



Edited by
Rob Jenkins
Jan-Christoph Heilinger
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WORDS OF WISDOM

cherished advice
from academic mentors
around the world



Global Young Academy

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WORDS
OF
WISDOM

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PREFACE

PhD students and postdoctoral researchers often receive from their supervisors words of wisdom that stay with them for the rest of their lives. Good advice at the right time can make a huge difference, especially in the early stages of a career. Unfortunately, not everyone who seeks advice has access to it. Although there is plenty of guidance on the mechanics of writing a thesis or a grant proposal, there is much less on maintaining morale, overcoming obstacles, and keeping things in perspective. This book fills that gap, bringing together outstanding examples of supervisors' words of wisdom, and making them available to early-career researchers around the world.

The Words of Wisdom project was first proposed at the 2014 AGM of the Global Young Academy (GYA) in Santiago, Chile. As a worldwide network of young researchers, the Global Young Academy is well positioned to undertake such a project. This book includes 76 contributions from 31 countries on 6 continents. Over half of them were submitted by Global Young Academy and National Young Academy members. Each contribution consists of the name, nationality, and subject area of the contributor, followed by the quote itself and, optionally, an attribution. Where the contributor chose not to name the advisor, the attribution field is left blank. Beneath the quote, the contributor puts the advice into context, explaining the situation in which it arose and the reason that it stuck.

Despite the demographic diversity of the contributors, several clear themes emerged. The chapters of this book reflect those themes and the varieties of research experience around the world. Some of the contributions are personal, others are pragmatic, some are even poetic. But all reward contemplation. Together, they reveal much about the humanity of knowledge generation, the challenges of a career in research, and the value of mentorship in negotiating these challenges. We hope they will be a source of inspiration and support to early-career researchers worldwide.

DEDICATION

Jon Driver (1962 - 2011).

Supervisor extraordinaire.

ACKNOWLEDGEMENTS

This is a book **by** early-career researchers **for** early-career researchers. The project was entirely reliant on contributing authors. We thank all the contributors for donating their recollections and their time. Christina Scott joined the project as research assistant, running the online campaign and organising submissions. Our thanks to Christina for making it look easy. Bob Rich provided invaluable comments on the edited manuscript. Marg Pardey coordinated final approvals from contributors. We thank Matthias Moosburger for his design mastery and gracious accommodation of our changing requirements. Finally, enormous gratitude to the GYA office for administering the project. Without their support and patience, it could not have been realised.

The Words of Wisdom Working Group

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**ONE
PERCENT
INSPIRATION**

Adewale Adewuyi
Nigeria
Industrial Chemistry



“Think globally but act locally.”

Prof. Oladele Osibanjo

Coming from a developing nation, where we lack easy access to modern scientific equipment and lack the enabling environment for cutting edge research, it was difficult for me to even contemplate scientific innovation during my PhD. I was so discouraged. The more I read the high impact articles, the more despondent I became, not realising that all I needed for innovation was right here. I went to see my Professor, and his advice was to always look inward – to make use of what is around you to solve the problem created around you. That was my eye opener.



Gregory Weiss
USA
Chemical Biology

*“Don’t worry about the competition.
Only worry if you’re working in an area
that’s not attracting any competition.”*

Stuart L. Schreiber

Flipping through the back pages of *Science* magazine, I had found a job listing from a large pharmaceutical company inviting applicants to work on a project that sounded suspiciously similar to my graduate project. I knew that the company was working in the general area, but their advertisement confirmed their pursuit of a nearly identical approach. My advisor delivered his advice with a laugh and a dismissive wave. His enthusiastic fearlessness sustained me through graduate school and beyond.

Rapela Maphanga

South Africa

Physics



“Don’t be a Jack of all trades and master of none.”

All fields of research are broad. No one can tackle all of the problems. Better to focus on one problem and become the expert on that.



Masanori Arita
Japan
Bioinformatics

“Be sticky to your research goal.”

Although there are many interesting areas within science, my supervisor told me to focus on one thing and pursue it with supreme effort.

Hong Ching Goh

Malaysia

Geography and Urban Planning



“Never lose the sight of a forest just for a tree.”

Eckart Ehlers

I tend to fall into the details and lose sight of the larger picture of how things are supposed to work. These words remind me to refocus.



Heather Ferguson
UK
Cognitive Psychology

*“Stick to the big questions,
don’t get bogged down in the details.”*

Tony Sanford

This piece of advice was given to me as I handed in my PhD thesis and was moving to a new institution. It is something I try to keep in mind when planning new research projects. The details can be interesting too, but never forget the bigger picture and future implications.

Annemieke Aartsma-Rus

Netherlands

Genetics & Therapy



“Make sure you don’t waste your potential on a mediocre project, and be sure not to pursue something indefinitely. Question whether you are on the right track. If the answer is ‘No’, then move on to something else.”

Maarten van Tol

Dr van Tol told me this just before my MSc degree, because he wanted me to succeed. He probably never knew that I got stuck in a dead-end project during my PhD. But thanks to his advice I had the courage to discuss the problem with my supervisors. They suggested that I start a side project, which quickly became my main project, and grew into the topic on which I am now a world expert.



Matthew Finkbeiner
Australia
Cognitive Science

“Ideas are free, it’s what you do with them that counts.”

Prof. Alfonso Caramazza

Posted on Professor Alfonso Caramazza’s door when I worked with him as a postdoctoral fellow at Harvard University.

