Ming Dynasty; thus, he crossed the ocean and took refuge in Japan. While he was there, he taught medical skills on the treatment of smallpox to his disciples and wrote twelve medical books, including *Hundred Ways to Kill Smallpox* (《痘疹百死傳》), *Treatment for Smallpox* (《痘疹治術傳》), and *Women's Treatment for Smallpox* (《婦人治痘傳》). During the Kuanzheng years (寬政; from 1789 AD to 1800 AD), Rui-Xian (瑞仙), the fourth generation under Ikeda (池田), was promoted to medical official since he was very proficient in treating smallpox. He was responsible for



setting up the first treatment branch of smallpox in Japan.

In Kyōan years of Japan (慶安; from 1648 AD to 1652 AD), famous Chinese doctor Ming-De Chen (陳明德) (native of Jinhua Prefecture, Zhejiang Province), who later changed his name to Ying Chuan Ru De (穎川入德), was employed to work in Nagasaki (長崎), Japan. He had excellent medical skills, and his prescriptions worked every time. He was especially good at treating pediatric diseases and wrote the *Heart's Record of Medicine* (《心醫錄》). People in Nagasaki admired and acknowledged him for his medical skills, and asked him to stay in Japan. During that same time, doctor Ning-Yu Wang's (王寧宇) fame spread in Japan. He practiced medicine in Edo (江戸) and several people went to him to study medicine and learn from him. Some of his disciples were medical officials of Bakufu (幕府). Medical school of Wang was popular at that time.

In Kangxi years of Qing Dynasty, several Chinese doctors went to Japan. Some of them were Doctor Wen-Qi Lu (陸文齊) from Hangzhou who went to Japan in 1703 AD; Doctor Zai-Nan Wu (吳載南) from Suzhou who arrived in Japan in 1718 AD; Doctor Zhen-Xian Chen (陳振先) from Suzhou and Doctor Lai-Zhang Zhu (朱來章) from Tingzhou, Fujian Province who both went to Japan in 1721 AD; Doctor Qi-Lai Zhou (周歧來) from Suzhou who arrived in Japan in 1725 AD; and in the same year, Lai-Zhang Zhu who visited Japan again with his sons, Pei-Zhang Zhu (朱佩章) and Zi-Zhang Zhu (朱子章); and Doctor Song-Yang Zhao (趙淞陽) from Suzhou who went to Japan in 1726 AD. Among these doctors, the



most famous were Zhen-Xian Chen and Zi-Zhang Zhu. When Zi-Zhang Zhu arrived in Japan, Zuiken (栗本瑞見) and Imaoji Dosan (今大路道三), and medical officials of the Bakufu, wrote to him to seek advice because of his excellent medical skills. The Bakufu also ordered his officials to seek for Zi-Zhang Zhu's advices for any medical concerns. Unfortunately, Zi-Zhang Zhu died of an illness a year after his arrival. In comparison, when Zhen-Xian Chen arrived in Nagasaki, Japan, he visited the suburbs, collected one-hundred sixty-two medicinal herbs, and wrote the *Record of Functions* (《功能書》) which was renamed *Zhen-Xian Chen's Record of Functions of Medicinal Herbs* (《陳振先藥草功能書》) by Inomoto Chayon (井元成).

- European and American Countries

Although China experienced dynasty replacement from Ming to Qing, missionaries who arrived in China during the Ming Dynasty still stayed to do missionary work during the Qing Dynasty; they cooperated fully with the imperial court of Qing and acted as the emissaries for cultural exchanges of China and western countries. Therefore, China was still able to continue its medical exchanges with other foreign countries.

Medical exchanges between China and other countries became very frequent in the period of late Ming and early Qing. At that time, China obtained most of its knowledge on western medicine through the missionaries. However, under the ruling of Emperor Yongzheng, the



policies of seclusion and religion prohibition were implemented; missionaries who had practiced medicine and preached their religions for years in China were expelled. As a consequence, they started to study Chinese medicine and pharmacy, and further spread traditional Chinese medicine to Europe. Among the knowledge of traditional Chinese medicine, acupuncture and moxibustion, herbal foundation, and pulse theory were mostly taught by the missionaries to the Europeans. *Medical Treatises* (《醫論》) written by Mi-Ge Bu (卜彌格; Michel Boym) was the earliest book on pulse theory. The Italian version of this book was published in the 15th Kangxi Year (1676 AD) in Milan. After 10 years, Natural Medicine Research Institute of Nürnberg, Germany collected, supplemented and revised this book. The pulse theory of traditional Chinese medicine translated by Mi-Ge Bu enlightened the famous British doctor J. Flover's (弗洛伊爾) thinking. Flover, then, made great efforts to study the pulse theory, and translated the traditional Chinese medicine from Latin to English. In the 46th Kangxi Year (1707 AD), he published the translated book as well as the *Pulse Examination Table for Doctors* (《醫生診脈表》) in London.

The western world came to know about acupuncture and moxibustion in the 17th century; which was evident in Marco Polo's (馬可波羅) letters when he mentioned that Chinese used needles for medical treatment. The acupuncture and moxibustion were first introduced to Europe by Catholic priest Du Halbe. The earliest recording of acupuncture was recorded by



Punter (旁特) from Dutch East India Company (in 1658 AD). An employee named M. Busschof (布紹夫), who suffered from gout for years, was cured by moxibustion. He then introduced acupuncture and moxibustion to the Netherlands, which were translated to English later. A German named Geilfusius (吉爾弗西斯) wrote the book *Moxibustion Skills* (《灸術》) which marked the spread of Traditional Chinese Medicine to Europe. In the 18th century, Europeans gradually became familiar with China's acupuncture and moxibustion; around fifty books were published about acupuncture and moxibustion in the country. These books were widely circulated in Britain, German, France, Czech, Sweden, and other western countries. Ireland once published a specialized book to describe the physiological effects of acupuncture and moxibustion.

During the period of Qing Dynasty, Hal-De Du (杜赫德) could be regarded as the key person who introduced Chinese medicines to Europe. He wrote a four volume book entitled *A General Introduction to China* (《中國全志》) which was published in Paris in the 13th Yongzheng Year (1735 AD). The first volume contained pulse examination diagrams of traditional Chinese medicine; the second volume recorded several Chinese medicines; the third volume translated several Chinese publications such as *Hong-Jing Tao's Herbal Foundation* (《陶弘景本草》), *Herbal Foundation Compendium* (《本草綱目》), *The Divine Husbandman's Herbal Foundation Canon* (《神農本草》), the first volume of *Herbal Foundation* (《本草》), *Pulse in Rhymes* (《脈訣》), *Records of Famous*



Doctors (《名醫別錄》), and *Assembly of Medicine* (《醫藥匯錄》). The book published by Hal-De Du had a great impact in Western Europe and was translated to English and German soon after its release. Charles Darwin (達爾文), a famous biologist, indirectly quoted the contents of *Herbal Foundation Compendium* in one of the articles of his book on biological variability. He also considered Du's book as an encyclopedia about China.

Records show that during the 140 years, from 1700 AD to 1840 AD, the western world published about sixty books on traditional Chinese medicine; around forty-seven books on acupuncture and moxibustion, five on pulse, two on clinical practice and history of medicine, and one on pharmacy. According to numerical data during this period, Italy, France, German, Britain, Ireland, Czech, and Sweden, published books on acupuncture and moxibustion, which were the key targets for development. In addition, Chinese clinical practice of obstetrics, and external medicine, and the history of traditional Chinese medicine were given a great deal of attention. Countries that published the most medical works were France, Germany, and Britain.

The importing of western medicine in the beginning of Qing Dynasty was not affected by the policy of religion prohibition because of the reward policy of Emperor Kangxi. In the 31st Kangxi Year (1692 AD), Emperor Kangxi was infected with malaria. After taking the medicine provided by the French missionary, Cheng Zhang (張誠; P. Joan Franciscus Gerbillon),



and Portugal missionary, Ri-Sheng Xu (徐日升; P. Thomas Pereyra), his condition became. Later, cortex chinae (金雞納皮) from India was sent to the palace by French missionaries, Ruo-Han Hong (洪若翰; P. Joames Fontaney) and Ying Liu (劉應; Mgr. Claudus de Visdelou). The emperor did not immediately trust the medicine so he ordered other people, who also suffered from malaria, to try the medicine first. The patients recovered not long after. He also ordered four officials to take a small amount of the medicine to test it, and no adverse effects were noted. Emperor Kangxi was then advised that it was safe to take the medicine. He recovered from malaria in a few days after the administration of the medicine. Since then, Kangxi trusted the missionaries, and granted them Bei Tang (北堂), which was also called Jiu Shi Tang (救世堂), as well as a mansion located at Guangsha of the Xi'an Gate of the Imperial City (皇城西安門). In addition, several missionaries such as An Tai Xiu Shi (安泰修士), Huai-Zhong Luo (羅懷忠), De-Xian Luo (羅德先), and Ji-Xun Fan (樊繼訓) had been trusted by Emperor Kangxi to conduct medical activities in China.

In the 29th Kangxi Year (1690 AD), French missionaries, Jin Bai (白晉; P. Joach Bouvet) and Duo-Ming Ba (巴多明; P. Dominicus Pareniu), went to the palace under the order of Emperor Kangxi. They introduced the works of French anatomists Er-Nei Wei (韋爾內; Guichrd Joseph du Verney) and Dai-Ni (戴尼; Dienis) anatomist and author of the *New General Observation* (《新的普遍觀察》), Professor Thomas Bartholin (湯瑪斯·巴托林) from University of Copenhagen. Jin Bai and Duo-Ming



Ba (P. Dominicus Pareniu) sorted, summarized and translated the works of these renowned anatomists into Manchu scripts, included a large number of illustrations, and compiled them to create a book explaining and analyzing human anatomy. Duo-Ming Ba (P. Dominicus Pareniu) entitled the book *Human Anatomy Compiled Based on the Blood Circulation Theory and Discoveries of Dienis* (《按血液循環理論及戴尼斯發現而編成的人體解剖學》), while Emperor Kangxi named it *Qin Ding Ge Ti Quan Lu* (《欽定格體全錄》). The book has a total of nine volumes and introduced theories of blood circulation, chemistry, toxicology, and pharmacology aside from anatomy. Duo-Ming Ba (P. Dominicus Pareniu) sent three copies of the manuscript written in Manchu to French Academy of Science in which, a copy was then kept in Bi-Shu-Shan-Zhuang (避暑山莊; Summer Resort), Chang-Chun-Yuan (暢春園; Garden of Everlasting Spring), and Wen-Yuan-Ge (文淵閣; Literary Profundity) in Beijing.

After Emperor Yongzheng implemented the religion prohibition policy, business trade between China and western countries was constrained and was only permitted in Shi San Hang (十三行) of Guangzhou. Those involved in medicinal business in this area were mainly missionaries and accompanying I-Shen (醫生; Physician) of the East India Company. I-Shen (Physician) was employed by the East India Company to ensure the health of the merchants working in Guangzhou and Macau. In addition, local people were allowed to have consultations with the employed I-Shen (Physician). Among the doctors who were employed by



East India Company to work in China was Alexander Pearson (皮爾遜). He was the first doctor who gained the trust of Chinese people. Starting from the 10th Jiaqing Year (嘉慶; 1805 AD), Pearson administered smallpox vaccines to local Chinese children; these vaccines were shipped to China by a Portugese named Hewit from Manila. In the 11th Jiaqing Year (1806 AD), Pearson employed several Chinese assistants and Xi Qiu (邱熿), was the most outstanding of them all. With the help of Chinese people, Pearson's vaccination extended from cities to rural areas. In 1815 AD, he established a clinic in Guangzhou and would vaccinate fifteen to forty children within nine days. The vaccination was conducted by the Chinese pox division under Pearson's supervision. Although Xi Qiu did not have any medical skills, he was able to vaccinate over 10,000 children; and thus, many went to him to learn the ways of vaccination.

When Pearson started variolation, he summarized his vaccinating skills and wrote the book entitled *Newly Generated and Detailed Variolation Method* (《新訂種痘奇法詳悉》); it was the earliest book about human variolation. The Chinese version was completed by missionary Tang-Dun Si (斯湯頓; George Thomas Staunton), and was published in the 10th Jiaqing Year (1805 AD) with the title *Newly Published Magical Book of Britain on Smallpox Vaccination* (《英吉利國新出種痘奇書》). The book discussed the invention of variolation, how the method spread across western countries, and the comparison of smallpox and cowpox vaccines. It also described the methods, processes,



tools used, and possible clinical symptoms of vaccination in details. Apart from texts, diagrams were also included to depict the vaccination situation. *On Smallpox Vaccination* (《引痘論》) written by Xi Qiu, was included among the published books by Pearson. The first issue was put out in the 22nd Jiaqing Year (1817 AD). It mainly introduced the methods of identifying smallpox, storing vaccines, drawing-out of vaccine lymph, inoculating vaccinia, keeping of lymph to produce vaccine, and using tools for vaccination. It also recorded several medicines to be administered to treat complications.

Apart from I-Shen (Physician) sent to China by the East India Company, missionaries also came to China such as Morrison (馬禮遜) from London Missionary Society, who was the first missionary in the country in the 19th century. The first Christian clinic in China was established by David Livingstone (李溫斯頓) and Morrison which started its operation in the 25th Jiaqing Year (1820 AD). They employed a Chinese assistant who understood traditional Chinese medicine to serve the underprivileged localas. It can be regarded as the beginning of Christian missionary work in China. Moreover, Morrison and David Livingstone opened this clinic not only to treat patients, but also to fulfill their interest in traditional Chinese medicine. David Livingstone studied the effects of Chinese medicines on pain relief and did the researches the perspective of the western medicine. He was able to establish a library with over 800 volumes of medical books and books discussing all kinds of Chinese



medicines. In addition, he employed an I-Shen (Physician) of traditional Chinese medicine to help him understand the nature of different Chinese herbal medicines.

Lei-Shu Guo (郭雷樞; Thomas Richardson Colledge) was hired as I-Shen (Physician) of East India Company in the 7th Daoguang Year (道光; 1827 AD). He studied in Leicester Infirmary and St. Thomas Hospital in Britain. With the help of East India Company, Lei-Shu Guo opened an Ophthalmic Hospital in Macau. It was a charitable health institution serving underprivileged individuals who only need to obtain certificates issued by the company avail of free treatment. Patients will only pay for the medicines that would be prescribed to them.

In the 13th Daoguang Year (1833 AD), Bo-Jia (伯駕; Peter Parker) was sent to China by the American Board Mission. He was the first Christian preacher who arrived in China. He was also a doctor, and conducted several medical missionary works in the country. Bo-Jia (Peter Parker) established the Ophthalmic Hospital in Guangzhou in the 15th Daoguang Year. Due to the hospital's advanced medical technology and free treatment for the underprivileged, many people sought consultations in the hospital. Currently, today's Bo-Ji Hospital (博濟醫院) in Guangzhou was the successor of Bo-Jia's Ophthalmic Hospital. Despite the growing tension between China and Britain due to the opium incident in the 19th Daoguang Year (1839 AD), Bo-Jia (Peter Parker) was still permitted to stay in China. This was because he was able to relieve Ze-Xu Lin (林則徐)



of the hernia he was suffering from at that time. Due to this, Bo-Ji Hospital was praised, and Bo-Jia (Peter Parker) was allowed to continue his work in the hospital. In the 20th Daoguang Year (July 5th, 1840 AD), the first opium war broke out, and Bo-Jia (Peter Parker) was then asked to return to Britain, and the Ophthalmic Hospital stopped its operation.

- Southeast Asia

Before the 15th century, Vietnam always used original versions of Chinese medical books; it was only in the latter years that they gradually compiled their own medical works. According to the book entitled *Essential History of Vietnam* (《越南史要》), You-Zhuo Li (黎有卓), the son of the Grand Councilor, loved Chinese medicine, and was interested in studying medicine and pharmacy. His efforts were devoted to studying *Feng's Secret Record in Pocket* (《馮氏錦囊秘錄》), *Jing-Yue's Complete Compendium* (《景岳全書》), and *Thorough Knowledge of Medicine* (《醫貫》); and worshipped the book *The Yellow Emperor's Inner Canon* (《黃帝內經》). He supplemented the knowledge he obtained from the books with clinical experience, and with that, he was able to complete and publish the book entitled *A Complete Understanding of Overseas Medicine* (《海上醫宗心領全帙》) with sixty-six volumes in 1770 AD. Vietnam also published several medical works that included academic essentials of Chinese pharmacy such as *Magical Effects of South Medicines* (《南藥神效》) and *Identification of South Medicines* (《南藥考辨》).



In the middle of the 13th century, Chinese medicine was beginning to spread in Thailand during the Sukhotai Dynasty (速古台王朝) through the Chinese who understood traditional Chinese medicine and pharmacy residing in Thailand. During the period of Ayuttaya Dynasty (阿瑜陀耶王朝; from 1350 AD to 1767 AD), a number of Chinese nationals went to the cities of Thailand to sell medicines. The most famous among them was Song-Qing Li (李松青), a native of Dongli Township, Chenghai Town, Guangdong. He established the Tian-Shun Li Tang (李天順堂) Pharmacy in Bangkok, and was the first Chinese I-Shen (Physician) to provide decoction services. The business then was handed down from generation to generation, and the family became well-known in the field of pharmacy. According to the *History of Qing on Siam* (《清史稿·暹羅傳》), Thailand once gave China about ten types of medicines as tributes which included sterculia (通大海), borneol (冰片), rhinoceros horns (犀角), aquilaria (沉香), and ambergris (龍涎香). The imperial court of Qing, in return, gave out medicines such as ginseng (人參), and offered preferential treatment to medicine merchants from Thailand.



Section 3 Medical Works

Shang Lun Pian (《尚論篇》)

The book *Shang Lun Pian* is originally entitled as the *Discussion of Zhong-Jing Zhang's on Cold Damage and Re-compiled 397 Methods* (《尚論張仲景傷寒論重編三百九十七法》). It was written by Chang Yu (喻昌) and was mainly based on *Systematized Identification of on Cold Damage* (《傷寒論條辨》) by You-Zhi Fang (方有執). The author showed respect to the classical work, but also bravely criticized the improper compiling and annotations of Shu-He Wang (王叔和), Yi Lin (林億), and Wu-Yi Cheng (成無已) on Zhong-Jing's classical work. He believed that only through parallel discussion of the six channels could truly illustrate the original text of *On Cold Damage* (《傷寒論》), and make it close to its original meaning.

The first four volumes of the book mainly discussed the patterns of cold damage of the six channels and the treatments. The book dealt with the general ideas of the physician, Zhong-Jing Zhang, on typhoid fever. The author believed that among the four prefaces, the cold damage of winter months was the basic guiding principle to be followed, and proposed the theory of "Tripartite Confrontation of Three Principles" (「三綱鼎立」). The rest of the book was divided into chapters by the six



channels; and the third yang channel had an additional four disease categories namely: (1) aggravated diseases, (2) drag-over diseases, (3) diseases, and (4) combination diseases. *Shang Lun Hou Pian* (《尚論後篇》) mainly discussed the principles, methods, formulas, and medicines of cold damage and warm diseases, and narrated the pathologic mechanism and treatments of fright wind, the different kinds of pediatric diseases, and the formulas of greater yang and yang brightness. It also mentioned yin and yang frequently during the discussion of the theories, and stressed the importance of the regulation of yin and yang during treatment.¹

***A Compendium of Cold Damage Treatment* (《傷寒來蘇集》)**

A Compendium of Cold Damage Treatment is a compilation of three books of *Wings to on Cold Damage* (《傷寒附翼》), *Wing Discussion of on Cold Damage* (《傷寒論翼》), and *Annotations of on Cold Damage* (《傷寒論注》). It was an important work made by the research school of cold damage, and was written by Qin Ke (柯琴), a famous doctor of Qing Dynasty. Influenced by the down-to-earth academic atmosphere during the beginning of Qing Dynasty, Qin Ke became meticulous, prudent, and down-to-earth in learning. His book was divided into eight volumes with the sequence re-arranged and the original text annotated according to formulas and patterns of the six channels. The *Annotations of on Cold Damage* was written based on the original text of *On Cold Damage*. Qin Ke refuted previous ideas contained in “397 Methods”, and “Tripartite



Confrontation of Three Principles”, and elaborated his understanding of Zhong-Jing’s heart methods of pattern identification.

Wing Discussion of on Cold Damage gave a comprehensive discussion on miscellaneous diseases of cold damage. It criticized not only Shu-He Wang’s errors in sequence arrangement and illustrations of miscellaneous diseases of cold damage, but also errors committed by medical schools in cold damage studies. After this book, he wrote *Wings to on Cold Damage* which talked about formulas. It did not only analyze the formulas in *On Cold Damage*, but also rearranged the sequences of articles, formulas, and pattern identification of cold damage. It further annotated and explained the meaning of formulas and the indications provided on *On Cold Damage*; this made the medical theories in line with clinical application. *A Compendium of Cold Damage Treatment* provided a systematic discussion of *On Cold Damage* from sequence arrangement methods to patterns, treatments, formulas, and medicines that can be applied to various situations.

Pursuing Original Ideas of Herbal Foundation Compendium (《本草崇原》)

Pursuing Original Ideas of Herbal Foundation Compendium was written by Doctor Zhi-Cong Zhang (張志聰) of Qing Dynasty and his disciple, Shi-Shi Gao (高世栻). It was the first annotated work of *The Divine Husbandman’s Herbal Foundation Canon* (《神農本草經》). To



complete this book, Zhi-Cong Zhang used the theory of five movements and six qi, verified them, and referred to his own clinical experience. The book divided medicines into grades namely: top, medium, and low; one volume for each grade. Two-hundred thirty-three medicines from *Herbal Foundation Compendium* were selected, and another fifty-six kinds were added and included in the book. “Pursuing original ideas” (「崇原」) discussed the meaning of the theory of medicinal natures. The book also analyzed the mechanism of the disease, the different effects of treatment based on growth, shape, color, nature and flavor of medicines, and the attributes of yin, yang, and five phases; which showed the author’s willingness and determination to credit the source. The contents of the book in large characters and those that started with “my note” (「愚按」) appear to have been written by Zhi-Cong Zang. It mainly elucidated the natures, flavors, and functions of each medicine. Meanwhile, contents in smaller characters and those that started with “note” (「按」) seemed to have been the work of Shi-Shi Gao. It verified and further elaborated aliases, origins, appearance, qualities, and authenticity of the medicines. In addition, entries noted with “added” (「附」) were medicines that were not included in *The Divine Husbandman’s Herbal Foundation Canon* and have been put in by the authors themselves.²



Collected Supplements to Patterns and Treatments (《證治匯補》)

Collected Supplements to Patterns and Treatments was written by Yong-Cui Li (李用粹). The author had a section on miscellaneous diseases wherein he included pattern identification and treatment experience of doctors practicing before the Qing Dynasty. It was a great collection of miscellaneous diseases of internal medicine. The book has a total of eight volumes, which contained the following: outline, internal causes, appearance, upper orifices, chest and diaphragm, abdomen and rib, lumbus and knees, and lower orifices. Centered on miscellaneous diseases of internal medicine, the book introduced over eighty common disease patterns; one chapter for each pattern. Each chapter is further divided into several sections. The author first quoted the content of *The Inner Canon* (《內經》), then selected theories of several different doctors, and attached the sources of the annotations. The author combined his own ideas with previous academic ideas to complete this book. In addition, the book gave a brief and concise illustration on methods of treatment, symptoms, pulses, accompanying symptoms, and medications.

The Essential Herbal Foundation (《本草備要》)

The Essential Herbal Foundation was written by Ang Wang (汪昂). After several correction and supplementation, it was entitled *Supplement*





A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

to *The Essential Herbal Foundation* (《增補本草備要》). Ang Wang thought that some of the previous master pieces on herbal foundation were rich in content, but did not provide emphasis on important points. Others, according to him, were too simple, lacking in details, and incomplete. Hence, he studied from different medical schools to learn and absorb others' good points. He took inspiration in the ideas from *Magic Pivot* (《靈樞》), *Plain Questions* (《素問》), and *The Divine Husbandman's Herbal Foundation Canon* to complete *The Essential Herbal Foundation*. The book has eight volumes. The first volume provided annotations, explanation and illustrations on functions, nature, flavors, and preparation of medicines. The book recorded four-hundred and seventy-eight primary medicines, and twenty-six subordinate medicines; and contained about four-hundred drawings. *The Essential Herbal Foundation* covered internal medicine, external medicine, and gynecological and facial features of the



traditional Chinese medicine. It quoted from one-hundred and thirteen books, mainly from *Herbal Foundation Compendium and Annotation of The Divine Husbandman's Herbal Foundation Canon* (《神農本草經疏》), to discuss the nature and functions of medicines in detail.³

***Feng's Secret Record in Pocket* (《馮氏錦囊秘錄》)**

Feng's Secret Record in Pocket, also called *Feng's Pocket* (《馮氏錦囊》) or *Secret Record in Pocket* (《錦囊秘錄》), was written by Zhao-Zhang Feng (馮兆張) who has a style name of Chu-Zhan (楚瞻) and from the native place of Haiyan, Zhejiang Province. Zhao-Zhang Feng spent thirty years gathering, simplifying, and correcting errors from the ideas of different doctors, and adding several folk empirical formulas to complete this book. The book is divided into the *preface volume* (〈卷首〉), *Essentials of The Inner Canon* (〈內經纂要〉), *Medicinal Natures and Treatments for Miscellaneous Pox Diseases* (〈雜症痘疹藥性主治會疹〉), *A Collection of Poxes* (〈痘疹全集〉), and *A Collection of Miscellaneous Diseases* (〈雜症大小會參〉); it also included essentials of gynecology, key points of pulse rhythms, medical annotations, and essentials of external medicine. In addition, it contained detailed records on pediatric diseases and poxes. *Medical Annotations* (〈藥按〉) recorded mostly complicated and severe disease cases treated by Zhao-Zhang Feng. Feng preferred warm supplementation, and used eight-ingredient (八味), six-ingredient (六味), eight-gem (八珍), and perfect major formulas (十



全). His book mainly emphasized the importance of supplementing the kidney and fortifying the spleen.

***Ben Jing Feng Yuan* (《本經逢原》)**

Ben Jing Feng Yuan, written by Lu Zhang (張璐), was a comprehensive pharmaceutical work on herbal foundation. Lu Zhang thought that medicines recorded in *The Divine Husbandman's Herbal Foundation Canon* were incomplete, some content of the canon had lost, and some were irrelevant since they were seldom used in clinical practice. As a consequence, he only included the most commonly used medicines found in *The Divine Husbandman's Herbal Foundation Canon*, and referred to the classification method of *Herbal Foundation Compendium* to classify over seven-hundred medicines and categorized them into thirty-two parts to complete his four-volume book. The book described the nature and functions of each medicine, discussed its preparation, origins, and appearance and nature identification, and explained briefly but clearly its pharmacology. *Ben Jing Feng Yuan* is not only a master piece of work on herbal foundation annotation, but also is a summary of the author's 60 years of medical experience. It provided an especially detailed explanation on medicine identification such as the identification of "processed urine deposit" (「秋石」), which indicated that people back then had prior knowledge of the properties of several organic matters and inorganic salts.⁴



Zhang's Clear View of Medicine (《張氏醫通》)

Zhang's Clear View of Medicine was written by Lu Zhang. It was a comprehensive book on clinical practice. The author combined previous medical literature with his years of clinical experience, and referred to one-hundred and thirty medical publications to complete this book. Before its completion, the content was revised several times and the draft was changed for almost ten times. *Zhang's Clear View of Medicine* mainly discussed diseases and treatments of internal medicine, external medicine, gynecology, pediatrics and facial features, and attached empirical cases. The book has sixteen volumes. The first twelve volumes talked about diseases by branch and pattern; for each disease, it illustrated the contents from *The Inner Canon* and *Essential Prescriptions of the Golden Coffer*. In addition, the book also included ideas of famous doctors such as Si-Miao Sun (孫思邈), Xian-Ke Zhao (趙獻可), Zhong-Chun Miu (繆仲淳), Dong-Yuan Li (李東垣), Jia-Yan Yu (喻嘉言), Dan-Xi Zhu (朱丹溪), Li-Qi Xue (薛立齋), Jing-Yue Zhang (張景岳), and Ken-Tang Wang (王肯堂). Finally, the author combined his own clinical experience to these ideas to complete the book. Lu Zhang's medical works aside from *Zhang's Clear View of Medicine* included *Cold Damage Identification from Tongue* (《傷寒舌鑿》), *Opinions on Cold Damage* (《傷寒續論》), *Analysis of Patterns of Cold Damage* (《傷寒兼症析義》), *Introduction to Cold Damage* (《傷寒緒論》), *Three Original Flavors of Palpation* (《診宗三



味》), and *Ben Jing Feng Yuan* which constituted the combined issues of *Zhang's Seven Medical Books* (《張氏醫書七種》).

***A Compendium of Ancient and Modern Books · A Complete Collection of Medical Books* (《古今圖書集成·醫部全錄》)**

A Compendium of Ancient and Modern Books (《古今圖書集成》) is a reference book, and was originally named *A Compilation of Ancient and Modern Books* (《古今圖書彙編》). It was compiled by Meng-Lei Chen (陳夢雷) under the order of Imperial Prince Cheng (誠親王). It has a total of 10,000 volumes, and was divided into over 6,000 units. It took about ten years to complete and finish this book. Later, Emperor Kangxi changed the title to *A Compendium of Ancient and Modern Books*, and



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 175 (A collection held in the library of the Chinese Medicine Research Institute in China)




ordered to supplement it to cover all schools of classics and history books. *A Compendium of Ancient and Modern Books · A Complete Collection of Medical Books* is a unit of the *A Compendium of Ancient and Modern Books*. It has a total of five-hundred and twenty volumes, and was compiled by Ting-Xi Jiang (蔣廷錫) et al. under the order of Emperor Yongzheng. They spent three years referring to over 3,000 volumes of medical books, and deleting hundreds of thousands of characters to complete this unit.

The book was compiled in several categories. It collected about one-hundred and twenty medical works from *The Inner Canon* and from other medical works published in the beginning of Qing Dynasty. It recorded works from all kinds of ancient doctors including shaman, Confucian doctors, doctors from a family with long tradition, good doctors, famous doctors, noble doctors, lucky doctors, skillful doctors, filial doctors, hidden doctors, vulgar healers, and female doctors. *A Complete Collection of Medical Books* (《醫部全錄》) explained ancient literature, classified biographies of doctors and all kinds of diseases, and noted the sources in details for the convenience of checking with the original books. It is the largest reference book of medical literature preserved to date.



