NSF research and activities touch every State of this Nation and provide tremendous support at all levels of education.

NSF is a unique agency because it is the only agency with a primary mission of supporting fundamental scientific research, as well as engineering research. Unlike some of our other science agencies, NSF is not a mission agency in the sense that it has an established program to target. In fact, it solves many problems through the process of fundamental research, often in a serendipitous manner.

As Nobel Prize winner Theodore Svedberg remarked, as he accepted his reward in 1926, ''A glance at the history of science and technics shows that it is precisely the search for truth without any preconceived ideas, research for the sake of knowledge alone, that in the long run has most benefited humanity. The investigations which have seemingly been the most purely abstract have often formed the foundation of the most important changes or improvements in the conditions of human life.''

It is challenging in this day and age to support this type of research. The U.S. has many pressing needs that require solutions on very short time lines, particularly related to national security and the health of our aging population. For this reason and others, we have seen companies decrease their investments in long-term research projects. Nevertheless, economists have confirmed the accuracy of Dr. Svedberg's statement that fundamental research has, indeed, paid the highest dividends to humanity over the years.

Estimated return on investment in research and development is difficult to calculate, but generally ranges from 20 to 400 percent. That is an incredible payback. Furthermore, past investments in NSF have contributed greatly to major technological advances in areas and industries that are critical for U.S. economic growth such as biomedical applications.

The former Director of the National Institutes of Health, Harold Varmus, is well-known for his following statement: ''Medical advances may seem like wizardry. But pull back the curtain, and sitting at the lever is a high-energy physicist, a combinational chemist or an engineer.''

Continued support for fundamental research lays the groundwork for innovations in other disciplines that directly impact the lives of every American. We are here today to authorize a continued investment in this type of NSF groundbreaking work.

I thank Chairman BAIRD and his dedicated staff for their work on preparing this bill in a bipartisan manner, and encourage my colleagues to support it.

Mr. Chairman, I reserve the balance of my time.

Mr. BAIRD. At this point I understand Mr. KIRK would like to engage in a colloquy. Would Mr. EHLERS care to yield some time to him for that?

Mr. EHLERS. Mr. Chairman, I am pleased to yield such time as he may consume to Mr. KIRK for a colloquy.

Mr. KIRK. I thank the gentleman, one of the only working scientists serving in the Congress.

I had intended to offer an amendment to this legislation with regard to the mercury issue, but working with the committee, I understand the better place I am talking about is in the EPA Office of Science.

So I would like to say that I strongly support investment in scientific and mathematical research, but I would like to engage in a colloquy with the chairman, especially to emphasize how essential it is for comprehensive and frequent research on mercury levels in one of our Nation's most treasured ecosystems, the Great Lakes.

Mercury pollution is now a serious problem for my district in northern Illinois, as well as across the Nation. The Great Lakes are particularly vulnerable to exposure, as 36 percent of mercury emissions are generated in the Great Lakes region.

In fact, there are currently 18 fish advisories for mercury contamination in the region, yet the Great Lakes are a source of food and especially drinking water for over 40 million Americans. This undoubtedly contributes to the recent estimate that the U.S. Government has seen more than 300,000 American babies born each year with a risk of mercury poisoning.

It's critical that we begin to take an annual inventory of mercury levels in the Great Lakes to understand the sources of this pollution and especially the trend to see whether this danger is growing. With this information the Congress would be able to provide more effective and comprehensive regulation of mercury pollution and mitigation of its harmful effects.

I would like to thank Chairman BAIRD for agreeing to engage in this colloquy on this important matter, and I appreciate all his support in working to ensure that we have the most comprehensive, scientific, accurate and timely information on mercury contamination. I look forward to working with the chairman on this issue.

Mr. BAIRD. I very much thank the gentleman for working so closely with us and with Ranking Member EHLERS on this. I absolutely agree with the gentleman from Illinois on the importance of mercury in the Great Lakes, and I applaud him for raising this issue. It is crucial that we continue to gather the necessary data in order to protect current and future generations in the environment from dangerous mercury exposure. I am aware and appreciate the gentleman understands that the National Science Foundation does not generally engage in this type of research, and, as indicated, it is really more the appropriate domain of the Environmental Protection Agency.

Accordingly, I will be happy to work with the gentleman from Illinois, and I look forward to the committee providing direction to the U.S. EPA in a letter to that effect.

Mr. KIRK. I thank the chairman for that. I look forward to seeing the committee's letter, because I think it will move the ball significantly to help this Congress redress a growing danger.

To the gentleman from Michigan, a leader on Great Lakes protection, and removing environmental contamination, I thank him for working on this issue.

Mr. EHLERS. I thank the gentleman for those comments. We will be happy to continue working with him.

Mr. Chairman, I reserve the balance of my time.

Mr. BAIRD. Mr. Chairman, I yield myself such time as I may consume in order to engage in a colloquy with the gentlelady from California (Ms. WOOLSEY).

Ms. WOOLSEY. Thank you, Mr. Chairman, for giving me this opportunity to talk about the importance of research into the environmental, cultural and health impacts of introducing new genetically modified plants and animals into our agriculture, horticulture and aquaculture systems.

The National Science Foundation, which supports a broad range of basic research in the biological sciences, is well equipped to perform this basic research that will help us develop more sustainable approaches to pest management, understand and manage unique environmental and health risks, and even discover ways in which modified plants could provide environmental benefits.

Mr. Chairman, this is critical research that the National Academy of Sciences has called for in a recent report. While I am not offering an amendment to this bill before us today, I do ask for your help in raising the profile of this very important issue as you proceed with the bill.

Mr. BAIRD. I would like to thank the gentlelady for bringing this issue to our attention. It is indeed an important area of research for our Federal Government, and for NSF in particular. I appreciate and respect very much your continued interest and leadership on this. We would be happy to work with you as we proceed towards conference about raising the profile of this issue and the importance of this research.

Ms. WOOLSEY. Thank you, Mr. Chairman. I look forward to working with you.

Mr. BAIRD. Mr. Chairman, I reserve the balance of my time.

Mr. EHLERS. Mr. Chairman, I yield back the balance of my time.

Mr. BAIRD. Mr. Chairman, to close, let me just once again express my deep gratitude and tremendous respect to Dr. EHLERS for his leadership, not only now as ranking member, but over the years he has served on this committee. Quite literally there has been no more tireless and effective advocate for this legislation and for science in general than Dr. EHLERS. We all respect and admire that and appreciate that greatly.