Rawiwan Laocharoensuk

Thailand

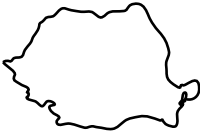
Nanomaterial Chemistry



“Do something that interests you and do it to the absolute best of your ability. With this recipe, whatever your limitations, you will almost certainly still do better than anyone else.”

Prof. Harold Kroto

At the time I was struggling with a project for almost a year without getting any result, and I was thinking of changing my project to something else. Fortunately, I was invited as a young researcher to participate in the Nobel Laureate Meeting in Chemistry. Listening to all the Laureate lectures provided me with such a great inspiration, particularly Prof. Kroto's quote. It made me question myself, and I persisted with the project, leading finally to success.



Aron Telegdi-Csetri
Romania
Philosophy

“In the Humanities, we often busy ourselves with the past, or with dead people. We must remember though that we are alive, and must act accordingly. To be useful to life, be independent, assertive, and young.”

Quite often, it seems to a young scholar that all has already been said, and that there is nothing one can add to the existing scholarship. But this is clearly wrong. One needs to find a way to overcome such feelings. Tradition itself only exists through us, and only through us can it inform and influence the future. This is what a scholar should aim for.



**NINETY-NINE
PERCENT
PERSPIRATION**

Pedro Martinez-Santos

Spain

Water Resources



*“The academic career is a long-distance race.
Step by step and day by day is
the only way to succeed.”*

I learned that there is no easy path if you want to make it in the world of research. It's all about perseverance.



Abidemi J. Akindele
Nigeria
Pharmacology

*“Research is all about sincerity, focus, diligence,
hard work and patience.”*

Prof. Olufunmilayo O. Adeyemi

The purpose of our research is to find answers to questions. But for some questions, as answers are won, the need for more probing also emerges. Often when I show Prof. Olufunmilayo experimental results, she guides me to more questions that need to be answered, and then, this maxim reverberates. These words of wisdom have benefited me and also continually guide my research. I always pass them on to those who look up to me.

Yusuf Baran

Turkey

Genetics



“The scientific life is a long road. You have to be patient, passionate, target oriented, be a good team player, and help others.”

Ufuk Gunduz

I credit this advice from Prof. Gunduz for much of my success.
It worked. Today, I give the same advice to my students.



Obiekezie Theresa Nkechi

Nigeria

Geophysics

“There is no alternative to hard work.”

Dr. J.U.C. Chukwudebelu

Sometimes plain words can help you to knuckle down.

Research success is often just a matter of hard work.

Henri Tonnang
Cameroon
Applied Mathematics



“Courage and more courage plus determination added to hard work yields tangible success.”

This encouragement to persevere came after four years of looking around, struggling for money and searching for a proper University where I could study what I wanted.



Mimi Haryani Hassim
Malaysia
Chemical Engineering

*“A PhD is all about endurance,
perseverance and persistence.”*

Prof. Nor Aishah Saidina Amin

My PhD studies were a tough journey, with exhaustion, and feeling guilty for sacrificing family time with my husband and child to get my PhD. One day a Professor from my home university visited the overseas university where I was studying. Over lunch, I poured my heart out. Her words were, and still are, very inspirational to me whenever I am facing challenges in life. I pass them on to my colleagues and students whenever needed.

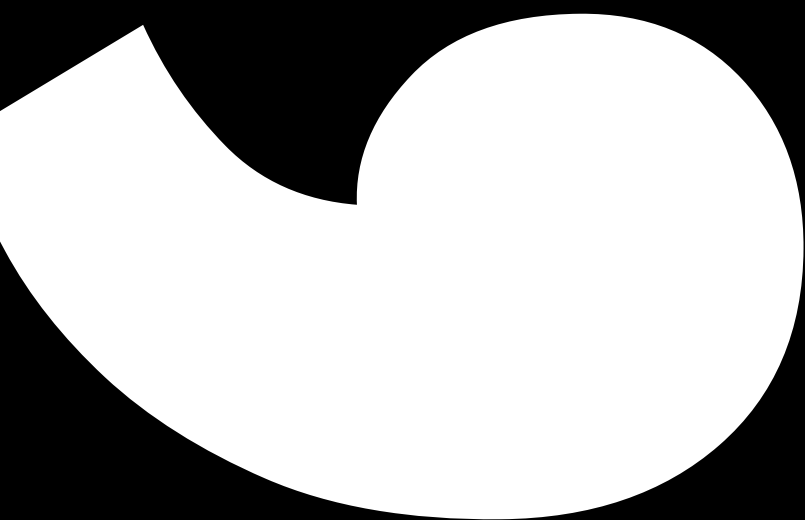
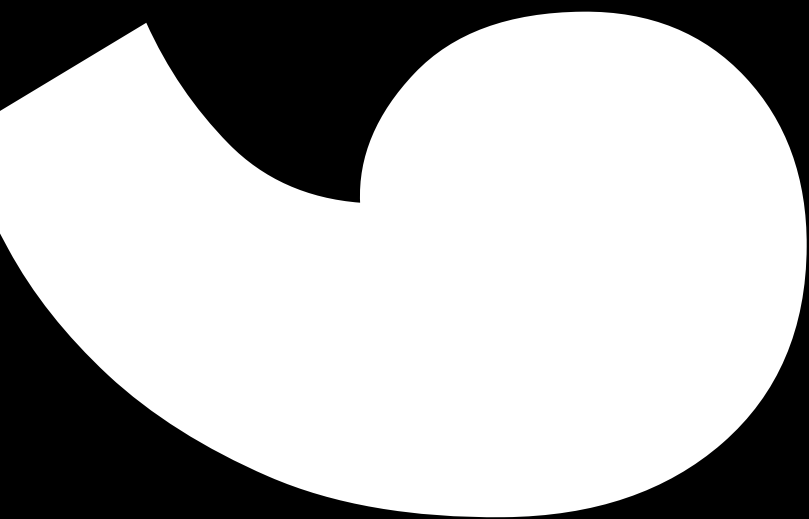
Rob Jenkins
UK
Psychology



