

TESTIMONY
of
Dr. Michael Lubell
for
The House Appropriations Subcommittee
on Commerce, Justice and Science

March 11, 2011

Mr. Chairman and members of the committee, thank you for the opportunity to testify today. I am appearing on behalf of the American Physical Society (APS), which represents 48,000 physicists in universities, industry and national laboratories. I want to begin by thanking the committee for its past support for the National Science Foundation (NSF), NASA and the National Institute of Standards and Technology (NIST).

As a university professor and a research physicist, I can personally attest to the critical role these agencies have played in advancing the frontiers of American science and in training America's next generation of scientists. As members of this committee you are probably familiar with the facts, so I will not repeat them in the limited time I have.

Instead, I want to return to an issue the APS raised in prior testimony before this committee, one that was not addressed during the last three years and now looms large in FY 2012 for NSF. Let me review the history in brief.

In November 2008, then President-Elect Obama requested the APS to provide the new administration with advice on science infrastructure needs that could be address in an economic stimulus bill. The APS was pleased to do so and within six weeks complied a list of shovel-ready projects and instrumentation requests pending at a number of federal agencies, among them NSF.

Most of the agencies largely followed our guidance. However, NSF elected to use the majority of funds it received in the American Recovery and Reinvestment Act to address another critical need: increasing the acceptance rate of very highly rated research proposals that budgetary strictures had prevented the Foundation from supporting previously. The acceptance rate had declined precipitously and then director Arden Bement believed it was reaching crisis proportions.

The need was certainly compelling, but NSF's decision to address it with funds that would last only three years created the specter of a significant funding shortfall in FY 2012. Indeed, President Obama's FY 2009 budget recognized the problem, reflected by the administration's anticipated increase of 17 percent for the NSF in the out-year budget for FY 2012.

In prior testimony we called this committee's attention to the administration's plan, which we deemed difficult if not impossible to realize. And to

address the looming shortfall, we urged the committee to allocate much of the increases in the NSF's FY 2009, 2010 and 2011 budgets to "one shots," such as laboratory start-ups or new faculty grants of very limited duration. Unfortunately, our recommendations were not enacted into law, and today the NSF faces the problem of either allowing students supported with the ARRA funds (that run out at the end of FY 2011) to be stranded in the middle of their graduate education or severely restricting the award of new grants.

Neither course is desirable: both are damaging to America's global scientific leadership that polling has shown the public values deeply. The clock cannot be turned back to prior fiscal years. That much we all know. But if this committee elects not to grant NSF the appropriation increase requested in the FY 2012 presidential budget, the problem the Foundation faces will be made considerably worse. Therefore, although we recognize the need to address the federal deficit, we urge this committee to be wise in how and it reduces expenditures and where it applies the cuts.

Building a better America requires a strong science research enterprise and a highly skilled workforce. To sustain our nation's economic growth and to keep the highly-skilled jobs within our borders, we must commit ourselves to educating the scientific workforce of the future and providing the young scientists of today with the resources they need to keep our nation at the innovative frontier. Over the years, NSF has played a central and extraordinarily effective role in both endeavors. We believe it deserves the funding the president has requested and we hope the committee will find a way to provide the necessary appropriation.

In closing, let me again express my appreciation for the committee's past strong support for American science and through its appropriations not only for the NSF but for NASA and the National Institute of Standards and Technology, as well. Thank you for affording me the opportunity to testify.