



GOVERNMENT-UNIVERSITY-INDUSTRY RESEARCH ROUNDTABLE
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2010 ANNUAL REPORT
GOVERNMENT-UNIVERSITY-INDUSTRY RESEARCH ROUNDTABLE
(GUIRR)

NATIONAL ACADEMY OF SCIENCES
NATIONAL ACADEMY OF ENGINEERING
INSTITUTE OF MEDICINE
500 FIFTH STREET, N.W., WASHINGTON, DC 20001

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Mission

The Government-University-Industry Research Roundtable (GUIRR) was created in 1984 in response to the report of the National Commission on Research, which called for an institutionalized forum to enhance communication among the top leaders of government and non-government research organizations. Its formal mission, revised in 1995, is “to convene senior-most representatives from government, universities, and industry to define and explore critical issues related to the national and global science and technology agenda that are of shared interest; to frame the next critical question stemming from current debate and analysis; and to incubate activities of on-going value to the stakeholders. This forum will be designed to facilitate candid dialogue among participants, to foster self-implementing activities, and, where appropriate, to carry awareness of consequences to the wider public.” [www.nas.edu/guirr]

GUIRR Member Meetings

Council Members, Council Associates, and University-Industry Partners (20 pairs; 40 organizations) met three times in 2010 for timely discussion on technology research advancements and associated challenges that cut across all three sectors – government, universities, and industry – and that can benefit from greater cross-sector collaboration. Meeting topics are proposed by the membership and reviewed/selected by the Executive Committee.

Meeting attendance is of members and invited guests. The number of attendees at each meeting has steadily grown, with 65+ participants now generally expected.

On February 22-23, 2010, GUIRR members came together for a discussion on “Sensors: From Sea to Space – Innovations and Implications for the Future.” Members considered the ubiquity of sensors and sensor networks and considered their potential to provide viable solutions to important global issues.

The focus of the June 29-30 meeting was on “WATER: Quality, Quantity, and the Need for Innovative Technologies”, which provoked (as intended) cross-sector thinking and dialogue around water as an underestimated, finite, and exhaustible resource.

The fall 2010 GUIRR meeting (October 12-13) addressed a complex and controversial topic. The title of the meeting was “Geoengineering: Contemplating the Issues and the Need for Research”. The intention with this meeting was to provide a means for government, university, and industry leaders to examine and better understand the issues, options, and ramifications of geoengineering *before* the nation is confronted with a true climate emergency.

GUIRR Leadership Dinners

Members of the GUIRR Council (only) gathered at DC area restaurants for two special Leadership Dinners in 2010. The first dinner was held May 21 and featured Canadian educator and scholar Dr. Benoit Godin, who presented his thoughts on “The Culture of Numbers: From Science to Innovation.” The second dinner, held December 13, featured “A Conversation with the New Director of the National Science Foundation” – Dr. Subra Suresh. Dr. Suresh, incidentally, is a new member of GUIRR’s Executive Committee.

GUIRR Support

In 2010, GUIRR activity (program and administration) was supported by federal grant awards from NIH, DOD, NIST, and USDA, totaling roughly \$277,000. University-Industry Partner dues accounted for an additional \$525,000 in core funding. [NOTE: Additional public/private funds were secured to support two distinct, semi-autonomous programs under GUIRR’s purview, namely FDP and UIDP.]

Projects

International Research Collaborations

Calling itself the “I-Group”, members of this highly energized GUIRR working group are conducting a practical, systematic study of international research collaborations and how such interactions are constructed across differing cultures, policies, languages, and customs. A highly successful workshop was held July 26-27, 2010 entitled “Examining Core Elements of International Research Collaboration” that considered three “horizontal”, or cross-cutting, issues: (1) creating an environment for productive international collaboration, (2) cultural differences and nuances, and (3) legal issues and agreements as well as five “vertical” content domains: (1) ethics, (2) research integrity and the responsible conduct of research, (3) risk management, (4) intellectual property, and (5) export controls. A workshop summary report (type 3) is currently being readied for publication early this summer (2011). Testimonials from a number of workshop participants were received and have been posted to the GUIRR web site (http://sites.nationalacademies.org/PGA/guirr/PGA_050827; see in box to right)

