

# FINANCIAL SUPPORT OF GUIRR



LARRY RHOADES (2<sup>ND</sup> FROM L) WITH UI PARTNERS (L TO R) ROBERTO PECCEI, JUAN SANCHEZ, FRANK PITA AND GEORGE REYNOLDS

GUIRR's accomplishments can be attributed in large part to the participation and contribution of the federal R&D agencies. Core funding enables GUIRR to quickly take on projects of its members' choosing rather than waiting for a specific contract or grant to cover an activity. In many cases, this funding marks the difference between timely resolution of pressing issues vs. a post-mortem analysis of what might have been done.

The federal agencies that provided core support during 2005 were:

- Department of Defense
- Department of Homeland Security
- National Institutes of Health
- National Institute of Standards and Technology
- National Science Foundation (support for FDP only)
- U.S. Department of Agriculture

The University-Industry Partners Program is an important component of both GUIRR membership and its funding base. These institutional members ground GUIRR's policy discussions with their first-hand factual experience. As geographically dispersed leaders in their sectors, the UI partners also serve as GUIRR's antennae for new trends in, and pressures on, the national research enterprise.

The partnerships that provided support during 2005 were:

- Georgia Institute of Technology/Boeing
- Iowa State University/Cargill
- Massachusetts Institute of Technology/Northrop Grumman
- Pennsylvania State University/Corning
- Rice University/National Instruments
- Stanford University/IBM
- University of California, Davis /Mars, Incorporated
- University of California, Los Angeles/Hewlett-Packard Company
- University of California, San Diego/Qualcomm
- University of Texas at Austin/Semiconductor Research Corporation
- Partner in transition/Battelle Pacific Northwest National Laboratory.

In addition, project-specific support in 2005 was provided by the Kauffman Foundation, which contributed towards the University-Industry Partnership/Re-Engineering Intellectual Property Negotiations Project and, through a direct grant to Georgia Institute of Technology, supported the study on corporate R&D siting decisions ("Here or There" project).

## GOVERNMENT-UNIVERSITY-INDUSTRY RESEARCH ROUNDTABLE COUNCIL (2005)

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**TOM ARRISON, Senior Staff Officer, Policy and Global Affairs Division**

**DENISE GREENE, Executive Assistant, FDP and Administrative Associate, GUIRR**

**EDVIN HERNANDEZ, Program Associate, FDP**

**JERRY STUCK, Executive Director, FDP**

**YVETTE WHITE, Program Associate, GUIRR**

For more information about GUIRR and the University-Industry Partners Program, visit our web site at  
<http://www.national-academies.org/guirr>

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**THE NATIONAL ACADEMIES**  
*Advisors to the Nation on Science, Engineering, and Medicine*

# ANNUAL REPORT 2005



## THE GOVERNMENT-UNIVERSITY-INDUSTRY RESEARCH ROUNDTABLE

NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES  
2101 CONSTITUTION AVENUE, N.W., WASHINGTON, DC 20418

# MESSAGE FROM THE CO-CHAIRS

Since its inception in 1984, the Government-University-Industry Research Roundtable (GUIRR) has provided senior representatives from government, university and industry with a means of addressing critical issues in science and technology. While three formal meetings each year provide a structure for reviewing progress on GUIRR projects (in addition to subjects of topical interest), much of the critical work of GUIRR is done in project-specific working groups. A common denominator of all GUIRR projects is their ability to address a pressing national need with relevance to all three sectors – government, university, and industry – in the science and technology arena.

Projects are typically multiyear. A current example is the University-Industry Partnership, which began hosting meetings of delegates picked by the Industrial Research Institute and the National Council of University Research Administrators in 2003, to examine differing industry and university views of intellectual property negotiations. By 2005, the effort had developed a set of guiding principles for grounding University-Industry (U-I) partnerships. The working group will conclude its work in Spring 2006 and be superseded by a follow-on implementation effort, national in scope, to beta-test, then institutionalize these new approaches to university-industry research collaborations.

Many GUIRR projects also have a strong global component, for example, our ongoing GUIRR project in the area of deemed exports. In this case, working group members are seeking improvements in federal regulations that will continue to allow the effective participation of foreign nationals in U.S. university research – a crucial element of the future U.S. research enterprise – while adequately protecting technologies with strong implications for national security. GUIRR members are interacting effectively with Defense and Commerce officials on this issue.

