Comments on Pathways to Prevention Workshop:
Advancing the Research on Myalgic Encephalomyelitis/
Chronic Fatigue Syndrome

As an ME/CFS patient, it was music to my ears to read the Workshop's acknowledgment that "ME/CFS is an area where the research and medical community has frustrated its constituents, by failing to assess and treat the disease and by allowing patients to be stigmatized." I thank the Workshop for detailing the many shortcomings that have plagued the ME/CFS field for decades and for truly "hearing" the testimony you received.

1. My major comment is for the final report and your Workshop to do everything possible to make sure ME/CFS becomes a top NIH priority. As you know, ME/CFS has been the orphan child at the bottom of NIH's priorities for years. The $5 million dedicated annually to ME/CFS in recent years is mind-boggling and appalling. Indeed, ME/CFS is is in the bottom 10 of 237 diseases NIH is studying! http://report.nih.gov/categorical_spending.aspx

There are undoubtedly numerous reasons why this has happened. One reason, sadly, is that ME/CFS has never been a Congressional priority in an area where Congressional attention can make a huge difference. And, as the Workshop recognized, though in kinder language, NIH has a history of indifference to ME/CFS. However there are also institutional patterns that the Workshop can work to change – in particular, to recommend a major change in the parameters that direct NIH research funding.

A 2013 report on New Evidence on the Allocation of NIH Funds across Diseases (commissioned by the Robert Wood Johnson Foundation) concluded that NIH funding relied on deaths and hospitalization for allocation of funding. Milbank Quarterly at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3607129/ This clearly puts ME/CFS at a severe disadvantage. There is no evidence currently of mortality associated with it (a rare piece of good news), and any hospitalizations are likely to be linked to co-morbid conditions rather than ME/CFS. Yet, clearly, as the Workshop noted, ME/CFS is a horrific and common disease.

The researchers concluded: *Overall, we found a strong and statistically significant relationship between NIH funding and deaths and hospitalizations associated with a disease. We detected some evidence that more "applied" grant mechanisms—in particular, funding for clinical trials—are more responsive than other types of funding.* They also noted that "*the results point to an interesting political economy at the NIH. Congress and disease interest groups may have an important role in emphasizing particular broad diseases, resulting in more funding for certain institutes than others. And the more directed grant mechanisms may serve as important "safety valves" in the allocation process to respond to pressure to address particular health priorities (and/or political considerations) in a more fine-grained way than is possible through investigator-initiated "basic" research grants. The results also suggest, however, that even the less directed (non-RFA, noncenter, nonclinical, noncontract) grants show positive and statistically significant responsiveness to both measures of disease burden. [*i.e., death and hospitalization*] Id.*

I am by no means an expert on NIH funding, having found the Milbank report in five minutes on the Web. Nonetheless, it appears that none of the grant mechanisms above have worked for ME/CFS. Nor has the intramural funding program: as the Milbank report notes, *another potentially interesting safety valve mechanism is the intramural program. Though a small share of the agency's*

budget (about 10 percent in 2008), intramural research has historically been important in helping the agency respond to public health emergencies, including HIV-AIDS (Hardin 2012). Priority setting, including responsiveness to disease burden, would seem to be more viable through intramural funding if such funding were easier to steer.

This leads me to conclude that there needs to be institutional changes in how NIH funds research and uses its discretionary intramural funds to assure that the severity and prevalence of disease is considered. I would like your report to scream, albeit politely, for both a huge increase in funding and for new approaches to establishing research priorities. And while the Workshop can't shake a magic want, a change of attitude from the leadership of NIH to make ME/CFS priority must take place if the Workshop's recommendations are to bear fruit.

2. LINES 113-115; 348-350 It is important to discuss self management for any illness, but it is critical to keep in mind that self management cannot alleviate most ME/CFS symptoms. The government should be focusing its financial resources on basic research and pharmaceutical treatments, not on further study of CBT. It does not take a rocket scientist to conclude that CBT would help most people with <u>any</u> serious illness learn illness management skills; the research priority needs to be on diagnosing and treating the physical illness.

3. LINES 172 -177 The committee says these questions must be answered :

What is the pathogenesis of ME/CFS? What is the role of virologic mechanisms, especially herpes viruses? Does mononucleosis lead to ME/CFS in adolescents?
What is the role of other pathogenic agents?
Is this a genetic disease? Is there a gene-environment interaction?
Is ME/CFS a spectrum disease?
Are different pathways responsible for different symptoms?

I am puzzled. <u>Yes</u> is already known to be the answer to several of these questions – the question is <u>how and why</u>, not <u>whether</u>.