Opening Statement - Congressman Daniel Lipinski Subcommittee on Research & Science Education Hearing on The Relationship Between Business and Research Universities: Collaborations Fueling American Innovation and Job Creation August 1, 2012

Thank you Chairman Brooks for holding this hearing, and thank you to the witnesses for being here this morning. And I'd like to give a special thanks to Dr. Graziano for being here today after agreeing to testify just three days ago, and to Chairman Brooks and his staff for their flexibility in adding Dr. Graziano as a witness.

I could not have selected a more apt hearing title myself. Norm Augustine, the former CEO of Lockheed Martin, likes to describe scientific research as the "engine of a thought-based economy." To paraphrase him further, if your plane is too heavy to fly, you don't toss out the engine. I couldn't agree more, which is why even in these tight budget times I continue to believe that we must sustain our investments in scientific research, which means sustaining our investments in our world-class research universities.

But it takes more than just the engine to fly a plane, it takes a system of components working together. In this case, the path from the lab bench to innovation and job creation depends on a complicated network of private companies, scientists, universities, venture capitalists, startups, and entrepreneurs. At the June 27 hearing we heard from several university leaders representing a diverse set of research universities about the nature of their partnerships with industry and their efforts to promote entrepreneurship on their own campuses. At a July 16 field hearing in Chicago we heard from research faculty and experienced entrepreneurs how the NSF Innovation Corps program is helping to drive entrepreneurship and commercialization of university research.

I am pleased that today we get to hear about some of the same issues from the perspective of business leaders whose companies actively partner with research universities, as well as the head of a research corporation at a major research institute.

One of the topics I'd like to explore further is the role of federal science agencies such as the National Science Foundation in facilitating and contributing to university-industry partnerships, and to hear from witnesses about what's working well and where we can make improvements. The federal government can use many mechanisms to promote collaboration between the business and university communities. These include tax incentives such as the R&D tax credit, direct support for university-based research centers that require or encourage industry partners, or convening university and industry stakeholders around areas of shared interest. These also include programs such as NSF's Innovation Corps, an education program which helps federally funded research innovations transition from the university lab into a profitable company. While limited partnerships around easily definable milestones are valuable and should continue, our ultimate goal is to promote the creation of innovation ecosystems within which universities, businesses, research institutes, and other stakeholders build and sustain long-term and mutually beneficial collaborations. In the last hearing, university leaders talked about the need to move more collaboration closer to this kind of peer-to-peer relationship. I'd be interested to hear the perspectives of today's panel on that issue.

Finally, I'd like to hear from our witnesses their thoughts on STEM education, and in particular how their companies can better partner with universities to ensure that they are producing graduates with the skills, including the soft skills, that meet the needs of today's industries. I think the data on the supply and demand for STEM workers is variable enough that it is difficult to generalize across all sectors of our

economy, or all levels of education. But as leaders from large companies with significant STEM workforce needs, you are well positioned to help us understand current and future demand in your respective industries.

Once again, I thank all of the witnesses for being here this morning and I look forward to your testimony.