In some cases, effective action by the U.S. on an issue may simply require better information. A recent example is a survey sponsored by GUIRR to obtain a clear understanding of the criteria used by multinational companies in locating new corporate R&D facilities globally. The results of this survey will inform federal decisions addressing the national competitiveness of the U.S. in an increasingly global market.

The Federal Demonstration Partnership (FDP), though a semi-autonomous organization convened by GUIRR, is also featured in this report. The results of FDP demonstrations yield “proof of concept” data to the federal agencies sponsoring research with regard to their administrative systems and approaches. This year’s efforts informed guidance issued by the Office of Management and Budget (OMB), the Office of Science and Technology Policy (OSTP), in conjunction with the National Science and Technology Council (NSTC) and other federal entities.

We close out 2005 acknowledging the leadership of Bill Joyce, CEO of Nalco, who guided GUIRR to significant achievements during his 6 year term as GUIRR’s industry co-chair. Bill’s term ended in mid-2005, and we wish to express our appreciation to him for all his hard work and generous devotion of time.

  
Mary Anne Fox  
Co-Chair

  
Lydia Waters Thomas  
Co-Chair



LYDIA THOMAS



RICHARD SPINRAD, MARY GOOD, AND HRATCH SEMERJIAN

# GUIRR ACTIVITIES IN 2005

## CORPORATE R&D INVESTMENT: A QUESTION OF HERE OR THERE?

GUIRR initiated this project, to better understand the decision-making processes of multinational companies in locating their R&D facilities worldwide. With funding from the Kauffman Foundation, and partnerships with the Industrial Research Institute, the American Chemical Society and the European Industrial Research Management Association, GUIRR was able to commission a quantitative survey of more than 200 European and American multinational companies across 15 industries. The survey and analysis were conducted by economists Marie and Jerry Thursby. The final survey report will be issued by the National Academies Press in 2006 (pre-publication results at <http://newton.nap.edu/catalog/11675.html>).

The “Here or There” survey shows that for companies locating R&D facilities in emerging countries, the most important attraction was growth potential in that country’s market, followed by the quality of R&D personnel. For companies locating R&D facilities at home or in other developed countries, the most important attraction was the quality of R&D personnel and the quality of intellectual property protection. One of the notable outcomes of the survey was the key role of universities in decisions on R&D facility location. University factors are more important than cost factors in R&D facility decisions in developed countries, and of equal importance to costs in emerging countries.



CLAUDE CANIZARES AND GARETH ROBERTS

## DEEMED EXPORTS

In a March 2004 Commerce Inspector General’s Report (IPE-16176), the Inspector General stated his opinion that universities were not exempt from adhering to deemed export controls, in contrast to previous interpretations of the “fundamental research exemption.” It was widely believed that any recommendations stemming from this new interpretation would effectively prohibit foreign nationals without green cards (students, postdocs, and some faculty) from working in U.S. university laboratories. A Deemed Exports working group of 10 GUIRR members and 7 federal collaborators (including representatives from Commerce and Defense) sought to address these issues and seek a workable resolution.

GUIRR’s exemption from the FACA (Federal Advisory Committee Act) was a key factor in allowing some essential cross-sector (government-university-industry) private dialogues to take place in 2005. As a result of GUIRR’s efforts and those of the broader community, more than 300 letters – a historic record – were sent to the Bureau of Industry and Security by affected institutions in response to a Request for Comment on Commerce’s proposed regulations on deemed exports. As of the end of 2005, Commerce was reviewing its interagency approach on deemed exports in light of these letters.

GUIRR is also addressing a proposed Defense Federal Acquisition Regulation Supplement (DFARS) clause mandating the badging and segregation of foreign students on U.S. university campuses. If implemented, many institutions believe this clause would bring U.S. university research to a near standstill. The GUIRR Deemed Exports working group is communicating with Defense personnel to explore potential rewordings of the above clause that would address the security intent without layering additional compliance burdens on universities.

