

Discovery Learning Center News

**Purdue University
Discovery Park**



Spring/Fall 2005

Meet Our New Interim Director



We are pleased to announce the appointment of the Discovery Learning Center's new Interim Director, Dr. Beverly Davenport Sypher. Dr. Sypher is also Associate Provost for Special Initiatives and Professor of Communication. Prior to joining the Purdue faculty in 2002, she was a Senior Fellow in the Office of the Provost at Virginia Tech University, Divisional Dean for the Social Sciences at the University of Kansas, and Chair of the Department of Communication at the University of Kentucky. Beverly earned a doctorate in Communication from the University of Michigan in 1981.

She has been recognized for outstanding teaching at the university and national levels and has authored numerous articles and books on organizational and health-related communication. Dr. Sypher has been the principal investigator or co-principal investigator for approximately \$6 million in grants from the U.S. Department of Education to enhance college student learning and numerous corporation and government contracts that examine a wide range of health and work-life issues.

"Discovery Park, and particularly the Learning Center, is evidence of a national trend toward renewed social responsibility on the part of universities," Dr. Sypher said. "In addition to promoting innovations in educational practices for students at all levels, the Discovery Learning Center also wants to concentrate on the learning adults must engage in throughout their lives. Issues of health, workplace productivity, computer literacy and a whole host of lifestyle choices depend upon translating scientific discoveries into usable information. Teaching is what drew me into this line of work. It keeps me focused on our most important work and is a reminder of what I came to the university to do."

Designing a Home

The Discovery Learning Center is moving closer towards becoming a physical reality. With the aid of BSA LifeStructures, DLC is creating a design for state-of-the-art learning research spaces that will be the heart of the building. Plans include completely flexible spaces designed as wet and dry teaching laboratories, large and small classrooms, and collaborative research areas. The emphasis in all of these spaces is on flexibility that allows researchers to configure the space to meet the needs of their research. All spaces will also feature the latest technology to enhance the learning experience and support the research mission. Additionally, the Discovery Learning Center will provide office and meeting space to support collaboration and DLC research project administration. Until that time, the DLC administrative offices will be located in the Burton D. Morgan Center for Entrepreneurship.

Growing

The Learning Center continues to grow adding more than 120 affiliates in the past 6 months. At present, the Learning Center has 440 affiliates representing 66 units at Purdue, businesses (including Lilly, Intel, IBM, Boeing, and Dupont), other Universities (including Harvard, Howard, Texas A & M, University of Florida, and Indiana University), public schools, and community and professional groups. Affiliates receive notification of DLC events and opportunities, grant, seminar, workshop, and project

announcements, and other information that may be of interest. In addition, Purdue affiliates are eligible for DLC aid in project preparation and management and participation in other DLC activities. You can become an affiliate by completing the on-line registration form found on the DLC website (www.purdue.edu/dp/learningcenter).

Discovery Park Undergraduate Research Internships

The Lilly Endowment recently announced a \$25 million gift to Discovery Park. This gift includes a \$2 million endowment to support undergraduate research experiences. The Learning Center is playing a key role in designing and implementing this exciting new program. The Discovery Park Undergraduate Research Internship (DURI) program is designed to involve Purdue undergraduates in the interdisciplinary research environment of Discovery Park. The program will provide opportunities for students to work with faculty affiliated with Discovery Park on cutting edge research projects that involve combining two or more disciplinary strengths (such as Nanoscience and Bioscience or perhaps Information Technology, Business, and Communications). Working closely with faculty, students will experience the excitement, challenge, and power of truly interdisciplinary research in the fast-paced, entrepreneurial environment that is Purdue's Discovery Park. To date, 25 undergraduate students have been paired with 20 research projects for the Fall of 2005. Ultimately, the DURI program hopes to place fifty students each semester (Fall and Spring) in laboratories in Discovery Park. Summer research experiences and grants to support student travel and supplies will be available on a competitive basis. Students may apply on-line at: <http://www.purdue.edu/dp/learningcenter/duri/>. Faculty may submit new student projects at the beginning of 2006. Details will be posted on the DURI web page.



The Burton D. Morgan Center for Entrepreneurship was the site for the DURI Kick-off held September 15, 2005.

This program is intended to stimulate increased undergraduate research opportunities. Students may apply for projects through Monday, November 14th at 5:00p.m. Faculty researchers will receive qualified student applications on November 16th and make their Spring semester selections by December 2nd.

Future Entrepreneurs

The DLC has created and directs the Interns for Indiana (IfI) component of Purdue's Opportunities for Indiana program. Funded by the Lilly Endowment, Inc., this project seeks innovative ways to keep Indiana's college graduates in Indiana. One hundred forty-five students were placed with 69 start-up companies statewide from the Summer of 2004 through the Summer of 2005. The Interns for Indiana program offers students a unique opportunity to learn about the business world through a combination of education and experience.

