

## Testimony of Dr. Jon C. Strauss President, Bainbridge Graduate Institute Member, National Science Board and Chairman, National Science Board Task Force on International Science

## Before the Subcommittee on Research and Science Education House Committee on Science and Technology March 24, 2009 2:00 p.m.

Chairman Lipinski, Ranking Member Ehlers, and Members of the Subcommittee, I appreciate the opportunity to speak with you today. My name is Jon Strauss, and I am President of the Bainbridge Graduate Institute in the state of Washington. I am also a member of the National Science Board<sup>1</sup> and appear before you today in my role as Chairman of the Board's former Task Force on International Science. Thank you for the opportunity to testify on the important topic of science diplomacy.

The Board Task Force on International Science, established in September 2005, broadly examined international science and engineering partnerships. The resulting report, *International Science and Engineering Partnerships: A Priority for U.S. Foreign Policy and Our Nation's Innovation Enterprise*,<sup>2</sup> offers a series of recommendations on supporting international science and engineering partnerships as a tool to strengthen efforts in international diplomacy. The Task Force recommendations were developed after extensive formal and informal discussions with scientists and engineers from around the world. These discussions provided valuable insight into the intricate workings of international partnerships in relation to science and engineering initiatives.

<sup>&</sup>lt;sup>1</sup> The National Science Board (Board) is composed of 25 presidentially appointed, Senate-confirmed Members, including the Director of the National Science Foundation (NSF). The Board provides oversight for, and establishes the policies of, NSF. In this capacity, the Board identifies issues that are critical to NSF's future, approves NSF's strategic budget directions, approves annual budget submissions to the Office of Management and Budget, approves new programs and major awards, analyzes NSF's budget to ensure progress and consistency along the strategic direction set for NSF, and ensures balance between initiatives and core programs. The Board also has a broad policy advisory role to the President and Congress under the statutory obligation to "...render to the President and the Congress reports on specific, individual policy matters related to science and engineering and education in science and engineering, as the Board, the President, or the Congress determines the need for such reports." National Science Foundation Act of 1950 § 4(j)(2), 42 U.S.C. § 1863(j)(2) (2007).

<sup>&</sup>lt;sup>2</sup> International Science and Engineering Partnerships: A Priority for U.S. Foreign Policy and Our Nation's Innovation Enterprise (NSB-08-04) (February 14, 2008).

Over the last few years, international coordination among federal entities has been conducted primarily on an *ad hoc* basis. One of the key recommendations in the Board's report is the reestablishment of the National Science and Technology Council (NSTC) Committee on International Science, Engineering, and Technology (CISET). In the Board's judgment, a reconstituted CISET would serve to coordinate the activities of the various Federal science agencies and ensure a coherent, integrated, and strong U.S. international science strategy. Re-establishing such a committee would also advance national economic, security, and sustainability goals and provide a formal mechanism for interagency international policy review, planning, and coordination. An example of creating collaborations across borders and organizational boundaries comes from the Partnerships for International Research and Education (PIRE) program. PIRE, in NSF's Office of International Science and Engineering, supports U.S. scientists and engineers, and their institutions, to engage in innovative research and education projects in partnership with international colleagues. While PIRE coordinates international research efforts across the entire spectrum of NSF disciplines, similar activities could readily be coordinated and leveraged across the federal government through the NSTC CISET committee.

The global nature of many long-standing science challenges, such as epidemics, natural disasters, and the search for alternative energy sources, makes it critical for scientists and engineers from around the world to collaborate in addressing issues that cross geographic and national boundaries. Successful international science partnerships are critical to overcoming global challenges. These partnerships are also essential for ensuring that our economy remains competitive, our national security remains sound, and our valuable resources are effectively and efficiently used.

Science diplomacy can advance international relations and U.S. foreign policy efforts around the world. Science and engineering – with its common language, methods, and values – has helped to initiate and to reinforce positive relations between peoples and nations with historic and deep-seated enmities. These partnerships can create connections among people to build trust and communication, which will then facilitate future diplomatic endeavors. They also contribute to building more stable relations among communities and nations based on commonly accepted scientific values of objectivity, sharing, integrity, and free inquiry. For science diplomacy to succeed, it is critical that the federal government expand efforts to coordinate science and engineering activities across all research agencies. Again, a reconstituted CISET would help to ensure a coherent and integrated U.S international science and engineering strategy.

Improving the national capabilities of developing countries stands to benefit all participants and advance U.S. diplomacy. Engaging in science diplomacy and international science and engineering (S&E) partnerships will also foster the development of indigenous science and engineering capacity in developing countries, enabling them to become full participants in the global enterprise. Science and engineering partnerships among, and led by, developing countries are equally important in capacity building. Strengthening scientific capacity and promoting the free flow of information in developing countries will not only expand their S&E enterprises, but will help those countries attain a higher quality of life. NSF has recently signed a Memorandum of Understanding with the U.S. Agency for International Development which is intended to coordinate broadly scoped research and higher education initiatives in which NSF supports U.S. researchers and USAID supports S&E capacity building in developing countries. Efforts

between individual agencies such as this MOU would be greatly strengthened through an overall coordinating committee.

The National Science Board, as always, appreciates the support of the subcommittee regarding our policy recommendations. It was President Clinton who established by Executive Order the National Science and Technology Council with the Office of Science and Technology Policy (OSTP) taking leadership of the structure and organization of the NSTC. The Board in our report recommended "The National Science and Technology Council (NSTC) should reestablish a committee on international S&E to coordinate the activities of the ... various Federal mission agencies...." We stand by that recommendation to have the NSTC, under the leadership of OSTP, make the necessary changes in the structure.

## **Closing Remarks**

Reconstituting a NSTC committee on International Science, Engineering, and Technology is vital to coordinate successful international science and engineering partnerships as necessary tools to address global challenges, to advance S&E frontiers, to build U.S. S&E capacity and expertise, to energize U.S. innovation, to support international relations, and to foster capacity building in developing countries. U.S. leadership and participation in international science and engineering partnerships is truly a key catalyst for global prosperity.

Since 1950 when President Truman convened the first meeting of the National Science Board, the Board has worked to fulfill our mission to the nation: "To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense." The President has clearly demonstrated his commitment to science and spoken of the importance of science in domestic and international policy.

On behalf of the National Science Board and our Chairman, Dr. Steven Beering, I want to thank the Subcommittee for the important work it does for U.S. scientific research, education, and training.

Mr. Chairman, this concludes my remarks.