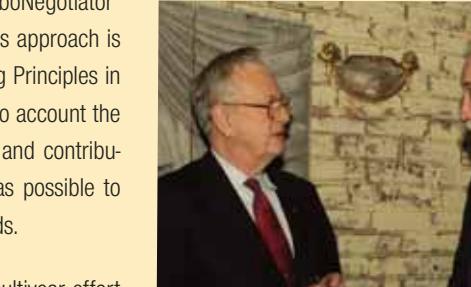


LYDIA THOMAS AND MARYE ANNE FOX

## UNIVERSITY-INDUSTRY PARTNERSHIP (PREVIOUSLY “RE-ENGINEERING INTELLECTUAL PROPERTY AGREEMENTS”)

The initial objective of this project (begun in 2003 by GUIRR) is to develop nationally accepted general principles and practices to expedite intellectual property negotiations between U.S. universities and industry, thereby removing a crucial (and growing) impediment to university-industry research partnerships in the U.S. In 2005, GUIRR was the host and neutral convener of approximately 34 invited delegates of this joint effort with the Industrial Research Institute (IRI) and the National Council of University Research Administrators (NCURA). Progress in 2005 includes:

- A set of guiding principles for University-Industry (U-I) partnerships. The Guiding Principles will be published in 2006, but current versions are posted at [http://www7.nationalacademies.org/guiirr/Guiding\\_Principles.pdf](http://www7.nationalacademies.org/guiirr/Guiding_Principles.pdf).
- Conceptualization of a proposed software tool dubbed “TurboNegotiator” for creating custom intellectual property agreements. This approach is intended as a key tool for implementing the above Guiding Principles in negotiating new IP agreements. The software will take into account the nature of the project at hand, and the needs, objectives and contributions of the parties, to route the negotiators as quickly as possible to “tailored” agreements that will satisfy their individual needs.
- A concluding Summit for the above initial phase of this multiyear effort is planned for Spring 2006. If successful, the Summit will also serve as a launching point for a new, much broader organization that will tackle “TurboNegotiator” as one of its initial efforts.



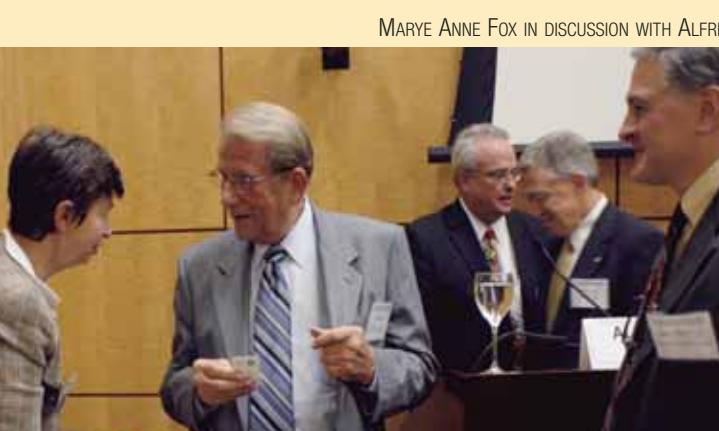
ARDEN BEMENT AND SEAN O’KEEFE

## DATA OVERLOAD

In the course of GUIRR meetings and more informal discussions, individual members of GUIRR raise new national issues for consideration by GUIRR. One example is the issue of “data overload” – the pressing need to more effectively assimilate and integrate the very rapidly growing volume of data in a wide-ranging array of disciplines. In November 2005, a recently formed GUIRR working group on data overload decided to narrow the scope of the project to coarse data fusion and integration across disciplines. This project is being conducted jointly with the National Academies’ Board on Mathematical Sciences and Their Applications (BMSTA).

## LEADERSHIP DINNER SERIES

This series allows the simultaneous engagement of federal and non-federal officials in wide-ranging small group, high profile discussions on politically sensitive topics. In 2005, GUIRR sponsored a dinner on Deemed Exports. This dinner helped to solidify the awareness of federal agencies of the new Commerce Department interpretation of deemed export regulations.



MARYE ANNE FOX IN DISCUSSION WITH ALFRED MANN

## FEDERAL DEMONSTRATION PARTNERSHIP (FDP)

GUIRR provides secretariat and convening support for the Federal Demonstration Partnership (FDP), a semi-autonomous cooperative organization to conceptualize, test and implement improvements to research administration.

