Industry/University Cooperative Research Center (I/UCRCs)

Funded by the National Science Foundation

An I/UCRC is a collaborative effort among universities, large and small companies, state and government agencies, and other organizations for the purpose of conducting **pre-competitive research of shared value.**

This model has been successfully utilized and refined for over **30** years.

Mission:

Grow the U.S. innovation capacity by developing **long-term partnerships** among industry, academe, and government.

Leverage NSF funds with industry to support and train the **next generation workforce** within a **global context.**

The I/UCRC Model:
A Cooperatively Defined, Funded & Shared Research Portfolio

- Members **pool their funds** together to conduct pre-competitive research
- Members meet 2 times/year and collectively **vote** to recommend which projects to fund
- Members have access to faculty, students, and center resources at all sites
- Members have **rights to a royalty-free, non-exclusive license** to generated intellectual property

Value to Industry and Academia

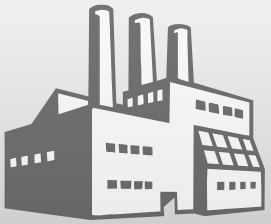
The NSF provides the operational framework, networking opportunities, additional funding opportunities, and more.

Benefits of Membership for Academe...

- New research and education program dimensions
- Student recruitment
- Leverage proof-of-concept results for new funding
- Trusted relationships with industry
- Ready partners for translation of discoveries
- Organize industry sector relationships

and Industry/Government

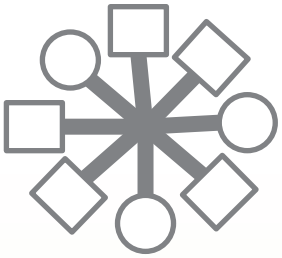
- High-value research projects
- Investment leveraging
- Sector networking
- Learning from industry peers and customers
- Pre-publication access to research
- Center researchers & facilities
- Access to talented students



Recent I/UCRC Fast Facts

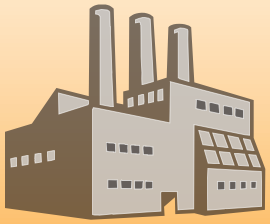
1000
students trained in center research graduated in 2012

30%
of graduates from I/UCRC centers were hired by members in 2011



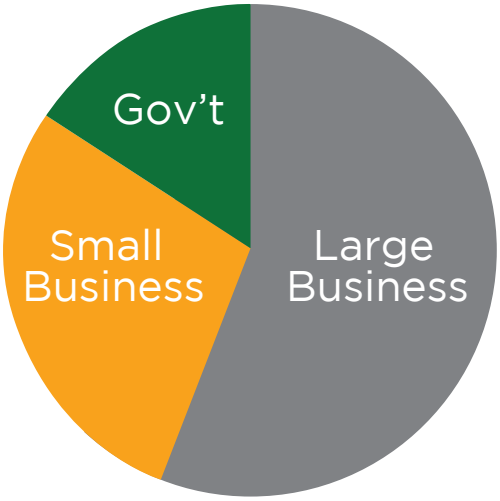
68 centers

192 sites



Over 1000
industrial & government memberships

Membership



>40
graduated I/UCRCs remain in operation true-to-model

Number of Centers in Each Focus Area

20 Information Communication & Computing centers

10 Energy & Environment centers

8 Advanced Materials centers

8 Biotechnology, Health & Safety centers

7 Advanced Manufacturing centers

7 Advanced Electronics, Phototonics Fabrication & Processing centers

4 System Design & Simulation centers

4 Civil Infrastructure System centers

Program Contacts

Lawrence A. Hornak, Ph.D.
Program Director, ENG/IIP
voice: 703.292.2678
email: lhornak@nsf.gov

Shashank Priya, Ph.D.
Program Director, ENG/IIP
voice: 703.292.4709
email: spriya@nsf.gov

Rita V. Rodriguez, Ph.D.
Program Director, CISE/CNS
voice: 703.292.8950
email: rrodriguez@nsf.gov

Become a part of the I/UCRCs. Find out how by contacting NSF program directors or center directors.

I/UCRC Homepage:
nsf.gov/eng/iip/iucrc

Funded Centers

Advanced Knowledge Enablement
Advanced Processing and Packaging Studies
Autonomic and Cloud Computing
Berkeley Sensor & Actuator Center
Bio Energy Research and Development
Broadband Wireless Appl. Center
Center for Advanced Forestry Systems
Center for Advanced Non-Ferrous Structural Alloys
Center for Advanced Vehicle and Extreme Environment Electronics
Center for Agricultural, Biomedical, and Pharmaceutical Nanotechnology
Center for Arthropod Management
Center for Biophotonic Sensors and Systems
Center for Configuration, Analytics and Automation
Center for Data Analytics
Center for Design of Analog Digital Integrated Circuits
Center for e-Design
Center for Electric Vehicles
Center for Electromagnetic Compatibility
Center for Energy Harvesting Materials and Systems
Center for Excellence in Logistics and Distribution
Center for Freeform Optics
Center for Friction Stir Processing
Center for Fuel Cells (CFC)
Center for Health Organization Transformation
Center for High-Performance Reconfigurable Computing
Center for Identification Technology Research
Center for Integrative Materials Joining Science for Energy Applications
Center for Metamaterials
Center for Nondestructive Evaluation
Center for Optical Wireless Apps
Center for Particulate and Surfactant Systems
Center for Pharmaceutical Development
Center for Research in Intelligent Storage
Center for Research in Storage Systems
Center for Resource Recovery and Recycling
Center for Spatiotemporal Thinking, Computing and Applications
Center for Surveillance Research
Center for the Integration of Composites into Infrastructure
Center for Tire Research
Center for Unmanned Aircraft Vehicles
Center for Visual Decision Informatics
Ceramics, Composites and Optical Materials Center
Child Injury Prevention Studies
Cooling Technologies Research Center
Cyberphysical Operating Rooms
Embedded Systems
Energy-Smart Electronic Systems Center
Experimental Research in Computer Systems
Grid-Connected Advanced Power Electronics
Hybrid Multicore Productivity Research
Intelligent Maintenance Systems
Laser and Plasma for Advanced Manufacturing
Membrane Science, Engineering and Technology Center
Net-Centric System and Software
Next Generation Photovoltaics
Power Systems Engineering Research Center
Safety, Security, Rescue Research
Science Center for Marine Fisheries
Security and Software Engineering Research Center
Silicon Solar Consortium
Smart Vehicles Concepts
Sustainable Integrated Buildings and Sites
Telecommunications (Connection One)
Visual and Decision Informatics
Water and Environmental Technology
Water Equipment & Policy
Wheat Genetic Resource Center
Wood-Based Composites Center

Four International Sites

Russia: Dubna International University
Germany: Leibniz University Hannover
India: Dharmsinh Desai University
Belgium: Katholieke Universiteit Leuven