Heart-Code of Essential Prescriptions of the Golden Coffe
(《金匱要略心典》)

Heart-Code of Essential Prescriptions of the Golden Coffe was compiled by Yi You (尤怡). “Heart-Code” (「心典」) means “to pursue what is in the heart of the ancient people” (「務求當於古人之心而後已」). Yi You wrote this book to explain *Essential Prescriptions of the Golden Coffe* (《金匱要略》). Yi You stayed mostly at home because of his disease, and went on to studied ancient versions of *Essential Prescriptions of the Golden Coffe*. He refined annotations to Zhong-Jing’s real meanings, and believed that the original version of *Essential Prescriptions of the Golden Coffe* had “simple but empirical formulas, and brief but difficult texts” (「其方約而多驗，其文簡而難通」). Therefore, he researched the connotations, and elaborated the original meanings to complete *Heart-Code of Essential Prescriptions of the Golden Coffe*. *Heart-Code of Essential Prescriptions of the Golden Coffe* provided a brief, clear, and precise explanation of the original texts of Zhong-Jing. It carried out comparisons to explain patterns, and analyzed formulas to show similarities and differences. Also, Yi You chose to omit difficult parts of the original text, rather than give a vague or wrong explanation. He also corrected text errors that have occurred during the copying for circulation.⁵





Medical Insights (《醫學心悟》)

Medical Insights was written by Guo-Peng Cheng (程國彭) who believed that medical science was a matter of life and death, and carelessness in this field was inexcusable. Consequently, he devoted himself to studying medical works from different schools. Combining his thirty years of experience in medical practice with what he learned in *On Cold Damage*, *The Classic of Difficult Issues (《難經》)*, *The Inner Canon*, and from essential ideas of previous doctors, he compiled this book for beginners of medical studies. Guo-Peng Cheng educated himself at Putuo Temple (普陀寺) in his later years. Acknowledging that the Medical Insight lack contents in the field of surgery, he wrote *The Methods of Surgical Branch (《外科十法》)* and attached it to this book. *Medical Insights* had some innovations in principles, methods, formulas, and medicines. The author created some effective formulas such as Cough-Stopping Powder (止嗽散), Pinellia, White Atractylodes and Gastrodia Decoction (半夏白朮天麻湯).⁶

A Life-for-All Collection of Patterns and Treatments of External Medicine (《外科證治全生集》)

A Life-for-All Collection of Pattern and Treatments of External Medicine, also called *A Life-for-All Collection of External Medicine (《外科全生集》)*, was written by Wei-De Wang (王維德). The book was



completed using the author's over forty years of clinical experience and the empirical formulas handed down to him from his ancestors. It discussed the patterns, causes, and treatments of welling-abscesses and flat-abscesses, and listed down twenty-nine diseases. Three chapters of the book were devoted to describing the upper, middle, and lower parts of the human body, and specifying the regulation for diseases of external medicine. The author also attached his experience on treating diseases of internal medicine, gynecology, and pediatrics as reference for clinical practice. The book contained seventy-five effective formulas of external medicine, and forty-eight empirical formulas for miscellaneous diseases. In addition, it also introduced the properties and preparation of over two-hundred common medicines of external medicine.

The Great Compendium of Eye Canon (《目經大成》)

The Great Compendium of Eye Canon was a famous book during the Qing Dynasty on eye diseases and was written by Ting-Jing Huang (黃庭鏡). Huang summarized his predecessors' achievements on eye disease department, combined them with his own clinical experience, and altered it four times to complete this book. Unfortunately, the book was not published. His disciple Xue-Li Deng (鄧學禮) after discovering the book, changed its title to *Orthodox Manual of Eye Disease Department (《目科正宗》)*, and published it during the 10th Jiaqing Year. Years later, Ting-Jing Huang's grandson discovered Xue-Li Deng's book, and presented it



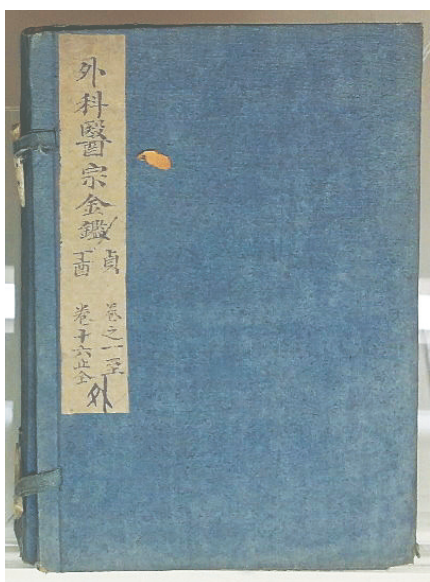
together with his grandfather's original book. He compared the book the two books and published a new version entitled *The Great Compendium of Eye Canon*. It was regarded as the most important work on the eye disease department. The book presented the symptoms, formulas, and medicines for eye diseases in the form of poetry and fu, and thus made the content easy to understand. Apart from medical treatises, the book also contained what the author gained, included all kinds of illustrations of five movements, six qi, five wheels, eight belts, acupuncture points, operation tools, and operation purposes, and presented the physiological structure and the names of different parts of the eyes, main lesions for every type of eye disease, shapes and production of operation tools, and indications for treatment.⁷

The Golden Mirror of Medicine (《醫宗金鑒》)

The Golden Mirror of Medicine was completed under the order of the imperial court of Qing Dynasty. It was a series of books on medical science compiled mainly by Qian Wu (吳謙), who was Pan-Guan (判官; Aide) of the Tai-I Yuan (太醫院; Imperial Academy of Medicine) and Chief Official for the compilation. The book has a total of ninety volumes, and about 1.6 million characters. It stressed on the principles and methods of medicine, and efforts were made on the selection and compilation of materials included in the book. The book was easy to use and understand. The book contained ideas from fifteen different materials and references including:



Correction and Annotations of Zhong-Jing's Complete Medical Books (《訂正仲景全書傷寒論注》), Correction and Annotation of Essential Prescriptions of the Golden Coffin (《訂正金匱要略注》), Heart-Methods and Essential Rhymes for Qi Movements (《運氣要訣》), Heart-Methods and Essential Rhymes for Four Examinations (《四診心法要訣》), Heart-Methods and Essential Rhymes for Miscellaneous Diseases (《雜病心法要訣》), Heart-Methods and Main Ideas for Bone Righting (《正骨心法要旨》), Heart-Methods and Essential Rhymes for External Medicine (《外科心法要訣》), Heart-Methods and Essential Rhymes for Pediatrics (《幼科心法要訣》), Heart-Methods and Essential Rhymes for Gynecology (《婦科心法要訣》), Heart-Methods and Essential Rhymes for Eye Disease Department (《眼科心法要訣》), Heart-Methods and



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)



Essential Rhymes for Cold Damage (《傷寒心法要訣》), *Heart-Methods and Essential Rhymes for Poxes* (《痘疹心法要訣》), *Heart-Methods and Essential Rhymes for Smallpox Vaccination* (《種痘心法要旨》), *Deletion and Supplementation of Formulas and Treatises of Famous Doctors* (《刪補名醫方論》), and *Heart-Methods and Essential Rhymes for Acupuncture and Moxibustion* (《刺灸心法要訣》). The whole book was written in rhymes, and introduced the pattern identification and treatment of diseases of different departments.

On Warm Heat (《溫熱論》)

On Warm Heat was written by Gui Ye (葉桂). It is a representative work of warm disease school. When Tian-Shi Ye (葉天士) was visiting Tingshan, Taihu Lake, his follower Jing-Shan Gu (顧景山) accompanied him, and recorded his words to complete this book. Da-Lie Tang included it in the first volume of *Lectures of Doctors in Wu* (《吳醫匯講》) after some content adjustment, and named it *Treatments of Warm Diseases* (《溫病論治》). Xiu-Yun Hua (華岫雲) included it in *A Clinical Guide* (《臨證指南》) with a slight difference in texts, and named it *Tian-Shi Ye's Treatise on Warm Heat* (《葉天士溫熱論》). Xu-Gu Zhang (章虛谷) included the version of Tang Dynasty in *A Blow of Medicine* (《醫門棒喝》), and annotated it. Meng-Ying Wang (王孟英) included Hua's version in *Warp and Weft of Warm Heat* (《溫熱經緯》), and named it *Xiang-Yan Ye's Chapter on External Contraction of Warm Heat* (《葉香岩



外感溫熱篇》)。

The book emphasized the pathologic mechanism of warm diseases which is as follows: “the warm evils are contracted in the upper body, and invade the lungs first. The lungs govern the qi, and belong to the defense system; the heart governs the blood, and belongs to the construction system” (「溫邪上受，首先犯肺。肺主氣屬衛，心主血屬營。」)。The book created the treatment method of “four-aspect pattern identification” (「衛氣營血辨證」), indicating that the four aspects were closely related to the changes of warm diseases. Tian-Shi Ye valued nourishing the yin, and believed that the importance of securing and protecting yang qi and that, only sufficient qi and liquid could guard the right qi and expel the evils to avoid severe diseases. With respect to diagnosis, he emphasized observing the tongue, examining the teeth, and identifying maculo-papular eruption and white papules.

A Compendium of Pediatrics (《幼幼集成》)

A Compendium of Pediatrics was written by Fu-Zheng Chen (陳復正) and contained the author’s previous medical works experience in pediatrics. The book emphasized that none of the four examinations namely: inspection, listening and smelling, inquiry, and palpation, was dispensable for understanding a disease. The author believed that pediatric diseases indeed had external symptoms, and careful examinations would lead to the understanding of the disease. He emphasized that pattern



A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

identification and treatments of poxes should focus on taking care of the original qi, giving priority to supplementing spleen and stomach, and adopting the method of co-action and counter-action to assist in healing.

On the Source of Medicine (《醫學源流論》)

On the Source of Medicine was written by Da-Chun Xu (徐大椿) in his later years. It can be regarded as a collection of Da-Chun Xu's medical papers (「徐大椿醫學論文集」). Although the title contains the word “source” (「源流論」), it is not a historical work on the source of the development of traditional Chinese medicine, but a theoretical work that illustrated the author's viewpoints of phenomena of thinking, theories, and schools of thoughts related to traditional Chinese medicine. The author



bravely criticized the bad practices at that time in order to attract the attention of the medical field on medical theories. The book also criticized the doctors at that time for failing to check the symptoms and causes of the disease, and for just repeating what the books said which made these doctors unable to use medicines to their full potential.

Newly Revised Herbal Foundation (《本草從新》)

Newly Revised Herbal Foundation was written by Yi-Luo Wu (吳儀洛). The whole book was divided into six volumes, and each volume was further subdivided into three volumes. Thus, it has a total of eighteen volumes. The book recorded six-hundred and seventy-two medicines, and forty-eight subordinate medicines, a total of seven-hundred and twenty types. The first volume gave a general introduction to medicinal natures, and classified medicines into eleven sections of water, fire and earth, metals and minerals, fruits, vegetables, grass, wood, grains, animals, insects, fish and aquatic animals with scales and shells, and humans, with a total of fifty-one categories. The author recompiled *The Essential Herbal Foundation* by Ang Wang, kept most of its content, supplemented the shortage, and added medicines that were not recorded in *Herbal Foundation Compendium*. The author named the new version *Newly Revised Herbal Foundation*. Yi-Luo Wu added most of his medication experience and clinical knowledge in the book. He also eliminated the false and waste, and retained the true and essences of medical books



including *The Essential Herbal Foundation*, and endowed them new connotations. More importantly, he added and gave detailed introduction on several folk medicines that had not been recorded or had not been explained properly in previous herbal foundation books. For some of the medicines that had been recorded by his predecessors, Yi-Luo Wu wrote an especially lengthy article describing them. For medicines that were easily mistaken, Wu also gave detailed statements on their identification.

***Supplement to the Herbal Foundation Compendium* (《本草綱目拾遺》)**

It took Xue-Min Zhao (趙學敏) years to complete the *Supplement to the Herbal Foundation Compendium*. The book has 10 volumes, and recorded about nine-hundred medicines. It was named “Supplement” (「拾遺」) because it recorded medicines that were not included in *Herbal Foundation Compendium*. Xue-Min Zhao widely collected and studied medical works, and blended in his own knowledge of herb identification and clinical experience. He researched nine-hundred and twenty-one medicines to delete errors in previous reference books and to make supplementation. In all the medicines stated in his book, seven-hundred and sixteen medicines were not included in *Herbal Foundation Compendium*, while two-hundred and five medicines were subordinate medicines. He made supplementation to one-hundred and sixty-one medicines that had been previously recorded in *Herbal Foundation*



Compendium, and included several folk treatments and empirical formulas. In addition, he included in his book popular western medicines at that time, such as iodine, ammonia water, essential oils, and cinchona. With respect to the classification sequence of medicine, the *Supplement* (《拾遺》) followed the layout of *Herbal Foundation Compendium* to illustrate the sequence of water, fire, earth, metals, minerals, grass, wood, vines, flowers, fruits, grains, vegetables, tools, poultry, animals, aquatic lives with scales, aquatic lives with shells, and insects, a total of eighteen sections. Further, a new section about flowers was added which include mume flower, lilac, begonia, and roses. *Herbal Foundation Compendium* also has a human section, however, the *Supplement* thought “using human to treat another human being” (「以人療人」) was not a good idea, and thus deleted this section.

Supplement to the Classified Case Histories of Famous Physicians (《續名醫類案》)

Supplement to the Classified Case Histories of Famous Physicians was a large-scale, specialized book on medical cases that has been preserved till now. Considering that there several contents were missing in *Classified Case Histories of Famous Physicians* (《名醫類案》), and many other medical cases surfaced after the Ming Dynasty, Zhi-Xiu Wei (魏之琇) still was able to summarize classical works of previous dynasties, and compile diseases of different departments in details. He divided the



book into departments of internal medicine, external medicine, gynecology, pediatrics and facial features. The medical cases of acute infectious poxes took up the largest part of the book. Zhi-Xiu Wei gave accurate illustrations on most of the medical cases, and added annotations and his own opinions when quoting cases of other doctors. He paid attention to the identification of related cases, and gave practical discussion. The book has a substantial amount of sources, and collected clinical cases of three-hundred and eight famous doctors of the past dynasties. Regardless of the schools, the book used disease names as the outline, and discussed medical cases one by one. It used several cases under one disease to verify and enlighten each.

A Collected Work on Leprosy Treatment (《瘋門全書》)

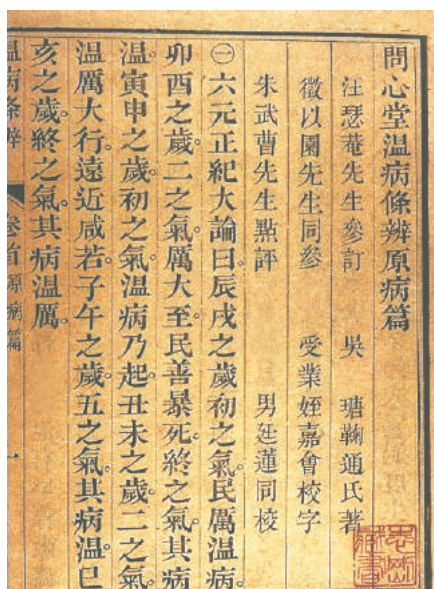
A Collected Work on Leprosy Treatment is a specialized book on leprosy, and was written by Xiao-Ting Xiao (蕭曉亭). The book is composed of *Summaries of Epidemics (《癘疾輯要》)* and *Essentials of Epidemics (《癘疾備要》)*. After collation of Chun-Tai Yuan (袁春台), it was published under the name of *A Collected Work on Leprosy Treatment*. The book quoted previous literature, accurately discriminated the spread routes of leprosy and prevention methods. It described the origins and symptoms of the disease, and made them easy to understand. With regards to the treatment of leprosy, Xiao-Ting Xiao proposed nine methods of internal treatment and six methods of external treatment, and listed about



one-hundred and seventy prescriptions. The content of the book was rich, and the author was good at using hydnocarpus pulp (大楓子肉). In addition, Xiao-Ting Xiao disagreed that this disease would surely relapse, or would not be cured. He explained that discontinuing treatment or incomplete treatment would lead to relapse.

Systematized Identification of Warm Diseases (《溫病條辨》)

Systematized Identification of Warm Diseases was written by Tang Wu (吳瑭). Tang Wu summarized clinical researches on warm diseases, and adopted the triple burner pattern identification (三焦辨證) as the principal axis to connect the content from the beginning to the end. He discriminated the diagnoses and treatments of warm diseases, and blended



Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 180 (A collection held in the library of the Chinese Medicine Research Institute in China)



in six-channel pattern identification of *On Cold Damage*, defense, qi, construction, and blood pattern identification of *On Warm Heat*, and theories of *On Scourge Epidemics* (《溫疫論》) written by You-Ke Wu (吳又可). The analysis was orderly and meticulous, and his insights were remarkable. For example, some famous formulas such as Coptis and Mume Decoction (連梅湯), Palace-Clearing Decoction (清宮湯), and Mulberry Leaf and Chrysanthemum Beverage (桑菊飲) were generated skillfully by Tang Wu using Tian-Shi Ye's empirical formulas.

The book divided warm diseases into three chapters of upper burner, center burner, and lower burner to discuss manifestations, diagnosis, and treatment methods for each disease. It emphasized on extending the treatment principles of *The Inner Canon* and *On Cold Damage*. The chapter of upper burner mainly elaborated upper burner syndromes of all kinds of warm diseases. The chapter of center burner mainly discussed the diagnoses, treatments, and medicines of different warm diseases and cold-damp symptoms. The chapter of lower burner elaborated medical formulas and medicines for lower burner syndromes. This book identified patterns, and elaborated the evolution of rules of warm diseases. It clearly pointed out the locations and properties of diseases, and proposed corresponding treatment methods and medicines. Lastly, it emphasized the combination of natures and flavors while using medicines.⁸



Three-Character Classic of Medicine (《醫學三字經》)

Three-Character Classic of Medicine was written by Xiu-Yuan Chen (陳修園) in his later years. He followed the form of *Three-Character Classic* (《三字經》), and used three-character rhymes to give a general introduction to the origins of medicine, basic theories of traditional Chinese medicine, and symptoms and treatments of common diseases of different branches. The third and the fourth volumes elaborated formulas and medicines for diseases recorded in this book, and briefly discussed the knowledge of yin and yang, channels and network, bowels and viscera, four examinations, and qi movements. The book featured limited and simple words with profound basic theories of traditional Chinese medicine. The author attached annotations of his own perceptions or quotations of his predecessors to each rhyme to elaborate treatment implications. Finally, because the book is extremely comprehensive, it has a high reference value.

Sores Branch Collected Heart-Perceptions (《瘍科心得集》)

Sores Branch Collected Heart-Perceptions was written by Bing-Jun Gao (高秉鈞) was a famous book on external medicine. The book contained *Collected Clinical Heart-Perceptions of Sores Branch* (《瘍科臨證心得集》) and *Formula Collection of Sores Branch Collected Heart-Perceptions* (《瘍科心得集方匯》). Bing-Jun Gao proposed the “triple



burner pattern identification” (「外科三焦辨證」) in the book and recorded his perceptions in clinical practice of external medicine. It illustrated pattern identification and treatment methods of diseases of external medicine. At the end of the book, *Formulas for Paste, Elixir, Pills and Powder for Family Use* (《家用膏丹丸散方》) was attached, which is a valuable clinical reference.⁹

Supplement to Traumatology (《傷科補要》)

Supplement to Traumatology is a famous book on the department of traumatology. Xiu-Chang Qian (錢秀昌) compiled the essential ideas of *Heart-Approach to Bone Righting* (《正骨心法》), and combined them with his own clinical experience to complete this book. The book mainly illustrated human skeletons, pulse manifestation of the department of traumatology, and clinical treatment. The first volume recorded pulse rhymes, important points of humans, bone righting tools, and bone standard. The second volume illustrated thirty-six methods of external treatment, and discussed, in details, the diagnoses and treatments of traumas on different parts of the human body, as well as the treatment of incised wounds. The third volume used decoctions in rhymes to illustrate trauma treatment. Lastly, the fourth volume extracted effective formulas from famous doctors for treatment of traumatic conditions and emergency cases.



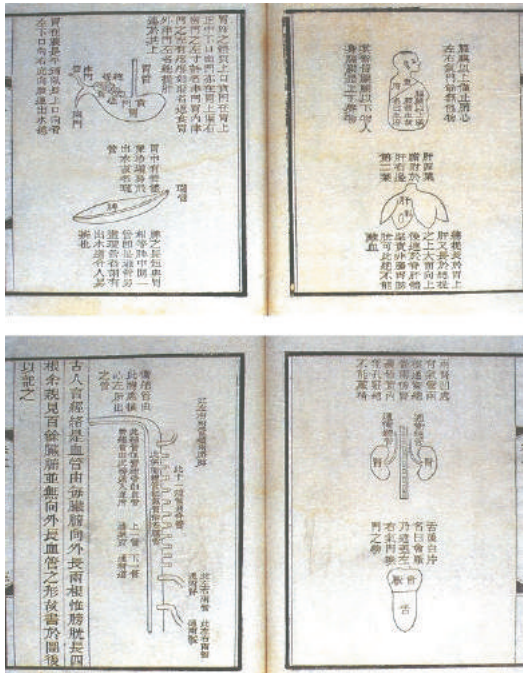
Qing-Zhu Fu's Gynecology (《傅青主女科》)

Qing-Zhu Fu's Gynecology, also named *Gynecology* (《女科》), was written by Shan Fu (傅山), and was a specialized book on gynecology and obstetrics. The statements were practical, and the wordings were succinct; the author was also very cautious when combining formulas. The principles, methods, formulas, and medicines recorded were meticulous and practical. Based on liver, spleen, and kidney, and taking qi and blood as the foundation, the book gave a detailed statement on common gynecological and obstetrical diseases such as menstruation diseases, vaginal discharge, pregnancy, and postpartum. Shan Fu paid great attention to vaginal discharge, and put it in the first chapter. According to the book, vaginal discharge occurred mainly because the “vacuity of the spleen qi, depression of the liver qi, invasion of the evil qi, and forcing of the heat qi” (「脾氣之虛，肝氣之鬱，溼氣之侵，熱氣之逼」) caused damage to the controlling and governing vessels. Shan Fu emphasized that liver depression and spleen vacuity were the main reasons for vaginal discharge. Finally, the book showed the author's exceptional skills in using the methods of supplementing qi and blood, and regulating the spleen and stomach.¹⁰



Correction of Errors in Medical Classics (《醫林改錯》)

Correction of Errors in Medical Classics was written by Qing-Ren Wang (王清任). Although the medical society at that time objected to the study of human anatomy, Qing-Ren Wang still continued to study and went to unmarked common human graves for victims of epidemics and execution sites, several times, to observe the structures of human viscera. After forty-two years of study, based on his observation results, he corrected errors committed on existing books about the positions of human organs. The book was divided into two volumes, and recorded thirty-three



Correction of Errors in Medical Classics
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 181 (A collection held in the library of the Chinese Medicine Research Institute in China)



formulas, including twenty-two formulas for increasing blood flow and transforming stasis. The book also expanded the range of treatment for increasing blood flow and transforming stasis of the traditional Chinese medicine. Qing-Ren Wang had unique opinions on the treatment of diseases such as blood stasis and half-body paralysis. Some of his formulas were widely used in clinical practice, and demonstrated excellent effects. In addition, Qing-Ren Wang believed that the most important elements of the human body were blood and qi. He proposed the idea of qi freeing and increasing blood flow, and created formulas such as Generalized Pain Stasis-Expelling Decoction (身痛逐瘀湯), Yang-Supplementing Five-Returning Decoction (補陽還五湯), Orifice-Freeing Blood-Quickening Decoction (通竅活血湯), and House of Blood Stasis-Expelling Decoction (血府逐瘀湯) to treat about fifty diseases, including paralysis and wilting, stasis, difficult parturition, and hemiplegia. Most of the formulas showed effective clinical effects.¹¹

Jade Key to the Secluded Chamber (《重樓玉鑰》)

Jade Key to the Secluded Chamber was written by Mei-Jian Zheng (鄭梅潤) and was a specialized book on otorhinolaryngology. The book included Mei-Jian Zheng's clinical experience, and his family's medical collections to complete the book. It was divided into the first-half volume and the second-half volume; the former discussed the anatomy, physiology, and pathology of the throat, and the general diagnoses of throat



diseases. It also contained the patterns of incurable diseases discussed medicines, acupuncture and moxibustion treatment for thirty-six throat wind diseases, including diseases of the ears, nose, throat, mouth, teeth, lips, and tongue. In addition, it described the disease locations and symptoms in sequence, and confirmed the effectiveness of acupuncture, medicines and internal and external treatment. This volume further discussed the names of acupuncture tools and presented treatments as combinations of the internal and external treatment. For internal treatment, the author proposed to chase the wind and expel the phlegm, free the channels and dissipate blood, and nourish the yin and clear the heat. As for the external treatment, the book showed the author's exceptional skills at adopting methods of insufflation, holding in the mouth, washing, and applying. The second-half volume, "Wind Needle Rhymes" (「風針訣」), was about acupuncture and moxibustion. It narrated point selection, acupuncture, manipulation, treatment functions of common points used in otorhinolaryngology, and acupuncture and moxibustion methods. Mei-Jian Zheng proposed to use acupuncture and medicines at the same time for treatment. He thought highly of acupuncture and moxibustion, and emphasized the clinical application of the three needles namely: "freeing wind block needle, skin-puncturing needle, and qi needle" (「開風路針、破皮針、氣針」). His treatments were focused initially on providing treatment followed by regulating the symptoms by dispelling phlegm, and freeing the channels and network.¹²



Medical Formulas Gathered and Explained (《醫方集解》)

Medical Formulas Gathered and Explained was written by Ang Wang was a representative work on formula study. Ang Wang collected medical theories of previous doctors, and carefully analyzed their principles and meanings of formulas to create the book, thus calling it “formulas gathered and explained” (「集解」). It provided brief and concise analyses on principles of medicines and formula, adopted popular and simple methods to elaborate basic theories of traditional Chinese medicine, disease causes, and disease properties, and clearly stated the principles, methods, medical formulas, and rules for clinical usage. The book was not divided into volumes, but listed twenty-one sections discussing in detail, the origins of diseases, pulse, bowels and viscera, channels and network, treatment methods, and classified formulas. Lastly, the book also quoted precisely the ideas of other doctors. The book contains about six-hundred formulas, and can be regarded as a formula manual for clinical practice.

Correction of Important Massage Methods (《厘正按摩要術》)

Correction of Important Massage Methods, written by Zhen-Yun Zhang (張振鏊), contained important medical points of different doctors, and Zhen-Yun Zhang’s opinions on massage manipulation for children. The book was divided into four volumes; the first volume mainly discussed



pattern identification, emphasized four examinations and eight principles, gave importance to manual manipulation as a method of treatment for children, and recorded thirty-eight chest and abdomen palpation methods in details. The second volume is about theory establishment. It was the first to summarize manual manipulation techniques for children into eight massage methods such as “pressing, rubbing, pinching, malaxating, pushing, moving, twisting, and shaking”. Further, it included about thirty treatment methods such as needling, stone needling, quenching, compressing, bathing, sweating, ejection, and precipitation. Consequently, the third volume discussed about the point selection for massage. It illustrated the importance of selection of points using the affected channel and the eight-principle pattern identification. This volume contained twenty-four illustrations on massage and explicated the methods and effects of point massage. Finally, the fourth volume included common pediatric diseases and introduced twenty-four diseases such as gan disease, thrush, and fright wind. The chest and abdomen palpation, eight massage methods, and point massage proposed in this book are still being used nowadays.

Lectures of Doctors in Wu (《吳醫彙講》)

Lectures of Doctors in Wu was issued initially in the 57th Qianlong Year (1792 AD) and was an irregularly scheduled journal. A total of eleven volumes were issued, and a bound volume was created. During the 10 years of its publication, this journal collected ninety-four articles from



regions south of the Yangtze River, including medical works of forty-one doctors from Changshu (常熟), Changting (長洲), Taicang (太倉), and Wuxi (無錫); and included fifteen articles written by Da-Lie Tang (唐大烈). *Lectures of Doctors in Wu* collected all kinds of articles, disregarding their forms, but considering the authors who showed independent thinking and presented unique ideas. Articles in each volume covered different branches of internal medicine, external medicine, gynecology, and pediatrics. The content included annotations and commented on the following: existing medical books, discussion of a specific diseases and disease causes and pathologic mechanism, theories of movement and qi and channels and network, mediation of formulas and herbal foundation, exchanges of empirical formulas, medical ethics education, medical essays, research on medical history, medical terms, songs and rhythms, and reading methods. It had rich content, and paid great attention to the application of theories and clinical experience.

Section 4 Biographies of Medical Experts

Chang Yu (喻昌)

Chang Yu (from 1585 AD to 1664 AD) had a style name of Jia-Yan (嘉言), and called himself Xi-Chang Lao Ren (西昌老人) in his later years. He was a native of Jianxin, Jiangxi (nowadays Nanchang City,



Jiangxi Province), and was a famous doctor in the period of late Ming and early Qing. Together with Lu Zhang and Qian Wu, the three of them were regarded as the Three Famous Doctors of Early Qing. During Chongzhen years (崇禎; 1630 AD), he was promoted to Gong-Sheng (貢生; Tribute Student), Second Class. He once submitted statements discussing government affairs; however, his advice was not accepted. As dirty politics corruption prevailed daily, he gradually distanced himself from the political circle. Finally, he decided to become a monk, cut his hair and travelled between Nanchang and Jing'an. It is because of this that Chang Yu had a sound knowledge of Buddhist principles; the spirit of Buddhism could also be traced in his medical works and medical practice. In his later years, Chang Yu was diligent in writing books, and taught medicine. He had a deep understanding of medical theories, especially the *On Cold Damage*. He was flexible in choosing medicines, and cured patients who suffered from severe chronic diseases. He had numerous disciples and followers, and was well-known all over the country.