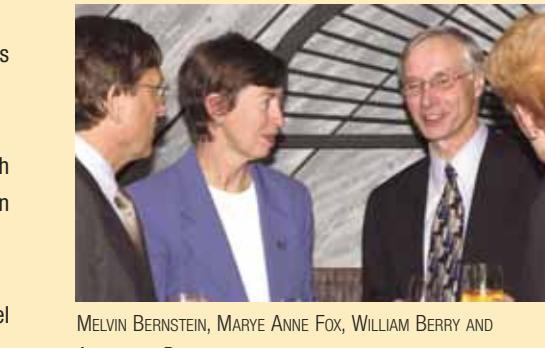
Some of FDP’s accomplishments in 2005 are:

- A 7,000 person survey of faculty administrative burden.
- Increased membership of emerging research institutions (ERI’s) in FDP.
- OMB approval for certifying sub-recipient audits through use of the web-based audit clearinghouse, rather than institution-by-institution investigations.
- OSTP and OMB joint endorsement of FDP developed model subagreements as an effective practice that should be extended among all collaborating institutions.
- An OMB/OSTP request to federal agencies to acknowledge multiple principle investigators in grant awards – an initiative spurred by discussions with FDP.
- Use of FDP as community forum for input on Grants.gov implementation.

More information on the work FDP has done recently, and its impact on the research infrastructure in the U.S., can be found on the FDP website, <http://thefdp.org/index.html>.



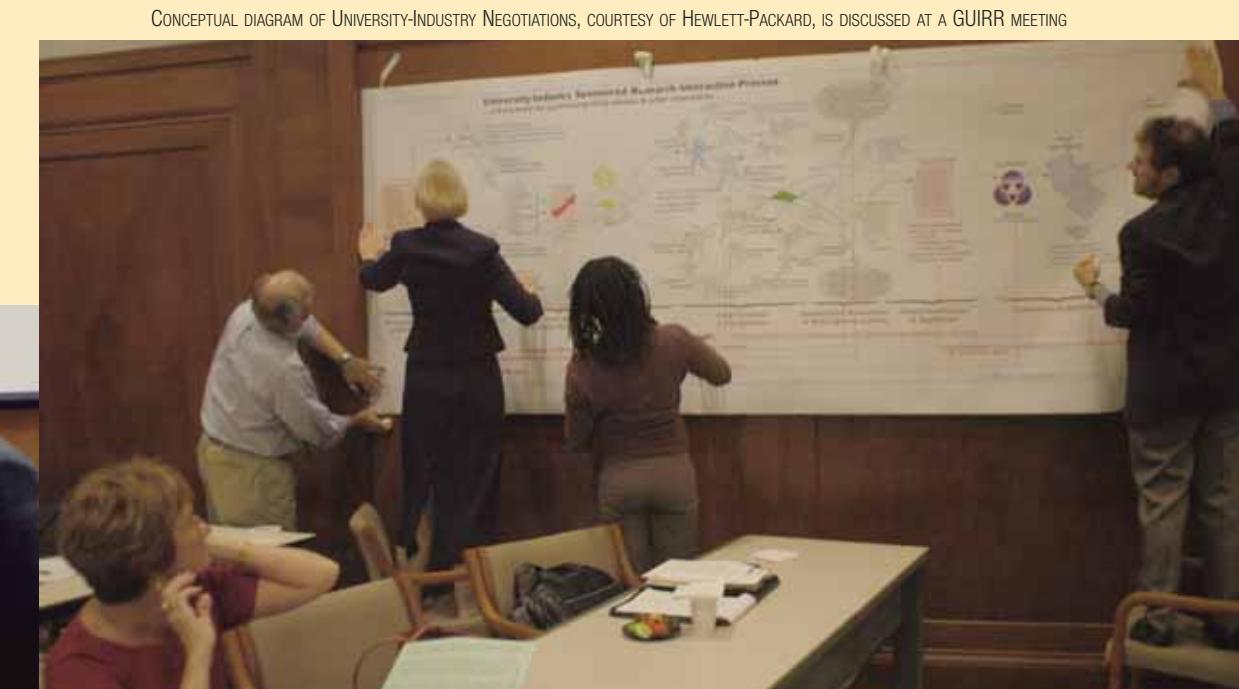
JOHN TURNER ADDRESSING THE GUIR MEMBERSHIP



MELVIN BERNSTEIN, MARYE ANNE FOX, WILLIAM BIERMAN AND ANTOINETTE BETSCHART



PETER CSEKE AND WANG AUSTIN



CONCEPTUAL DIAGRAM OF UNIVERSITY-INDUSTRY NEGOTIATIONS, COURTESY OF HEWLETT-PACKARD, IS DISCUSSED AT A GUIR MEETING