Opening Statement - Rep. Daniel Lipinski (D-IL) Ranking Member, Subcommittee on Research and Technology House Committee on Science, Space, and Technology Hearing on: Frontiers in Innovative Research, Science, and Technology Act November 13, 2013

Thank you, Chairman Bucshon for holding today's hearing on the discussion draft of the FIRST Act, and welcome to our witnesses.

We have all seen the headlines about how our competitors are pouring resources into R&D. They may not be ahead of us now in total investment, but China and others are already far outpacing us in R&D growth. As we all know, these are long-term investments, and failing to adequately invest now will catch up with us when we see slower job growth.

In my district last week, Argonne National Laboratory announced that due to sequestration and future budget uncertainty they would be forced to let 120 of their staff go. Although Argonne is funded primarily by the Department of Energy rather than NSF or NIST, this serves as a reminder of what will happen if we continue to let science funding stagnate across the Federal Government. If this trend continues, the long term effects on our scientific competitiveness will be catastrophic. Agencies and universities won't be able to plan, some of the best and brightest will give up and leave their labs, and the younger generation will see what their mentors are up against and decide against a career as a researcher altogether. A witness before this committee recently said that if he were a young scientist today in a foreign country he doesn't think he'd decide to come to America to study and stay to do research, as he had done early in his career.

I understand very well that America faces a serious debt threat and that we need to make some tough decisions; but almost all of these are well outside the purview of this Committee or the scope of today's hearing. The Chairman's intent is to hold off on including authorization levels until we have a budget deal. I hope that we can use the time before the budget deadline to more fully discuss some of the policy proposals contained in the draft, and I also hope this does not mean that we intend to let budget negotiators dictate to this committee what the appropriate levels of funding are for federal science agencies. Since we are an authorizing committee, we should be leading the discussion about authorization levels that reflect a smart and balanced approach to making sure we remain strong and competitive in science, technology, and innovation. I look forward to working with the Chairman and all of my colleagues to that end. Before we hear from the witnesses, let me just comment on a few of the priorities I have for this legislation. First, manufacturing plays a significant role in our economic and national security. We must reinvigorate and expand America's manufacturing base, and we cannot do that with the technologies and processes of yesterday. The small and medium-sized industries that comprise a significant portion of our manufacturing capacity don't have the resources or capacity to invest in the most far-reaching R&D with potential application to the manufacturing technologies and processes of the future. NIST and NSF play a critical role in funding such research and we should take the opportunity of moving legislation to reinforce and expand our efforts to revitalize American manufacturing.

Next, NSF is responsible for supporting research across all scientific disciplines, from the physical and life sciences, to engineering, to the social, economic, and behavioral sciences. I know that some of my colleagues question the value of research in the social and behavioral sciences, but there is ample evidence that this research is just as important as any NSF conducts, and the budget for the entire social, behavioral, and economic science directorate amounts to just over three percent of all of NSF's budget. Social and behavioral sciences have played a critical role in strengthening our response to disasters, improving public health, strengthening our legal system, and optimizing the use of federal resources. I believe any reauthorization of NSF should provide sustainable funding to all scientific disciplines and not impose any unique restrictions or conditions on any specific type of research.

I would also like to see inclusion of language to formally establish NSF's I-Corps program. Results from the first couple of years of this program support my belief that I-Corps will yield exponential benefits, helping turn NSF's research investments into new companies and jobs across the country. In fact, it is important that we work together *across* the federal research portfolio to lower the barriers for the commercialization of federally funded research. Supporting the creation of public-private partnerships, reducing the risk for capital investment, and eliminating obstacles to technology transfer will help us get a larger return on our investment in science not only in economic terms, but for the benefit of all Americans.

I will close with just a couple of thoughts about the draft bill under consideration today. I have concerns with language in the bill that would make changes to the way that NSF conducts merit review of research proposals. While some of my colleagues may believe that these provisions merely increase accountability and transparency in the use of federal resources, I fear that the criteria used in the bill are vague and that the process is unnecessarily burdensome. At best this language may add a good deal of uncertainty as to how research grants would be awarded, at worst I fear it could fundamentally alter how merit review is done at an agency that is viewed as a gold standard by the rest of the world. I am not opposed to increasing accountability and transparency. I welcome rigorous oversight of NSF programs. But I believe we need to think through these concerns and possible solutions more carefully and I hope we will have the opportunity to do so not just today, but in additional hearings on this bill.

Thank you, Mr. Chairman and with that I yield back the balance of my time.