Chang Yu wrote many books and proposed the theory of “Tripartite Confrontation of Three Principles” and extended Zhong-Jing’s theory in his book *Shang Lun Pian*. The content was brief, and easy to understand. He explored the implications, and narrated the essentials of treatment. *Axioms of Medicine* (《醫門法律》) was a book he wrote about clinical treatment of diseases. It covered rules for clinical identification and treatment, and analyzed disease causes and pathological mechanisms. *Yu*



Yi Cao (《寓意草》) was another book he wrote wherein he recorded about sixty clinical cases he experienced, and stressed that “disease discussion first, before medication”. The three abovementioned books were called *Yu’s Three Books on Medicine* (《喻氏醫發學三書》). Also, *Shang Lun Hou Pian* (《尚論後篇》) was attached to *Appendent Chapter of Questions and Answers* (《問答附篇》) and *Choices for Cold Damage* (《傷寒抉疑》). With regards to clinical treatment, Chang Yu was especially proficient and knowledgeable in miscellaneous diseases of internal medicine. He did extensive researches on Zhong-Jing’s theories, and valued the protection of the spleen and stomach, the supplementation and nourishing of right qi, and warming and supplementing the lower origin. He emphasized the importance of having a clear understanding of the disease situation before prescribing a formula. He also generated a detailed statement on prohibition of medicines to avoid mistreatment. Chang Yu was strict and practical with studies. His study included classical works such as *The Inner Canon* and *The Classic of Difficult Issues*, and theories of different scholars, where he learned and deeply absorbed the essentials. His academic achievement included the establishment of “autumn dryness theory” (「秋燥論」), “great qi theory” (「大氣論」), and “the method of hauling the boat upstream” (「逆流挽舟法」).¹³



Shan Fu (傅山)

Shan Fu (from 1607 AD to 1684 AD) was a doctor in the period of late Ming Dynasty and early Qing Dynasty. He was initially named Ding-Chen (鼎臣), but later changed this to Qing-Zhu (青主). He had two style names: Qing-Zhu (青竹) and Ren-Zhong (仁仲), and was a native of Taiyuan, Shanxi Province. Shan Fu read extensively, and was extremely studious. He deeply studied Confucian classics, historical records, religions, poems, music, sinology, and miscellaneous operas, and had unique understanding of them. He also had excellent performance in medical field. He not only had outstanding medical skills, but also had a heart to help people.

Shan Fu was born in a scholarly family with members being government officials. He started to study Confucianism when he was young. He was very smart, and was recruited as Government Student of Erudite when he was only 14. Later, as he felt that taking part in the imperial examinations could not bring actual benefit to the country and the people, he pursued and concentrated on medical studies. He cared about political issues, rebelled against the Qing Dynasty, and contributed his efforts to rebuild the Ming Dynasty. In the 9th Chongzhen Year of Ming Dynasty (1636 AD), his master Ji-Xian Yuan (袁繼咸), who was Superintendent of Training of Shanxi, was falsely accused. To show his dismay, Shan Fu organized student movements, which finally cleared his



master of the accusation. After Ming Dynasty perished, he retired and lived in secluded mountains and devoted himself to writing. Shan Fu refused the recruitment from Qing Dynasty and mentioned that he would rather live in the mountains than cooperate with the Qing Dynasty. He would not flatter influential officials, and was loyal to his own country.

Qing-Zhu Fu's Gynecology and Andrology (《傅青主男女科》) was Shan Fu's master work. The book showed great originality in discussing the treatment of vomiting. He also cured diseases using separate medicines for men and women. The medicines and formulas recorded in the book were common, and had good empirical effects. Shan Fu's medical thoughts were influenced mainly by Confucianism and Taoism. His philosophy on human body and life was based on *The Book of Changes* (《易經》), and theories of yin, yang, five phases, essential qi, and visceral manifestation of *The Yellow Emperor's Inner Canon*, and the ideas of Xun Zi (荀子), Mo Zi (墨子), Lao Zi (老子), and Zhuang Zi (莊子). He integrated these theories and thoughts, and formed his own medical system. He valued qi and blood in clinical practice, and preferred to deal with the disease and at the same time, supplement through medications during treatment. He was especially proficient in miscellaneous diseases of the gynecology and internal medicine, and thought highly of empirical folk formulas.



Zhi-Cong Zhang (張志聰)

Zhi-Cong Zhang had a style name of Yin-An (隱庵), and also called himself Xi-Ling Yin-An Dao Ren (西陵隱庵道人). He was a native of Qiantang, Hangzhou, Zhejiang Province and was a famous doctor in the period of late Ming and early Qing. According to him, he was the 46th generation under Zhong-Jing Zhang. Zhi-Cong Zhang was born in a family of I-Shen (Physician). His father died when he was young. He then, gave up Confucianism, and started to study medicine. He learned from the famous doctor, Sui-Chen Zhang (張遂辰), in his early years, and made efforts to study medical works of past dynasties. He absorbed essentials of the theories of other doctors, and had profound knowledge of *The Inner Canon* and *On Cold Damage*. Later, influenced by the lecture of Zhi-Yi Lu (盧之頤), who was a famous doctor in the period of late Ming, he established “Lv Shan Tang” (「侶山堂」) in Hangzhou, and summoned doctors and their disciples to discuss medical science, and discriminate right practices from wrong.¹⁴

Zhi-Cong Zhang delivered lectures and practiced medicine for several years, and had a great number of followers and disciples. Some of Zhi-Cong Zhang’s works were completed through discussions with his fellows and followers; his unfinished works on the other hand, were completed by his followers with his annotations attached to them. This marked the beginning of collective writing. His works included *Origin of*



on Cold Damage (《傷寒論宗印》), *Variorum of Magic Pivot* (《靈樞集注》), *Pursuing Original Ideas of Herbal Foundation Compendium* (《本草崇原》), *Variorum of Plain Questions* (《素問集注》), and *Annotated Essential Prescriptions of the Golden Coffe*r (《金匱要略注》). Unfortunately, his book *Secret Acupuncture and Moxibustion* (《針灸秘傳》) had been lost. He wrote *Compendium of on Cold Damage* (《傷寒論綱目》) and *Variorum of on Cold Damage* (《傷寒論集注》) in his later years, but died even before finishing them. His disciples continued to compile these books.

Ang Wang (汪昂)

Ang Wang (from 1615 AD to 1699 AD) had a style name of Ren-An (詡庵), and called himself Wan-Hu Lao Ren (灣澹老人) in his later years. He was a native of Xiuning, Anhui Province, and was a Xin'an doctor during the Late Ming to early Qing period. He studied Confucianism in his early years; after the Ming Dynasty perished, he decided not to take the imperial examinations, and concentrated instead, on medical studies. Ang Wang was serious with learning. He read all kinds of Confucian classics, historical records, and medical works. After careful verification of ancient books, he compiled a series of famous medical works. A total of thirteen literature works of traditional Chinese medicine were signed under the name of Ang Wang. Among all his works, the following are the most revered ones: *Annotations to Plain Questions and Magic Pivot* (《素問靈



樞類纂約注》), *The Essential Herbal Foundation, Medical Formulas Gathered and Explained*, and *Decoctions in Rhymes* (《湯頭歌訣》); these are regarded as “Wang’s Four Master Pieces” (「汪氏四書」)¹⁵.

Lu Zhang (張璐)

Lu Zhang (from 1637 AD to 1699 AD) had a style name of Lu-Yu (路玉), and called himself Shi-Wan Lao Ren (石頑老人) in his later years. He was a native of Wuxian, Jiangsu Province and was a famous doctor in the period of late Ming and early Qing. When he was young, he studied to become an official and learned medicine along with it. After the Ming Dynasty perished, he lived in seclusion and took refuge in Dongtingshan, Taihu Lake for 10 years. He gave up the imperial examinations, and focused instead on medical studies. He entertained himself by practicing medicine and writing books. Lu Zhang practiced medicine for several decades; he was famous for his excellent medical skills at that time, and became popularly known as the “National Doctor” (「國手」). Together with Chang Yu and Qian Wu, they were regarded as the Three Famous Doctors of Early Qing.

Lu Zhang read a great many books, and was diligent in writing. In the 16th Shunzhi Year of Qing Dynasty (1659 AD), he returned to his hometown, and summarized the medical notes he wrote during his 15 years of seclusion to complete his book entitled *Medicine on Return* (《醫歸》), indicating that he had returned from seclusion. In the subsequent 40 years,



he practiced medicine in the local area, and kept writing. He also made great efforts to develop and nurture medical talents. Apart from his sons Deng Zhang (張登) and Zhuo Zhang (張倬), he had many followers. His works included *Zhang's Clear View of Medicine* (《張氏醫通》), *Opinions on Cold Damage* (《傷寒續論》), *Introduction to Cold Damage* (《傷寒諸論》), *Three Original Flavors of Palpation* (《診宗三昧》), *Ben Jing Feng Yuan* (《本經逢源》) and *Expanded Thousand Gold Pieces Formulary* (《千金方衍義》).

Qin Ke (柯琴)

Qin Ke (from 1662 AD to 1735 AD) had a style name of Yun-Bo (韻伯), and called himself Si-Feng (似峰). He was a native of Yuyao, Zhejiang Province and was a famous doctor during the Qing Dynasty; he was also known as someone who was good at writing especially poems and ancient literature. In his early years, he studied to become an official. After Ming Dynasty perished, he decided to abdicate from the imperial examinations, and turned his attention instead to studying medicine. He worked hard on medical studies, read extensively, and tried to understand the ideas carried in the books to the best of his abilities.

Although Qin Ke had excellent medical skills, he stayed at home most of time to write books. He extensively read all kinds of medical classics, had a good knowledge of *Magic Pivot* and *Plain Questions*, and thought highly of the ideas of Zhong-Jing. He studied *The Inner Canon* and *On*



Cold Damage, and completed *Combination of The Inner Canon* (《內經合璧》). Unfortunately, this book failed to be passed on. His works also included two volumes each of *Wings to on Cold Damage*, and *Wing Discussion of on Cold Damage*, and four volumes of *Annotations of on Cold Damage*. These three books were collectively referred to as *A Compendium of Cold Damage Treatment* which was the master work of Qin Ke. The book mainly aimed to explain the meanings of the original text, and to clarify the heart-method of Zhong-Jing. In addition, this book summarized and rearranged the articles of *On Cold Damage*. Qin Ke spent his lifetime studying, annotating, and explaining *On Cold Damage*, and seldom practiced medicine. As a consequence, not many people at that time knew his name. However, after his medical works were released, he gradually gained praises from other doctors. The book *History of Qing · Biography of Qin Ke* (《清史稿·柯琴傳》) highly commended Qin Ke's books and mentioned that "Qin's two books made a great contribution to Zhong-Jing's ideas" (「論者謂琴二書，大有功於仲景」).¹⁶

Yi You (尤怡)

Yi You had style names of Zai-Jing (在涇) (also written as Zai-Jing; 在京) and Yin He (飲鶴), and called himself Zhuo-Wu (拙吾), as well as Si-He Shan Ren (飼鶴山人) in his later years. He was a native of Changzhou, Jiangsu Province, and was a famous doctor of Qing Dynasty. Yi You formally acknowledged famous doctor Chu Ma (馬倬) of Suzhou



as his master when he was 20 years old and that was when his fame started. He widely read medical works from the period of the Yellow Emperor and Bo Qi to modern times. He studied medicine in Chang Yu private school, and learned from others' ideas. He studied *Magic Pivot*, *Plain Questions*, and Zhong-Jing's theories thoroughly allowing him to absorb all the ideas contained in these books. In his later years, he focused on studying *On Cold Damage*, and *Essential Prescriptions of the Golden Plaque* (《金匱要略》). He also studied theories of doctors of the Sung, Yuan, Ming and Qing Dynasties. *Heart-Code of Essential Prescriptions of the Golden Coffer* was Yi You's master piece. The book corrected, annotated, and explained the *Essential Prescriptions of the Golden Coffer*. The content was easy to understand and explained difficult implications of the original text in simple words, and presented several unique opinions and supplementations from the author. Yi You summarized and annotated *On Cold Damage* in his work *Pearl-String Variorum of on Cold Damage* (《傷寒貫珠集》). The book was divided into eight volumes, and provided clear presentation of data with an orderly outline. Yi You also wrote *The Wings of the Golden Coffer* (《金匱翼》) to clarify the patterns and treatments of miscellaneous diseases of the internal medicine. It was a supplementary material to *Heart-Code of Essential Prescriptions of the Golden Coffer*. Further, Yi You's other book, *On Medical Reading* (《醫學讀書記》), contained his notes, verification, and comments on ancient medical books and theories of other doctors. Another book, *Jing-Xiang*



Building Medical Cases (《靜香樓醫案》), presented the clinical cases of Yi You. It was summarized and edited by individuals of later generation, and was included in *Medical Cases of Four Doctors* (《四家醫案》) compiled by Bao-Yi Liu (柳寶貽).¹⁷

Xue Xue (薛雪)

Xue Xue (from 1681 AD to 1770 AD) had a style name of Sheng-Bai (生白), and called himself Yi-Piao (一瓢), Huai-Yun Dao Ren (槐雲道人), Sao-Ye Shan Ren (掃葉山人), Mo-Jian Dao Ren (磨劍道人), and Mu-Niu Lao Xiu (牧牛老朽) in his later years. He was a native of Jiangsu Province and was a famous warm disease doctor in Qing Dynasty, enjoying the same fame with Gui Ye (葉桂) at that time. Xue Xue studied Confucian classics in his early years. He was educated and was good in writing, especially poems, painting, boxing, and health cultivation. He was especially proficient in medical skills, and was an expert in warm diseases. During Qianlong years, he was invited to take part in the Examination of Erudite Literatus (「博學鴻詞」) twice, but he refused both. He was aloof, proud but generous, and was not interested in fame and fortune. When his mother fell ill, he devoted himself to studying medicine, and this improved his medical skills significantly.

Xue Xue was a master in treating damp-heat patterns. His treatments were often highly effective. He wrote *Systematized Identification of Damp-Heat* (《濕熱條辨》) to give a systematic description on causes,



pathologic mechanism, disease locations, and evil contraction routes of warm diseases. The book also provided a detailed explanation on the differences between warm diseases and cold damage. The treatment methods proposed by Xue Xue were incisive, flexible, and ingenious. The formulas were valid and original. The book became an important foundation for the development of diagnosis and treatment theories of warm diseases. Furthermore, he wrote the *Original Meanings of the Medical Canon* (《醫經原旨》) to annotate some parts of *The Inner Canon* using his own opinions and the theories of other doctors. He also extended the theories of *Magic Pivot* and *Plain Questions* in this book. He also wrote *Miscellaneous Notes of Daily Lecture* (《日講雜記》) which discussed prescriptions and medical principles, and was published in *Lectures of Doctors in Wu* edited by Da-Lie Tang. Later generations compiled two books of his books, *Sao Ye Zhuang Medical Cases* (《掃葉莊醫案》) and *Sheng-Bai Xue's Medical Cases* (《薛生白醫案》).¹⁸

Gui Ye (葉桂)

Gui Ye (from 1667 AD to 1746 AD) had a style name of Tian-Shi (天士), and called himself Xiang-Yan (香岩), Mr. Nan-Yang (南陽先生), or Shang-Jin Lao Ren (上津老人). He was a native of Wuxian, Jiangsu Province and was one of the four famous warm-disease doctors of Qing Dynasty. Tian-Shi Ye was born in a family of I-Shen (Physician). Both of his grandfather and father were famous doctors. His grandfather, Shi Ye



(葉時), was an expert in pediatrics, while his father, Zhao-Cai Ye (葉朝采), also had medical knowledge, and was good at painting, carving, and music. Gui Ye followed the family tradition, studied medicine from his father when he was young, and read extensively. When he was 14 years old, his father died. To honor him, he studied from Mr. Zhu (朱某) who was a follower of his father. He consulted Mr. Zhu like he was his master every time he hears of anyone who was good at medicine. Consequently, he studied from seventeen masters in ten years, including Yuan-Yi Ma (馬元儀), Yang-Jun Zhou (周揚俊), and Lu Zhang. Apart from pediatrics, Gui Ye was also skillful in internal medicine and external medicine. Due to his superior medical skills, local people regarded him as “Heaven’s Doctor Descended to the Earth” (「天醫星下凡」).

As for clinical practice, Gui Ye was good at palpation and observing complexion. He had superior diagnosing and treating skills, and noble medical ethics. He often provided free medical treatment to underprivileged patients and gave them free medications as well. Before he died, he told his descendants “to be prudent to become doctors” (「慎毋輕言醫」). He emphasized that medical science was about patients’ health and lives, and only those with a kind heart could start learning and practicing medicine. It can be seen that he was a benevolent doctor. Gui Ye had many opinions and experience in treating warm diseases. He created the “Theory of Stomach Yin”, and proposed the idea that “the spleen preferred strong and dry, and the stomach preferred soft and moist” (「脾



喜剛燥，胃喜柔潤」). He used *The Inner Canon* as the principle of theoretical study, learned from Zhong-Jing, and blended his own clinical experience and opinions into Dong-Yuan's theories. He greatly influenced later generations' treatment of warm diseases and miscellaneous diseases of internal damage. Gui Ye did not have plenty of medical literary works; however, his followers, disciples and descendants recorded his talks and lectures, then later, collected, summarized, and compiled them to make to book *On Warm Heat*. Among his disciples were Jing-Wen Gu (顧景文) and Xiu-Yun Hua (華岫雲) made the greatest contribution to this book.

Da-Chun Xu (徐大椿)

Da-Chun Xu (from 1693 AD to 1771 AD) formerly called Da-Ye (大業), had a style name of Ling-Tai (靈胎), and called himself Hui-Xi Lao Ren (涇溪老人) in his later years. He was a native of Songling Town, Wujiang, Jiangsu Province. He was a famous doctor in Qing Dynasty, and was especially proficient in internal medicine and external medicine. Due to the family tradition, Da-Chun Xu studied Confucianism when he was young, and passed the qualifying examination to become a Cultivated Talent. However, he was not interested in fame and fortune, instead, he pursued to study medicine; this inclination further grew when several members of his family fell ill and later, died because of improper treatment. He devoted himself to reading medical works of famous doctors, and studying medical classics. Da-Chun Xu was educated, and



strict with studies. He was down-to-earth, and good at absorbing the experiences of his predecessors. He practiced medicine for a number of years, accumulated rich clinical experience, and still kept a benevolent heart as a doctor. With respect to medication in clinical practice, he proposed ideas such as “using medicines was like using soldiers” (「用藥如用兵」), and “each disease definitely had a medicine for cure” (「有一病則有一藥以制之」). He proposed to be flexible in using medicines, and objected to formulation and prevalent customs of medication. He believed that doctors should probe into the name of the disease, and identify the causes and symptoms, before prescribing medicinal formulas which should depend on a specific pattern. He criticized the blind faith of supplementing medicines, and corrected bad practices in the medical field.

Da-Chun Xu wrote many books, including *Annotation of the Classic of Difficult Issues* (《難經經釋》), *Hundred Medicines from The Divine Husbandman's Herbal Foundation Canon* (《神農本草經百種錄》), *On the Source of Medicine, Classified Formulas of Cold Damage* (《傷寒類方》), *Lantai Rules* (《蘭台軌範》), *Comment on Thorough Knowledge of Medicine* (《醫貫砭》), and *Cautious about Disease and Shallow Opinions* (《慎疾芻言》). He also commented on *Orthodox Manual of External Medicine* (《外科正宗》) by Shi-Gong Chen (陳實功) and *A Clinical Guide with Case Histories* (《臨證指南醫案》) by Tian-Shi Ye.¹⁹



Yuan-Yu Huang (黃元御)

Yuan-Yu Huang (from 1705 AD to 1758 AD), also named Yu-Lu (玉璐), had a style name of Kun-Zai (坤載), and called himself Yan-Nong (研農) or Yu Qiu Zi (玉楸子). He was a native of Changyi County, Shandong Province. He was the 11th generation under Xuan Huang (黃宣) who was the Grand Guardian of Ming Dynasty, and was a famous doctor during Qing Dynasty. He was very smart, and passed the exam to become Cultivated Talent when he was 15 years old. When he was 30 years old, due to the improper treatment of an unqualified doctor, he lost his left eyesight. Feeling sorry for himself, he decided to study medicine so he called later practice and teach on this field. He travelled to Beidu (now Taiyuan, Shanxi), Qingjiang (in Jiangxi), and Wulin (Hangzhou, Zhejiang). He mainly adopted the method of warming and supplementing to treat diseases, and was greatly influenced by Jie-Bin Zhang (張介賓). He once passed the exam to become a Yu-I (Imperial Physicians), and was ordered to accompany and serve Emperor Qianlong on a southern tour. His formulas always demonstrated surprising effects, and as a result, the emperor conferred him a plaque that honored him as someone who has “Subtle Understanding of Medicine” (「妙悟岐黃」). His medical thoughts were profound, and had connections to the ideas of *The Book of Changes*. He made extensions on *The Classic of Difficult Issues*, *The Inner Canon*, *On Cold Damage*, and *Essential Prescriptions of the Golden*



Coffer, and developed them to form his own theories. Lastly, he greatly promoted the idea of “supporting the yang and repressing the yin” (「扶陽抑陰」).²⁰


Yuan-Yu Huang believed that hundreds of diseases were the result of the changes in the six qi. Applying the six qi to the human bodies, they could be further divided into standard qi, fundamental qi, and center qi. Diseases of external contraction and internal damage were caused by wind, heat, summer heat, damp, dryness, and cold. He also argued that human lives were based on yang qi. Effulgent yang qi would guarantee the vitality of the five viscera and six bowels, and individuals would stay healthy enough to resist any infections and acquisition of diseases. He valued the “supporting the yang and repressing the ying” during clinical treatment, and thought highly of spleen-earth. He always protected the yang qi and believed that freeing it would eliminate blocking. With respect to medicines, he preferred warm and heat medicines to bitter and cold ones, and believed in the idea of up-bearing and down-bearing of the center qi that runs in the principles, methods, formulas, and medicines. With respect to pulse manifestation, he proposed to up-bear the liver qi, and down-bear the gallbladder qi. He pointed out that the liver qi tends to fall down, while the gallbladder qi tends to counter-flow, and that it was better to supplement the liver than to induce discharges. The core principle was the theory of center qi, either in physiology, pathology, or prescription. He believed that people fell ill because of the falling-out of the center qi.



Yuan-Yu Huang wrote many books, including *Subtle Implication of Plain Questions and Magic Pivot* (《素靈微蘊》), *Explained on Cold Damage* (《傷寒懸解》), *Explained Golden Coffin* (《金匱懸解》), *Heart-Origins of Four Saints* (《四聖心源》), *Suspended Pivot of Four Saints* (《四聖懸樞》), *Medicine Explanation in Changsha* (《長沙藥解》), *Words on Cold Damage* (《傷寒說意》), *Yu Qiu's Medicine Explanation* (《玉楸藥解》), *Explained Plain Questions* (《素問懸解》), *Explained Magic Pivot* (《靈樞懸解》), and *Explained Classic of Difficult Issues* (《難經懸解》).

Yi-Luo Wu (吳儀洛)

Yi-Luo Wu (from 1704 AD to 1766 AD) had a style name of Zun-Cheng (遵程). He was a native of Ganpu Town, Haiyan, Zhejiang Province, and was a famous doctor and book collector of Qing Dynasty. He was born in a family where most of his ancestors were government officials and businessmen. His rich family provided him complete education. His ancestors collected a large number of books, and most of them were rare. In the 2nd Yongzheng Year, Yi-Luo Wu passed the exam to become a Cultivated Talent. He held the study concept of “pursuing the truth of matters” (「格物窮理」) and “practicing and experiencing personally” (「躬行實踐」). He believed that knowledge should be beneficial for national affairs, which was contradicting to the stereotyped writing that was popular in the imperial court of Qing Dynasty. Due to his





failure to pass the imperial exams several times, he gave up pursuing a government official career, and started to extensively explore medical science. Yi-Luo Wu once travelled to Hubei, Guangdong, Hebei, and Henan. He lived in Siming (now Ningbo) for five years, and often went to “Tian Yi Ge” (「天一閣」) which was a library where he read medical works. Later, Yi-Luo Wu started his career as a doctor and practiced medicine for over forty years. In his spare time, he was diligent in writing which resulted in several published books.

Yi-Luo Wu initiated the idea that the processing of medicines should be sufficient, and prescriptions should be practical. His ideas were the link that connected traditional Chinese medicine, herb processing, and formula application of his predecessors to the later generations. Yi-Luo Wu had a good knowledge of herbal foundation, formulas, medicines, cold damage, and warm diseases. He thought that although the book entitled, *The Essential Herbal Foundation* by Ang Wang, discussed all kinds of theories, it did not provide rules to follow. He then, used this book and compiled its contents with his ideas to form the *Newly Revised Herbal Foundation*. His other book, *Effective Use of Set Formulas* (《成方切用》), contained the good points of *Medical Remedies Researched* (《醫方考》) by Kun Wu (吳崑) and *Medical Formulas Gathered and Explained* by Ang Wang. In this book, he was also able to attach his original ideas under each section, and present new meanings. The book contained about 1,100 formulas which were either added or altered by him



and all were proven effective and practical formulas. Yi-Luo Wu was also flexible in selecting medicines and studied *On Cold Damage*, and referred to the ideas of Chang Yu to revise the *Shang Lun Pian*. He referred to *The Second Annotation to On Cold Damage* (《傷寒論二注》) by Yu-Zai Zhou (周禹載) and *Systematized Identification to On Cold Damage* (《傷寒論後條辨》) by Jiao-Qian Cheng (程郊倩), and attached his own opinions to complete the book entitled *Channel Classification of Cold Damage* (《傷寒分經》).²¹

Xue-Min Zhao (趙學敏)

Xue-Min Zhao (from 1719 AD to 1805 AD) had a style name of Shu-Xuan (恕軒), and called himself Yi-Ji (依吉). He was a native of Qiantang, Zhejiang Province (now Hangzhou, Zhejiang Province). He was a medical and pharmaceutical expert of Qing Dynasty. Xue-Min Zhao was born in a family of government officials and his father understood medical science. During the Qianlong years, epidemics prevailed. His father employed doctors, and combined medicines for treatments, and thus saved thousands of lives. Xue-Min Zhao showed his talent even when he was still young. In his early years, he studied for the imperial examinations because his father aspired him to become a government official. His younger brother Xue-Kai (學楷) studied medicine in order to make a living. As a result, the brothers set up a study room to store medical classics, and constructed “Yang Su Garden” (「養素園」) to plant all kinds of herbs. They also built



“Li Ji Hall” (「利濟堂」) to practice medicine. Later, Xue-Min Zhao became highly interested in medicine, and decided to give up the imperial examinations. His father also changed his mind, and supported him to study medicine. He was educated, and had wide interests. He often forgot to take a rest. As he read numerous books, and overused his eyes, he got an eye disease but eventually recovered after several years of treatment.

Xue-Min Zhao paid great attention to folk experience in clinical treatment. collected a large amount of folk experience in medicine, and summarized those magic formulas, which were “considered as secrets” (「秘不輕授」), and difficult to obtain, to complete the book *Treatments of Folk Medicine* (《串雅》) in 1759 AD.²² Xue-Min Zhao gathered Bai-Yun Zhao’s (趙柏雲), a Ling-I (鈴醫, bell healer), medical experience, and combined it with his own clinical experience, and with the empirical formulas he collected from different individuals to complete this book. The book was divided into internal treatments and external treatments with four volumes for each. It was a book specialized in “the medical skills of itinerant healers” (「走方醫」). The medications recorded in this book were characterized as “cheap” (「廉」), “empirical” (「驗」), and “convenient” (「便」).

Xue-Min Zhao was serious with study. Considering that *Herbal Foundation Compendium* was not perfect, and had flaws and missing contents, he thought that it was a must to correct and supplement it. Therefore, he compiled the *Supplement to the Herbal Foundation*



Compendium. It was another important work on pharmacy after *Herbal Foundation Compendium* by Shi-Zhen Li (李時珍). The book recorded seven-hundred and sixteen plants which were either not included or not described in details in the *Herbal Foundation Compendium*. He also wrote *Collection of Medicine* (《醫林集腋》), *Nang Lu Ji* (《囊露集》), *She Sheng Xian Lan* (《攝生閑覽》), *Trustworthy Formulas in Yang Su Garden* (《養素園傳信方》), *Introduction of Magic Medicines* (《奇藥備考》), and *Words on Herbal Foundation* (《本草話》). Most of these books have already been lost, and only *Supplement to the Herbal Foundation Compendium* and *Treatments of Folk Medicine* have been preserved till now.

Gen-Chu Yu (俞根初)

Gen-Chu Yu (from 1734 AD to 1799 AD) was named as Zhao-Yuan (肇源), and was a native of Shaoxing, Zhejiang Province. He was a famous doctor during the Qing Dynasty. As he was the third child of the family, he was called “Mr. Yu Third” (「俞三先生」). His family practiced medicine for generations. He had several opinions and ideas on patterns and treatment of external diseases and had sound understanding on *The Inner Canon* and *The Classic of Difficult Medicine*. He wrote the book *Popular On Cold Damage* (《通俗傷寒論》) which gave general definitions to diseases and patterns of cold damage. It proposed the integration of warm and cold, and used cold damage as the general term for heat diseases. The



book also used the six-channel pattern identification proposed by Zhong-Jing as the basis for the patterns and treatments of externally contracted heat diseases, and blended in the theory of qi transformation. It extends Zhong-Jing's *On Cold Damage*, and is profound and essential in content. The later generations considered it to be a complete compendium for treating external contraction in four seasons. The formulas can be classified into five categories namely: (1) promoting out-thrust, (2) releasing effusion with dissipating acidity, (3) harmonizing resolution, (4) cooling discharge, and (5) warm supplementing. He predicted dates of recovery for each disease, and was correct most of the time. Gen-Chu Yu proposed the idea that "diseases were generally connected to six channels" (「百病不外六經」). He believed that the six channels could cover all diseases caused by external contraction, and adopted the method of three-burner pattern identification to judge patterns of scourge epidemics. In addition, Gen-Chu Yu also paid attention to diseases caused by latent evils. He believed that the qi of four seasons would hide, which could cause diseases. Further, he believed that the causes of disease were two evils of wind and cold. Therefore, during treatment, he proposed that mild precipitation should be conducted several times to eliminate evil, which would then support the right qi, before thoroughly eliminating the latent evil.

Popular on Cold Damage was Gen-Chu Yu's summary and supplement to the six-channel patterns of cold damage. It did not only used



ideas of *On Cold Damage*, but also presented Gen-Chu Yu's clinical experience and extensions making it a popular and practical book. The Theory of Qi Transformation (「氣化學說」) was popular in regions south of the Yangtze River in the period of Ming and Qing Dynasty. Gen-Chu Yu was influenced by this theory. Although all the six-channels were equally important, he paid special attention to yang brightness channel, and classified the yang brightness patterns of cold damage into two types namely: fire transformation patterns and water transformation patterns.