“Collecting more data can only bring you closer to the truth.”

Jon Driver

When I was writing up my thesis, it dawned on me that one of my experiments might not be as conclusive as I had thought. I talked to Jon about how best to deal with this. The more we spoke, the more he persuaded me that resolving the ambiguity required another experiment. My heart sank. I didn't want to run another experiment at this late stage. Then the coup de grâce: “Collecting more data can only bring you closer to the truth”. How could an aspiring scientist resist?



CONFIDENCE

Gijs Wuite
Netherlands
Physics



“When giving a presentation, remember that the audience will never be more excited about the results than you are yourself.”

I was given feedback about a presentation I had given for a group meeting. It stuck with me because my advisor is an excellent speaker and I had noticed that his enthusiasm during presentations is really effective.



Regina So
Philippines
Chemistry

“Be confident in whatever you do.”

I was struck by how my mentor believed in me more than I believed in myself.

Thomas Edison E. dela Cruz

Philippines

Microbiology



“Don’t be afraid to present your work. You know your research better than anyone else.”

Prof. Dr. Irineo J. Dogma, Jr.

Presenting work publicly is something that we often find scary. We worry that others will find fault in our research. Before I defended my undergraduate thesis, my research mentor urged me not to be afraid of presenting research, and to see the panel members as people who help to improve my research. It was the beginning of many presentations both at national and international scientific conferences and meetings.



Anina Rich
Australia
Cognitive Neuroscience

*“Impostor syndrome is really common — we
all feel it, don’t worry. You’re a scientist.
Respect the objective evidence that
you deserve to be where you are!”*

Todd Horowitz

When I first arrived at my postdoc at Harvard Medical School, I was pretty sure I didn’t deserve to be there, whereas clearly everyone else did. To have a senior scientist say that he felt the same way about himself was very reassuring – and surprising! Since this time I’ve realised that most people seem to have this ‘impostor syndrome’ at some time or other. It’s important to believe the objective evidence that you deserve to be where you are.

Jenny Yang

USA

Chemistry



“Just remember that every feeling of anxiety and uncertainty you have when you start your independent career has been experienced by all the scientists that have come before you, so you are not alone.”

The most striking aspect of starting my independent career was the amount of time I spent alone in my office having doubts about my ability to start an impactful and original research program. It was comforting to know that this was not unique to me, and that starting your own research program often comes with these feelings of uncertainty.



Uriel Haran
Israel
Management

“When presented with an opportunity, don’t wait, don’t hesitate, don’t doubt yourself.”

Ido Erev

When I wasn’t sure if my dissertation was good enough for submission, and again when I wasn’t sure if I should apply for a job at my preferred school, this ‘kick in the rear’ made me go for it. I am very happy that I did.

Caradee Yael Wright
South Africa
Environmental Health



“Never be afraid of the experts in your research field. Contact them courteously and ask for advice. You never know where the relationship may go.”

At the time, I was new to the field of personal solar ultraviolet radiation, and was the only researcher working on it in my country. I contacted the world leader in this field and he offered me all kinds of support. He supplied me with instruments for my Masters project and advised me remotely from the UK. Years later, he was my PhD examiner, and today, we correspond as colleagues.



WRITING

Moritz Riede

Germany

Physics



“The difference between a good researcher and an excellent researcher is that the excellent researcher is able to structure her work clearly.”

I got this advice from one of my PhD supervisors when he returned a first draft chapter of my PhD thesis that had many handwritten comments, including many good suggestions on how to improve the structure of my thesis.



Sabina Leonelli

UK

Philosophy

“Do not spend a day without writing.”

In the final year of my PhD, I was struggling to write up my thesis. A mentor told me that it is not necessary to make great progress every day, but it is important to make some progress every day by sitting down to write for at least one hour, no matter what else was going on. I found this advice to be very helpful, and have been trying to follow it every since.

Roberta D'Alessandro

Italy

Linguistics



“There is no such thing as a paper that is difficult to write. There are only lazy people.”

Tanya Reinhart

I was struggling to write one of my first papers in a clear and accessible style. There were many difficult concepts to explain in a very short space. I tried and tried and got more and more frustrated. Then I went to talk to Tanya, who gave me this piece of advice. It was not especially uplifting at first, but it encouraged me to try harder. I always remember her counsel when things get tough.



Anina Rich
Australia
Cognitive Neuroscience

“Communication takes work. Either you do the work when you write, or the readers do the work when they read. Don’t make the reader do the work.”

I heard this during a grant-writing workshop. I use it all the time to motivate clearer communication in my writing and pass it on to my students and postdocs.