Food Safety and National Defense

In September 2009, this working group organized and hosted a Technology Workshop on Food Safety and National Defense, with nearly 70 subject matter experts in attendance. The agenda and formal presentations may be viewed under “Current Projects” on the GUIRR web site. The group is currently considering hosting a follow-on set of workshops, with the first intended to inspire companies to mobilize around issues of food safety research in a cooperative manner that mimics the Sematech model. The working group is interested in exploring mechanisms (current and new) for getting newer technology (e.g., detection, processing, etc.) into the food safeguard system and, moreover, examining how new technologies are validated.

Here or There? Revisited

In 2006 a report to GUIRR was published entitled: Here or There? A Survey of Factors in Multinational R&D Location. GUIRR members and others (notably folks from the U.S. Department of State) have often commented on the usefulness of this particular report and have asked for an update. The authors of the report, Drs. Jerry and Marie Thursby (Georgia Tech), have confirmed their willingness to conduct a follow-on survey to determine whether much has changed in the past five years, particularly in light of the economic downturn. Other organizations that have expressed interest in collaborating on the project to date include: Industrial Research Institute (IRI), Semiconductor Research Corporation (SRC), and European Industrial Research Management Association (EIRMA). The working group hopes to expand its survey population beyond the US, Canada, Mexico and Europe and collect data from Asian countries as well.

University-Industry Demonstration Partnership (UIDP)

The UIDP is a semi-autonomous activity that falls under GUIRR’s programmatic umbrella. The UIDP has its own membership structure and fees. It is in Phase II with nearly 80 organizational members. [www.uidp.org]

UIDP members devote the majority of their energies and resources to the identification and implementation of projects that will advance university-industry research collaborations in the United States and ultimately promote U.S. competitiveness. Two member meetings are held each year, generally at a member organization’s location. In 2010, the meetings were held Atlanta, Georgia in March (GA Tech, host) and in Charlotte, NC (UNC-Charlotte and IBM, hosts) in October. A special Project Summit was also held in Washington, DC in December.

The Partnership has pursued a number of dedicated projects, including:

- ***Contract Accords/TurboNegotiator.*** The first Contract Accords booklet, now printed, contains five approved contract accords. Development of a new set of accords is underway and includes:

Foreground Intellectual Property, Export Control, Copyrightable Materials, Nondisclosure, Material Transfer Agreements, Fee for Service Agreements, and Master Agreements.

- **Government Funding Webinar Series.** Sponsored in conjunction with the National Council for Entrepreneurial Tech Transfer (NCET2).
- **Industry Interest Webinar Series.** Sponsored in conjunction with NCET2.
- **Researcher Handbook.** UIDP members are developing a primer for faculty who are interested in working with industry. A companion piece, a primer for industrial scientists who seek to work with universities on research projects, is also under development.

Federal Demonstration Partnership (FDP)

The FDP is currently in Phase V and operates as a semi-autonomous activity under GUIRR. Its purpose is to reduce the administrative burdens associated with federal research grants and contracts. It is comprised of 10 federal agencies and 120 institutional recipients of federal funds. [www.thefdp.org]

The FDP holds three member meetings per year, always in Washington, DC. In 2010, meetings were held January 25-26, May 13-14, and August 30-31.

