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For more information about GUIRR and the U-I Partners program, please visit our web site at http://www.national-academies.org/guirr

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THE NATIONAL ACADEMIES
Advancing Science: Engineering, and Medicine
This report was produced by the National Academies—National Academy of Sciences, National Academy of Engineering, and Institute of Medicine—with members and associates who bring diverse perspectives and expertise to bear on issues of critical importance to society.

http://www.national-academies.org/
THE PURPOSE OF THE ROUNDTABLE

In 1984, the National Academies started the Government Univer-
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table (GUIRR). The Roundtable was created so that leaders in science and technology from business, government, and academia could meet together in an informal setting to discuss science and technology issues of broad national importance and to take action where needed. Such actions have been wide in scope — including national collaborations — sometimes resulting in significant changes. A central reason for the success of GUIRR has been the senior level of the participants, the broad mix of government, industry, and academic leaders, and the unique role of the National Academies in the nation’s science and technology enterprise. Although there have been many changes since 1984, the usefulness of GUIRR as a forum has remained unchanged.

In the decades since the inception of GUIRR, science and technology has become an increasingly global enterprise. The U.S. to an increasing extent must compete for scarce talent, resources and research partners. In order to remain globally competitive, U.S. industry seeks to speed up its access to rapidly developing lines of research and emerging technologies. Global business must also be done in an interdependent world where environmental, workforce, energy and sustainability issues must increasingly be taken into account along with a rapidly changing global science and technology environment. These changes require increased attention by the U.S. in promoting more effective science and technology collaborations, increased agility of research institutions in meeting rapidly changing needs, and enhanced training of future scientists and engineers. To succeed in meeting these changes at a national level, government, industry and academia must be able to collaborate effectively.

The University-Industry (U-I) Partnership Program — an important part of the Roundtable — provides a response to this rapidly changing global environment. The Partners serve as an “antenna” for the Roundtable. They are a key resource and sounding board for exploring new ideas and fresh perspectives on issues affecting the health of the U.S. science and technology enterprise. Because of the structure, membership, and contacts afforded by GUIRR, the Partners have a unique opportunity to catalyze change in the U.S. science and technology enterprise.

UNIQUE FEATURES OF GUIRR AND U-I PARTNERS PROGRAM

GUIRR is unique because it is comprised of a critical mass of key stakeholders in U.S. science and technology, including senior government officials, corporate executives, and key decision makers from academia. GUIRR also provides ready access to the resources of the National Academies and its institutional and personal connections to the science and technology community. Key elements of GUIRR include:

- Roundtable meetings—three meetings annually provide a forum for constructive interchange on critical science and technology issues.
- Working groups—flexible action-oriented teams that can quickly catalyze high level Government-University-Industry cooperation on issues of national importance.
- Educational forum to focus attention and assemble experts, policy makers and decision makers for specific issues.

WHAT GUIRR MAKES POSSIBLE

- Access to the National Academies network of international scientists, world class experts, senior government officials, industry leaders, and academic decision makers — the key policy makers with responsibilities for the long-term health of the nation’s science and technology enterprise.
- Educational forum to focus attention and assemble experts, policy makers and industry leaders around issues of national concern.
- GUIRR working groups composed of government, university and industry (G-U-I) members and facilitated by a National Academies staff committed to implementing institutional change.
- Flexible and informal venue to maximize interaction among Roundtable members, federal officials, and academy leaders.

GUIRR U-I COLLABORATIONS

Individual GUIRR Council members and U-I Partners propose and champion projects that after being approved by GUIRR, are pursued by new GUIRR Working Groups. These new GUIRR working groups provide the specific interests of their participants, as well as broad, national concerns. These projects, in combination with the National Academies’ congressional mandate as advisors to the nation and its international recognition in the sciences, can bring national attention to a wide range of issues. U-I collaborations cover a very broad range of topics. Typical issues include:

- Science and engineering workforce
- Export controls and visa policy in a globalized world
- Alternative approaches to intellectual property
- National innovation infrastructure
- Educating for homeland security in the next generation
- Large scale data integration (dealing with “data overlap”)
- Information technology and the future of the research university

Recent and current examples of U-I collaborations include:

Export Controls: This GUIRR working group (with federal collaborations), coordinating closely with other National Academies units and outside organizations, secured a federal reworking of impending regulations (in Commerce and DOD) that would have otherwise strongly affected the ability of foreign nationals to work in U.S. university laboratories. This effort has been continued as educational workshops and meetings, in the work of a federal advisory committee, and in other venues.

Strengthening R&D Collaborations between U.S. Industry and Universities. In 2003, GUIRR U-I members, in collaboration with NCURA and IRI, began a collaborative effort to improve university and industry U-I approaches to negotiating intellectual property (IP) agreements. A set of guiding principles for U-I research partnerships was published from this collaboration, along with a collection of case examples showing how the guiding principles apply in day-to-day IP negotiations. This effort led to the formation of the Guiry Multinational University-Industry Demonstration Program (UIDP) at http://uidp.org, which is being convened by GUIRR as a quasi-autonomous entity, to provide improved communication between industry and academia on collaborative research, and to beta test improved approaches to university-industry collaboration. The longer term UIDP purpose, at a national level, is to improve the health of the U.S. R&D enterprise and its contribution to the U.S. economy.
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In the decades since the inception of GUIRR, science and technology has become an increasingly global enterprise. The U.S. has to increasingly compete for science talent, resources, and research partners. In order to remain globally competitive, U.S. industry seeks to speed up its access to rapidly developing lines of research and emerging technologies. Global business must also be done in an interdependent world where environment, workforce, energy, and sustainability issues must increasingly be taken into account along with a rapidly changing global science and technology environment.

These changes require increased attention by the U.S. in promoting more effective science and technology collaborations, increased agility of research institutions in meeting rapidly changing needs, and enhanced training of future scientists and engineers. To succeed in meeting these changes at the national level, government, university, and industry must be able to collaborate effectively.

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The U-I Partners have access to all aspects of the GUIRR program, and provide significant contributions to the overall impact of the working groups. Because of their access to leading policy makers, GUIRR staff assists in identifying and enlisting experts and decision makers for specific issues.

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THE UNIVERSITY-INDUSTRY PARTNERS PROGRAM

REVITALIZING THE NATION’S SCIENCE AND TECHNOLOGY ENTERPRISE

William Rees, Department of Defense and C.D. (Dan) Mote, Jr., University of Maryland

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THE NATIONAL ACADEMIES
4101ers to the Future in Science, Engineering, and Medicine

This report was produced by the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council in the exercise of its authority of independence by its charter granted by Congress.

6.85
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