Xiao-Ting Xiao (蕭曉亭)

Xiao-Ting Xiao was a native of Luling, Jiangxi Province. His father Xingchu (醒初) had a sound knowledge of theories of different scholars, and was also proficient in medicine. Xiao-Ting followed the footsteps of his father and studied medicine. He used his medical skills to help people, and did not charge them any fees. Therefore, many people came to ask for his help. During his time, leprosy prevailed in Guangdong and Jiangxi. He saw the tragic effects of leprosy on the families of patients infected by it. This made him give up on Confucianism to study medicine. He absorbed good ideas of other doctors, and saved hundreds of people. Xiao-Ting Xiao spent three years to compile *Summaries of Epidemics* (《癘病輯要》) and *Essentials of Epidemics* (《癘病備要》); both only had one volume each. Unfortunately, these were not published because he was poor. Later, Chun-Tai Yuan et al. combined these two books, annotated them, and compiled



them into a book named *A Collected Work on Leprosy Treatment* (《麻瘋全書》). The book was printed and published a number of times and is still being circulated today with the title *A Collected Work on Leprosy Treatment* (《麻門全書》). The book illustrated the origins and symptoms of leprosy, and provided several methods for pattern identification and treatments. It also quoted related literature from the past dynasties.

Tang Wu (吳璿)

Tang Wu (from 1758 AD to 1836 AD) had a style name of Pei-Heng (配珩), and called himself Ju-Tong (鞠通). He was a native of Huaiyin, Jiangsu Province, and was a famous doctor of warm diseases in the period of mid Qing Dynasty. He studied Confucianism when he was young. Later, when his father got inflicted with a certain disease and died, he gave up Confucianism for medicine. When his niece got inflicted and died of warm heat, he became determined and started to pay attention to warm diseases. When he was 26 years old, he went to the capital city, and took part in the proofreading and transcribing of *Si Ku Quan Shu* (《四庫全書》). He then read the *On Scourge Epidemics* (《溫疫論》) by You-Xing Wu, and was greatly inspired by it. He then, carefully studied the warm disease theories and treatment experience of You-Xing Wu, and Tian-Shi Ye, and read theories of different doctors. Later, a severe epidemic broke out in the capital city, and many patients died because of improper treatment. Supported by friends including Ting-Zhen Wang (汪廷珍), Tang Wu



adopted the treatment method of warm diseases, and cured about ten people; this gained him fame. Considering the disadvantages of sticking to the methods of cold damage to treat warm disease, Tang Wu devoted himself to finding the correct opinions on warm diseases. He summarized his clinical experience and perceptions, and referred to medical classics of past dynasties to complete the book entitled *Systematized Identification of Warm Diseases* (《溫病條辨》). The book argued the importance of identifying the yin and yang, and proposed the theory of triple burner pattern identification. It also adopted the method of combining clauses and annotations to illustrate warm diseases, and carried out analysis of each and every warm disease. Finally, the book also mentioned the six-channel pattern identification.

Tang Wu valued the treatment principles of warm diseases, including clearing the networks, clearing construction, and fostering the yin, in order to improve the therapy of rooting inner heat and fostering yin as much as possible. He created several medicinal formulas such as “Lonicera and Forsythia Powder” (「銀翹散」), “Construction-Clearing Decoction” (「清營湯」), “Mulberry Leaf and Chrysanthemum Beverage” (「桑菊飲」), and “Pulse-Restorative Variant Decoction” (「加減復脈湯」). Tang Wu also wrote *Treatment for Malpractice of Medicine* (《醫醫病書》) which mainly discussed medical ethics, diseases, patterns, treatments, medicines, and formulas. *Wu's Medical Cases* (《吳氏醫案》) presented medical records that validated the contents of *Systematized*



Identification of Warm Diseases. It was compiled by later generations. Apart from formulas, it also recorded disease changes of patients.

Lin Yu (余霖)

Liu Yu (from 1723 AD to 1795 AD) had a style name of Shi-Yu (師愚). He was a famous doctor in warm diseases in the period of mid Qing Dynasty. He was a native of Tongcheng, Anhui Province (also known as Changzhou, Jiangsu Province). Lin Yu studied Confucianism when he was young, and failed the imperial exams several times; because of this, he gave up Confucianism to study medicine. In the 29th Qianlong Year (1764 AD), his father was infected by an epidemic disease, and died because of improper treatment. He was devastated with the loss of his father which made him devote himself into studying warm diseases. Lin Yu read extensively, and studied medical classics extensively such as *Magic Pivot* and *Plain Questions*. He absorbed the good points of other doctors, and was influenced by He-Jian Liu's (劉和間) idea of fire heat, and You-Ke Wu's *On Warm Epidemics*. He wrote the two-volume book entitled *A View of Epidemics Characterized by Papules* (《疫疹一得》).²³

A View of Epidemics Characterized by Papules gave a comprehensive discussion on causes, pathologic mechanism, patterns, treatments, formulas, and medicines of scourge epidemics. Lin Yu believed that the prevailing epidemics were related to the qi movements of the four seasons, and that an abnormal qi movement would lead to diseases. He believed that



the hot toxin in the stomach was the origin of the disease. The severity of the attack, whether acute or moderate, depended on the strength of the human body the toxin is trying to invade. The identification and analysis of disease patterns were based on the hot toxin principle: “epidemic is a toxin, the fire of which appeared”(「疫既曰毒，其火明矣」). In clinical treatment, Lin Yu thought highly of He-Jian Liu’s theory of clearing heat and resolving toxin, and created the famous formula of “Scourge-Clearing Toxin-Vanquishing Beverage”(「清瘟敗毒飲」). Lin Yu was the first to bravely use large doses of medicine. He argued the importance of properly changing the dosage and the type of medicines to be used based on the severity of the disease. He emphasized the importance of combining clearing heat and resolving toxin with increasing the blood flow and transforming stasis during treatment achieve good effects.

Xiu-Yuan Chen (陳修園)

Nian-Zu Chen (陳念祖) (from 1766 AD to 1823 AD) had style names of Xiu-Yuan (修園) and Liang You (良有), and called himself Shen-Xiu (慎修). He was a native of Ximei Village, Jiangtian, Changle City, Fujian Province. He was a famous doctor during the Qing Dynasty. His father died when he was a child, and his family struggled in poverty. His grandfather Ju-Lang Chen (陳居廊) was educated, and good at medicine. Nian-Zu Chen inherited this knowledge and was passed down on him from his ancestors. In his early years, he worked hard to study Confucianism, and



read medical works of past dynasties. He thought highly of Zhong-Jing's theories, and held the study concept of "learning from ideas of ancestors and absorbing good points of others" (「勤求古訓，博採眾方」). Nian-Zu Chen became Government Student when he was 20 years old, however, he was not able to finish his study at Fuzhou Aofeng Academy of Classic Learning (福州鰲峰書院). In the 57th Qianlong Year (1792 AD), he became a successful candidate in the imperial examinations at the provincial level. Later, he took official positions such as County Magistrate and Prefect of a Superior Prefecture. He once studied from Zong-Yu Tsai (蔡宗玉), who was a famous doctor in Quanzhou. Nian-Zu Chen was an incorruptible and intelligent official. In his spare time, he would practice medicine to help people. He became very famous at that time because of his superior medical skills. He resigned on his position under the pretext of illness. After that, he became diligent in writing; his works included *Rhymes of Modern Formulas* (《時方歌括》), *Three-Character Classic of Medicine* (《醫學三字經》), *Variorum of Formulas of Cold Damage* (《傷寒醫方集注》), *Magical Effects of Modern Formulas* (《時方妙用》), and *Rhymes of True Formulas from On Cold Damage* (《傷寒真方歌括》). Later generations collected sixteen of his works and compiled them into a book called *A Collection of Nanya Tang's Medical Books* (《南雅堂醫書全集》).



Qing-Ren Wang (王清任)

Qing-Ren Wang (from 1768 AD to 1831 AD), also named Quan-Ren (全任), had a style name of Xun-Chen (勳臣). He was a native of Yutian, Hebei and studied martial arts when he was young. Later, he turned to medical study. He had excellent medical skills and once travelled to Luanzhou, Fengtian, and Beijing to practice medicine and he later opened a pharmacy named “Zhi Yi Tang” (「知一堂」) in Beijing. Qing-Ren Wang was serious with studying. When Qing-Ren Wang was in



Qing-Ren Wang
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 175

Luanzhou, a severe epidemic broke out in the town of Daodi. He had a chance to pass through a public graveyard (義冢), and there he saw internal organs coming out of the corpses because of a stray dog's bites. Every morning, he then carefully observed the exposed internal organs of over thirty corpses of children. He did this for about ten consecutive days, and compared what he saw with the illustrations and drawings of human viscera by his predecessors. In order to thoroughly study human organs, he went to the execution site (刑場) several times. He observed the visceral



structures of executed prisoners, and using his observations, he created book *Correction of Viscera Drawing Based on Personal Observation* (《親見改正臟腑圖》). In addition, Qing-Ren Wang conducted several experiments of animal dissection. After over ten years of study, he wrote the book *Correction of Errors in Medical Classics*. The highlight of the book was the application of the method of “increasing blood flow and transforming stasis” (「活血化癥」). The book proposed the theory of qi and blood, and advocated the treatment methods of “supplementing qi and increasing blood flow” and “expelling stasis and increasing blood flow”. It contained unique opinions on the diagnosis of static blood patterns and pathologic mechanism analysis, and established principles of qi supplementing, increasing blood flow, transforming stasis, and freeing yang. Qing-Ren Wang created several formulas for increasing blood flow and transforming stasis, such as Yang-Supplementing Five-Returning Decoction (補陽還五湯), House of Blood Stasis-Expelling Decoction (血府逐癥湯), Lesser Abdomen Stasis-Expelling Decoction (少腹逐癥湯), and Infra-diaphragmatic Stasis-Expelling Decoction (膈下逐癥湯). These were all famous formulas for regulating qi and blood, and are still being widely used in today’s clinical practice. In addition, Qing-Ren Wang also proposed new ideas on human brains. Influenced by Shi-Zhen Li of Ming Dynasty, he proposed the idea that “intelligence and memory lie in brain rather than the heart”, and elaborated the formation and physiological functions of the brain. He carefully analyzed the physiological connections



between the five offices and the brain, and the pathologic mechanism of brain lesions. Finally, he argued that brain lesions included withdrawal, reversal, mania and withdrawal.

Shi-Xiong Wang (王士雄)

Shi-Xiong Wang (from 1808 AD to 1868 AD) had a style name of Meng-Ying (孟英), and called himself Qian-Zhai (潛齋), Gui-Yan (歸硯), Sui-Xi Ju Shi (隨息居士), Ban-Chi Shan Ren (半癡山人), or Meng-Yin (夢癡; also known as Meng-Ying; 夢影) in his later years. He was a native of Yanguan Town, Haining, Zhejiang Province, and was one of the four famous doctors in warm diseases of Qing Dynasty. Shi-Xiong Wang was born in a family of doctors. Three generations of his family practiced medicine. His great-grandfather, Xue-Quan Wang (王學權), wrote the book *Chong Qing Tang Essays* (《重慶堂隨筆》). Both of his grandfather and father, Guo-Xiang Wang (王國祥) and Sheng Wang (王升) respectively, were famous for their medical skills. Influenced by profound family tradition, Shi-Xiong Wang inherited their career as a doctor. His father died when he was only 14 years old. Before his father passed away, he told Shi-Xiong Wang to practice medicine to help the people. This became Shi-Xiong Wang's inspiration to explore medical science.

Shi-Xiong Wang was born in an era of wars. Throughout his life, he experienced several epidemic outbreaks such as warm heat, cholera, and epidemic pestilence. He travelled around the country to practice medicine



and treat patients. In the 17th Daoguang Year (1837 AD), due to the chaos caused by wars, epidemic pestilence prevailed in Jiangsu and Zhejiang. As Shi-Xiong Wang was often absent from home during the year, and could not give his sons and daughters timely treatment when they were ill, he lost his daughter due to cholera. Feeling deeply regretful, he wrote *On Cholera* (《霍亂論》) in following year. Shi-Xiong Wang accumulated quite a rich clinical experience, and often had remarkable discoveries. During his clinical practice, he used an especially unique treatment method of nourishing the yin. He acquired most of his knowledge from the epidemics and warm diseases. He used common medicines, but exquisite effects were shown. When epidemics prevailed, he saved many people. Therefore, he was very famous in the regions south of the Yangtze River. He had profound achievements and unique ideas on warm diseases, and became a master of that era in warm diseases.

Shi-Xiong Wang wrote many books, but some have been lost because of the wars. He was especially good at treating warm diseases and miscellaneous internal damage diseases. Influenced by his great-grandfather, he deeply studied dietotherapy, and wrote *Sui Xi Ju Dietary Book* (《隨息居飲食譜》). The content was easy to understand and practical to use. It collected about three-hundred and thirty diet therapy medicines and related formulas, and elaborated food's natures, flavors, effects, application methods, and matters needing attention. It was a specialized book on dietotherapy of traditional Chinese medicine, health



care, disease prevention, and prolonging life. He also wrote *Warp and Weft of Warm Heat*.²⁴ This book systematically summarized the theories of warm diseases. He took *The Inner Canon* and ideas of Zhong-Jing Zhang as the warp, and the ideas of doctors such as Gui Ye, Xue Xue, Ping-Bo Chen (陳平伯), and Lin Yu as the weft to compile this book. *Simple and Effective Formulas of Four Branches* (《四科簡效方》) was written in his middle age. It was a collection of empirical formulas for common diseases of internal medicine, external medicine, gynecology, and pediatrics. He also took part in the compilation of *A Collection of Classical and Empirical Formulas* (《匯刊經驗方》). Later, he also wrote *Sui Xi Ju Revised on Cholera* (《隨息居重訂霍亂論》). It was written when he lived in Shanghai, and met the outbreak of cholera. He revised and supplemented the *On Cholera* to complete this book. He also wrote *Qian Zhai's Simple and Effective Formulas* (《潛齋簡效方》), and attached *Qian Zhai's Words on Medicine* (《潛齋醫話》).

Kun Qi (祁坤)

Kun Qi (approximately from 1610 AD to 1690 AD) had a style name of Guang-Sheng (廣生), and called himself Kui-An (愧庵) or Sheng Yang Zi (生陽子). He was a native of Shanyin (now Shaoxing), Zhejiang Province. He was a famous doctor of Qing Dynasty in external medicine. Kun Qi was born in a scholarly family. His family studied Confucianism for generations. He started to read Confucian classics when he was still



young, and read books of different scholars extensively. He also studied for the imperial examinations; However, his family, later, fell in hard times. Encouraged by a local doctor, Wang Dai (戴望), he gave up Confucianism to study medicine. He formally acknowledged Wang Dai as his master. During the rule of Emperor Shunzhi, he was recruited as Yu-I (Imperial Physicians). Later, he recognized by the Emperor Kangxi, and was promoted as Pan-Guan (Aide) of the Tai-I Yuan (Imperial Academy of Medicine).

Kun Qi widely read medical works of past dynasties, and absorbed their essences. His clinical treatment often showed excellent effects and was especially proficient in the study of external medicine. Kun Qi thought that although many medical classics of external medicine had wide sources, they were shallow in content. In addition, doctors always paid more attention to internal medicine than external medicine, and failed to keep a balance between this two. Therefore, he referred to the essentials of *Plain Questions* and *Magic Pivot*, collected theories of famous doctors of past dynasties, and combined them with his opinions and clinical experience of external medicine to compile and produce the book *The Great Compendium of External Medicine* (《外科大成》). The book elaborate the “pulses of welling-abscesses and flat-abscesses” (「癰疽之脈」), and referred to the eight-principle pattern identification including disease causes, symptoms, diagnosis and treatment, formulas and medicines, and prognosis, to classify and treat welling-abscesses and flat-



abscesses. The book also emphasized on the channel and network identification, and treatments using acupuncture and moxibustion. Considering welling-abscesses and flat-abscesses with pus, the author proposed that the cut should be done along the meridians, and after which, a drainage should be made to take care of the pus (走向下刀切開引流).

Yong-Cui Li (李用粹)

Yong-Cui Li (1662 AD to 1722 AD) had a style name of Xiu-Zhi (修之), and called himself Xing-An (惺庵). He was a native of Ningbo Prefecture, Zhejiang Province. He was good at treating diseases of internal medicine, gynecology, and pediatrics. He was a master in pattern identification, clinical treatment, palpation, and prescription. He was one of the four doctors assigned in Shanghai during the rule of Emperor Kangxi. He carefully studied *Magic Pivot* and *Plain Questions*, and gained a lot of knowledge from it. He also absorbed and collected essentials of other doctors' theories, and supplemented them. He wrote *Collected Supplements to Patterns and Treatments* where he mainly discussed his perceptions in clinical treatment, which provided clinical reference for later generations. In addition, the book gathered treatments of miscellaneous diseases of internal medicine. Finally, his follower Ting-Yi Tang (唐廷翊) compiled the clinical cases of Li and his son, and named it *Jiu De Tang Medical Cases* (《舊德堂醫案》).



Wei-De Wang (王維德)

Wei-De Wang (from 1669 AD to 1749 AD) had style names of Hong-Xu (洪緒), Dan-Ran (澹然), and Lin-Hong (林洪), and called himself Lin-Wu San Ren (林屋散人), Ding Ding Zi (定定子), and Dong Ting Shan Ren (洞庭山人). He was a native of Cili Village, Xishan Town, Wuxian, Suzhou. He was a famous doctor during the Qing Dynasty. Wei-De Wang was born in a family of doctors and inherited his great-grandfather's secret empirical formulas and skills of external medicine, and was proficient in internal medicine, external medicine, gynecology, pediatrics, and especially external medicine. He also had certain knowledge of yin, yang, divination, and feng shui theory. Wei-De Wang spent years practicing medicine in regions south of Yangtze River. He gained a lot of knowledge on welling-abscesses and flat-abscesses which were common in the local areas, and created the famous Harmonious Yang Decoction for treating yin of flat-abscesses. Based on his over forty years of clinical experience, he wrote the book *Life-For-All Compendium of External Medicine, Patterns and Treatment* (《外科證治全生集》).²⁵

Qian Wu (吳謙)

Qian Wu had a style name of Liu-Ji (六吉). He was a native of She County, Anhui Province; the dates of his birth and death are unknown. He was a famous doctor under the rule of Emperor Yongzheng and Emperor



Qianlong. He once worked as Yu-I (Imperial Physicians) of the Imperial Court of Qing, and was promoted to be Pan-Guan (Aide) of the Tai-I Yuan (Imperial Academy of Medicine). He was modest, gentle, respectful, and cautious. As he also had excellent medical skills, together with Chang Yu and Lu Zhang, they were regarded as the Three Famous Doctors of Early Qing. In the 4th Qianlong Year (1739 AD), the emperor ordered Yu-Duo Liu (劉裕鐸), Pan-Guan (Aide) of the Tai-I Yuan (Imperial Academy of Medicine), and Qian Wu, Zong-Xiu-Guan (總修官; Chief Official), to compile a large-scale comprehensive book series of medicine for reference use. After the completion, Emperor Qianlong named it *The Golden Mirror of Medicine*. The book has ninety volumes, and was preserved at the Palace Storehouses. It collected and summarized medical works and empirical formulas from the period of the Spring and Autumn, and the Warring States to the period of Ming and Qing Dynasties. They corrected the errors and supplemented the missing entries, deleted irrelevant data and preserved valuable ones. The book aimed to return to simple ideas from profound knowledge, explore undiscovered meanings, and make extensions. The book contained illustrations, empirical formulas, discussions, and conclusions, and attached rhymes for easier reciting. It was suitable for clinical use, and was widely circulated. The book gave a complete illustration on internal medicine, external medicine, acupuncture and moxibustion, and traumatology. It integrated the achievements of ancient medical works and literature, and became one of the text books of the Tai-



I Yuan (Imperial Academy of Medicine).

Jin-Bie Shen (沈金鰲)

Jin-Bie Shen (from 1717 AD to 1776 AD) had a style name of Qian-Lü (芊綠), and called himself Ji-Men (汲門), Zai-Ping (再平) or Zun-Sheng Lao Ren (尊生老人). He was a native of Wuxi, Jiangsu Province and started to study Confucianism when he was still young. In his middle ages, he failed the imperial examinations several times, and thus gave up Confucianism to study medicine. He studied books on medical skills, and read ancient books on medicine. He explored *Magic Pivot, Plain Questions*, and theories of Ji Zhang (張機) and other famous doctors, both ancient and modern. Jin-Bie Shen was diligent in writing. He read medical books of past dynasties, absorbed essentials of other doctors' theories, and used other books to verify and correct another. Thus, he completed *Unified Classification of Pulse Manifestations* (《脈象統類》), *Incisive Light on the Source of Miscellaneous Disease* (《雜病源流犀燭》), *Rhymes of Disease Correspondences of Pulses* (《諸脈主病詩》), *Compendium of On Cold Damage, Medicine Classification by Formula* (《要藥分劑》), *Jade Rule of Gynecology* (《婦科玉尺》), and *Confusion Explanation of Pediatrics* (《幼科釋迷》). All these books are collectively known as *Shen's Books about Respecting Life* (《沈氏尊生書》).



Zhi-Xiu Wei (魏之琇)

Zhi-Xiu Wei (from 1722 AD to 1772 AD) had a style name of Yu-Huang (玉璜) (or Yu-Heng; 玉衡), and called himself Liu-Zhou (柳州). He was a native of Qiantang (now Hangzhou, Zhejiang Province), and was a famous doctor in Qianlong years of Qing Dynasty. He was also a famous poet at that time. Zhi-Xiu Wei was born in a family of doctors. He proposed to enrich and nourish the liver and kidney, and valued liver-wood. He thought highly of Gui Ye's idea of "using softness and moistness for regulation" (「非柔潤不能調和」), and often used soft and moist medicines to nourish the liver yin. He created the "All-the-Way-Through Brewing" (「一貫煎」), and believed that this formula could "cure rib pain, acid swallowing, acid vomiting, mounting-conglomeration, and all liver diseases". The formula is composed of glehnia (沙參), ophiopogon (麥門冬), fresh rehmannia (生地黃), Chinese angelica (當歸), lyceum (枸杞子), and toosendan (川楝子), and has the function of enriching the yin coursing through the liver. Zhi-Xiu Wei appreciated Guan Wang's (汪瓘) *Classified Case Histories of Famous Physicians* very much. He once collated and summarized this book, and found that much of its content are missing. As a consequence, he referred to *Case Histories* (《醫案》) written by Li-Qi Xue (薛立齋), absorbed essences of others, added medical cases of dominant doctors after Ming Dynasty, and attached his own opinions to complete the book *Supplement to the Classified Case*



Histories of Famous Physicians (《續名醫類案》). The book has rich sources such as history and biographies, local chronicles, collected works, and novels. It can be considered as a compendium of medical cases before the period of early Qing Dynasty, and was a specialized book with the largest scale of medical cases that has been preserved till now.

Nan Zhang (章楠)

Nan Zhang had a style name of Xu-Gu (虛谷), and was a native of Kuiji, Guyue (now Shaoxing, Zhejiang Province). He was born between the Qianlong years and Daoguang years, and was a famous doctor of Qing Dynasty. Nan Zhang had been in poor health since he was young. Therefore, he studied medicine by himself with great efforts. He once travelled to Guangdong Province, Hebei Province, and Jiangsu Province to visit famous doctors to learn from them. However, in the first ten years of his study, he failed to grasp the key points. When he finished reading medical works such as *A Clinical Guide with Case Histories* (《臨證指南醫案》) by Tian-Shi Ye, he was greatly inspired. With respect to academic thoughts, he was deeply influenced by Gui Ye and Xue Xue. He had certain achievements on pattern identification and treatment of warm diseases. He proposed unique ideas, and established his own school. His fame spread all over the medical field at that time. He had sound understanding and thought highly of medical works and theories of famous doctors such as He-Jian Liu, Gao Li, Zhen-Heng Zhu, and Jing-Yue Zhang. He also



thought highly of *On Cold Damage* and *The Inner Canon*, and believed that in tracing the origins of principles, one should start with the classics. He objected to improper extensions of theories, and thought that these would lead to contradicting views and opinions. Therefore, based on his own experience and opinions, he wrote a book to discuss disputable but important issues of medical theories, and named it *A Blow of Medicine* (《醫門棒喝》) to warn and remind careless individuals about the dangers of improper extensions and annotations. He also wrote *Original Meanings of on Cold Damage* (《傷寒論本旨》) which was a book specialized in febrile diseases. This book mainly explained *On Cold Damage*, developed the warm disease theory, and commented and analyzed some formulas made by Zhong-Jing. Nan Zhang also wrote *Classified Annotations of Magic Pivot and Plain Questions* (《靈素節注類編》), and annotated *Tian-Shi Ye's Treatise on Warm Heat* (《葉天士溫熱論》) and *Systematized Identification of Damp Heat* (《濕熱條辨》).

References

1. Lin-Hua Zheng & Bin Xie (2009). On the Academic Thoughts of *Shang Lun Pian*. *Jiangxi Journal of Traditional Chinese Medicine*. 40(12). pp. 5.
2. Xun-Chao Ji, Zhi-Dong Xu & Fei Luo (2009). On the Academic Achievements and the Meaning of *Ben Cao Chong Yuan* by Zhi-Cong

- Zhang. *Yunnan Journal of Traditional Chinese Medicine and Materia Medical*. 30(8). pp. 73.
3. Zhong Zhen (2003). Contribution of *The Essential Herbal Foundation* to Traditional Chinese Medicine. *Hubei Journal of Traditional Chinese Medicine*. 25(7). pp. 6-7.
 4. Ya-Jun Huang & Ren-Shou Chen (2011). Comment on *Ben Jing Feng Yuan* by Lu Zhang. *Journal of Sichuan of Traditional Chinese Medicine*. 29(9). pp. 30.
 5. Rui1 Zhang, Xue-Mei Li & Xiao-Ping Fu (2010). On Academic Thoughts of Xin Dian of *Essential Prescriptions of the Golden Coffe*r. *Chinese Archives of Traditional Chinese Medicine*. 28(10). pp. 2173.
 6. Hao Li & Lin Liang (2011). Analysis of Treatment Methods and Formula in *Medical Insights*. *Beijing Journal of Traditional Chinese Medicine*. 30(10). pp. 757.
 7. Kun Li, Jia-Wei Chang & Zhe Li (2011). Main Points of *The Great Compendium of the Ophthalmology Canon*. *Chinese Journal of Basic Medicine in Traditional Chinese Medicine*. 17(8). pp. 853.
 8. Gu-Di Shi, Wen-Di Wei & Tie-Feng Zhang (2012). Analysis of Latent Summer Heat of *Systematized Identification of Warm Diseases*. *Henan Traditional Chinese Medicine*. 32(10). pp. 1269-1270.
 9. Ya-Lan Feng & Qing Zhou (2010). Features of Erysipelas Treatment Mentioned in *Sores Branch Collected Heart-Perceptions*. *Guiding Journal of Traditional Chinese Medicine and Pharmacy*. 16(12). pp. 12.

10. Ying-Lian Liu, Wen Yue & Li Huang (2012). Analysis of Identification and Treatment Features of *Women's Diseases of Qing-Zhu Fu's Gynecology*. *Guide of China Medicine*. 10(19). pp. 311.
11. Qian-Ya Zhong (2009). Comments on Academic Values of *Correction of Errors in Medical Works*. *Journal of Liaoning University of Traditional Chinese Medicine*. (7). pp. 7-9.
12. Pin Cong & Jian-Wei Li (2008). Quintessence of Laryngology Through Studying *Jade Key to the Secluded Chamber*. *Chinese Journal of Otorhinolaryngology in Integrative Medicine*. 16(2). pp. 151.
13. Feng-Xi Long & Dong-Xin Tang (2012). Discussion on the Background of Chang Yu's Formulation of His Academic Thoughts. *Henan Traditional Chinese Medicine*. 32(12). pp. 1608-1609.
14. Ting-Xiu Lin (2010). A Study on the Theory of Qi Transformation of Six-Channel by Zhi-Cong Zhang. *Beijing University of Traditional Chinese Medicine*. pp. 6-9.
15. Su-Qin Han (2009). Academic Characteristics of Ang Wang's *Collection of Prescriptions with Notes*. *Henan Traditional Chinese Medicine*. 29(11). pp. 1067-1068.
16. Yang Lin & Yu Li (2001). Discussion on Qin Ke's Academic Achievements. *Chengdu Medical Journal*. (4). pp. 217-218.
17. Zong-Dong Zhang (1992). Supplementary Records of Achievements of Yi You. *Journal of Yunnan College of Chinese Medicine*. (3). pp.



- 44-45.
18. Gong-Chen Xue (2009). Prestigious Physician Xue Xue Described by Poet Qiu Shuai. *Chinese Medical Culture*. (6). pp. 27-28.
 19. Gong-Chen Xue (2002). Da-Chun Xu's Thoughts of Medical Ethics. *Journal of Nanjing University of Traditional Chinese Medicine (Social Science)*. (1). pp. 9-12.
 20. Qian Hu & Xiang-Ming Fang (2012). Exploration and Analysis of Yuan-Yu Huang's Treatment Method of Six Qi. *Journal of Shanxi College of Traditional Chinese Medicine*. 13(3). pp. 20-21.
 21. Jie-Min Song, Jia-Qi Guan & Guang-Hui Liao (2010). On Yi-Luo Wu's Academic Thoughts and His *Renewed Herbal Foundation*. Symposium of the 3rd National Clinical Traditional Chinese Medicine Conference. pp. 92-94.
 22. Lu-Ming Xiang (2012). Xue-Min Zhao and Ling-I's (*Treatments of Folk Medicine*). *Henan Traditional Chinese Medicine*. (6). pp. 667.
 23. Shu-Jie Jia & Xin Song (2010). On Lin Yu's Academic Thoughts. *Modern Journal of Integrated Traditional Chinese and Western Medicine*. (28). pp. 3637-3638.
 24. Yue-Fei Jiang & Xiu-Juan Bian (2010). Comments on *Warp and Weft of Warm Heat* by Shi-Xiong Wang. *Journal of Emergency in Traditional Chinese Medicine*. 19(4). pp. 664-645.
 25. Yu-Long Pu (2008). Analysis of the Syndrome and Treatment of Flat-Abscesses Discussed in *Life-Saving Manual of Diagnosis and*





Treatment of External Diseases Written by Wei-De Wang. *Shanghai Journal of Traditional Chinese Medicine*. 42(7). pp. 59.





Chapter 10 *Traditional Chinese Medicine in Modern Times* (from 1840 AD to 2013 AD)

Section 1 Historical Background

During the Daoguang years (道光) of Qing Dynasty, a war broke out between China and Great Britain because of issues with the opium trade. China was defeated, and the *Treaty of Nanjing* (《南京條約》) was signed in 1842 AD. This was the first unequal treaty in modern history of China with Great Britain. Wars continued in the following years. In 1895 AD, during the Guangxu years (光緒) of Qing Dynasty, the Chinese and Japanese Jiawu War (甲午戰爭) broke out which ended in 1895 AD with the signing of the *Treaty of Shimonoseki* (《馬關條約》). Under the terms of this treaty, China was forced to concede Taiwan, the Penghu Islands, and the Liaotung Peninsula to Japan. After this defeat, China once again became the target of powerful foreign countries. For instance, in 1900 AD, the Eight-Power Allied Forces, formed by Britain, the United States, France, Germany, Japan, Russia, Austria, and Italy started a war with China's Qing Dynasty which concluded with the latter's defeat. As a result, *China had to sign the Boxer Protocol* (《辛丑條約》) with the eight



countries together with Britain, France, Germany, the United States, Japan, Russia, Austria, Italy etc. eleven countries. The treaty imposed a large number of compensation on China, and forced it to surrender several of its sovereign rights. Thus, the imperialist countries were able to gradually extend their sphere of influences from the coastal areas to the interior.

