Expanding Global Network: Discovery to Delivery

The United States ranks #1 in innovation. Purdue is preparing for the 21st century global economy. The 21st century is characterized by enormous opportunities, global reach, speed, and knowledge intensity. Our students, faculty and staff are addressing global challenges – global health, global competitiveness, global energy security, global warming, global entrepreneurship. Discovery Park works synergistically with the Office of Vice President for Research, the Purdue academic units including the International Program Office, the Vice Provost for Engagement, the Purdue Research Park, and the Indiana Economic Development Corporation to be an engine for the global economy. Our execution strategy involves working closely with overseas Purdue alumni, global corporations, and local and overseas funding agencies. Purdue’s Discovery Park will catalyze the rapid growth of Indiana’s economy analogously to other university-driven economic development clusters (e.g. Silicon Valley, North Carolina Research Triangle, etc.).

**Discovery Park overarching global goals** are:

- Make Purdue one of the **preferred US institutions for research collaborations** globally.

- **Enhance and maintain** the excellent reputation and **visibility** that Purdue enjoys at all levels globally.

- Provide **global experience** for Purdue faculty, students and staff.

- Define the **21st Century Land Grant University**.

**Examples of Global Activities**

- Facilitate student recruitment by global companies (e.g. internships and employment)
- Provide global experience to students – study abroad and advanced research programs
- Provide global experience to faculty (e.g. sabbaticals)
- Conduct joint research symposiums and projects
- Form global alliances (joint institutes and centers)
- Form corporate sponsorships and partnerships
- Participate in international trade shows (e.g. BIO 2006/2007)
- Conduct professional training programs (e.g. regulatory training for drug manufacturing)
- Contribute to economic development by attracting businesses to Indiana
- Cultivate alumni relations overseas
Specific Examples of Global Activities

Environmental assessment in Azerbaijan
(J. Bickham)

Study abroad entrepreneurship and managing director internship with the Tsinghua University, China
(M. Brzezinski, N. Duval-Couetil, S. Liu, C. Buck and P. Sharma)

Research interaction in life sciences, nanoscience, entrepreneurship with the Monash University, Australia
(A. Rebar and P. Sharma)

Molecular imaging and theragnosis with the Korean Institute of Science and Technology, South Korea
(J. Leary and K. Park)

Bionanotechnology and pharmaceuticals with the Center for Cellular and Molecular Biology, Hyderabad, India
(J. Leary, D. Bergstrom, J. Irudayaraj, P. Sharma, C. Buck)

Research interaction with the Bayero University, Nigeria
(K. Beaver)

Frontiers in applications of carbon nanotubes and graphene with the Jawaharlal Nehru Center for Advanced Scientific Research
(T. Fisher, T. Sands and P. Sharma)

Modeling and simulation of nanowire with the Institute of Microelectronics, Singapore
(M. Lundstrom)

Faculty/student exchange between the Birck Nanotechnology Center and the National Taiwanese University, Taiwan
(L. Chang)

Operations research and healthcare delivery systems in the United States and China
(L. Zhao)

Faculty and students exchange with the Tata Institute of Fundamental Research, Mumbai, India
(P. Sharma, V.J. Davisson, C. Buck, K. Beaver)

Research collaboration in nanophotonics with Siberian Federation University, Russian Federation
(V. Shalaev)

University of Canterbury and Canterbury Economic Development Corporation, New Zealand
(C. Vibbert and A. Rebar)

Strategic planning for launching programs in environmental and ecological research, information technology, and biomedical research with the Qatar University, Qatar
(A. Elmagarmid)

China-US Joint Research Center for Ecosystem and Environmental Change
(J. Bickham and P. Sharma)

PU-Calumet/PU-WL DP research collaboration visit to Hong Kong
(G. Hong and J. Harbor)

cGMP Institute for training with the Peking University
(S. Liu, C. Rutledge, K. Morris)
Electricity generation and transmission planning model for India
(B. Bowen, D. Canchi, P. Preckel, J. Gore, P. Sharma)

Ecohydrologic response of land use changes
(I. Chaubey)

Global Health in Focus: Purdue and Notre Dame
(A. Rebar and others)

Global Corporate Partnerships and Sponsorships
Thermo Fisher Scientific; Infosys Technologies Ltd.; Satyam Computer Services; Tata Consulting Services; Dr. Reddy’s Lab; Wockhardt; Cummins; Zhejiang Hisun Pharmaceutical Co., Ltd; Shasun Chemicals and Drugs Limited