Robert Leckey

Canada

Law



“Beware the burden of the adjective: choose consciously which concepts you present, unmodified, as ‘normal’ and which you qualify (cf. marriage, same-sex marriage).”

Rod Macdonald

Rod was commenting on a draft paper of mine. This insight opens up critical thinking in all kinds of contexts concerning whom we give the power to define the terms we use in our analysis.

Aviv Kidron
Israel
Human Resources

“Write the lacuna of the study.”

Shay Tzafir

This advice was given to me when I was writing a research proposal. The practice of ‘writing the lacuna’ helped me to see the big picture and tell the whole story. To this day, it is part of my writing habit.

Heather Ferguson
UK
Cognitive Psychology



*“Some people are changers
and some people are improvers.”*

Tony Sanford

This advice was given to me after I received reviews of a journal article. It really helps me to decide what revisions to make before resubmitting. Some reviewers want a paper to be exactly the way they would write it, but it might not actually improve the paper. I also now find it really useful when marking or commenting on students' or collaborators' work. I always try to be an improver, not a changer.



Joachim Allgaier
Germany
Social Science

*“It is better to say a lot about a little,
than to say a little about a lot.”*

I received this advice from my supervisor when discussing a draft of a journal article. The message is to stay focused and not to wander off to related issues that dilute the main point. Now that I am supervising students myself, I often use that quote to pass the message on.

Anonymous

*“I could decorate my entire room
with rejection letters!”*

Anonymous

This was my mentor’s way of emphasising that rejections are part of our profession.



Kai M. A. Chan
Canada
Environmental Science

“Just let them go!”

Gretchen C. Daily

I was sitting in Gretchen’s office, complaining that I couldn’t find time to finish up all my old manuscripts. Gretchen looked at me as if I’d just told her that I was part Yeti. “Do you realise how many papers I have abandoned over the years?” She went on to describe a handful of finished datasets and half-written articles. “You are going to accumulate so many papers over the next few years you won’t even be able to count them. Pick the few that will define your career. The others – just let them go!”

Kai M. A. Chan
Canada
Environmental Science



“Just be careful that you don’t become known as the guy who pokes holes in other people’s work. Anyone can find faults in a paper. The really hard work is making an important original contribution.”

Simon A. Levin

As a first-year graduate student, I published a critique of another paper in *Science* magazine. Simon came into my office and delivered this reality check. Getting my letter into *Science* was a thrill, but with Simon’s words ringing in my ears, I realised it was a cheap thrill. Following the philosophy that Simon lives, I want to be a constructor and champion of science, not a cutting critic.



Matthew Hammond
USA
History

“Do not publish things before they are ready.”

There will be a lot of pressure to publish and publish often, but quality matters. Taking the time to present the work at seminars or conferences, to have colleagues read it, and to proofread thoroughly will end up being worth it in the end.

Rees Kassen

Canada

Evolutionary Biology



“Don’t read the literature, write the literature.”

I had passed my advisor an obscure paper that was only tangentially related to the subject of my thesis. He was deeply engrossed in some other task at the time when he delivered this nugget, and probably said it more to get me out of his space than to give me enduring advice. However, it has stayed with me all these years because it contains an essential truth: if you can’t argue your point from first principles, no amount of supporting literature is going to help. To this day I tell this story to my students. My hope is that it gives them license to stop reading once in a while and focus intensely and closely on the ideas that the literature speaks to.



Samuel Sojину Olatunbosun

Nigeria

Organic Geochemistry

“Even if you teach with fire in your mouth, without publications, your academic growth will be stunted.”

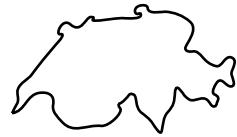
Sonibare Oluwadayo

This advice was intended to spur me into writing a good research article during my PhD studies, and it did stick with me. I saw others in the University setting who focused on teaching to the detriment of purposeful research. They were denied opportunities for career progression.

”

**WORK-LIFE
BALANCE**

Verina Wild
Switzerland
Bioethics



“Go out once a week with your partner, no matter how exhausted you are, how little money you have for spending on a babysitter, and how much you would rather stay at home.”

Jeffrey Kahn

I received this advice when we had our first child (now we have two). My partner and I both work in academia. Going out once a week is supposed to keep you sane as overworked parents and as a couple who hardly see each other in peace and quiet. We don't manage to go out as often as once a week, but we do think about this advice very often, and we try to adhere to it as best we can. It does help on so many levels.



Robert Leckey
Canada
Law

*“Don’t emulate your two most workaholic
senior colleagues, no matter how
‘successful’ they have been.”*

The advice alerted me to the high costs that certain kinds of achievement can impose – something it’s worth coming back to as new opportunities come my way (with their attendant costs).