In 1905 AD, Yat-Sen Sun (孫中山) established the China Federal Association (「中國同盟會」) with Japan, and put forward the slogan: “to expel foreign invaders, recover the lost land, establish a republic, and equalize the land ownership” (「驅除韃虜，恢復中華，創立民國，平均地權」). The Association proposed to save China with the Three Principles of People. In 1911 AD, the Revolution of 1911 broke out, and Yat-Sen Sun was elected as the provisional president. Pu Yi (溥儀), Emperor of Qing Dynasty, was forced to give up the throne, which ended the feudalism that lasted for over 2000 years in China.

In 1919 AD, the May 4th Movement (五四運動) broke out in China; a student protest of which the youth were mainly involved. This was the result of the Chinese government’s failure to defend the country’s interests during the Paris Peace Conference (巴黎和會). The said conference transferred German’s interests in Shandong Province to Japan which caused discontent among the people, and lead to a revolution. In 1921 AD, the Communist Party of China (中國共產黨; CPC) was founded, and in 1927 AD, Kai-Shek Chiang (蔣介石) established a separate national government and central authority with the Nationalist Party in Nanjing to



oppose the existing national government in Wuhan; it was called Ning-Han Division (「寧漢分裂」). In 1931 AD, supported by Soviet Russia, the Communist Party of China (CPC) established the Soviet Republic of China which was antagonistic to the Republic of China (中華民國). On July 7th 1937 AD, Lugouqiao Incident (盧溝橋事變) occurred, and Japan took this opportunity to start a full-scale invasion in China. This prompted the second cooperation between the Communist Party of China (CPC) and the Nationalist Party; it was the beginning of the full-scale anti-Japanese war. In 1945 AD, the USA dropped atomic bombs in Japan, specifically in Hiroshima (廣島市) and Nagasaki (長崎市) successively. This forced Japan to an unconditional surrender which ended the Second World War formally. After the victory over Japan, a civil war broke out between the Republic of China and the Communist Party of China (CPC). The national government suffered defeat after another, and as a result, it retreated to Taiwan in 1949 AD. The Republic of China and the People's Republic of China established by the Communist Party of China (CPC) formed the division situated across the strait.

The introduction of western culture greatly impacted the society in the late period of Qing Dynasty. At that time, eastern, western, new, and old thoughts coexisted in different fields of education, philosophy, literature, natural science, and medicine. New social and cultural ideas emerged. Intellectuals were freed from the high-pressure control of the imperial court of Qing Dynasty, and strongly advocated revolution. The



cultural peak of Qing Dynasty began under the ruling of Emperor Qianlong (乾隆帝) and Emperor Jiaqing (嘉慶帝). The rulers implemented a large-scale literary inquisition which reached its peak in the in the mid to late ruling period of Emperor Qianlong. To avoid political prosecution, intellectuals focused on books to study sinology. They studied and verified classics of Confucianism, and avoided topics related to politics and to Ming and Qing Dynasties. In addition, while conducting high-pressure control on intellectuals, the rulers also promoted academic development. For instance, Emperor Kangxi (康熙帝) established the Bo Xue Hong Ru Ke (博學鴻儒科; Erudite Scholasticus Examination), and ordered to compile the *History of Ming Dynasty* (《明史》). In addition, Emperor Qianlong issued an imperial edict to compile Si Ku Quan Shu (《四庫全書》). Lastly, the Imperial Court of Qing Dynasty adopted the policy of conciliation; it which promoted textual research, and greatly contributed to the preservation of Chinese classics.

After the first opium war (鴉片戰爭), China was influenced by scientific knowledge of the western world. Considering the crises that the invasion of powerful countries had brought to China, intellectuals felt that trivial and uninteresting textual research was not helpful for the situation that China was facing. Hence, they gave up the study promoted by Emperor Qianlong and Emperor Jiaqing; instead, they engaged in studying ideas that was “beneficial to the society” (「經世致用」). They opposed and, thus tried to abolish textual research because it was impractical and



useless. They advocated western science, and strongly urged to reform. After the second opium war with Great Britain and France, the Westernization Group launched reformations in different areas, and proposed to “learn from foreigners to fight against them” (「師夷長技以制夷」). With respect to the cultural exchanges in the period of late Qing Dynasty, some advocated western learning, while others supported Chinese learning. In order to mediate the conflict between the western learning and the Chinese learning, scholar Zhi-Dong Zhang (張之洞) proposed the idea of “taking Chinese traditional thoughts, cultures, and systems as the foundation for the introduction of advanced science and technologies of the western world” (「中體西用」).

After China’s defeat in the Chinese-Japanese Jiawu War, reforms that promoted western learning underwent fast development. They advocated the use of western knowledge to reform China’s political system. This led to the birth of Wu Xu Reform (戊戌變法) under the supervision of Emperor Guangxu (光緒皇帝). The new policies included a series of innovations in education, economy, and military. The main purpose of the reform was to change China’s political system to constitutional monarchy. However, due to the obstructions and disapproval from the traditional school, the reform only lasted for 103 days; thus, it was also called “Hundred Days’ Reform” (「百日維新」).

In 1915 AD, Du-Xiu Chen (陳獨秀) created the *Youth Magazine* (《青年雜誌》), and proposed the ideas of “Mr. D” (「德先生」)



(democracy) and “Mr. S” (「賽先生」)(science). The magazine criticized warlord autarchy and absolute monarchy, actively eliminated traditional ideas, established scientific spirit, and awakened public’s awareness on democracy. It marked the start of the “New Culture Movement” (「新文化運動」). The magazine would later publish Shi Hu’s (胡適) *A Discussion on Literature Reformation* (《文學改良芻議》) which proposed the use of vernacular Chinese for writing (白話文運動), and caused literature revolution. In 1917 AD, the October Revolution of Russia succeeded, and as a result, intellectuals of China gave up democracy for socialism. They believed that communism is the only way to transform China into a powerful and rich country. They called on workers and farmers to revolt and change China. The Marxism (馬克思主義) soon spread all over the country.

Due to the enlightening from the western culture, natural science flourished in modern China. In addition, during the late period of Qing Dynasty, missionaries arrived in China bringing along with them theological doctrines as well as scientific knowledge. Data show that from 1853 AD to 1897 AD, missionaries translated 68 books on natural science. Although science books were rare at that time, and the content was mainly about religion, compared to traditional Chinese science books, they still had much innovative and scientific content; for that reason they were extremely welcomed by intellectuals. From the middle period of the 19th century, scientific research in China showed significant progress after



exchanges with western scientific knowledge. A number of famous engineers and scientists become prominent. For example, Shou Xu (徐壽) (from 1818 AD to 1884 AD), a scientist during the Qing Dynasty, devoted himself to spreading his knowledge on chemistry of the West in modern times, and created the Chinese naming principles of chemical elements. Another is mathematician Shan-Lan Li (李善蘭) (from 1810 AD to 1882 AD) who introduced a great number of mathematical items and symbols, wrote *Method for Identifying Prime Numbers* (《考數根法》), and translated several mathematical works. There was also Tian-You Zhan (詹天佑) (from 1861 AD to 1919 AD) who is now known as the “Father of Engineering of Modern China” (「中國近代工程之父」). He was the first Chief Engineer of China’s railways, and took charge of the construction of the Jing-Zhang Railway; thus, he is also known as the “Father of China’s Railways” (「中國鐵路之父」). These experts made great contributions to the scientific development and modernization of China. Other prominent scientists are famous geologists Hong-Zhao Zhang (章鴻釗) (from 1877 AD to 1951 AD), Si-Guang Li (李四光) (from 1889 AD to 1971 AD) et al. made considerable contributions to geological exploration, investigation, and research, and cultivated a number of geological talents for China. Si-Guang Li is regarded as the “Father of Geology of China” (「中國地質學之父」). Another is Xu-Dong Fan (范旭東) (from 1883 AD to 1945 AD) and De-Bang Hou (侯德榜) (from 1890 AD to 1974 AD), inventor of Hou’s process for soda manufacture (「侯式聯合製鹼法」),



who were the pioneers of the chemical industry in modern China. Contributions of mathematician Shi-E Lin (林士諤) (from 1913 AD to 1987 AD) are also worth noting. He proposed *Shi-E Lin's Method* (《林士法》) for polynomial solution and was also the founder of instrumentation technology and inertial technology of China's aviation industry. Finally, there was Xue-Sen Qian (錢學森) who was regarded as the "Father of China's Aviation Industry" (「中國太空之父」). All of these experts have made outstanding contributions to the scientific development of modern China.

Section 2 An Introduction to the History of Traditional Chinese Medicine

Development of Traditional Medicine

Missionaries arriving in China in the period of Ming and Qing Dynasties performed missionary work providing medical treatment to the Chinese people. They also brought in several original medical skills and ideas from the western world. During the period of late Qing Dynasty, academic ideas from the West gradually spread in the East. Books containing the medical science of the western world in the 17th century were translated by missionaries in China including those by Matteo Ricci (利瑪竇), Nicolas Longobardi (龍華民), and Johann Schreck (鄧玉函).



However, the contents of the books were brief, thus, it didn't receive much attention. After the opium war, missionaries and church organizations started to establish hospitals in Macau, Hong Kong, and in the five treaty ports. In these hospitals, western medical treatment was being administered to patients. Because the treatment showed significant effects, people gradually accepted western medicine and surgical operations. Later, western medicine became widely spread due to the establishment of hospitals, and schools, and the availability of translated medical books.

Due to the expansion of hospitals, foreign doctors started to recruit young Chinese as assistants. Those who learned from foreign doctors were the first to experience western medicine, and were pioneers in the field of western medicine in China. At that time, a large number of books on western medicine were translated into Chinese. Benjamin Hobson (合信) compiled five kinds of medical books which laid the foundation for the western medicine. The books covered surgery, internal medicine, gynecology, etc., and contained information from basic diagnosis to clinical treatment. They also gave a comprehensive and systematic introduction to western medicine. Taking a view of the spread of western learning in modern times, the development of medicine was the most prosperous one. The exchanges between the western and traditional Chinese medicine broadened the perspective of the latter in terms of medical knowledge and practice. Since the middle period of the 19th century, surgical operations of the western medicine had made great



progress due to the invention of an anesthesia. However, as for the internal medicine, traditional Chinese medicine was far ahead from the western medicine. Thus, some would argue that “western medicine is good at external medicine while traditional Chinese medicine is good at internal medicine” (「西醫長於外科，中醫長於內科」).

In the 22nd Guangxu Year (1896 AD), Peking Imperial University (京師大學堂) was established. Consequently, in the 24th Guangxu Year (1898 AD), during the promotion of Wu Xu Reform, Emperor Guangxu adopted the suggestion from Qi-Chao Liang (梁啟超) and You-Wei Kang (康有為) to establish a medical college; he then handed its management to Peking Imperial University. Accordingly, in 1903 AD, the university announced its study programs; medicine was the fourth out of the total eight subjects. It was then further divided into medical science and pharmacy. Although there were still courses on traditional Chinese medicine, the western medicine was the main part of the teaching.¹ In the 32^{ed} Guangxu Year (1906 AD), the schooling length of the Peking Medical College was extended from three years to five years in order to achieve better study and research results. In addition, course arrangement no longer focused on western medicine, but it gave equal value to traditional Chinese medicine and western medicine. Of the 33rd Guangxu Year (1907 AD), Peking Medical College was changed to Peking Specialized Medical College (京師醫學專門學堂). Also, the university’s program planning, schooling length, etc. had to be approved by the educational authority. However, due



to the lack of experience of the imperial court of Qing Dynasty in traditional Chinese and western medicine education, they were incapable of prescribing study programs for subjects being provided in the university. As a result, all students were sent to Japan to study, and the official university that provided traditional Chinese medicine education stopped its operation.

Medical talents cultivated by medical schools and colleges operated by the government were rare, and fell short of the demand of the whole country. Therefore, the traditional apprenticeship training method was still the main approach to gain traditional Chinese medical skills in modern times. Since apprenticeship training provided an opportunity for a more focused learning, teachers were able to pass on all their life-time clinical experience and academic study results to students. For instance, Bo-Tan Chen (陳伯壇), a famous doctor during the late Qing Dynasty, was once a successful Ju-Ren (舉人) in the imperial examination at the provincial level in the 20th Guangxu Year. He wrote *A Discussion on Essential Prescriptions of the Golden Coffin* (《讀過金匱》) and *A Discussion on Cold Damage* (《讀過傷寒論》). He devoted himself to medical practice, writing, and teaching in his late years, and cultivated many talents of traditional Chinese medicine. Apart from his son Wan-Ju Chen (陳萬駒) and his daughter Kun-Hua Chen (陳坤華) who took medicine as their career, many of his disciples had excellent medical skills.

China didn't formally included medical science into the national



education system until 1949 AD. Educational institutions of traditional Chinese medicine in modern times were established by private funds or academic groups such as the Li Ji Medical College (利濟醫學堂) of Zhejiang Province (1885 AD), and Guangzhou Medicine and Beneficence Association (醫學求益社) (1906 AD). In addition, exchanges in traditional Chinese medicine were often conducted through the activities directed by several academic groups. However, from 1920 AD, traditional Chinese medicine was suppressed by the government. These schools of traditional Chinese medicine struggled due to the lack of funds and worn-out devices, and thus their influences were limited.

Arguments of traditional Chinese medicine in modern times were quite different from those in the ancient times due to the introduction of western medical thought and social influences. The development of modern medicine is inclined towards specialization, and medical researches of different departments were published one after another. According to the *Union Catalog of Chinese Medical Books and Illustrations* (《中醫圖書聯合目錄》), there are a total of 202 works on surgical department, 104 of which were completed in modern times. There are also books discussing the treatment of sores, venereal diseases, syphilis, leprosy, etc. Several surgical experts also emerged such as Jing-He Yu (余景和) and Pei-Zhi Ma (馬培之). With respect to the internal medicine, apart from comprehensive medical books, specialized books on liver diseases, lung diseases, cholera, stroke, and stomach diseases were



also published. With respect to the gynecological department, a number of books published discusses about menstrual period, and pre- and post-partum care and treatment. As for the pediatric department, further researches were conducted on pattern identification and treatment of pox sores and measles papules; especially the former in which, about 10 specialized books were published. In modern times, over 90 books on eye diseases were published, including the *Six Essential Factors of Ophthalmology* (《眼科六要》) and *Integration of Ophthalmology of Western Medicine and Traditional Chinese Medicine* (《中西眼科匯通》). They elaborate on the symptoms, and systematic treatment of eye diseases, and thoroughly summarize the advancements and development of ophthalmology in modern times. As scarlet fever prevailed in modern times, medical books discussing this disease were published one after another, and many original ideas were proposed.

Traditional Chinese medicine in modern times observed for disease causes and patterns more carefully than the past, and thus the treatment methods were slightly different. In addition, it gradually became diversified, and many famous doctors proposed new ideas. For example, Bo-Xiong Fei (費伯雄), who was an expert at treating vacuity-taxation, created several famous formula for treating phlegm-rheum, pulmonary consumption, etc. He was also especially proficient in treating chronic diseases. Another is Pei-Zhi Ma, who was a representative of Meng-He Medical School (孟河醫派) he and an expert at surgery. He adopted



diversified methods for treatment, including provision of medications in the form of powder, pills, and paste, and the use of knives and needles for external treatment. In addition, he wrote *A Collected Work on Surgical Department* (《外科傳薪集》) which contained over 200 clinical formula. The book also introduces the use of surgical tools during surgical procedures, and describes the use of external pastes in detail. With respect to traumatology, Kao-Qing Jiang's (江考卿) opinions were quite unique. He assessed fractures by the grating sound of bones. This method is still being used today especially during surgical treatment. Ting-Hai Zhao (趙廷海), is another example, who wrote the *Secrets of Treatments in Traumatology* (《救傷秘旨》), which introduces the pattern identification and treatment of bone fractures. It records the method of repairing rib fractures using fixations on both sides which is similar in today's method of using gypsum as paste. Another famous individual is Doctor Shang-Xian Wu (吳尚先) who famously known as the "Master of External Treatment" (外治法宗師). He recorded his lifetime experience on external treatment in *Topical Remedies in Rhyme* (《理瀹駢文》). He also expanded the scope of application of medicinal paste, and created a milestone for traditional Chinese medicine in modern times. Lastly, treatment of laryngeal diseases was no longer limited to oral administration; medicinal paste, insufflation, acupuncture, etc. were also used as adjuncts for treatment.

In modern times, traditional Chinese medicine in Jiangsu Province,



Shanghai, Zhejiang Province, areas in the south of the Five Ridges, etc. had different emphases on diagnosis and medicine choices; because of this, different medical schools were developed, including Meng-He Medical School of Jiangsu Province. Meng-He is a small town along the Yangtze River. Five famous doctors namely: Bo-Xiong Fei, Pei-Zhi Ma, Chong-Shan Chao (巢崇山), and Gan-Ren Ding (丁甘仁) were natives of this town. They had excellent medical skills, and once there was a famous saying that “Wu-Zhong had the most advanced medical science, and doctors from Meng-He had the most excellent medical skills in Wu-Zhong” (「吳中醫學甲天下，孟河醫生冠吳中」). From Daoguang years of Qing Dynasty to 1874 AD, Meng-He Medical School was at its peak. It was able to expand its influences over the whole China. During this period, famous doctors gathered in Meng-He Town, and trades of Chinese medicines were prosperous. People streamed in to seek medical help. Among the talented alumnus of Meng-He Medical School are members of Fei and Ma families; Bo-Xiong Fei and Pei-Zhi Ma were the most famous ones. Bo-Xiong Fei was the seventh generation of the Fei family to practice medicine. He advocated mild treatment, and proposed the principle of “slow treatment” (「緩治」); which yielded significant effects. On the other hand, Pei-Zhi Ma’s family started to practice medicine during the Ming Dynasty. His grandfather Xing-San Ma (馬省三) practiced medicine for decades, and had outstanding medical skills, especially in external medicine. Pei-Zhi Ma’s disciples Wei-Fang Chao (巢



渭芳), Gan-Ren Ding, Ji-Heng He (賀季衡), and Xing-Bo Deng (鄧星伯) were also famous in the local area. During the late Qing Dynasty and early period of the Republic of China, doctors of Meng-He Medical School gradually settled in other places. Famous doctors then included Cheng-Zu Fei (費承祖), Xing-Bo Deng, Shi-An Sha (沙石安), Ji-Heng He (賀季衡), Chong-Shan Chao, and Gan-Ren Ding. Chong-Shan Chao practiced medicine in Meng-He at first, and then moved to Shanghai. He was a proficient doctor, especially in external medicine. His son Feng-Chu Chao (巢鳳初) was also famous as a doctor. He also had several disciples including Jian-Qiu Wang (汪劍秋), Xiao-Chu Huang (黃曉初), Zuo-Qing Tao (陶佐卿), and Jun-Cheng Liu (劉俊丞). Gan-Ren Ding, student of Pei-Zhi Ma, was especially good at internal medicine, external medicine, and laryngology. He practiced medicine in Hangzhou, and then moved to Shanghai. He had rich experience in diagnosis and treatment, and committed himself to promoting traditional Chinese medicine through teaching. In 1915 AD, he established Shanghai Specialized School of Traditional Chinese Medicine (上海中醫專門學校) which officially came into service two years later. Owing to Meng-He Medical School, Shanghai has become the origin of the traditional Chinese medicine education in China.

During the ruling of Beiyang Government, i.e. from 1912 AD to 1928 AD, the government issued two laws on medical education. The first was the *Regulations for Specialized Medical Schools* (《醫學專門學校規程



Relevant Journals of Traditional Chinese Medicine

Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 257 (From a collection at the Museum of the History of Traditional Chinese Medicine located at the Shanghai University of Traditional Chinese Medicine)

令》), in 1912 AD, followed by the *Regulations for Specialized Pharmaceutical Schools* (《藥學專門學校規程令》). The former covered 48 subjects, while the latter, 31 subjects. However, these subjects did not include traditional Chinese medicine and Chinese pharmacy. In the following year, the Ministry of Education issued a regulation on universities which divided the departments and colleges into seven

八寶丹

此丹用以拔毒收口

外科必需藥

丹最是緊人一着

紅升丹藥方

此丹用以去積生肌

硃砂五不雄黃五不水銀一兩火硝四兩白硫一兩皂礬五不共六味又一方加硃砂五不

調製方法

先將二硫火硝研細碎入大銅杓內加火硝一小杯燒化一乾即起研細入水良等味研至不見星黃為度再入硝末合研勻好陽城罐用紙根泥今人用瓦蒸未更便利指厚兩乾帶輕口朴之勿候生裂紋搗泥罐子泥補之極極乾泥亦可如有裂紋以罐子泥補之極極乾再晒至裂紋方入前藥在內罐口以紙油蓋蓋定加鐵梁於釜之上下用鐵絲紮緊用棉紙搦茶醃密周圍塞罐口縫間外用石灰細末踏調封固卷上加炭火二塊使卷熱罐口封固易乾也○再用大丁三根釘地下將罐子放丁上罐下置堅定大炭火一塊外砌百眼炉升三柱香久第一柱香用底火如火大則亦先飛上第

Original manuscripts of proven effective prescriptions written by the famous Taiwanese TCM physician, Yun-Lei Li, in the final years of the Qing dynasty (photographed by Pei-Chi Chou in Li's Mansion)



categories namely: arts, law, agriculture, engineering, commerce, medicine, and science. Moreover, medicine was further divided into medical science and pharmaceutical science; still, traditional Chinese medicine and Chinese pharmacy were not included in the course programs. The lack of Chinese medicine and pharmacy in the educational system gave rise to the first revolt in the history of Chinese medicine. Bo-Tao Yu (余伯陶) et al. established Shanghai Shenzhou Medical and Pharmaceutical Association (神州醫藥總會), and urged medical organizations from different areas to communicate with each other, and attend the “Petition of Saving Chinese Medicine and Pharmacy” (「醫藥救亡清請願團」). In 1913 AD, the *petition from Chinese Medical and Pharmaceutical Association* (《神州醫藥總會請願書》) was proposed; Wei-Sun Yun (惲薇蓀), Jin-Shu Ye (葉晉叔) et al., and Tong Ren Tang (同仁堂) and Xi He Nian Tang (西鶴年堂) were recommended as representatives to present the petition. The statements from the petition letter are as follows:

“We earnestly request to promote Chinese medicine and pharmacy and to approve the establishment of specialized schools for Chinese medicine; which is the will of the people...” (「為請求建議，呈為懇請提倡中醫中藥，准予另設中學(中醫學)醫藥專門學校，以重民命而順輿情事…」) *“The Republic has just been founded, and strives to become stronger. Medical talents of our country are about to compete with those from the rest of the world. The Ministry of Education included only courses*



of western medicine for medical programs, and left out Chinese medicine. Although this is forced by the progressing tendency of the world, and has decent reasons, we believe that Chinese medicine and pharmacy are key elements for national health, and are closely related to national welfare and people's livelihood. We can rectify Chinese medicine and pharmacy, but it is improper to discard them... (「今者民國肇始，力圖自強，我國醫藥人材，方將與世界各國競勝爭雄，教育部太部定章，於醫學課程獨取西法，不及中學，此雖迫於世界進化之大勢，別具苦心，然會員等愚以為醫藥為衛生強種之要素，與國計民生有絕大關係；速舉中醫中藥切實整頓則可，逐如淘汰則不可…」)

The petition letter proposed eight specific measures which are: (1) to establish publishing houses for Chinese medical books; (2) to establish hospitals; (3) to set up training schools of Chinese medicine; (4) to stipulate diagnosing, observing formalities and case establishing procedures; (5) to eliminate or supplement different medicines including pills, powder, paste, and elixir; (6) to establish libraries of medicine and pharmacy; (7) to establish show-rooms for medicines; (8) to establish medicine testing centers and to edit medical journals.

The petition letter ended with the following statements:

“the ministry is the general administrator of the national education. It should listen to the voice of the public, and make decisions without prejudice. We request to promote Chinese medicine and pharmacy, and to approve the establishment of specialized schools. Apart from appealing to



the Ministry of Education and the Congress, we shall submit a general regulation for approval. We are looking forward to your reply.” (「大部為全國教育總司，必能下順輿情，俯加採擇，當無畸輕畸重之虞。所有請求懇請建議提倡中醫中藥，准予另設專門學校各緣由，除向教育部懇請，議會請求外，理合抄具簡章，吳請俯充批示祇遵，不勝迫切待命之至。謹呈。」)

Under the pressure of the public voice, the Beiyang government replied to De-Xun Yu's (余德勛; Bo-Tao Yu) petition letter in January 1914 AD which is as follows:

“This ministry expects academic completeness of medical science, and hopes to follow the progressing direction of the world. After that, policies on quarantine inspection and hygiene shall be implemented. We hope to implement policies without a hitch, and don not mean to have different attitudes on Chinese medicine and western medicine.” (「本部對於醫學，只期學術完備，求合於世界進化之大勢，然後檢疫，衛生諸政，冀可推行無礙，並非於中醫、西醫有所歧視也。」)

When the medical education field was appealing to the government about the establishment of schools, two non-governmental organizations exerted great efforts achieve this goal. They were the National Education Association (全國教育聯合會) and the China Education Improving Institute (中華教育改進社). The National Education Association was founded in Shanghai in 1911 AD. It held its 11th annual meeting in 1925 AD, and the 16th resolution was to suggest to the Ministry of Education the



inclusion of Chinese medicine into the studying program of medical science. This resolution is written in the *Education Meeting of Zhejiang Province* (《浙江省教育會議案》) and *Education Meeting of Hubei Province* (《湖北教育會議案》). Both have similar contents including specific theories and methods for constructing Chinese medicine education. The other non-governmental organization that supported Chinese medicine education is the China Education Improving Institute. It was founded in Shanghai in 1922 AD. It is aimed at reforming China's education system. Furthermore, famous educators in modern times, including Yuan-Pei Cai (蔡元培) and Xing-Zhi Tao (陶行知), once acted as Person-in-Charge of the said society. In 1925 AD, China Education Improving Institute held its fourth annual meeting in Shanxi. During the meeting, the group was divided into 24 subgroups who will carry out different discussions. The subgroup of Chinese medicine education discussed and passed two proposals about Chinese medicine education. These are: *Appealing to the Ministry of Education to Add Traditional Chinese Medicine into the Education System* (《請教育部學校系統添列中醫一門案》) and *Appealing to the Ministry of Education to Include Programs of Chinese Medicine Schools to the Education System* (《由本社請教育部規定中醫學校課程並編入學校系統案》). The society spared no efforts to help start Chinese medicine education.

At the beginning of the Republic of China, Chinese medicine education was not formally included in the educational system. However,



due to the efforts of non-governmental organizations and educational groups, the Beiyang Government finally confirmed the importance of Chinese medicine and pharmacy publicly, and approved the establishment of private Chinese medicine schools. In addition, the public affirmed the Chinese medicine education. Due to the immense support from different fields of society, Chinese medicine education had a comfortable environment for development. Chinese medicine schools were then, established in different places one after another. For example, in 1915 AD, famous doctor Gan-Ren Ding and Ying-Tang Xia (夏應堂), et al. requested to establish the Shanghai Specialized School of Traditional Chinese Medicine, and registered with the Beiyang Government. Gan-Ren Ding wrote the *Letter to the President about Establishing Shanghai Specialized School of Traditional Chinese Medicine* (《為籌建上海中醫專門學校呈大總統文》). The letter was brief and concise; it high-lighted the significance of Chinese medicine education. The action reflected the voice and the courage of the advocates of Chinese medicine. Finally, in 1917 AD, the Shanghai Specialized School of Traditional Chinese Medicine formally opened with Guan Xie (謝觀) as its President. In 1931 AD, the school changed its name to Shanghai College of Traditional Chinese Medicine (上海中醫學院) headed by Ji-Wan Ding (丁濟萬). In the next year after the establishment of Shanghai Specialized School of Traditional Chinese Medicine, Bo-Tao Yu and Tie-Sheng Bao (包識生) et al. established the Shenzhou Specialized School of Medicine and Pharmacy



(神州醫藥專門學校) in Shanghai with a schooling length of five years. Unfortunately, the school had to close-down due to fund shortage. In 1925 AD, Wu-Jiu Chen (陳無咎) et al. established the Shanghai School of Chinese Medicine (上海漢醫學院) with a schooling length of four years. The school stopped its operations, this time, due to the shortage of students. Furthermore, Shanghai Specialized School for Women (上海女子專門學校) was established by Ying-Tang Xia and Gan-Ren Ding. The school specialized on gynecology, pediatrics, and obstetrics, and in 1927 AD, it merged with Shanghai Specialized School of Traditional Chinese Medicine.

Apart from education, Shanghai was the first to use correspondence teaching to conduct Chinese medicine education. In April 1925, Tai-Yan Zhang (章太炎), Po-Lang Zhang (張破浪), and Tie-Qiao Yun (惲鐵樵) established the Correspondence Teaching Society of Traditional Chinese Medicine (中醫通函教授學社). At first, there were only 250 students. The textbooks used were *Selected Essentials of Inner Cannon* (《內經要義選刊》) written by Tie-Qiao Yun and *Selected Essentials of On Cold Damage* (《傷寒論要義選刊》) and *New Ideas on Miscellaneous Diseases* (《雜病新論》) written by Tai-Yan Zhang. In the autumn of the same year, after Tie-Qiao Yun announced the *Declaration of Founding Correspondence School* (《創辦函授學校宣言》), the population of the students reached 600, and about 20 lecture notes have been compiled. It eventually closed-down in 1928 AD. During the ruling of the Beiyang



Government, a total of seven schools of traditional Chinese medicine were established in Shanghai; however, by 1928 AD, only Shanghai Specialized School of Traditional Chinese Medicine was still operational. The first few batches of students who graduated from this school became important individuals in Chinese medicine education in modern times. They were responsible for the establishment of several Chinese medicine schools in Shanghai which had profound influences on the development of Chinese medicine education.