The FDP is pursuing a number of projects, as follows:

- **ARRA Task Force.** The FDP responded quickly to the American Recovery and Reinvestment Act of 2009 (ARRA) to serve as a clearinghouse for information gathering and sharing, frequently asked questions and good practices to assist universities in responding to the ARRA reporting requirements providing greater consistency in data submitted from member institutions. The FDP joined forces with the Council on Governmental Relations to leverage resources in providing a single portal for information on the ARRA. The FDP is currently analyzing data from a survey conducted of its members that looks at how resources were allocated to perform the work required by ARRA. A report is forthcoming.
- **STAR Metrics.** The Star METRICS project has continued to grow and now has over 100 participating institutions. This project is analyzing data from various sources to determine what the actual economic effect that the federal investment in the American research enterprise really is. It goes beyond just jobs created, but also looks at how inventions and start-up companies that resulted from federal research dollars are affecting the economy.
- **Streamlining A-133 Audit Compliance.** This FDP project is gathering more participants and audit information.
- **Established the Joint Application Design Team.** This working group assists Grants.gov staff in improving systems and processes associated with the submission of applications for federal assistance funding.
- **Faculty Burden Survey.** The FDP continues its efforts to implement the recommendations arising from the original survey. It has been five years since the first survey was conducted and faculty have put together a committee to develop the follow-up survey to determine if any inroads have been established or new barriers have been erected.
- **Research Compliance.** Also new in Phase V is a new committee dedicated to exploring ways of streamlining compliance processes. This committee currently has four subcommittees; Conflict of Interest, Human Subjects, Animal Subjects and Export Controls.
- **Project Certification.** The FDP is working with the Office of Naval Research and the Department of Health and Human Services in exploring alternate mechanisms for certifying researcher's effort on federally funded research grants.

Members of GUIRR Council

C.D. (Dan) Mote, Jr., Co-Chair [NAE], Former President and the Glenn L. Martin Institute Professor of Engineering, University of Maryland at College Park – **GUIRR Co-chair**
Lydia Waters Thomas, Co-Chair, President and Chief Executive Officer, retired, Noblis – **GUIRR Co-chair**
Lieutenant General Sam Armstrong, U.S. Air Force, retired
Roger N. Beachy [NAS], Director, National Institute of Food and Agriculture (*ex officio*)
Susan Butts, Senior Director of External Science and Technology Programs, The Dow Chemical Company, retired
Ashton Carter, Under Secretary for Defense for Acquisition, Technology and Logistics (*ex officio*)
Ralph Cicerone [NAS], President, National Academy of Sciences (*ex officio*)
Francis S. Collins [NAS, IOM], Director, National Institutes of Health (*ex officio*)
Gladys Escalona de Motta, Chancellor, University of Puerto Rico – Rio Piedras
Nina Fedoroff [NAS], Science and Technology Advisor to the Secretary of State (*ex officio*)
Harvey V. Fineberg [IOM], President, Institute of Medicine (*ex officio*)
Patrick Gallagher, Director, National Institute of Standards and Technology (*ex officio*)
Jesse L. Goodman [IOM], chief Scientist and Deputy Commissioner for Science and Public Health (*ex officio*)
Paul Hertz, Chief Scientist, Science Mission Directorate, National Aeronautics and Space Administration (*ex officio*)
John Holdren, Director, White House Office of Science and Technology Policy (*ex officio*)
Lisa Jackson, Administrator, Environmental Protection Agency (*ex officio*)
Steven Koonin [NAS], Under Secretary for Science, U.S. Department of Energy (*ex officio*)
Ralph Kuncl, Provost and Executive Vice President, University of Rochester
Jane Lubchenco [NAS], Under Secretary of Commerce for Oceans and Atmosphere, National Oceanic and Atmospheric Administration (*ex officio*)
Alan Merten, President, George Mason University
Craig Mundie, Chief Research and Strategy Officer, Microsoft Corporation
Tara O'Toole, Under Secretary for Science and Technology, U.S. Department of Homeland Security
Steven M. Paul [IOM], Director, Appel Alzheimer Research Institute, Weill Cornell Medical College
Luis M. Proenza, President, The University of Akron
James Rosser, President, California State University, Los Angeles
David B. Spencer, Founder, Chairman and Chief Technology Officer, wTe Corporation
Subra Suresh [NAE], Director, National Science Foundation (*ex officio*)
Charles M. Vest [NAE], President, National Academy of Engineering (*ex officio*)
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