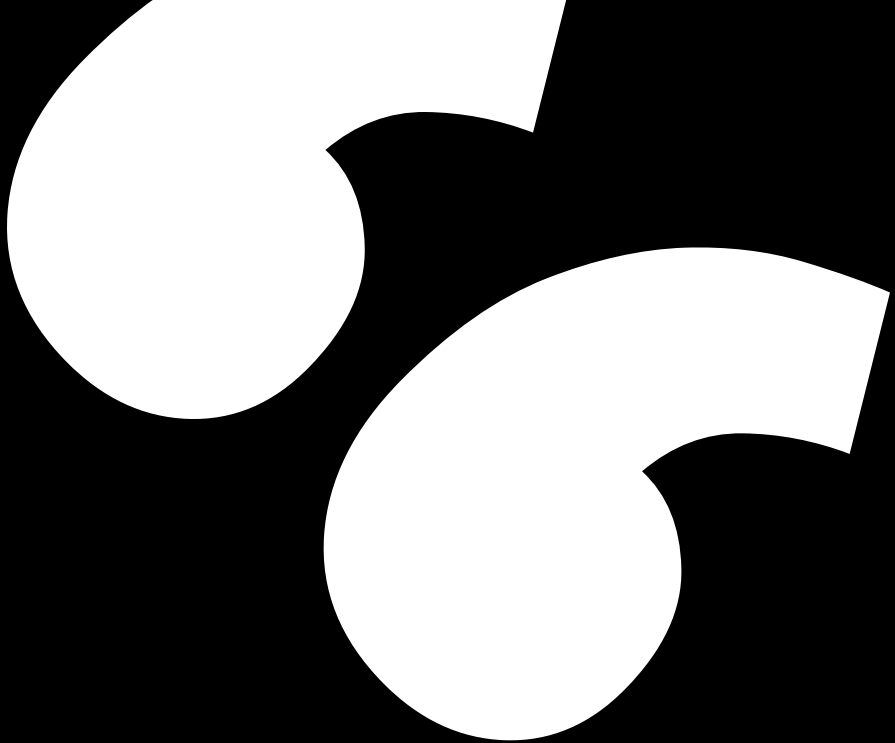
Tiago Falk
Canada
Electrical Engineering



“If you know that a PhD is something that you want to pursue, then get it out of the way while you are still in student mode. If you go into industry and get used to making ‘good money’, it will be harder to return to student life afterwards.”

Helio Magalhaes de Oliveira

I was in doubt as to whether to go into industry or straight into an MSc after my Bachelor's. This advice stuck with me and I completed my MSc and PhD in quick succession. In hindsight, it was the best thing I could have done.



MINDSET

Prateep Beed

India

Neuroscience and Biological Computation



“Distinguishing immediate benefits from delayed rewards is the key to passion and a sustainable mindset.”

Our cultural background plays a huge role in how we decide between immediate benefits and delayed rewards. In research we should not put all of our pennies on immediate results but should also value long-term returns on our investments.



Numpon Mahayotsanun
Thailand
Tribology in Manufacturing

“Contribute your highest potential.”

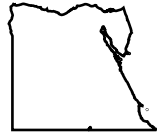
Jian Cao

Giving your highest potential means that (1) you know yourself, and (2) you know how you can contribute what you are good at with passion.

Sameh Soror

Egypt

Genetics



“Always be ready for the worst.”

John Cullum

It is quite often in research that things do not work as expected. It is very important to always have alternative plans at hand.



Dilfuza Egamberdieva
Uzbekistan
Microbiology

*“Treating research as fun is an important step
to building up a successful career as a scientist.”*

Prof. Gisela Höflich

During my PhD, the daily routine of being a scientist seemed boring to me, and I considered leaving science for a more interesting job. One day my supervisor told me ‘Dilfuza, treat science as a hobby, and enjoy doing research – it opens a door through which you find all your dreams.’ I tried it, and it works!

Lim Boon Han

Malaysia

Engineering



“Scientists are the most truthful people.”

When you are dealing with science and nature through research, you have to be honest regarding the results of your experiment. If you cannot be truthful to yourself and your results, you will never achieve your final target.



Lim Boon Han
Malaysia
Engineering

“God doesn’t put the secrets of the world in one box, instead he distributes them in many boxes.”

A lot of innovation and creativity involves combining concepts from different disciplines.

Nic Badcock

Australia

Psychology



“If there are two ways to do something, always choose the one with the learning curve.”

Stephan Lewandowsky

This advice was put to me in the context of computer programming. Sometimes it is easier to grind through a task inefficiently than it is to learn a better way of doing it. But next time, the old way will take just as long. Better to put the effort into learning once and reap the savings again and again. This definitely generalises to lots of situations.



Sasha Kagansky
Russia
Epigenetics

*“It is better to sweat in the gym
than to bleed on the street.”*

Pyotr Shkramada

It sounded scary in the context of Physical Education at high school, and may have broader implications.



THE PATH

Eva Alisic
Netherlands
Psychology



“If you want to change your behaviour, you can only do it through baby steps or through changing your environment.”

B. J. Fogg

Work got much busier for me after my PhD, and I resolved to develop better work habits to manage the change. Fogg steered me away from overambitious goals that would set me up for failure. Instead he recommended starting small (for example, opening your writing file every morning directly after starting the computer) and building gradually in the direction you want to go (writing a paragraph each morning). The other approach is to change the work environment. If you go somewhere where there is no internet, you can't fritter away the day on email and it will be easier to get that writing done.



Carina Fourie
South Africa
Philosophy

“It is better not to think that your PhD thesis must be brilliant. Think of it as something that you get out of the way — a stepping stone to the really interesting research that you want to do in future.”

I think many of us resist finishing our thesis because we worry that it isn't a work of genius. It need not be. It needs to be good and it needs to be original. Think about it this way and it is easier to complete.

Matias Arim

Uruguay

Ecology



“There are many ways of being a good scientist.”