The beginnings of private traditional Chinese medicine education in Zhejiang Province can be traced back to the 11th Guangxu Year (1885 AD). Qiu Chen (陳虬) established the Li Ji Medical School. On the other hand, the famous doctor Lang-Xian Zhu (朱闐仙) in Huangqiang established “Huang-Qiang Zhu’s Private School of Chinese Medicine and Pharmacy” (「黃牆朱氏私立中國醫藥學校」) in 1914 AD. Another prominent individual is Shan-Lei Zhang (張山雷), Dean of Studies, who announced the Opinion Letter on Course Arrangement of Chinese Medicine School. He accurately analyzed the importance of preserving the essence of traditional Chinese medicine; the letter has become an important literature on course arrangement and discipline construction for Chinese medicine education since the formation of the Republic of China. Consequently, in 1917 AD, Zhejiang Specialized School of Traditional Chinese Medicine (浙江中醫專門學校) was established under the support of Zhejiang Pharmacy Company. In 1919 AD, Shan-Lei Zhang established Lanxi



Specialized School of Traditional Chinese Medicine (蘭溪中醫專門學校). Both schools are formal Chinese medicine schools.²

During the ruling of the Beiyang Government, Chinese medicine schools in different areas started to compile their own lecture notes to be used as teaching materials. For example, Shanghai Specialized School of Traditional Chinese Medicine used *Essentials of Medical Classics* (《民經輯要》) written by Gan-Ren Ding; Lanxi Specialized School of Traditional Chinese Medicine used *Summary and Annotation of the Classic of Difficult Issues* (《難經匯注箋正》) written by Shan-Lei Zhang; and Changsha Mingdao School of Traditional Chinese Medicine (長沙明道中醫學校) used *Compendium of Pulse Rhymes* (《脈訣大全》) written by Xiu-Cheng Zheng. In early 1927 AD, in order to collect and compile together all teaching materials of Chinese medicine schools all over the country, Ping-Shu Li (李平書) and Ying-Tang Xia et al. started planning on establishing an editing office for Chinese medicine textbooks. In the following year, the first meeting of the Committee of Teaching Material Compilation was summoned; the meeting was hosted by Wen-Fang Jiang (蔣文芳). Eleven Chinese medicine schools from all over the country communicated with each other, and shared their opinions based on their teaching experience to reach an agreement.

In 1929 AD, the Chinese medicine circle held another meeting on teaching material compilation. The meeting was summoned by the National Federation of Medical and Pharmaceutical Associations (全國醫



藥團體聯合會). Representatives of schools who attended the meeting were all from the field of Chinese medicine education in modern times. The meeting obtained three results: (1) unifying the guiding principle for teaching material compilation of Chinese medicine education; (2) confirming the five-year schooling length and class hours; and (3) confirming the teaching arrangement of each academic year. The convening of the meeting indicated that traditional Chinese medicine has acquired an important status in the medical field, and the construction of traditional Chinese medicine educational system has improved considerably. It also showed the centripetal force in the field of traditional Chinese medicine and pharmacy.

Influenced by western medicine, traditional Chinese medicine in modern times proposed the idea of “scientization of traditional Chinese medicine” (「中醫科學化」). The compilation of teaching materials not only focused on Chinese medicine, but also added contents on the integration of Chinese and western medicine. The educational circle of traditional Chinese medicine realized that, the current society had received western medicine education since they were young, and thus they selected knowledge of western medicine to enrich their teaching materials. Because the thinking system of traditional Chinese medicine and western medicine different from each other, the compiling of teaching materials for the integration of Chinese and western medicine was beset by difficulties. The compilation of teaching materials for traditional Chinese medicine had



quite a slow start compared to that of western medicine.

To start traditional Chinese medicine education, clinical practice teaching was a difficult issue. To further study medicine, apart from learning theoretical knowledge, experience of clinical practice is absolutely necessary. Traditional Chinese medicine education gives special attention to this. Therefore, during the establishing of Chinese medicine schools, people had planned to set up affiliated hospitals as a part of the education. In 1917 AD, Shanghai Specialized School of Traditional Chinese Medicine started to deliver classes. In order to cultivate more medical practitioners, President Gan-Ren Ding et al. set up Shanghai Guang Yi Hospital (上海廣益醫院) in 1921 AD. Before long, Guang Yi North Hospital of Traditional Chinese Medicine (建廣益中醫北院) was established. Zhong-Ying Ding (丁仲英), son of Gan-Ren Ding, acted as the Director of the two hospitals. The hospitals not only provided free treatment and medications for people, but also provided students opportunities to master the essentials of traditional Chinese medicine through clinical practice. Furthermore, Shanghai Guang Yi Hospital not only acted as a place for clinical teaching, but also as a venue during gatherings of the members of Shanghai Society of Traditional Chinese Medicine. Numerous famous doctors had gathered there to hold academic seminars, and to discuss medical cases. From 1921 AD to 1925 AD, the hospital had held a total of 26 academic seminars. By 1926 AD, Guang Yi Hospital had become quite famous over the country. In 1930 AD, Gan-Ren



Ding's son, Zhong-Ying Ding, established Hua Long Hospital of Traditional Chinese Medicine (華隆中醫院) which has a branch for hospital internship. He employed graduates of the Chinese medicine schools as Resident Doctors.

The establishment of affiliated hospitals for traditional Chinese medicine education was far more difficult than establishing schools. In 1933 AD, Suzhou School of National Medicine (蘇州國醫學校) was established. Two years later, a clinic was opened. In order for students to achieve good effects on clinical practice, and offer more opportunities to the poor to receive medical help, Suzhou School of National Medicine added budget for medicines and medical equipment in 1935 AD to bring benefit to the public.

Traditional Chinese medicine education in modern times was very different from that in ancient times. Due to the spread of western medicine, apart from preserving traditions, Chinese medicine education integrated the western medicine's pharmaceutical knowledge and abstracted its natural science. When Chinese medicine education was flourishing during the beginning of the Republic of China, it continued to uphold its traditional excellence, and used medical classics of the ancient times, handed down theories and clinical experience from ancient Chinese medicine, and preserved the features of traditional Chinese medicine.

In 1947 AD, an all-out civil war (國共內戰) between the Nationalist Party and the Communist Part broke out. The government of the Republic



of China moved to Taipei, Taiwan in 1949 AD, starting the political confrontation across the strait. During the time when Taiwan was seized by Japan, licensed physicians of traditional Chinese medicine had been rare. In 1942 AD, there were only ninety-seven licensed physicians of traditional Chinese medicine (licenses had only been issued once when the Japanese took over Taiwan), about three thousand physicians, seven hundred dentists, and two thousand midwives. In general, medical workers at that time were extremely limited. After Taiwan was recovered, the government issued “Methods of Selection and Training of Medical Workers” (「醫事人員甄訓辦法」) in 1949 AD. Apart from doctors of western medicine, doctors of Chinese medicine have also been allowed to take part in the examination. This gradually increased the number of medical practitioners in Taiwan. Also, the arrival of some Chinese medicine doctors who are followers of the government of the Republic of China contributed to the increase. As a result, traditional Chinese medicine was still able to persist from the time Taiwan was covered.

In 1953 AD, the licensure examination of traditional Chinese medicine was suspended due to rampant malpractice. It was not until 1964 AD, when the Examination Yuan (考試院) accepted the request from the traditional Chinese medicine field, that the Chinese medicine licensure examination was restored. In 1948 AD, the number of traditional Chinese medicine doctors has been insufficient in Taiwan. To ensure that traditional Chinese medicine will be studied rigorously, the Ministry of Examination



(考選部) held Verification Examination and Special Examination of Physicians of Traditional Chinese Medicine. It was in 2008 AD when the former was abolished in order to increase the proportion of traditional Chinese medicine doctors fostered by formal education; not before long, the latter was suspended in 2011 AD. From then on, traditional Chinese medicine has been guided to the direction of formal education.³

After the government moved to Taiwan, the traditional Chinese medicine field presented a petition to the Legislative Yuan (立法院) for establishing colleges of traditional Chinese medicine. In 1958 AD, China Medical College (中國醫藥學院) was founded, which was the beginning of private education of traditional Chinese medicine. Currently, traditional Chinese medicine education is divided into seven-year Chinese medicine educational system and five-year post-bachelor Chinese medicine educational system. The schooling length of the seven-year Chinese medicine education system has been changed to eight years in 1996 AD. For instance, China Medical University (中國醫藥大學) has two kinds of schooling length; Chang Gung University (長庚大學) has set up the Department of Traditional Chinese Medicine with a schooling length of eight years in 1998 AD; I-Shou University (義守大學) and Tzu Chi University (慈濟大學) have five-year post-bachelor Chinese medicine department. After the completion of needed credit hours, graduates can participate in the Inspection and Verification Examination for Doctors of Traditional Chinese Medicine.





China Medical University,
Taichung, Taiwan;
Photographed by
Dr. Jaung-Geng
Lin

China Medical University is originally known as China Medical College. It was established in 1958 AD. It is the first college of traditional Chinese medicine in our country. In 1972 AD, the university changed the schooling length from six years to seven years, and established several research centers such as the Research Center for Chinese Herbal Medicine, Research Center for Chinese Medicine and Acupuncture, and Anti-cancer Research Center. The research on Chinese medicines and acupuncture and moxibustion became more comprehensive. The traditional Chinese medicine education promoted the modernization of Chinese medicine, improved the integration of Chinese and western medicine, and further established a new medical system. In 1973 AD, in order to improve the studies of fundamental and specialized subjects of traditional Chinese medicine, and strengthen the program for clinical internship, China Medical College raised money from the field of the traditional Chinese medicine to build the Affiliated Hospital of China Medical College (中國



醫藥學院附設醫院). In 1975 AD, the construction of the hospital started, and the graduate class of the research institute of traditional Chinese medicine was established. During this period, National Union of Chinese Medicine Doctors' Association (中醫師公會全國聯合會) resumed in Taiwan, and tried its best to help establish the hospital. In 1980 AD, the construction of the Affiliated Hospital of China Medical University was completed; Ting-Fu Wang (王廷輔) was appointed as Director. The Affiliated Hospital set up outpatient services for both Chinese and western medicine. It was the only hospital then that combined Chinese and western medicine.

In 1984 AD, China Medical College set up Department of Post-bachelor Chinese Medicine which had a schooling length of five years. In the following year, Affiliated Mazu Memorial Hospital of China Medical College (中國醫藥學院附設媽祖紀念醫院) was built. In order to cultivate more talents of traditional Chinese medicine, the college continued to set up graduate and doctoral classes of traditional Chinese medicine. Approved by the Ministry of Education (教育部), China Medical College was converted to China Medical University in 2003 AD. Furthermore, bachelor, graduate, doctoral, and post-bachelor classes of Chinese medicine were integrated into the College of Chinese Medicine; the Research Institute of the Integration of Chinese and Western Medicine, and the Research Institute of Acupuncture and Moxibustion were also established.⁴

In 1991 AD, National Yang-Ming University (國立陽明大學)



launched the Research Institute of Traditional Chinese Medicine (傳統醫學研究所). It is the first research institute among public medical colleges of the Republic of China that specialized on traditional Chinese medicine and pharmacy education. Supported by the government, the research center carried out several studies on different fields in cooperation with other universities and colleges. For example, Yang-Ming University took charge of the cross-university research on herbs and gene integration. To further enhance the research quality and improve the efficiency of data gathering, functions of other public resources, libraries, and equipment centers should be strengthened. The Research Institute of Traditional Chinese Medicine of Yang-Ming University is committed to making traditional Chinese medicine and pharmacy highly scientific, systematic, and standardized, and integrated into the system of modern medical science so as to carry forward the essence of the culture of traditional Chinese medicine, and contribute to the quality of health of every individual.⁵

Ten years after its establishment, Chang Gung University set up the Department of Traditional Chinese Medicine. In 1997 AD, approved by the Ministry of Education, its construction started, and the department started to recruit students the following year. It aims to pursue modernization of traditional Chinese medicine and the integrate Chinese and western medicine. The schooling length of the department is eight years. The first six years are for the studies of specialized courses of



Chinese and western medicine, while the seventh and eighth year is for the internship program of western and Chinese medicine respectively. In order to enhance the qualities of fundamental course teaching and clinical practice of Chinese medicine, Chang Gung University cooperated with famous Chinese medicine and pharmacy universities and colleges in Beijing, Chengdu, and Fujian Province of the Mainland China, and employed several senior professors to deliver courses together with teachers from Chang Gung University, aiming to cultivate more talents of traditional Chinese medicine. The Graduate School of Traditional Chinese Medicine was established in 2000 AD, and started the recruitment in July the following year. It was established to cultivate talents of Chinese medicine, integrate traditional medicine with modern technologies, and improve clinical teaching and academic research. For the Department of Traditional Chinese Medicine of Chang Gung University and Chang Gung Hospital of Traditional Chinese Medicine to continually develop, it is necessary to formulate a complete Chinese medicine educational system, provide channels for further training of teachers, maintain excellent teacher resources, and allow formal education, research, and clinical practice to work closely with each other to create a comprehensive development center for traditional Chinese medicine.⁶

The legal status of Doctor of Traditional Chinese Medicine was verified when the draft of Physician Act was passed in 1943 AD. In order to protect the legal interests of doctors of traditional Chinese medicine in



Taiwan, traditional Chinese medicine doctors gathered and in 1945 AD, they initiated the construction of National Union of Chinese Medicine Doctors' Association. In 1949 AD, the government of the Republic of China moved its capital to Taipei. In 1975 AD, the field of traditional Chinese medicine in Taiwan applied to the Interior Ministry for resuming the National Union of Chinese Medicine Doctors' Associations. Currently, the National Union of Chinese Medicine Doctors' Association has a total of twenty-two members in Taiwan. Its target is to promote the development of traditional Chinese medicine and pharmacy.

To establish a complete medical system in Taiwan, the Committee on Chinese Medicine and Pharmacy of the Department of Health (衛生署中醫藥委員會) and the National Union of Chinese Medicine Doctors' Associations jointly advocated the inclusion of traditional Chinese medicine into the national health insurance, and supported the provision of outpatient global budget payment system, and improvement of the quality of service being provided by traditional Chinese medicine. To effectively assess the quality of clinical practice and enhance the standard of medical treatment of Chinese medicine, the government encouraged university and college hospitals to set up a department for traditional Chinese medicine, and include it into the formal educational system. In 1997 AD, the Taipei City Hospital of Traditional Chinese Medicine (台北市立中醫醫院) was established. It is an important marker for the development of traditional Chinese medicine in Taiwan. In 1971 AD, Chinese Traditional Medicine



Research and Development Foundation (中國醫藥研究發展基金) was established in Taipei. It is involved in studying and treating all kinds of diseases. In 1981 AD, in order to cooperate with the government policy, it formed the Experiment Team of Chinese and Western Medicine Cooperation (中西醫療合作實驗小組) together with Taipei City Peace Hospital (台北市立和平醫院). After changing its name thrice, it was finally called Chinese and Western Medicine Cooperation Team (中西醫療合作組) in 1984 AD. Recognizing the importance of traditional Chinese medicine for the public, the government included the Chinese and Western Medicine Cooperation Team into the system, and changed it to the Department of Traditional Chinese Medicine of Taipei City Peace Hospital (台北立和平醫院中醫部). Since 1997 AD, the department has been developing smoothly. To enhance the quality of medical treatment, the government of Taipei set up Taipei City Hospital of Traditional Chinese Medicine (台北立中醫醫院) to recruit talents of both Chinese and western medicine, and created the new era of Chinese medicine treatment in Taipei. The hospital is divided into four subdivisions namely: education and research, quality of medical treatment, administrative management, and community service. The hospital integrates education and research into clinical practice of traditional Chinese medicine, absorbs the advantages of western medicine and blends them into Chinese medicine, and develops medical service with unique features. It upholds the unification of Chinese and western medicine, modernization of Chinese medicine, internalization



of Chinese medicine, and scientization of Chinese pharmacy.

With the support from Kaohsiung City Council, National Union of Chinese Medicine Doctors' Associations, and other civil groups, Kaohsiung City Hospital of Traditional Chinese Medicine (高雄市立中醫醫院) was established in 1983 AD; and became the first public hospital of traditional Chinese medicine in Taiwan. In 1995 AD, the hospital abided to the government policy, and provided medical service through the national health insurance. The first Director of the hospital is Doctor Chung-Gwo Chang (張成國). In 2003 AD, after obtaining approval from the Committee of Traditional Chinese Medicine and Pharmacy of the Department of Health, Executive Yuan, Kaohsiung City Hospital of Traditional Chinese Medicine set up Clinical Teaching Center of Traditional Chinese Medicine (中醫臨床教學中心), and became one of the qualified teaching hospitals of traditional Chinese medicine in Taiwan.

In 1980 AD, China Medical University Hospital was established. It is the first hospital in Taiwan that provides both Chinese and western medicine. The Department of Traumatology of Traditional Chinese Medicine was set up in 1982, and Cooperation Center of Chinese and Western Medical Treatment was set up in 1987 AD, which recognized the idea of unifying Chinese and western medicine. Of the same year, the Research Office of Traditional Chinese Medicine Diagnosis was established. It advocates the scientization and modernization of traditional Chinese medicine. Affiliated Hospital of China Medical University set up



the Department of Gynecology of Traditional Chinese Medicine and the Department of Pediatrics of Traditional Chinese Medicine in 1988 AD and 1990 AD respectively. In 1991 AD, it set up the Department of Traditional Chinese Medicine to unify the internal assignment and operation of different departments of the traditional Chinese medicine.⁷

Chang Gung Memorial Hospital established the traditional Chinese medicine outpatient department at Linkou branch in 1996 AD; this is when medical center hospitals started to set up a department for traditional Chinese medicine. In 1999 AD, the hospital was expanded to set up a branch of traditional Chinese hospital. In the following year, Chang Gung Memorial Hospital established the traditional Chinese medicine outpatient department at Keelung and Kaohsiung. In 2002 AD, outpatient services of traditional Chinese medicine were also provided in Yunlin and Chiayi.

Section 3 Biographies of Medical Experts

Zong-Hai Tang (唐宗海)

Zong-Hai Tang (from 1846 AD to 1897 AD) studied Confucianism since he was young, and once passed the examination for Metropolitan Graduate. Later, as his father often fell sick, he started to study medicine. He studied *The Inner Canon* (《內經》), *On Cold Damage* (《傷寒論》), etc. He was proficient in medicine, and had rich clinical experience. In





Zong-Hai Tang
Source: A General History of Traditional Chinese Medicine, a volume containing collections of illustrative plates and an atlas of historical relics; page 245 (provided by Mon-Hsia Wang)

In addition, he spent several years completing *On Blood Patterns* (《血證論》). He created four methods namely suppressing, dispersing, quieting, and supplementing which were highly praised by the medical field. Zong-Hai Tang had a wide circle of acquaintance, including famous doctors Bo-Long Zhang (張伯龍), and the Deng brothers, Yun-Li Deng (鄧雲筮) and Yun-Hang Deng (鄧雲航). They often gathered together to discuss medical issues. He also was a close friend of Guang-Di Liu (劉光弟), and was influenced by the

ideas of reformism. The following are some of his published works: *Essentials of Eastern and Western Medical Works* (《中西匯通醫經精義》); *A General Introduction to Medicine by Changes* (《醫易通說》); *A Clear Introduction to Medicine* (《醫學一見能》); *Supplement and Correction of Annotated On Cold Damage* (《傷寒論淺注補正》); *Questions and Answers of Herbal Foundation* (《本草問答》); *Supplement and Correction of Annotated Essential Prescriptions of the Golden Coffer* (《金匱要略淺注補正》); and *Three-Character Rhythms for Dysentery* (《痢症三字訣》).



During Guangxu years, Zong-Hai Tang was practicing medicine in Beijing. At that time, western ideas and cultures were prevailing in China. Being accustomed to the western medicine, Tang thought there was much space for traditional Chinese medicine to progress. He thought western medicine and traditional Chinese medicine had their own advantages, and it was improper to totally reject the value of traditional Chinese medicine, or to blindly absorb knowledge of the western medicine. He proposed the idea that traditional Chinese medicine and western medicine should learn from each other. He was the first person from the medical field to clearly point out the “integration of traditional Chinese medicine and western medicine” (「中西醫匯通」) in modern times. From the view of traditional Chinese medicine, Zong-Hai Tang fairly evaluated the development of western medicine, and believed that both western medicine and traditional Chinese medicine have the same origin. He integrated the two for different treatment patterns. His ideas influenced later medical scholars. He also made great contributions on the integration of traditional Chinese medicine and western medicine afterwards.

Yu-Jie Huang (黃玉階)

Yu-Jie Huang was born in 1850 AD, and had a style name of Ming-Hua (奠華). He called himself Ying Zhou San Ren (瀛洲散人), and was a famous doctor from Taiwan. Yu-Jie Huang was smart, studious, and a vast reader. He started to practice medicine when he was 26. Aside from this,



he studied Buddhism all his life. During the China-France War (中法戰爭), he assisted Provincial Governor Ming-Chuan Liu (劉銘傳) to fight against the French army. After the war, the imperial court of Qing awarded him a military exploit of fifth rank (五品軍功銜). In the 10th Guangxu Year, cholera spread in the area of Danshui, Taipei. People died one after another. Yu-Jie Huang carefully made prescriptions, and produced pills and powder, successfully curing over 800 infected individuals. He also wrote the one-volume *New Recuperation Methods* (《療養新方》), illustrating the prevention and treatment of epidemic pestilences. Not long after Japan seized Taiwan, cholera outbreak occurred again in Taipei. In the following year, plague and macule sand continued to persist as. Without regards for his own safety, Yu-Jie Huang travelled in rural areas to treat and provide medications to the people curing many of them. In addition, he wrote *On Leg-hoisting Sand of Cholera* (《霍亂吊腳痧醫書》) and *Newly-compiled Treatments of Lump Pestilence* (《疔瘡瘟治法新編》) which were published and printed in thousands of copies, and handed out to people all over the Taiwan. He was also the one who suggested to the government to establish the “Taiwan Clinic of Plague” (「臺人黑死病治療所」) for overall prevention and treatment. After the clinic was established, he was assigned as Director of Doctors. Furthermore, several other public and private medical institutions and groups competed to employ him. He was also a part of a number of medical institutions and held an approximate of ten important positions namely:



Medical Affair Consultant of Taipei County Clinic of Plague, Committee Member and Consultant of Taipei Ren Ji Hospital (仁濟院), Member of Plague Prevention Committee, Medical Affair Director of Quarantine Station of Epidemic Diseases of Mengxia Security Hospital (艋舺保安醫院), Medical Affair Director of Spring-Return Office of Taipei Association of Tea Merchants (臺北茶商公會回春處). Lastly, he took part in the fund raising for establishing Ji An Hospital (濟安醫院) and Gong Ji Hospital (共濟醫院).

In 1901 AD, the Government of Taiwan held the licensure examination of traditional Chinese medicine in different prefectures. Yu-Jie Huang, as he had excellent medical skills, he was exempted from taking the examination; he then obliged to assist in organizing it. In the following year, the government of Taiwan issued him the license to practice traditional Chinese medicine. He was the first person to receive such license when Taiwan was seized by Japan. Moreover, Yu-Jie Huang not only was proficient in medicine, but also had noble medical ethics. He often reduce or waive his consultation fee. In addition, he had many disciples; at that time, many famous physicians of traditional Chinese medicine in Taipei were students of his, including Zi-Qiao You (尤子樵), Shou-Qian Huang (黃守乾), Zhi-Qing Chen (陳直卿), Di-Qing Chen (陳迪卿), Lian-Jin Ye (葉鍊金), and Zi-Xin Chen (陳自新). Yu-Jie Huang spared no efforts to promote the prevention and treatment of epidemic diseases. He also made great efforts to guide the social customs towards a





positive direction, and promoted the modernization of Taiwan society (e.g. proposing to eliminate foot-binding and to cut hair). During the time when Taiwan was seized by Japan, he spent many efforts on social relief and social indoctrination by taking the post of Indoctrination Teacher of Taipei Prison. He also made contributions to the improvement of personal hygiene in Taiwan, and travelled all over the country to assist in epidemic disease prevention. Lastly, the General Service Administration of Lugang published an article about Yu-Jie Huang's chivalrous deeds on the newspaper, and wrote an inscription to praise his medical ethics.

Pei-Wen Zhu (朱沛文)

Pei-Wen Zhu (born in the middle of the 19th century) was a doctor of late Qing Dynasty. He was born in a family of doctors. He started to learn medicine from his father when he was young, and was very diligent. Pei-Wen Zhu grew up in Guangzhou where western thoughts were prevailing. Apart from reading a large number of ancient Chinese medical books, he also acquired knowledge from many translated medical works, and even had a chance to observe an autopsy in medical school of western medicine. All of these deepened his understanding of the western medicine. Pei-Wen Zhu proposed to combine medical theories with clinical treatment. He believed that traditional Chinese medicine was good at pursuing reasons, while western medicine was proficient in studying actual facts. The two supplemented each other. He proposed to integrate traditional Chinese





medicine and western medicine, and scientifically analyze the advantages and disadvantages of traditional Chinese medicine and western medicine in clinical practice which would be used as the standard for choices. Pei-Wen Zhu wrote “notes” (「按語」) to express his opinions on traditional Chinese medicine and western medicine. He was very prudent in learning.

Pei-Wen Zhu pointed out that the integration of traditional Chinese medicine and western medicine was mainly about the physiological anatomy. He wrote *A Brief Introduction to Visceral Manifestation of Sino Medicine and Foreign Medicine* (《華洋臟象約纂》) which was also called *A Brief Introduction to Visceral Manifestation of Chinese Medicine and Western Medicine* (《中西臟腑圖像合纂》). The book synthesized past medical works that described the human viscera, anatomic diagrams, etc.; and used medical knowledge on physiological anatomy of western medicine to discriminate traditional Chinese medicine and western medicine. Pei-Wen Zhu believed that the specific approach to be used for integrating traditional Chinese medicine and western medicine was clinical verification. He gave importance in learning the position of the human viscera through anatomic experiments to compensate for the lack of knowledge of traditional Chinese medicine on human structure. After obtaining a thorough understanding of the human viscera, he was able to further illustrate the structure and functions of different human organs, and compare in detail the differences between traditional Chinese medicine and western medicine on theories of human channels and network vessels,



and human body circulation.

Xi-Chun Zhang (張錫純)

Xi-Chun Zhang (from 1860 AD to 1933 AD) was a famous doctor in modern times. He studied Confucianism when he was still young. He had a good memory, read vastly, and was studious. In his spare time, he learned medicine from his father. When he failed the imperial examinations twice, he gave it up, and decided to concentrate on studying medicine. Xi-Chun Zhang was famous for his outstanding medical skills. In the late 19th century, western medicine was prevailing in China. He read several translated medical works, and studied theories of western medicine. In 1918 AD, Xi-Chun Zhang became the Director of Shenyang Lida Hospital (瀋陽立達醫院). He proposed the idea of the integration of traditional Chinese medicine and western medicine. Xi-Chun Zhang believed that all theories of the western medicine can also be found in the theories of traditional Chinese medicine. He made great efforts to include anatomic knowledge of the western medicine into the theories of traditional Chinese medicine. He proposed to adopt the advantages of the western medicine to compensate for the disadvantages of traditional Chinese medicine, and apply the scientific spirit of the western medicine in the clinical treatment of the traditional Chinese medicine. In addition, Xi-Chun Zhang was very prudent in making prescriptions. In order to discriminate features of different medications, he tried the mall to himself, and did not blindly



follow the ancient ideas. He tried to integrate the western medicine and the traditional Chinese medicine, and carefully recorded the constituents of every medications, preparation methods, usage, etc. in order to provide the best treatment effects. Lastly, he wrote *Records of Chinese Medicine with Reference to Western Medicine* (《醫學衷中參西錄》).⁸

Tie-Qiao Yun (惲鐵樵)

Tie-Qiao Yun (from 1878 AD to 1935 AD) was a famous doctor of traditional Chinese medicine in modern times. He was one of the main figures to advocate the preservation of traditional Chinese medicine. Tie-Qian Yun worked as a character compiler at first. He had sound literary basis, and only had a brief understanding of medicine when he was young. He, however, read a great number of books from the western world. He was good at English. Due to his work, he had more opportunities to access all kinds of medical works than most ordinary people have. He conducted intense researches on traditional Chinese medicine and western medicine. He started to publish medical works when he was 40, and wrote about 50



Tie-Qiao Yun
Source: General History of Traditional Chinese Medicine, a Volume of collections of Illustrative plates and atlas of historical relics, page 249



books. He was an important representative of the school of integration of traditional Chinese medicine and western medicine.

During the translation, Tie-Qiao Yun learned the knowledge of western medicine accurately and completely. He was able to propose ideas about traditional Chinese medicine and western medicine from a scientific point of view. He proposed that traditional Chinese medicine in modern times was “more accurate than the old one, and more sophisticated than the western medicine” (「較古人為精，視西人尤密」). His ideas were also unique. During the integration of traditional Chinese medicine and western medicine, Tie-Qiao Yun discovered that former focused on exploring the connections between the natural changes and the physiological activities of humans, while the latter was proficient in studying local focuses, bacteria, anatomy, etc., stressing on practice. He believed that both medical systems have their own merits. He emphasized that any kind of science would contain knowledge that is different of the other ones, and theories of traditional Chinese medicine and western medicine were no exception. Therefore, regardless of the prejudice of theoretical schools, he absorbed the method of experiment of the western medicine, valued the importance of clinical experience, and bought scientific instrument, trying to establish new traditional Chinese medicine by integrating it with western medicine. Apart from promoting the integration of traditional Chinese medicine and western medicine, Tie-Qiao Yun also took part in many activities for traditional Chinese medicine, including creating its churches, studying its



theories, and opposing its revocation.

Tsung-Ming Tu (杜聰明)

Tsung-Ming Tu (1893 AD-1986 AD), also known as Simu (思牧), was born in Tamsui District (now Danshuei, Danshui) New Taipei City. But his ancestors came from Quanzhou City, Fujian Province. He studied Chinese medicine and sinology when he was nine years old in a private school operated by his eldest brother, Sheng-Cai Tu (杜生財). Because his father had a close relationship with the prominent Taiwanese Chinese medicine practitioner, Yu-Jie Huang, Tsung-Ming Tu often went to Datong District, Taipei City to visit Mr. Huang with his parents during his childhood, a memory which influenced his future ambition to be a great extent.^{Note1} In 1903 AD, Tu was enrolled into Hobe College (滬尾公學校) and received an education in Japanese style. He was admitted to Taiwan Sōtokufu Medical School (總督府醫學校) as the champion of the entrance examination. He was at the same time the first graduate of Hobe College to enter the medical school. In 1914 AD, he graduated from the medical school with the highest grades again. Tsung-Ming Tu went to Japan to study at Tokyo Imperial University's Department of Pharmacology in 1916 AD. He was instructed by Professor Kurata Morishima (森島庫太) and decided to pursue the study of pharmacology which he wanted ever since he was a child. He acquired a doctorate in medicine in 1922 AD and was the first Taiwanese to do so.





