

## e-Enterprise Center

The e-Enterprise Center at Discovery Park (e-Center) was one of four original centers whose operations began in January 2002. The goal of the e-Center is to catalyze growth by using systems technology and engineering in the solution of grand societal challenges.

**Historical Accomplishments:** The e-Center's initial activity focused on developing large scale interdisciplinary and multiple discipline activity and practices of Discovery Park. The e-Center (a) defined the position and hired the first Managing Director, (b) developed the first seed grant program, and (c) organized a pipeline process for systematically seeding, nurturing, and executing large scale activities. e-Center representatives met with Deans and department heads, and conducted forums to identify key Purdue assets for new large scale activity. Externally, e-Center personnel met with Foundations, corporate contacts, and visited program officers to identify opportunities. These activities provided key input concerning investment decisions, including the following examples:

- Provided 20% of e-Center original Lilly Endowment funding for cost share for the Network for Computational Nanotechnology (NCN), which became a flagship project of the Birck Nanotechnology Center. For a several month period, 50% of the e-Center's Managing Director's time was spent helping to grow NCN.
- Defined and developed a portfolio of manufacturing and logistics projects and recruited Professor John Sullivan to help lead this portfolio. This ultimately contributed to the founding of the Center for Advanced Manufacturing (CAM).
- Played a key role in the development of the Pharmaceutical Technology and Education Center (PTEC), e-Center staff filled the original key roles. PTEC ultimately led to the National Institute for Pharmaceutical Technology and Education (NIPTE) and an NSF Engineering Research Center in Structured Organic Composites. PTEC was transferred to CAM after its formation.
- The e-Center Director, Dr. Joseph F. Pekny, starting in November 2003, organized the proposal effort that was funded by the Regenstrief Foundation to found the Regenstrief Center for Healthcare Engineering (RCHE). Dr. Pekny served as the Founding Director of RCHE from January 2005 to February 2006. During the original three year trial period, a majority of e-Center resources were used to grow RCHE. RCHE is now a permanent Discovery Park Center.
- Provided significant support in terms of development and research staff time and cost sharing (\$359,459 with F&A) for the Center for Catalyst Design (CCD). Begun in 2003 with a \$2.4M grant from the Department of Energy, CCD continues today with support from DOE and ExxonMobil.
- Working closely with the Oncological Science Center, the e-Center has helped to seed an activity in Cancer Care Engineering and helped to raise over \$3.5 million in seed funds. This activity closely involves the Indiana University School of Medicine.
- The e-Center was heavily involved in NASA Specialized Center of Research and Training in Advanced Life Support (ALS NSCORT) from December 2002 through September 2006 for total funding of \$6.77M.
- The Purdue Regional Visualization and Analytics Center (PURVAC) was established in January 2006 to assist National Visualization and Analytics Center (NVAC) and the U.S. Department of Homeland Security and is funded by DHS. PURVAC is also supported by both the e-Enterprise (providing over \$69,000 in direct cost sharing in the form of managing director support) and Cyber Center of Purdue's Discovery Park and is closely collaborating with Purdue Homeland Security (PHSI) and Regenstrief Center for Healthcare Engineering (RCHE) efforts.
- Assumed administrative responsibility for Purdue Homeland Security Institute (PHSI) that brings Purdue resources to bear on improving U.S. homeland security. PHSI was established with funding of \$750,000 from the VPR for three years.
- Providing managing director support for the Purdue Institute for Defense Innovation's (PIDI), whose mission is to greatly expand Purdue activity in the Department of Defense research.

**Future Aspirations:** The e-Center is currently focused on the development of the Purdue Homeland Security Institute (PHSI), Center for Energy Systems and Policy (CESP), the Cancer Care Engineering Project (CCE), activity in Global Health, and a Veterans Health Administration Program to found Engineering Research Centers (VERCs) to closely integrate research, education, and practice.