Pablo Marquet

Offered in the admission examination for my PhD.



Mark Williams
Australia
Cognitive Neuroscience

*“Have a five-year plan and a ten-year plan
of where you want your research to go. It
will change on the way, but have a plan.”*

Jason Mattingley

Good advice from my postdoctoral supervisor.

Jan-Christoph Heilinger

Philosophy

Germany



“Academia sometimes is a mean environment. It is important to stay decent. Always write your reviews, even if anonymous, in such a way that you could sign them with your real name.”

Luckily, I received this as a general piece of advice and not as a reaction to a review I had written. But these words of wisdom keep reminding me that individuals can make a difference, and should uphold standards of decency, even in an extremely competitive environment where some forms of misbehaviour seem to be acceptable, may be structurally encouraged, and regularly remain unpunished.



Tom Hartley
UK
Cognitive Neuroscience

“Just keep doing the best science you can.”

Professor Sue Gathercole

This may seem like obvious advice, but it came from my Head of Department at a time when I felt pressured to do less good science. This pressure to do something, anything, quickly is all around us in the 21st century, but it doesn't yield the best results. I've been fortunate to work with some very successful researchers, and the one thing they all have in common is the tenacity to continue working on a difficult problem or a new idea, even if it takes longer or involves a greater risk of failure. I am not sure I'll achieve as much as my mentors, but I will try.

Wilfred van der Wiel
Netherlands
Physics



“Never lose your horse sense.”

As scientists, we often do very complicated things with very complicated equipment. In this process it is easy to lose your ‘horse sense’ – your straightforward, everyday reasoning. Some mistakes can be avoided by a no-nonsense reality check.



Ghada Bassioni

Egypt
Chemistry

*“Better to be always on the safe side
than once on the unsafe.”*

Frank H. Koehler

A good mantra for operating in a hazardous environment.

Martin Dominik

UK



*“If you are right, nobody remembers.
If you are wrong, nobody forgets.”*

Just before I left the University of Dortmund not long after my PhD, one of our professors of Theoretical High Energy Physics spotted me walking along the corridor, and asked me to enter his office. There was something he wanted to show to me before I left. He pointed to the above quote that was hanging framed on one of the walls.



Tatiana Duque Martins

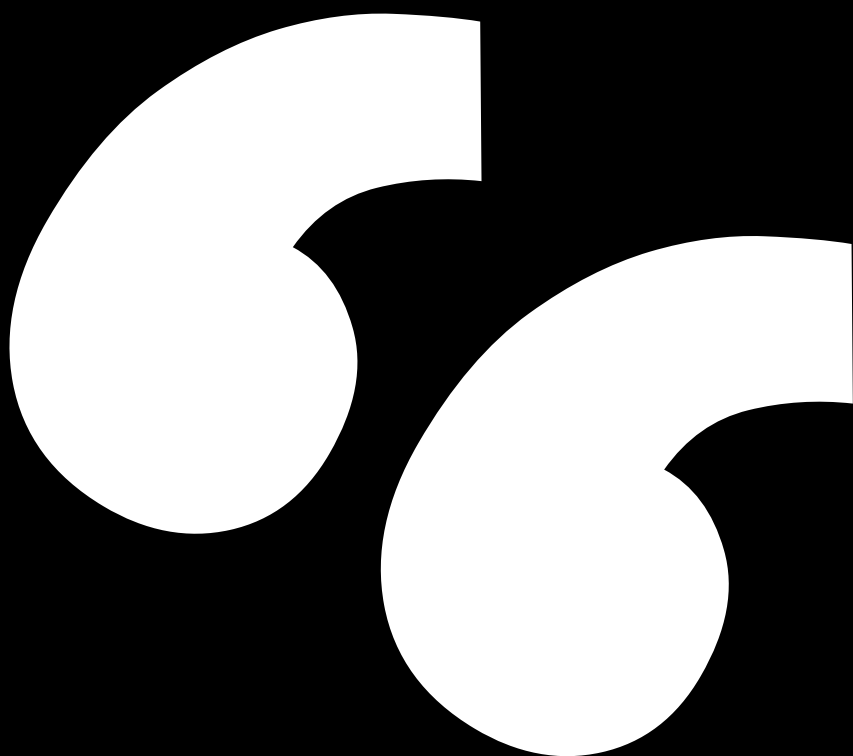
Brazil

Materials Science

“Keep your feet on the ground, your eyes aiming at the horizon, and your mind up at the stars.”

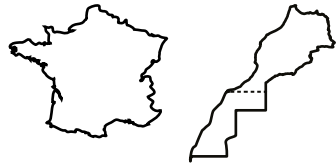
My mother

I had to decide between taking a great job at a Brazilian oil company and taking the first step on to graduate school. We needed the job, but Mom encouraged me to pursue the academic career, which I wanted more. She was there every time I tried to give up. She taught me that by acting in confidence and joy, I could follow the right path towards my lifetime dream. I believed her and I still do!



**THE
WIDER
WORLD**

Jauad El Kharraz
France & Morocco
Remote sensing



*“Research is not only about obtaining results,
but also about allowing the target audience
to understand and appreciate them!”*

José Antonio Sobrino

During my PhD years, I was very happy about some results from a long series of simulations that corroborated a particular algorithm. Hence, I was very euphoric when talking with my supervisor. He reminded me to make their significance clear to end-users beyond the scientific community.



