Opening Statement - Rep. Daniel Lipinski (D-IL)
Ranking Member, Subcommittee on Research & Science Education Hearing
"The Merit Review Process: Ensuring Limited Federal Resources Are Invested in the Best
Science"
July 28, 2011

Thank you Chairman Brooks, and thank you for holding this hearing this morning. It will not surprise anyone when I say that I have had a great interest in this topic since I first submitted a grant proposal to the National Science Foundation as a graduate student. That interest continued throughout my academic career and when I was elected to Congress I joined what was then the Science and Technology committee to a large extent because of my strong belief in the NSF and its mission. I agree with the statements of all of the witnesses here today that NSF's merit review system remains the gold standard for the world. And I don't say that just because that NSF grant application I submitted when I was in grad school was successful.

At the same time, I recognize that there are challenges in any system for allocating limited research dollars. I agree with Chairman Brooks that it is our job, on this subcommittee, to hold hearings such as this one to discuss these challenges and collectively imagine how we might continue to make NSF, and the merit-review system that it manages, even stronger. Particularly in this tight budget environment it is incumbent upon us all to make sure that the system for funding excellent science is as efficient and effective as possible.

In 2009, when I was chair of this subcommittee, we looked at a few slices of the broader topic being addressed today when we held a hearing on high-risk, high-reward, or what we also call transformative research. While Dr. Yamamoto was not on the panel for that hearing, a report that he helped author, the ARISE report, played a central role and remains relevant today. I look forward to learning from his deep expertise on this topic.

But there are many issues that we have not examined in detail, including the extent to which faculty from lesser resourced institutions face an uneven playing field. I am also interested in the extent to which the institutional structures underlying NSF's peer-review system influence decisions and the benefits and drawbacks of different approaches to peer-review.

For example, I am intrigued by proposals to conduct committee review in virtual environments such as Second Life. While I am perhaps a little skeptical, I recognize that virtual review has the potential to save taxpayers a lot of money in travel expenses, as well as to broaden the pool of reviewers. So I'm glad that the NSF is looking into innovative approaches. But we need to be confident that the group dynamics in a virtual environment, while certain to be different, do not in any way undermine the quality of NSF merit review.

I'm particularly interested in hearing the panel's recommendations about some of the alternatives to standard merit-review, not as a replacement of, but rather as a complementary approach. For example, in last year's COMPETES Act, I authored a provision that authorizes prize programs at all of the science agencies. While NSF, as a basic research agency, would need to design and implement a prize program that looks very different from those run by DARPA or NASA, I continue to believe that the NSF should experiment with some pilot projects to award research prizes. I look forward to hearing an update from Dr. Marrett on the Foundation's thoughts on this subject.

So I see this hearing as an opportunity to examine the real challenges that do exist in a very strong review system and to discuss current and novel approaches to overcoming those challenges.

Finally, Mr. Chairman [as you already mentioned], I think it's important to point out that the National Science Board is in the middle of a process to review and revise the existing merit review criteria. While I believe this hearing is critically important, it is unfortunate that we couldn't wait until this fall when the Board has finished its work and produced a new set of review criteria for the scientific community and this committee to examine. Especially in light of the provision in last year's COMPETES bill directing the agency to clarify the purpose and implementation of the Broader Impacts Review Criterion, it will be helpful at some point later this year or next year to revisit this topic.

With that Mr .Chairman, I thank all of the witnesses for being here today and I yield back.