A collection from the Exhibition Room on Li-Fu Chinese Medicine located at China Medical University, Taiwan (Photographed by Dr. Jaung-Geng Lin)

When the Division of Rehabilitation of Taiwan Government-General Office (臺北更生院) in Taipei City was established in 1930 AD, Tsung-Ming Tu became the chief of medical staff, specializing in the treatment of opium addicts. He set up the Rehabilitation Departments in many Taiwan sōtokufu hospitals all-round the country where drug users were treated using his therapy. In addition, Tsung-Ming Tu was also the first in the world's history to examine morphine from the urine of opium users, which really facilitated the identification and diagnosis of intoxicated patients. In the early days when Taiwan was returned to China, the Division of Rehabilitation in Taipei City was changed into Taiwan Provincial Tobacco Rehabilitation Center (戒煙所) in which he became the director. The



Division of Rehabilitation cured eleven thousand, four hundred and ninety eight patients in its lifespan of seventeen years that ended in 1946 AD. It was also the time when the last female patient was rectified and allowed to leave the hospital.

In 1937 AD, Tsung-Ming Tu became a professor at Taipei Imperial University (臺北帝國大學) and he took charge of the pharmacology lectures. He dedicated his whole life to localized medical study while valuing joyful research the most. He earned an international reputation through the study of venom pharmacology of Taiwanese snakes, opium addiction and morphine, chronic intoxication, and pharmacology of Chinese medicine. The thirteenth Annual Meeting of the Japanese Pharmacological Society was held in Taiwan in 1939 AD and Tsung-Ming Tu was the chairman. Pharmacologists from all over Japan gathered at Taipei Imperial University and attended the lectures delivered by Tsung-Ming Tu. This was one of his academic peaks. As Japan surrendered in 1945 AD and its rule over Taiwan was put to an end, the Faculty of Medicine, Taipei Imperial University changed its name to College of Medicine of the National Taiwan University and Dr. Tu assumed the role of its first schoolmaster. He established the Kaohsiung Medical University in 1954



杜聰明 Tsungming Tu

(Being provided by
Professor Yi-Tsau
Huang)



AD and educated a great number of medical talents in Taiwan, which won him the title of the Father of Taiwanese Medicine.^{Note 2}

Tsung-Ming Tu understood that Chinese medicine took up an important position in Taiwan's traditional society. He held the view that the modern approach to pharmaceutical chemistry might be adopted to study Chinese medicine, from the easy part to more difficult part. He also believed that effective therapy of Chinese medicine and acupuncture should be integrated into modern treatment. Therefore, he began to write *Research Methods of Chinese Medicine* (《關於漢醫學研究方法之考察》) in 1928 AD, which was published in thirty one issues continuously in the Taiwan Civil Newspaper (臺灣民報). The publication drew awareness, attention and discussion about Chinese medicine from all walks of life.^{Note 3} To promote the exploration of integrating Chinese with western medicine, Tsung-Ming Tu taught the pharmacological history of Chinese medicine, treatise on febrile diseases, pharmacology of Chinese medicine, etc., and compiled the *Pharmacology Reviews of Chinese Medicine* (《中醫藥學評論》) while he was at the College of Medicine of National Taiwan University. He also set up the National Taiwan Research Center of Chinese Medicine at the National Taiwan University Hospital, where he gathered experts of Chinese and western medicine to study therapies as well as the effect of treatise on febrile diseases and acupuncture. He also applied modern medical examination methods to analyze the treating mechanics of Chinese medicine. In addition, Tsung-



Ming Tu also opened courses in history of Chinese and western medicine at Kaohsiung Medical University. He put forward his idea of combining Chinese and western medicine in *Brief History of Chinese History* (《中國醫學史略》) which was published in 1959 AD.^{Note 4}

Yi-Ren Shi (時逸人)

Yi-Ren Shi was born in 1897 AD, and died in 1965 AD. He came from Wuxi, Jiangsu Province. He loved reading since he was young, and was educated. When he was 15 years old, he formally acknowledged the famous doctor Yun-Gong Wang (汪允恭) as his master, and learned all his skills. He started to practice medicine in 1916 AD. Moreover, Yi-Ren Shi was good at treating epidemic diseases; because of this, people came in stream to seek his help, and thus, his fame spread. Later, he established Zuo-Guo Jiang Medical Practice (江左國醫習所) in Shanghai, and worked as a professor at Shanghai Specialized School of Traditional Chinese Medicine and China School of Medicine to teach about warm diseases and epidemic diseases.



Yi-Ren Shi
Adopted from the
Chinese Medicine
Research Institute in
China, Records of
People, Volume 1, page
183

In 1929 AD, Yi-Ren Shi took the position of Executive Member of



Shanxi Improvement of Traditional Chinese Medicine (山西中醫改進研究會). He also worked as a professor at a private school, Shanxi Chuanzhi Vocational School of Medicine (山西川至醫學專科學校), and was the Chief Editor of *Shanxi Medicine magazine* (《山西醫學雜誌》). In 1939 AD, together with Jin-Mo Shi (施今墨), Shen-Chu Yu (俞慎初), etc., he established Fu Xing Vocational School of Traditional Chinese Medicine (復興中醫專科學校). He then became the Chief Editor of *Fu Xing Chinese Medicine Magazine* (《復興中醫雜誌》). Later, he taught in many schools in Jiangsu Province. In 1955 AD, he was employed as Chief Physician of Internal Medicine of Affiliated Hospital of China Academy of Traditional Chinese Medicine (中醫研究院附屬醫院). In 1961 AD, he became the Director of the Department of Traditional Chinese Medicine of the First People's Hospital (第一人民醫院) of Ningxia Hui Autonomous Region. Shi believed that the theories of the traditional Chinese medicine were as important as its medical practice. Finally, he summarized theories of traditional Chinese medicine, and proposed to integrate it with the western medicine. Some of his published works are *Shi's Diagnostics* (《時氏診斷學》), *Shi's Ideas of Inner Canon* (《時氏內經學》), and *China Pharmacology* (《中國藥物學》).

Dan-An Cheng (承澹齋)

Dan-An Cheng was born in 1899 AD, and died in 1957 AD. He was a native of Jiangyin, Jiangsu Province. He was born in a family of doctors,



and learned medicine from his father when he was young. He studied acupuncture, moxibustion, and pediatrics immensely. In 1917 AD, he formally acknowledged Jian-Zhuang Qu (瞿簡莊) as his master, and further studied acupuncture and moxibustion. After finishing his studies, he practiced medicine in Suzhou. He soon became famous because of his outstanding medical skills. In 1931 AD, Dan-An Cheng established China Society for Acupuncture and Moxibustion Research (中國針灸學研究社), and started the *Acupuncture and Moxibustion magazine* (《針灸雜誌》). In 1934 AD, Dan-An Cheng went to Japan for a medical seminar. Upon his return, together with some of his friends, he raised money to establish Specialized School of Acupuncture and Moxibustion (中國針灸醫學專門學校) and built an acupuncture and moxibustion sanatorium (針灸療養院). He devoted himself to exploring theories of acupuncture and moxibustion, discriminating medical works, both ancient and modern, and re-summarizing works on Chinese acupuncture and moxibustion. He published the *Revised Elaboration of the Fourteen Channels* (《校注十四經發揮》).

Bo-Wei Qin (秦伯未)

Bo-Wei Qin had a style name of Zhi-Ji (之濟). He was born in 1901 AD, and died in 1970 AD. He came from Pudong, Shanghai. In 1919 AD, he was admitted by Shanghai Specialized School of Traditional Chinese Medicine, and graduated with honors. Later, he started to practice



medicine in Shanghai, and wrote books in his spare time. Early in the 1920s AD, Bo-Wei Qin worked at Shanghai Book Bureau of National Medicine, and compiled the *Book Series of National Medicine* (《國醫小叢書》). In 1927 AD, together with the people from the medical field, he established Shanghai School of Chinese Medicine, and was the writer of the textbooks the school used.⁹ In 1930 AD, he established Guiding Society of Traditional Chinese Medicine (中醫指導社), and provided correspondence courses for traditional Chinese medicine. Consequently, Bo-Wei Qin was an expert in internal medicine. He was diligent in writing, and his works included *An Introduction to Traditional Chinese Medicine* (《中醫入門》), *Systematized Patterns of Inner Canon* (《內經類證》), *Essentials of Medical Cases of Famous Doctors of Qing Dynasty* (《清代名醫醫案精華》), etc. As an editor, he once compiled several magazines such as *Guidance Books of Traditional Chinese Medicine* (《中醫指導叢書》), *Magazine of Traditional Chinese Medicine* (《中醫雜誌》), and *World of Traditional Chinese Medicine* (《中醫世界》). He spared no effort in passing on traditional Chinese medicine.

Xiao-Shan Shi (石筱山)

Xiao-Shan Shi was named Rui-Chang (瑞昌), and had a style name of Xi-Hou (熙候). He was born in 1902 AD, and died in 1964 AD. He was a native of Wuxi, Jiangsu Province. He was born in a family of doctors, and inherited the family tradition. He once studied at Shenzhou Specialized



School of Traditional Chinese Medicine. In 1924 AD, he started to practice medicine in traumatology and external medicine. He inherited his family's experience in traumatology, and further studied it. He was especially proficient in treating bone fracture. Years of clinical experience enabled him to create a school of his own style. In 1929 AD, Xiao-Shan Shi and his younger brother You-Shan Shi (石幼山) opened a clinic. Xiao-Shan Shi practiced medicine for years, and valued regulation during the treatment. He preferred to conduct external treatment and internal regulation at the same time. He cured numerous trauma patients and some of the books he wrote about traumatology includes *Treatment Methods of Bone Righting* (《正骨療法》), *Lecture Notes of Traumatology* (《傷科講義》), and *Xiao-Shan Shi's Medical Cases of Traumatology* (《傷科石筱山醫案》).

Man-Qing Zheng (鄭曼青)

Man-Qing Zheng¹⁰ was also named Man-Ran (曼髯). He was born in 1902 AD, and died in 1975 AD. He came from Yongjia, Zhejiang Province. Mr. Zheng cultivated herbs, a skill he acquired from his mother, when he was young; and the idea of practicing medicine was conceived then. He studied at Yanghu School of Chinese Classics (陽湖國學院). He was good at poems, calligraphy, painting, Chinese boxing, and medicine, and enjoyed the fame of The Old with Five-Excellence (五絕老人). When he was 24, due to the recommendation of Jie-Min Cai (蔡子民), he entered National Jinan University (國立暨南大學) of Shanghai as a teacher. He





Man-Qing Zheng
Adopted from The
Development History of
Chinese Medicine in
Taiwan, page 8

was also appreciated by Chang-Shuo Wu (吳昌碩) and Gu-Wei Zhu (朱古微), and became the Director of the Department of Chinese Painting of Shanghai School of Fine Arts (美術專門學校). When he was 29, together with Bin-Hong Huang (黃賓虹) et al., he established China Literary and Art College (中國文藝學院), and took the position of Vice-Dean. In order to promote the education of traditional Chinese medicine, Man-Qing Zheng, Li-Fu Chen (陳立夫), Yi-Tang Jiao (焦易堂), et al. created the National Union of Chinese Medicine Doctors' Associations. He was the first Director General of the union. In 1946 AD, Mr. Zheng was selected to be a representative for the national assembly to generate the constitution. He went with the government of Republic of China to Taiwan, and created College of Traditional Chinese Medicine and Pharmacy in 1958 AD. Although Mr. Zheng refused to become the Dean and Director General, he was still concerned about the development of traditional Chinese medicine and pharmacy, and spared no effort to promote them.



Qin Tan (覃勤)

Qin Tan had a style name of Xing-Qun (醒群). He was born in 1906 AD, and died in 1981 AD. He was a native of Changde, Hu'nan. In 1933 AD, due to the great efforts made by Qin Tan, et al., the Legislative Yuan passed the traditional Chinese medicine rules, and released it three years late; it was a legislative guarantee for the traditional Chinese medicine. In 1943 AD, the Physician Law was passed due to the efforts of the legislators including Qian Tan, Geng-Zhi Kong (孔庚之), and Yang-Guang Peng (彭養光). Since then, traditional Chinese medicine obtained equal status as western medicine. In 1945 AD, National Union of Chinese Medicine Doctors' Associations was founded. Qin Tan was one of its pioneers. It granted traditional Chinese medicine inclusion in the national occupational groups.¹¹ Qin Tan followed the government of the Republic of China to Taiwan. In 1958, Qin Tan et al. founded China Medical College. It was the first traditional Chinese medicine school approved by the government. They had made boundless efforts and protests, and in the end, overcame all difficulties. Finally, traditional Chinese medicine was



Qin Tan
Adopted from The
Development History of
Chinese Medicine in
Taiwan, page 9



included in formal education, and continued to pass on and develop. Qin Tan spent all his lifetime spreading the culture of traditional Chinese medicine, promoting the education of Chinese medicine, and helping the younger generation with all his heart and energy.

Lian Zhu (朱璉)

Lian Zhu had a style name of Jing-Yu (景雱). He was born in 1909 AD, and died in 1978 AD. He was a native of Liyang, Jiangsu Province. Lian Zhu was active in promoting the study on acupuncture and moxibustion. He established a research institute on acupuncture and moxibustion in 1951 AD. For this, the Acupuncture and Moxibustion Experiment Institute under the Ministry of Health was founded. He also published the *New Acupuncture and Moxibustion* (《新針灸學》). In 1955 AD, Acupuncture and Moxibustion Experiment Institute was changed to Acupuncture and Moxibustion Research Institute, and Lian Zhu became its Director. He spent his lifetime studying medical theories of acupuncture and moxibustion, and greatly valued clinical practice. He carried acupuncture and moxibustion forward, and because of him, it gained attention from the international society.

Guang-Ya Ma (馬光亞)

Guang-Ya Ma, originally named Jian-Zhong Ma (馬建中), was born in 1915 AD, and died in 2005 AD. He was a native of Xiangtan, Hu'nan



Province. Guang-Ya Ma graduated from Hu'nan School of Chinese Classics (湖南省立國學專修館). He learned medicine from his grandfather, Wen-Cai Peng (彭文彩), who was a famous doctor. When his grandfather was treating patients, Guang-Ya Ma was always by his side, accompanying him learn practical experience. He started to practice medicine when he was only 20 years old. He provided treatment for the local people, and gained their trust because of his treatments are effective. In 1951 AD,



Guang-Ya Ma
Adopted from the
Special Issue celebrating
the 45th Anniversary of
the China Medical
University, Taiwan, page
34

Guang-Ya Ma arrived in Taiwan. The following year, he started his clinic in Taipei. He soon became famous because of his excellent medical skills. In 1972 AD, he acted as the Director of Chinese Medical Association. Moreover, in 1975 AD, he was employed as Adjunct Professor of China Medical School, which was the start of his teaching career. In 1978 AD, he was employed as the school's formal Professor, and later became the Director of the Department of Traditional Chinese Medicine and Director of Research Institute of Traditional Chinese Medicine. When the Affiliated Hospital of China Medical School was established, he worked as the Attending Physician of the Department of Traditional Chinese Medicine. Professor Guang-Ya Ma retired in 1992 AD, and then concentrated on



writing. His works included *30-Year Clinical Experience in Taipei* (《台北臨床三十年》)¹², *Internal Medicine of Traditional Chinese Medicine* (《中醫內科學》), *Diagnostics of Traditional Chinese Medicine* (《中醫診斷學》), *New Understanding of Warm Heat Diseases* (《溫熱病篇新解》), etc. Professor Guang-Ya Ma spent most of his lifetime practicing medicine, and cured countless individuals. In the later stages of his lifetime, he tried his best to cultivate students, spread essentials of traditional Chinese medicine, and pass on the connotations of the traditional Chinese medicine.

Tie-Tao Deng (鄧鐵濤)

Tie-Tao Deng was born in 1916 AD. He was an expert of traditional Chinese medicine. He graduated from Guangdong Specialized School of Traditional Chinese Medicine. Tie-Tao Deng was good at treating diseases of the digestive system and cardiovascular system. He was also proficient in using stomach and spleen theories to treat diseases of multiple systems of western medicine and difficult



Tie-Tao Deng
Adopted from the
Medical Literature of
Professor

multi-systemic diseases, such as myasthenia gravis, atrophic gastritis, hepatitis, liver cirrhosis, aplastic anemia, scleroderma, rheumatic heart



disease, and lupus erythematosus. He had accumulated a rich clinical experience; his works include the *Theory Discussion and Clinical Pattern* (《學說探討與臨證》), *A Collection of Cultivation* (《耕耘集》), and *Tie-Tao Deng's Words on Medicine* (《鄧鐵濤醫話集》). In addition, some of the works he edited include: *Newly Revised Science of Traditional Chinese Medicine* (《中醫學新編》), *Dictionary of Traditional Chinese Medicine* (《中醫大辭典》), *Practical Internal Medicine of Traditional Chinese Medicine* (《實用中醫內科學》), *Diagnostics of Traditional Chinese Medical* (《中醫診斷學》), and *Practical Diagnostics of Traditional Chinese Medicine* (《實用中醫診斷學》).

Hui-Ping Wu (吳惠平)

Hui-Ping Wu has a style name of Xiang Yuan (祥元). He came from Mahang, Wujin. He was born in 1916 AD. He was an expert in acupuncture and moxibustion, and has a PhD degree in medicine. His father Shun-Chun Wu (吳順椿) was a doctor in Wujin. Hui-Ping Wu learned acupuncture and moxibustion from his father when he was young, and studied all his secret skills. In 1934 AD, Hui-Ping Wu proposed to establish Wujin Laryngology Acupuncture and Moxibustion Society of Traditional Chinese Medicine (武進國醫喉外科針灸學社). He promoted and taught acupuncture and moxibustion. In 1952 AD, he moved to Taipei, and established the Chinese Acupuncture and Moxibustion Hospital (中國針灸醫院) and founded Taipei Acupuncture and Moxibustion Society (台



北針灸學會). He also opened an acupuncture and moxibustion training classes (中國針灸醫學班) to foster teach and train students about acupuncture and moxibustion. In 1955 AD, he expanded Taipei Acupuncture and Moxibustion Society to Chinese Acupuncture and Moxibustion Society (中國針灸學會), and was its Director for thirty years.

Hui-Ping Wu once was invited to treat head of the states and/or politicians from European and Southeast Asian countries such as Great Britain, the USA, German, France, Japan, and South Korea. His good medical skills earned him praises from his patients. For example, he improved the condition the Cambodian President, Lon Nol (朗諾德), who at that time, had hemiplegia. He was conferred honorary PhD degrees by over ten colleges including Sri Lanka International University (錫蘭國際大學), Pakistan Liberty University (巴基斯坦自由大學), British College of Acupuncture (英國針灸學院), American College of Acupuncture (美國針灸學院), and Martin University of Hong Kong (香港馬丁大學). Knowing about his fame, about five thousand individuals from sixty-two countries came to Taiwan to study and become his students.

Hui-Ping Wu wrote many books, including: *Chinese Acupuncture and Moxibustion Science* (《中國針灸學》), *Fundamentals of Acupuncture and Moxibustion* (《針灸基礎學》), *Physiology of Channels and Network Vessels* (《經絡生理學》), *Acupuncture and Moxibustion Medicine* (《針灸醫學》), *Diagrams of Bronze Acupuncture Figure* (《針灸銅人圖譜》), *Hanging Diagrams of Channels and Points* (《經穴掛



圖》), *Hui-Ping Wu's Acupuncture and Moxibustion* (《吳惠平針灸學》), *A Study on Hypertension* (《高血壓症之研究》), *On Wind-Damp Pains* (《風溼痛專著》), *Compendium of China's Practical Medicine* (《中國使用醫學大全》), and *A General Introduction to Acupuncture and Moxibustion* (《針灸概要》). These have been published in different languages such as Chinese, English, and Spanish versions. Hui-Ping Wu was once a member of Acupuncture Examination Committee of Examination Yuan, member of Examination Organizing Committee, President of Traditional Chinese Medicine Press, Director of Chinese Acupuncture and Moxibustion Hospital, Director of Chinese Acupuncture Association (中國針灸協會), Director of Track Acupuncture Association (軌跡針灸協會), Honorary Director of World Federation of Chinese Medicine Physician Societies (世界中醫師聯合總會), and Executive Director of Taipei Association of Natives of Wujin (臺北武進同鄉會).

Hong-Yuan Xu (許鴻源)

Hong-Yuan Xu was born in 1917 AD, and died in 1991 AD. He was a native of Hemei Town, Zhanghua County, Taiwan. He obtained a PhD degree in Pharmacy from Kyoto University (京都大學) of Japan. After he returned to Taiwan, some of the notable positions he was assigned to are: Director General of Chinese Pharmaceutical Association (中國藥學會): Taiwan Branch, Director of Health Research Institute of Taiwan (台灣省衛生試驗所), Chief of Bureau of Pharmaceutical Affairs of Department of



Health (衛生署藥政處), and Professor of Department of Pharmacy of private and public universities both in Japan and abroad. Due to his outstanding achievements, Hong-Yuan Xu received an award from the Japanese Society of Pharmacognosy (生藥學會) in 1984 AD, and an award from Japan Society for Oriental Medicine (東洋醫學會) in 1989 AD, and was the only Chinese who was included in the Medical and Pharmaceutical Celebrity List of Japan.

Hong-Yuan Xu spent his lifetime in studying traditional Chinese medicine and pharmacy. He was the first to introduce pharmaceutical technologies from Japan. He devoted himself to the development of scientifically concentrated Chinese medicines, and was regarded as the “Father of Scientific Chinese Medicines” (「科學中藥之父」) by the medical and pharmaceutical field. In 1972 AD, he established Brion Research Institute (必安研究所) which was engaged in analyzing medicines and studying pharmacology. In 1976 AD, he established Oriental Healing Art Institute (國漢方醫藥研究所) in California, USA. He concentrated on comparing and analyzing western and eastern pharmacy, and published several pharmaceutical books in English. He made considerable contributions in the integration of Chinese and western pharmacy. Furthermore, Hong-Yuan Xu summarized the results of domestic researches on pharmacy, and compiled the two-volume *Chemical Composition of Chinese Medicines* (《漢藥之化學成份》) and one-volume *A Brief Introduction to Medicinal Materials* (《簡明藥材》). He



also wrote countless books and papers on pharmacy. He had two hundred fifty-five papers published on domestic and foreign academic magazines, and wrote thirty-six books in Chinese, and twenty-three books in English.

Hong-Yuan Xu spent his life studying pharmacy. He also held several notable positions such as the Acting Director of Health Research Institute of Taiwan, Chief of Bureau of Pharmaceutical Affairs of Department of Health (台灣省衛生試驗所), Director of Chinese Pharmaceutical Association (藥政處) and Director General of Chinese Pharmaceutical Association Taiwan Branch for several years. He made considerable contributions in domestic pharmaceutical affairs; and worked as a professor at the Department of Pharmacy of Taiwan University (台灣大學藥學系), Taipei Medical College (臺北醫學院), China Medical College, and Chinese Culture University (中國文化大學). He spared no effort to help the later generation.

Wei-San Huang (黃維三)

Wei-San Huang was born in 1923 AD, and died in 2001 AD. He was a native of Linqing, Shandong Province. He studied at Tianjin College of Chinese Classics (天津中國醫學院). In 1947 AD, he took part in the Examination of Traditional Chinese Medicine Physicians of Shandong Province, and ranked first place. In 1951 AD, he started to practice medicine in Taiwan. He also took part in the preparation work for establishing China Medical College and became one of the professors who





Wei-Sun Huang
Adopted from the
Symposium on
Traditional Chinese
Medicine by Professor
Wei-Sun Huang

taught at the college. He also became the college's Director of the Department of Traditional Chinese Medicine, Director of Research Institute of Traditional Chinese Medicine, and Vice-President. Professor Wei-Sun Huang retired in 1998 AD. He made every effort to promote the education of traditional Chinese medicine in Taiwan.¹³

Professor Wei-Sun Huang was especially proficient in acupuncture science. In 1973 AD, he went to the USA to teach acupuncture. He attended international academic seminars for several times, and could be regarded as the earliest founder (開山鼻祖) of acupuncture in Taiwan. He wrote several books including: *Science of Acupuncture and Moxibustion* (《針灸科學》), *Elaboration of the Classic of Difficult Issues* (《難經發揮》), *Essentials of the Classic of Difficult Issues* (《難經知要》), and *Collected Papers of Traditional Chinese Medicine* (《中醫論文集》). Among these books, *Science of Acupuncture and Moxibustion* was selected by the Ministry of Examination as the primary reference book for preparing in the examination of traditional Chinese medicine, and it is also the textbook for college study.



Ji-Xing Ma (馬繼興)

Ji-Xing Ma is one of the Hui people (回族). He was born in 1925 AD in Ji'nan City, Shandong Province. He graduated from Medical School in Northern China (華北國醫學院) in 1945 AD. He once acted as the Chief-Editor of *Chinese Acupuncture and Moxibustion magazine* (《中國針灸雜誌》) and Professor and Member at Deputy Director level of Education Commission of Medical School in Northern China. He once taught at Beijing Training School of Traditional Chinese Medicine (北京市中醫進修學校)



Ji-Xing Ma
Adopted from the Chinese Medicine Research Institute in China, Records of People, Volume 1, page 27

and Department of Biology of Beijing Normal University (北京師範大學生物系). He once worked at the preparatory committee before the establishing of China Research Institute of Chinese Medical Sciences (predecessor of China Academy of Chinese Medical Sciences). He was also a researcher and the Deputy Director of Research Institute of Literature of Chinese Medical History, China Research Institute of Chinese Medical Sciences, and a member of Committee of Experts. He is now the Honorary Principal Researcher of China Academy of Chinese





(Picture on the left hand side): The Chinese Medicine Research Institute in 1955 AD

(Picture on the right hand side): The Chinese Medicine Research Institute in 1985 AD

Source: A General History of Traditional Chinese Medicine, a volume containing collections of Illustrative plates and an atlas of historical relics, page 315

Medical Sciences. He wrote *Explanation of Dunhuang Ancient Medical Works* (《敦煌古醫籍考釋》), *Philology of Traditional Chinese Medicine* (《中醫文獻學》), *Explanation of Mawangdui Ancient Medical Works* (《馬王堆古醫書考釋》), and *Annotated Divine Husbandman's Herbal Foundation Canon* (《神農本草經輯注》), which studied ancient medical works. His works also include *Brief Bone Righting by Acupuncture* (《簡明針灸正骨》), *Anatomical Positions of Stimulation Points for*



Acupuncture Treatment (《針灸療法刺激點解剖位置參考圖》) which is a colored hanging diagram for teaching, *Bronze Statue for Acupuncture and Points at the Statue* (《針灸銅人與銅人穴法》), *Explanation of Dunhuang Ancient Medical Works*, and *Research on Lost Medical Works Unearthed* (《出土亡佚古醫籍研究》). These works have significant influences on the study of acupuncture history and related literature.

Ji-Sheng Han (韓濟生)

Ji-Sheng Han was born in 1928 AD. He was a native of Xiaoshan, Zhejiang Province. He is an expert of neurophysiology. He graduated from the Department of Medicine, Shanghai Medical College in 1953 AD. He once worked as Professor of Department of Medicine in Peking University and Director of Institute of Neuroscience (神經科學研究所). Ji-Sheng Han started to study the principle of acupuncture pain in 1965 AD. With respect to neurochemical mechanism of suppressing acupuncture pain, his research on the mechanism of the interactions between Opioid and anti-opioid peptides is world-leading. He invented the method of using nerve stimulation to treat individuals addicted to heroin (海洛因) and cocaine (可卡因). In 1993 AD, he was selected the Academician of Chinese Academy of Sciences (中國科學院院士).

Ji-Sheng Han has published about four hundred papers of domestic and foreign journals. His works include *Outlines of Neuroscience* (《神經科學綱要》), *Principles of Neuroscience* (《神經科學原理》),



Neurochemical Principles of Acupuncture Pain (《針刺陣痛的神經化學原理》), and *Principles of Acupuncture Pain* (《針刺陣痛原理》). In addition, Ji-Sheng Han's academic achievement has received both domestic and foreign praise. He was the awardee of the Second and Third Prizes of the National Natural Science (國家自然科學), the First and the Second Prizes from National Board of Education (國家教委), and the first Yuan-Pei Cai Award (蔡元培獎) of Peking University in 2006 AD. He also received the Scholarship for Outstanding Neuroscience Worker jointly conferred by International Brain Research Organization (國際腦研究組織) and United States Neuroscience Foundation (美國神經科學基金會). He once acted as Member of Education Committee of International Association for the Study of Pain (國際疼痛研究會; IASP), and the Member of Executive Board of International Narcotics Research Conference (國際麻醉性物研究學會; INRC) for two terms. In 2007 AD, he became the President of International Neuropeptide Association (國際神經肽協會), China Branch. He is now Member of Subject Consultative Group of the Academic Degree Committee of the State Council, Member at Director Level of Chinese Medical Association Pain Society, and editor of many medical magazines.

Jing-Wei Li (李經緯)

Jing-Wei Li was born in 1929 AD. He was a native of Xianyang, Shaanxi Province. He was a senior researcher of China Research Institute



of Chinese Medical Sciences. He graduated from Xi'an University of Medicine in 1955 AD. He was engaged in researching the history of China's medical science and related literature for over 40 years. He established in succession, Research Office of Literature of China's Medical History (醫史文獻研究室), Research Institute of Literature of China's Medical History (中國醫史文獻研究所), and Museum of China Medical History (中國醫史博物館), and was the Director of all three. In 1978 AD, he applied at the Chinese Medical Association



Jing-Wei Li
Adopted from the cover page of A General History of Traditional Chinese Medicine, a volume containing collections of illustrative plates and an atlas of historical relics

Medical History Society and *Chinese Medical History magazine* (《中華醫史雜誌》). He was approved by the Academic Degree Committee of the State Council to be the graduate and doctoral supervisor. From 1979 AD, he acted in succession as Member of Prevention Medicine Group of China Scientific and Technological Commission, Member of Scientific Commission of Department of Health, Deputy Director, Director, and Honorary Director of Chinese Medical Association Medical History Society, Deputy Editor-in-Chief and Editor-in-Chief of Chinese Medical History magazine, and Member of Academic Commission of China Academy of Chinese Medical Sciences.