Orakanoke Phanraksa
Thailand
Law

*“Education is a fundamental
key for a better future.”*

Prof. Toshiko Takenaka

Just before my graduation, my supervisor shared with me the experience her country went through in order to enhance the knowledge of people in the community. The only way to change for the better is to keep educating people.

Noble Banadda
Uganda
Biosystems Engineering



*“Noble, as you come to the end of your
PhD study, Africa needs you.”*

Prof. Jan Van Impe

This was the day I defended my PhD thesis – a memorable day, particularly given that, from Masters to PhD, I had studied continually for seven years away from home.



Charisma Choudhury
Bangladesh
Transport

“If you plan to work in a developing country after graduating from a developed country, the importance of networking is even greater.”

Dean of Student Life

I always had the feeling that since I was not going to stay in the USA, I didn't need to network as much as those who are looking for a job there. The Dean of Student Life gave me this advice at a dinner event, and after returning to Bangladesh I appreciated how valuable it was.

Mari-Vaughn V. Johnson

USA

Natural Resources



“It has been my experience that when you find yourself in a position where you are a little uncomfortable, where the people around you do not share your expertise, that is precisely when you are in a position to make an impact with science.”

Dr. Elizabeth Prescott

Libbie shared this piece of advice during my interview with her for a Fellowship. We were the only scientists, sitting among economists, military and foreign service officers. The two of us collaborated to provide the Front Office of the Bureau of East Asian and Pacific Affairs with analyses and recommendations grounded in science. Her advice was liberating. With it she asserted that my training and my knowledge base were valuable tools for expanding the role of science in international policy decisions. I continue to revel in those slightly uncomfortable situations, often in rooms full of lawyers, economists, and bureaucrats, where I am a confident champion of science in policy development.



Jorge A. Huete-Perez
Nicaragua
Molecular Biology

“Be careful what you say in public. People look to scientists as wise people and expect much from us. Sometimes the expectations go beyond reality and we need to be prudent about what we say. They rely on us to make decisions that will affect their own lives. Our words have important consequences.”

Richard J. Roberts

To me this advice is about accountability and ethics in research. Rich and I were having an informal conversation about scientific development in Central America. I was telling him about my involvement in policy issues to promote research funding in Nicaragua in the context of meeting with high-level political figures. In Latin America, science is not readily available to decision makers, and scientists often do not have means to establish a dialogue with them. I was also sharing my frustration with politicians. Rich offered the assurance that one can ‘persuade bad people to do the right thing.’

Pedro Martinez-Santos

Spain

Water Resources



*“Today this is just philosophy,
tomorrow it will be common sense.”*

Basic science is sometimes looked down upon, as it pursues knowledge for its own sake rather than offering immediate solutions to immediate problems. The truth is that basic science provides insights that are essential for applied science.

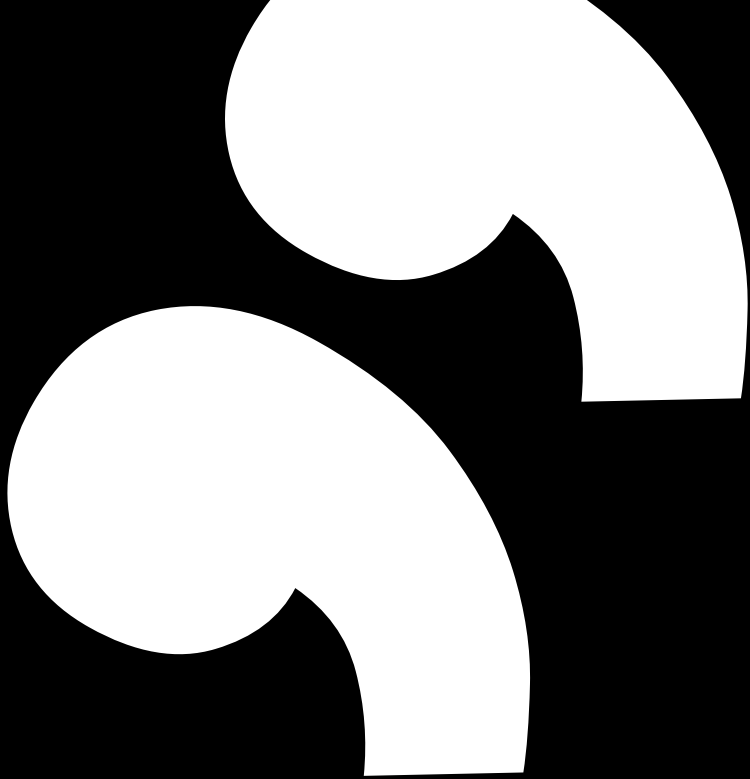


Abdeslam Badre
Morocco
Social Sciences

“Your importance grows in the eye of people around you only when you make them feel important; not by making yourself seem important.”

Zaki Abdelkader

Dr Zaki, my advisor, pointed out to me that I was overusing phrases such as, ‘My research is...’, ‘I chose to...’, and ‘I decided not to...’, in my dissertation. This overuse of ‘I’ not only jeopardised the objectivity of my writing, but also made me sound somewhat arrogant. My advisor said in a friendly way, ‘Once your dissertation is published, everyone will know that you wrote it, because it has your name on it. There is no need to remind the reader on every page.’



