Office of Research Overview

Melba Crawford, Assoc Dean for Research
Vicki Leavitt, SURF Program Manager
Donna Young, Administrative Assistant
Strategic Goal

• Conduct Research of Global Significance
  – Focus talent and facilities on research with potential for expanding boundaries of science and technology and addressing the global challenges and opportunities of the 21st century.
Office of Research Mission

- Support strategic development and operational management of the CoE research enterprise
- Promote the Discovery Park interdisciplinary philosophy and leverage interdisciplinary hiring
- Seek opportunities, networks and seed resources
- Support recruiting and appointment of research faculty and postdoctoral researchers
- Engage in industrial partnerships
- Educate and promote technology commercialization
- Involve undergraduate students in research
Major Funded Research Projects

- Department of Transportation NEXTRANS – $13M
- INSPIRE: Institute of (P-12) Engineering Research and Learning – $5M
- Joint Transportation Research Program of Purdue University and Indiana Department of Transportation – $51M since 1999
- Maha/NSF Engineering Research Center on Fluid Power – $15M
- NSF-funded Network for Computational Nanotechnology (NCN) – $36M since 2002
Major Funded Research Projects (cont.)

- NNSA PRISM: Center for Prediction of Reliability, Integrity and Survivability of Microsystems – $17M
- NSF Engineering Research Center on Structured Organic Particulate Systems – $15M
- Rolls Royce University Technology Center in High Mach Propulsion – $5M
- NEES: NSF George E. Brown Network for Earthquake Engineering Simulation – $105M
- NSF and DHS-funded VACCINE: Visual Analytics for Command, Control, and Interoperability Environments – $15M
Office or Research: Major Responsibilities to the CoE

- Assist Dean with allocation of research related resources
  - Administer PRF graduate student fellowships, international faculty travel grants, and summer faculty research grants
  - Provide seed funding for strategic initiatives
  - Participate in infrastructure planning
Office of Research: Major Responsibilities to the CoE (contd.)

- Assist Faculty in Developing and Managing Research Grants
  - Publicize funding opportunities
  - Sponsor and coordinate workshops in areas of strategic need for research (e.g. CAREER awards)
  - Support team development and coordination
  - Assist in large scale proposal development, site visits, team meetings, program reviews
  - Provide cost share to proposals
Office of Research: Major Responsibilities to the CoE (contd.)

• Liaison activities
  – Office of the Vice President for Research
    • Support limited submission competition process (30+ per year)
    • Represent CoE at Research Administration Meetings
  – Host external entities (companies, labs)
  – Assist faculty in networking with external partners
• Publicize College research activities
• Help with IP related issues
Office of Research: Major Responsibilities to the CoE (contd.)

- Manage and Fund Summer Undergraduate Research Fellowship Program
  - Mission of SURF: To provide a hands-on research experience for undergraduate students that will stimulate their interest in advanced education and possibly in a research career.
**SURF:** An intensive 11-week summer research experience for undergraduates

Largest undergraduate research program at Purdue

**Program benefits for students:**

- Receive pay for research activities
- Mentored by a faculty member and a graduate student
- Attend seminars on professional development including graduate school preparation
- Participate in the SURF Research Symposium
- Network and socialize with other researchers
SURF 2010

- 170 summer participants
  - 20% women, 11% ethnic minority students
  - Average GPA 3.62
- 3 Participating Purdue colleges, 21 schools and departments, 109 professors, 130 graduate mentors