By 2001 AD, Jing-Wei Li had published over one hundred fifty papers in domestic and foreign journals. He was Chief Editor for over thirty large-scale works such as *A General History of Chinese Medicine* (《中國醫學通史》), *Diagrams of History of Ancient Chinese Medicine* (《中國古代醫史圖錄》), *China Encyclopaedia of Medicine History of Medicine* (《中國醫學百科全書·醫學史》), and *Chinese Medicine Dictionary* (《中醫大辭典》). With respect to academic achievement, Jing-Wei Li has been awarded as recipient of the National Science Conference Award (全國科學大會獎), National Scientific Achievement Award (國家科技成果獎), Scientific Research Achievement Award at Ministerial Level (部級科研成果獎), Taiwan Li-Fu Work of Chinese Medicine Award (臺灣立夫中醫藥著作獎), and Award of China Academy of Chinese Medical Sciences (中國中醫科學院獎). He has been invited to several foreign countries such as Thailand, Japan, the USA, German, Britain, Canada, Malaysia, and Singapore for academic exchanges of medical history.

Ke-Ji Chen (陳可冀)

Ke-Ji Chen was born in 1930 AD in Fuzhou, Fujian Province. He is an expert in the integration of traditional Chinese medicine and western medicine, and an academician of Chinese Academy of Sciences. He graduated from Fujian Medical College. He is specialized in the field of internal medicine with integrated Chinese medicine and western medicine.



He is especially proficient in clinical and fundamental research of cardiovascular and cerebrovascular diseases. He is a Principal Researcher of China Academy of Chinese Medical Sciences, Director of National Cardiovascular Disease Center of Chinese Medicine and Western Medicine Integration of China-Japan Friendship Hospital (中日友好醫院) under the Ministry of Health, Honorary President of Chinese Association



Ke-Ji Chen
Adopted from the
website of the China
Academy of Chinese
Medical Sciences

of the Integration of Traditional and Western Medicine (中國中西醫結合學會), Executive Director of Chinese Medical Association (中華醫學會), Chief Director of China Geriatric Society (老年醫學學會), Honorary President of China Geriatrics Society (中國老年學學會), Member of Presidium of Education Department of Chinese Academy of Sciences (中國科學院), Honorary Committee Member of China Association of Science and Technology (中國科協), Head of Expert Group of Central Committee of Healthcare (中央保健委員會), Director of Academic Committee of Key Laboratory of Internal Chinese Medicine of the Ministry of Education, Member of Expert Group of Management Committee of Post-doctors of the Ministry of Personnel (人事部博士後管委會), Vice President of Consultative Committee of Senior Experts of World Federation of Chinese Medicine Societies (世界中醫藥聯合會), Member of Advisory



Committee of State Administration of Traditional Chinese Medicine (國家中醫藥管理局), Medical Consultant of the People's Government of Beijing, Member of Chinese Pharmacopoeia Commission (國家藥典委員會), and Director and Member of some academic groups.

Jaung-Geng Lin (林昭庚)



Dr. Jaung-Geng Lin receiving the Golden Robe Award from the Kingdom of Saudi Arabia in 1980. (A picture provided by Dr. Jaung-Geng Lin)

Jaung-Geng Lin was born in 1947 AD. He came from Zhanghua, Taiwan, and was a Physician of Chinese and Western Medicine. He graduated from the Department of Traditional Chinese Medicine of China Medical College in 1973 AD, and had his post-graduate and doctoral programs at the Graduate School of Chinese Medicine for further study. He is the first person in Taiwan to have a PhD degree in Acupuncture of Chinese Medicine, and was the first Professor of Chinese Medicine approved by the Ministry of Education.

Apart from clinical practice, he wrote quite a number of works. He took charge of the compiling of the *A Comparative Dictionary of Chinese and Western Medical Disease Names* (《中西醫病名對照大辭典》). The dictionary differentiates of all kinds of diseases from the theories of



Dr. Jaung-Geng Lin being awarded with the “Presidential Cultural Award” in 1993 AD, by President Teng-Hui Li. (A picture provided by Dr. Jaung-Geng Lin)

Chinese and western medicine, and provides a platform for physicians of Chinese and western medicine to communicate. *Dictionary of the Comparison of Disease Names of Chinese and Western Medicine* has been collected by libraries of Oxford University (牛津大學) and Cambridge University (劍橋大學) of the Britain, Harvard University (哈佛大學) and Princeton University (普林斯頓大學) of the USA. He also wrote fifty-one works including *Paper Collection of Acupuncture Research* (《針灸研究論文專輯》), *Abstract of Acupuncture* (《針灸醫學文摘》), *The*





President Shui-Bian Chen awarding Dr. Jaung-Geng Lin with a plaque with the inscription “Excellence in Traditional Chinese Medicine”, July 2003 (A picture provided by Dr. Jaung-Geng Lin)

Collection of New Acupuncture (《新針灸大成》), *New Ideas on Acupuncture* (《針灸學新論》), *The Newly Edited Color Book of Acupuncture and Moxibustion* (《新編彩圖針灸學》), *The Evolution of Traditional Chinese Medicine in Taiwan under Japanese Rule* (《日治時期之台灣中醫》), and *A Review of the History and Practice of the Needling Depth of Acupoints* (《針刺穴位深度研究》)^{14, 15, 16, 17, 18, 19, 20, and 21}. He had more than three hundred and thirty five papers published on top of the journals of clinical medicine both locally and abroad, such as PAIN. His achievements gained attention from the international society, and as such, he was frequently invited to give speeches during academic



Dr. Jaung-Geng Lin (sixth from the left in the back row) representing The World Federation of Acupuncture-Moxibustion Societies and Taiwan at the WHO's Workshop on the Implementation of a Regional Strategy for Traditional Medicine in the Western Pacific 2011-2020, held in Hong Kong, 7th to 8th May, 2012 AD. (A picture provided by Dr. Jaung-Geng Lin)

seminars. In 2008 AD, Jaung-Geng Lin was invited as the Principal Guest Speaker for annual Complementary and Alternative Medicine (互補及替代醫學; CAM) Conference co-hosted by Chicago University (芝加哥大學) and Mayo Clinic (梅約醫學中心) of the USA. Dr. Lin has been a frequent guest at UN-sponsored conferences in recent years, which includes the 2009 AD WHO-organized conference held in Milan on the Evidence-based medicine Guidelines for Traditional Chinese Medicine; the 2012 AD WHO-organized workshop held in Hong Kong on the Implementation of the Regional Strategy for Traditional Medicine in the



Western Pacific 2011-2020.

In 2013 AD, Dr. Lin was employed by UNESCO as an expert from WFCMS and providing advisor in the field of TCM and is the first Taiwanese to have received an invitation from UNESCO since Taiwan left the United Nations. Dr. Lin was invited to attend the 8th Session of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage sponsored by UNESCO held in Baku of Republic of Azerbaijan. In 2014 AD, Dr. Lin was again invited to be the ICHNGO FORUM speaker for the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage sponsored by UNESCO held in Paris of France, which made him the first professional scholar who delivered speech in UNESCO since Taiwan left the United Nations. In 2015 AD, Dr. Lin was invited to attend the 10th Session of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage sponsored by UNESCO held in Namibia. In 2015 AD, Dr. Lin was invited to join the 66th Session of WHO Regional Committee for the Western Pacific, which was held in Guan. Dr. Lin is also the Honorary President of the National Union of Chinese Medicine Doctors' Association R.O.C. and the President of the Taiwanese Association of Chinese Medical History and Literature.

Apart from practicing medicine and writing medical works, Jaung-Geng Lin also took part in the promotion of medical education. He once acted as the National Policy Advisor for the Office of the President (總統



府), Member of Committee of Medical Education of the Ministry of Education (教育部醫學教育委員會), Identifying and Organizing Member of the Committee of Examination of the Examination Yuan, Director of Chinese medicine related academic and research institutes of China Medical University, and Member of Committee of Chinese Medicine and Pharmacy of Department of Health, Executive Yuan. He was invited to act as Guest Professor by several universities including University of Victoria (國立維多利亞大學) of Australia, National Taiwan University College of Medicine (國立台灣大學醫學院), National Science and Technology RMIT University (國立墨爾本皇家理工科技大學), University of Oradea of Romania, University of Vasile Goldis of Romania, Guangzhou University of Chinese Medicine (廣州中醫藥大學), and Fujian University of Traditional Chinese Medicine (福建中醫藥大學). In order to improve the research connotations of Chinese medicine and complete the development of Chinese Medicine Doctors' Associations, Jaung-Geng Lin took the position of editing commissioner of many medical magazines, such as the yearly editor of ECAM and assumed the office of Director of Taipei Association of Chinese Medicine Doctors and National Union of Chinese Medicine Doctors' Associations, and founded certain journals of TCM.

Jaung-Geng Lin has won a large number of domestic and international awards due to his academic achievements. During the years of being the Director of the Department of Acupuncture and Moxibustion



in Veterans General Hospital (1979 AD-1980 AD), he was assigned to provide the medical services of Acupuncture and Moxibustion to citizens and the king of the Kingdom of Saudi Arabia. He was awarded Golden Robe award (金袍獎), the highest honor of Saudi Arab in 1980 AD, and was included in “Who’s Who in the Word” (「世界名人錄」) of the American Historical Association in 1989 AD. In 1990 AD, Dr. Jaung-Geng Lin was awarded the “Academic Contribution Award” by Alfredo Cristiani, the president of the Republic of El Salvador in Central America. In 1990 AD, Dr. Jaung-Geng Lin was included in “International Celebrities” (「國際學人名人錄」) of the International Biographical Center of Cambridge. In Taiwan, in 1993 AD, Dr. Jaung-Geng Lin was awarded a “Presidential Cultural Award” by President Teng-Hui Li, who was also the chairman of the General Association of Chinese Culture, to recognize Dr. Jaung-Geng Lin’s outstanding contribution to the development of Traditional Chinese Medicine. In July 2003 AD, President Shui-Bian Chen awarded Dr. Jaung-Geng Lin a plaque with the inscription “Excellence in Traditional Chinese Medicine” (communiqué of presidential office Issue 6534, No. 09200-20670, July 21, 2003) in recognition of Dr. Jaung-Geng Lin’s great contribution in development and enhancement of Traditional Chinese Medicine.



Notes

1. Lin-Rong Xiao & Yung-Hsien Chang (2011). Dr. Tsung-Ming Tu: An Advocate of the Unification of Chinese and Western Medicine in Taiwan. *Journal of Fujian University of Traditional Chinese Medicine*. 21(1). pp. 68-70.
2. Hong-Chien Ha & Tian Gao (1996). The Traditional Chinese Medicine in Taiwan During the Japanese (Part II). *Chinese Journal of Medical History*. 26(1). pp. 1-10.
3. Siao-Bin Yang (2012). Dr. Tsung-Ming Tu and the Development of Medical Education in Taiwan. *Education Review*. (4). pp. 120-122.
4. Hsiang-Lin Lei (2010). The Enigma Concerning Dr. Tsung-Ming Tu's Research in Traditional East Asian Medicine: On the Creation of Value in Integrative Medicine. *Taiwanese Journal for Studies of Science, Technology and Medicine*. (11). pp. 201-286.

References

1. Xin-Cheng Shu (1961). Contemporary History of Chinese Education. *People's Education Press*. pp. 46.
2. Shan-Lai Zhang & Chiang Huang (1980). Opinions on Curriculum Design in the Private Traditional Medical School Sponsored by Family



- Zhu. *Education of Chinese Medicine*. (1). pp. 41.
3. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine Development in Taiwan*. National Union of Chinese Medical Doctors' Association. pp. 207-208.
 4. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine Development in Taiwan*. National Union of Chinese Medical Doctors' Association. pp. 251-254 and 257-258.
 5. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine Development in Taiwan*. National Union of Chinese Medical Doctors' Association. pp. 268-270.
 6. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine Development in Taiwan*. National Union of Chinese Medical Doctors' Association. pp. 264-267.
 7. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine Development in Taiwan*. National Union of Chinese Medical Doctors' Association. pp. 315-319.
 8. Lin Cai, Shu Zhang, Bo-Nian Liao & Xiao Lui (2011). Zong-Hai Tang's Four Therapeutic Methods for Blood Syndrome in *Treatise on Blood Syndromes*. *Henan Traditional Chinese Medicine*. (12). pp. 1376-1377.
 9. Jaung-Geng Lin, Guang-Wei Chen & Pei-Chi Chou (2011). *On the Evolution of Traditional Chinese Medicine in Taiwan Under Japanese Rule*. National Research Institute of Chinese Medicine.
 10. Pei-Wen Zhu & Hong-Han Wang (2014). *Two Medical Books on the*



- Communication Between Traditional Chinese Medicine and Western Medicine. Press of University of Science and Technology of China.*
11. Xi-Chun Zhang (1974). *Records of Traditional Chinese Medicine and Western Medicine in Combination. People's Hygiene Press.* pp. 18.
 12. Tie-Qiao Yun (2007). *Four Medical Books by Tie-Qiao Yun. Fujian Science and Technology Press.*
 13. Mi-Mi Wang (2011). *Yi-Ren Shi's Medical Symposium. Academy Press.*
 14. Dan-An Cheng (1956). *The Elucidation of Annotated Fourteen Channels. Shanghai Hygiene Press.*
 15. Bo-Wei Qin (1939). Symposium of TCM Education. Problems in Textbooks Used in Medical Schools. *Research Society of Traditional and Western Medicine.* pp. 445.
 16. Xiao-Shan Shi (1959). *Anthology of Traditional Chinese Medicine Treatment Experience: Bone-Setting Therapy. Beijing: People's Hygiene Press.*
 17. Jaung-Geng Lin. (Chief Editor) (2004). *History of Traditional Chinese Medicine in Taiwan. National Union of Chinese Medical Doctors' Association.* pp. 341.
 18. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine Development in Taiwan. National Union of Chinese Medical Doctors' Association.* pp. 342-345.
 19. Lian Zhu (1955). *New Science of Acupuncture and Moxibustion.*



- Beijing: People's Hygiene Press.*
20. Guang-Ya Ma (1992). *30 Years of Clinical Practices in Taipei*. Beijing: People's Hygiene Press.
21. Tie-Tao Deng (1995). *Medical Collection of Tie-Tao Deng*. Beijing: People's Hygiene Press.
22. Hui-Ping Wu (1964). *Medical Science of Acupuncture and Moxibustion*. National Research Institute of Chinese Medicine.
23. Hong-Yuan Xu (1980). *On Traditional Chinese Medicinal Materials*. New Medicine Press.
24. Jaung-Geng Lin (Chief Editor) (2004). *History of Traditional Chinese Medicine in Taiwan*. National Union of Chinese Medical Doctors' Association. pp. 395-396.
25. Ji-Xing Ma (1990). *Traditional Chinese Medicine Philology*. Shanghai Science and Technology Press.
26. Ji-Sheng Han (1999). *Principles of Neuroscience*. Peking University Medical Press.
27. Jing-Wei Li (2005). *Encyclopedia of Traditional Chinese Medicine*. Beijing: People's Hygiene Press.
28. Ke-Ji Chen (1999). *Coronary Heart Disease*. China Medical Science Press.
29. Duanyi-Lin (1994). Doctor Jaung-Geng Lin and His Study of Acupuncture and Moxibustion. *Journal of Fujian University of Traditional Chinese Medicine*. 4(1).



30. Pin-Jia Wu (1994). Comment on the New Theories of Science of Acupuncture and Moxibustion. *Shanghai Journal of Acupuncture and Moxibustion*. 13(2).
31. Pin-Jia Wu (1994). Essentials of New Compendium of Acupuncture and Moxibustion. *Jiangsu Journal of Traditional Chinese Medicine*. 15 (1).
32. Hai-Tao Ye (1995). Dr. Jaung-Geng Lin's Research Towards Acupuncture and Moxibustion. *Journal of Clinical Acupuncture and Moxibustion*. 11(6).
33. Jing-Wei Li & Wei-Juan Gang (2011). Review of New Edition of the Science of Acupuncture and Moxibustion with Colored Illustrations. *Journal of Traditional Chinese Medicine*. 52(5).
34. Jing-Wei Li (2011). The Academic Studies of Professor Jaung-Geng Lin, The First Taiwanese Studying Traditional Chinese Medicine. *Chinese Journal of Medical History*. 41(1).
35. Juan Wang & Tao Xu (2011). Jaung-Geng Lin: Father of Needling Safe Depth. *Technology China*. (7).
36. Po-Hsin Lin (2013). Intelligence with Perseverance-The Achievements of Professor Jaung-Geng Lin in Traditional Chinese Medicine. *Taiwan Journal of Chinese Medicine*. (11).
37. On Jaung-Geng Lin's plaque (Presidential Decree No. 09200120670) with characters "Contribution to Medical Science" (「功著杏林」), which means Excellence in Traditional Chinese Medicine, an official



seal with characters “A Seal of Glorious Grace” (「榮典之璽」) is still legible. The Great Seal of the Republic of China is categorized into two types: one is the Seal of the Republic of China, and the other is the Seal of Glorious Grace. The former represents the Republic of China and is used in documents such as letters of credence, instruments of ratification, instruments of acceptance, full-power credentials, exequaturs, and commission of a consul. It is made of green jade, and has been put into use since the National Day of October 10, 1929. The latter is used by the head of the nation when he gives awards and seals documents like credentials, a proclamation of praise, and inscribed plaques. It is made of mutton-fat jade and it has been put into use since July 1, 1931.



Appendix

World Federation of Chinese Medicine Societies (WFCMS)

The World Federation of Chinese Medicine Societies (WFCMS) is an international Chinese medicine organization, with its headquarters located in Beijing. The aim of the WFCMS is to increase the mutual understanding and cooperation between world Chinese medicine organizations, enhance world academic exchanges, improve the professional level of Chinese medicine, and enable Chinese medicine to enter into mainstream medical systems worldwide, as well as push forward exchanges and cooperation between Chinese medicine and worldwide medical sciences.

National Union of Chinese Medical Doctors' Association, R.O.C.

The legal status of Chinese medical doctors was established in 1943 AD by the passing of a draft physician's law. After victory in the War in 1945 AD, traditional Chinese medicine (TCM) practitioners officially applied for registration to the government, and formed an organization called the "National Union of Chinese Medical Doctors' Association, R.O. C. (NUCMDA). In the same year, the inaugural meeting was held in Chongqing, Sichuan during which it became a formal professional organization for Chinese medical doctors. In 1949 AD when the current political situation was in disarray, the National Government moved to



Taiwan, while most of the supervisors elected by the association in mainland China did not follow National Government to withdraw to Taiwan, which meant the association was unable to operate normally. In order to ensure the legal rights of Taiwanese Chinese medicine, TCM practitioners wished to continue with the unity of Chinese medical doctors and submitted to the home department to resume a sitting of the National Union of Chinese Medical Doctors' Association, R.O.C. in 1975 AD.

The NUCMDA has 22 organizational members in Taiwan at present, such as Taipei, Kaohsiung, with its founding ambition of developing a Chinese medicine course. In order to improve the quality of Chinese medicine and reinforce the professional expertise of Chinese medical doctors, the NUCMDA successfully launched the research program at the Chinese Medical Academy, following which many specialized institutions of medicine (IOM) were founded, such as Traditional Chinese Medicine Association, Taiwan, Chinese Medical Association of Acupuncture (CMAA), Traditional Chinese Internal Medicine Association, The Association of Chinese Traumatology of R.O.C., Traditional Chinese Gynecological Medicine Association, Traditional Chinese Pediatric Medicine Association, Taiwan Clinical Chinese Medicine Association, etc. In addition to launching different research programs, the medical organizations focused on the combination of Chinese and Western medicine, often holding international academic seminars, which greatly improved the academic level of Chinese medicine.



Chinese Medical Doctors' Association of Taiwan (CMDA)

In 1949 AD, the Chinese Medical Doctors' Association of Taiwan (CMDA) held the first of two informal preparation meetings in Tainan, launched by Chiayi, Changhua, Kaohsiung, Pingtung and Taitung. The second meeting was held the following year and included the participation of Taipei, Keelung, Hsinchu, Taichung, Tainan, Hualien and Kaohsiung. Consequently, the Chinese Medical Doctors' Association of Taiwan (CMDA) was inaugurated in Fuguang hall of Jhungshan Auditorium of Taipei, with its aim to unite the Chinese medical doctors' associations of all counties and undertake academic medical research together so as to develop the quintessence of Chinese culture, implement the decree, improve people's health, enhance the conference member unions, as well as increase the legal rank and welfare of Chinese medical doctors. In December 31, 2000 AD, the Chinese Medical Doctors' Association of Taiwan (CMDA) was dismissed, with the association of each county directly joining the National Union of Chinese Medical Doctors' Association, R.O.C.

China Medical University (CMU)

The China Medical University (CMU), originally called the China Medical College, was founded in 1958 AD. It was the first Chinese medicine college in the Republic of China. After 1972 AD, the education system changed from six years to seven years and Research Center for



Traditional Chinese Material Medical, Research Center for Chinese Medicine & Acupuncture, and Cancer Research Center were founded. As a result, research into Chinese medicine and acupuncture was more thorough. Additionally, the modernization of Chinese medicine was promoted by the education on Chinese medical, which helped with the integration of Chinese and Western medicine, and further established a new medical system. This college was approved by the Ministry of Education and upgraded to the China Medical University (CMU), with the founding of the school of Chinese medicine.

In 1980 AD, a hospital attached to the CMU was completed and an integrative medical outpatient unit was opened, which was the only hospital unit that combined Chinese medicine with Western medicine. In 1984 AD, the CMU founded a post-bachelor Chinese medicine department with a five-year education system. Additionally, the Mazu Memorial Hospital attached to the CMU was established the following year. In order to cultivate talented doctors of Chinese medicine, the doctoral class of the Chinese Medical Research Institute was set up in 1988 AD, followed by a Chinese medicine doctoral class, Chinese pharmacy doctoral class and a basic medicine master class in 1992 AD. In 1997 AD, the hospital attached to the CMU was promoted to a medical center which was assessed by the government, becoming the top medical center in mid-Taiwan.



School of Traditional Chinese Medicine at Chang Gung University

The School of Traditional Chinese Medicine was founded following the opening of the Chang Gung University 10 years previously. In 1996 AD when the Chang Gung Memorial Hospital set up its Chinese medicine department and opened its outpatient department, Yung-Ching Wang, the founder, was very impressed by the broad and profound traditional Chinese medicine being practiced. As a consequence, he lobbied the Chang Gung University to actively set up a school of Traditional Chinese Medicine. With the help of Gui-Xiong Xie, ex-President of the Chang Gung Children's Hospital and Professor Jaung-Geng Lin of the CMU, a school for traditional Chinese medicine was being prepared, with the approval of the Ministry of Education, and was officially founded in the following year when it began to recruit students.

The School of Traditional Chinese Medicine at the CGU aims to pursue the modernization of Chinese and Western medicine, as well as the integration of Chinese and Western medicine. The educational system of this school is eight years. The first six years are focused on professional courses in Chinese and Western medicine; the seventh year is an internship in Western medicine, and the last year is an internship in Chinese medicine. In order to improve the quality of the basic courses in Chinese medicine and practical clinical education, the CGU cooperated with the famous Chinese medicine universities and colleges in Beijing, Chengdu and Fujian, employing many renowned professors and teachers to give lectures



so as to cultivate talented doctors of Chinese medicine.

School of Post-Baccalaureate Chinese Medicine at Tzu Chi University

The preparations for the School of Post-Baccalaureate Chinese Medicine at Tzu Chi University were held in May 2010 AD for the first time. Subsequent preparation meetings were successfully held and the university applied to the Ministry of Education, inviting Professor Jaung-Geng Lin, Professor Heng-Hong Zhang and Professor Mao-Feng Sun to be consultants. In March 2012 AD, the Ministry of Education approved the foundation of the School of Post-Baccalaureate Chinese Medicine, and the first independent examination was held in June 2012 AD. The aim of the Post-Baccalaureate Chinese Medicine course at Tzu Chi University is the worship of the spirits of compassion and joy, carrying forward and developing traditional Chinese medicine, as well as studying Chinese medicine by integrating modern medical technology so as to achieve the goal of serving people and society.

Beijing University of Chinese Medicine

The Beijing University of Chinese Medicine (BUCM), originally called the Beijing College of Chinese Medicine, is one of the earliest-established higher education institutions for Chinese medicine. Established in 1956 AD and renamed in 1993 AD, the BUCM was the only higher education institution for Chinese medicine to enter the China “211 Project 1”. In 2000 AD, the former BUCM merged with the Beijing



College of Acupuncture, Orthopedics and Traumatology. The newly merged BUCM became a priority institution directly under the supervision of the Ministry of Education. It was co-established by the Ministry of Education, the National Health and Family Planning Commission (previously Ministry of Health), and the State Administration of Traditional Chinese Medicine, as well as the Beijing municipality

Nanjing University of Chinese Medicine

Founded in 1954 AD, the Nanjing University of Chinese Medicine (NJUCM) was originally called the Nanjing College of Chinese Medicine and was renamed in 1995 AD. It is as famous as the other four Chinese medicine universities in Guangzhou, Shanghai, Beijing and Chengdu. The NJUCM specializes in the subjects of Chinese medicine and Chinese pharmacy, and has set up national key subjects, such as traditional Chinese pediatric medicine, the history and literature of Chinese medicine, etc. In addition, during the early stages of TCM higher education in China, the NJUCM set out the first edition of the syllabus, compiled the first series of textbooks, and cultivated the first group of teaching staff for the whole nation.

Shanghai University of Traditional Chinese Medicine

The Shanghai University of Traditional Chinese Medicine (SHUTCM) was one of the first four higher institutions of Chinese medicine founded by the People's Republic of China. The former



SHUTCM was a traditional Chinese Medicine specialist school in Shanghai. After the foundation of the People's Republic of China, the Shanghai Traditional Chinese Medicine College was founded in 1956 AD and in 1993 AD was renamed as SHUTCM. It is co-administrated by the Shanghai Municipal People's Government, Ministry of Education, Ministry of Health, as well as the State Administration of Traditional Chinese Medicine.

Guangzhou University of Chinese Medicine

Founded in 1956 AD, the Guangzhou University of Chinese Medicine (GZUCM) was originally known as the Guangzhou University of Traditional Chinese Medicine (GZUTCM). It is one of the four oldest TCM higher education institutions in China. It was originally administrated by the Ministry of Health and the State Administration of Traditional Chinese Medicine. However, in 2000 AD, it changed and is now administrated by Guangdong province with the joint co-operation of central government and local government.

Chengdu University of Traditional Chinese Medicine

Founded in 1956 AD, the Chengdu University of TCM was originally known as the Chengdu College of TCM. It is one of the oldest TCM higher education institutions in China. It can be traced back as far as the Sichuan College of TCM. In 2006 AD, it merged with the Sichuan Provincial Health School of Management Cadres and Sichuan Reproductive Health



Institute.

Tianjin University of Traditional Chinese Medicine

Originally called the Tianjin College of TCM, it was renamed as the Tianjin University of TCM in 2006 AD. It was founded in 1958 AD and approved by the Ministry of Education of the PRC, with the name of the International Chinese Traditional Medicine College. The National Chinese Medicine Teaching Advisory Board under the Ministry Of Education and Committee for Education of World federation of Chinese medicine societies are both located in this university.

University of the Pacific

The Pacific College is a distinguished educational institution of Chinese medicine in the US. Founded in 1986 AD, it provides students from all over the world with theory and practice in studying traditional Chinese medicine. The Pacific College has obtained many awards for its oriental courses in Chinese medicine and clinical training, and has received research funds sponsored by the USA National Institutes of Health. The educational aim of this college is to combine oriental traditional Chinese medicine and Western medicine in order to cultivate students to become professional medical personnel who are sympathetic and centered on patients.



Federation of Chinese Medicine & Acupuncture Societies of Australia Ltd. (FCMA)

Founded on March 10th, 1991 AD, the Federation of Chinese Medicine and Acupuncture Societies (FCMA) is a national Chinese medical and academic organization with its headquarters located in Melbourne, Australia. Its aim is to promote the social status of Chinese medicine doctors and acupuncturists, as well as to guarantee the rights of patients and doctors. The FCMA is the origin of initiating the legislative management of Chinese medicine and acupuncture practitioners in the world history, and persuaded the government to use legislative management to protect the regular development of Australian Chinese medicine.

Royal Melbourne Institute of Technology University (RMIT)

The Chinese College of Health Science and Medicine of the RMIT is internationally and universally acknowledged as the pioneer of Chinese medical education. Its wide range of research programs are sponsored by The National Health and Medical Research Council, and Australian Research Council, as well as other sponsors. As well as these sponsorships, the RMIT is preferred by the WHO and is appointed to be dedicated to traditional Chinese medicine.

College of Oriental Medicine, Kyung Hee University, Korea

Founded in 1948 AD, the Oriental Medical College of Kyung Hee



University, Korea was originally called the Tong-Yang College, later renamed as the Seoul College of Oriental Medicine and Tong-Yang College of Medicine, now a most renowned academic institution. After its foundation, with the basis of modern and oriental medical science, as well as comparison and comprehensive research, this college aims to establish a third field of medicine, that of Western Medicine combined with Chinese medicine.

Note

1. The 211 Project is a project of National Key Universities and colleges initiated in the 1990s AD by the People's Republic of China, and is a strategic policy aimed at China's higher education. The name for the project comes from an abbreviation of the 21st century and 100 (approximate number of participating universities) as well as a group of key subjects.



書名：History of Traditional Chinese Medicine

編著者：林昭庚、周珮琪、林伯欣、施惠娟

主編：林昭庚

發行人：顧記華

出版者：衛生福利部國家中醫藥研究所

地址：11221 台北市北投區立農街 2 段 155 之 1 號

電話：02-28201999 分機 4034

傳真：02-28264274

電子郵件：helena@nricm.edu.tw

網址：<http://www.nricm.edu.tw>

出版年月：2016 年 08 月第一版

定價：新台幣 500 元

GPN：4910500923

ISBN：9789860489668 (PDF)

展售處 (銷售服務)：

地址：11221 台北市北投區立農街 2 段 155 之 1 號

電話：02-28201999 分機 3362

網址：<http://www.nricm.edu.tw>

電子郵件：vincent@nricm.edu.tw

電子書設計製作：

設計製作：衛生福利部國家中醫藥研究所

地址：11221 台北市北投區立農街 2 段 155 之 1 號

電話：02-28201999 分機 4034

電子郵件：helena@nricm.edu.tw

網址：<http://www.nricm.edu.tw>

電子書播放資訊：

作業系統：Windows, Mac OS, Linux, Android

檔案格式：PDF

檔案內容：Adobe 文件

播放軟體：Adobe Reader

使用載具：PC、智慧型手機、平板電腦 (iPad)

其他類型版本說明：

2016年08月 第一版

ISBN 9789860489859 (EPUB)