**HELP IS
OTHER
PEOPLE**

Foluso Oyedotun Agunbiade

Nigeria

Chemistry



*“I am a captain of a ship and not a boat owner.
The captain of a ship is willing to go down with
the ship as against a small boat owner.”*

Prof. Kayode O. Adebowale

At a critical stage in my PhD research work, I was experiencing discouragement and lacked the necessary will to forge ahead. My supervisor noticed and told me the words above. Knowing that I had a supervisor who was invested in what I was doing, and who saw the research as a joint venture, gave me the resolve to carry on. I know I can always find support and encouragement from this.



Milica Pesic
Serbia
Cancer Research

*“One day when you become the boss, act
in such a way that your students love
you and enjoy working for you.”*

Zbigniew Pietrkowski

I had the opportunity to do a Master's in the USA under the supervision of a mentor from Poland. On one occasion, irritated with the attitude of my boss, he told me these words that I will never forget. Today, when I have the opportunity to be an advisor, I always remember his words of wisdom and I try the best to follow his advice.

Omorefosa Osarenkhoe Osemwegie

Nigeria

Mycology



“Your moral and academic comportment, disposition, and progression directly rubs off on mine.”

Okhuoya JA

My PhD research was dragging and my supervisor invited me into his office. He made me understand that my scholarly actions and reactions not only affect my reputation, but also his reputation in similar measure. This charge has stuck with me ever since. It guides my carriage, utterances, and academic commitment on campus, and made me realise that we share a bond that compares to father and son.



Juliana Galano
Brazil
Child Mental Health

*“Nobody does good quality
research by themselves.”*

Wagner Ribeiro

I didn't know the pathway to a good planned research project and was anxious to get started. I thought that I was good enough to carry it all by myself but in fact I needed people to help me think, plan, and perform it.

Eva Alisic
Netherlands
Psychology



“You can find mentors who do not even need to know that they are your mentors.”

You can benefit from someone’s knowledge without any formal arrangement. That can be especially helpful if you don’t have a mentor available in your own institution.



Kai M. A. Chan
Canada
Environmental Science

“It is excellent, interesting work. We only wish that you had involved us more.”

Simon A. Levin

My heart was racing as I entered the final committee meeting for my PhD. This was effectively my dissertation defence. When the committee was ready, my supervisor turned to me and spoke the words above. A light in my head switched on. Finally, I realised that being an independent researcher is not the same as being a solitary researcher.

Marco Peccianti

Italy

Physics



“You must work with the human material you get.”

Gaetano Assanto

An observation about the diversity of people working for you.

You have to adapt tasks to skills, not the other way around.



Jan-Christoph Heilinger

Germany

Philosophy

*“Sometimes, there is nothing better than
a good, old-fashioned phone call”*

True indeed. In these times of emailing, messaging, chatting, posting and tweeting, simply picking up the phone and talking something through has a unique quality. It can express particular respect for the interlocutor, and can underline the importance of what you want to talk about. (Better still to meet for lunch, but alas, this is often not possible).

Oded Hod

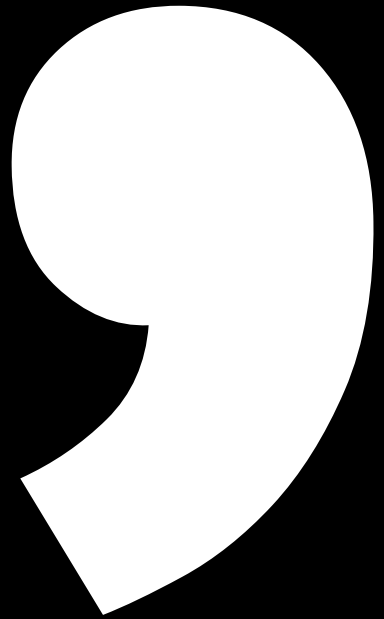
Israel

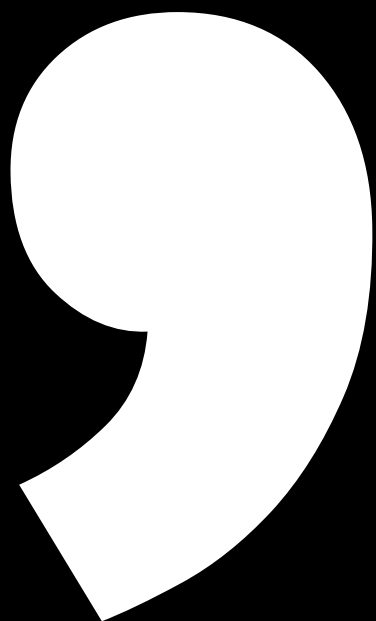
Theoretical Chemistry

“When you want to have something done, don’t e-mail, don’t call. Just go and talk in person.”

Amir Natan and Amir Boag

This is not a scientific advice. It is a general advice relating to the fact that when you interact with people in person (especially in the administration of an institution), your chances of achieving your goal are considerably higher if you look them in the eye.





**To contribute to the second
edition of this book, visit:**

<http://bit.ly/GYAwow>

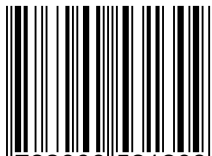
Early-career researchers often receive from their mentors words of wisdom that stay with them for the rest of their lives.

In this book, contributors from around the world share the tips that shaped their thinking. *Words of Wisdom* is a trove of scholarly advice, and a celebration of academic mentorship.



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