On August 19, 2005 the Learning Center hosted the *Impact for Indiana* celebration to mark a very successful first year of the IfI program. The event was held at the Buchanan Suites in the Ross Ade Pavilion. Speakers included Dr. Martin C. Jischke and Dr. Patricia R. Miller, Secretary of Commerce for the State of Indiana. All past and present Interns and participating start-up companies from all four campuses were represented at the event.



Martin C. Jischke and Nathan Spitz



Secretary of Commerce Patricia R. Miller speaking with several IfI students

August 19, 2005 *Impact for Indiana* celebration

Taking Nanoscience to the Public

Recent movies, books, and advertising campaigns have brought the term nanoscience to the public. However, few people understand the depth, breadth, potential, and risks associated with this new technology. The Discovery Learning Center is partnering with the College of Agriculture to fund and spearhead a campus wide effort to develop a museum display focused on nanoscience. This 400 square foot display, highlighting research efforts at Purdue University, will open at the Indiana State Museum in February 2006. After a six month run, the exhibit will travel to various other museums in Indiana, the Midwest, and elsewhere.

Database for Teachers

Teacher professional development is widely viewed as a key to excellence in teaching and learning. Colleges, universities, foundations, museums, and other Indiana organizations with an education mandate offer a wide variety of professional development opportunities for K-12 teachers. However, identifying these opportunities has long been serendipitous. To enhance teacher access to information about available professional development opportunities, resources, and other teaching aids, the Discovery Learning Center in collaboration with the College of Science Outreach and the Science Education Foundation of Indiana (SEFI) designed, implemented, and publicized a Science Education Database. This searchable database allows providers to input information about their program or products, and allows teachers to search based on subject matter, grade level, and several other categories. The database is accessible from the Discovery Learning Center webpage (www.purdue.edu/dp) and the SEFI webpage (www.sefi.org).

Annual Seed Grant Competition

The DLC Seed Grant program is intended to stimulate innovation and research in interdisciplinary teaching and learning, encourage implementation tests of new teaching and learning initiatives based on research into discovery-based learning, and develop learning initiatives that build on Discovery Park research programs. Purdue faculty and staff who are DLC affiliates are eligible to apply. Current seed projects awarded for the 2005-06 academic year include:

- Dutta-Bergman, M., Arns, L., & Madhavan, K. Application of advanced 3D visualization techniques to develop bioterror crisis communication training materials, \$18,500.
- Hartman, N., Bertoline, G., & Gilger, J. Developing a virtual spatial visualization assessment instrument, \$18,500.
- Samarapungavan, A., Mohler, J., & HogenEsch, H. IMMUNOWEB: The development of students' scientific reasoning and modeling skills in an electronic learning environment, \$18,301.

Twenty applications were received from 14 different academic departments including one from IUPUI.

Seed grant funds can be used for faculty release time or summer salary, equipment, materials and supplies, graduate student support, conferences, or other costs directly related to the goals of the funded project. Projects are to support activities that lead to grant submission to an external funding agency. The Discovery Learning Center will provide seed grant recipients with assistance in identifying funding opportunities and preparing the resulting proposals. Look for the next seed grant announcement coming in November 2005.

DLC Leadership Team

We would like to thank former DLC Co-Directors, Jon Harbor and Peggy Rowe, for the dedication and hard work it took to get our Center on its feet. Jon and Peggy will continue to serve as part of the DLC Leadership Team.



Jon Harbor



Peggy Rowe

Meet the Staff

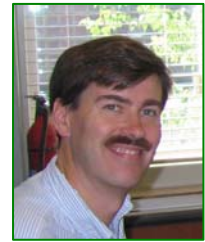


Willie Burgess

Wilella Burgess is the Managing Director of the Discovery Learning Center at Purdue University. She holds degrees in Biology, Earth Sciences, and Ecology from the Pennsylvania State University and has worked as a research scientist in both industry and academia. Over the past 15 years, Ms. Burgess has been instrumental in developing and analyzing the effectiveness of education programs and methodologies aimed at reaching audiences ranging from K-16 to graduate students, professionals, and the general public through a variety of formal and informal venues. Train-the-trainer programs designed by Ms. Burgess have provided teachers, community and industry leaders with content knowledge, pedagogical skills, and self-confidence to successfully implement new programs, modify existing programs, and teach students and/or colleagues. Results from this work have been published in leading education journals.

Randal Batchelor

As Assessment Specialist, Randal Batchelor will coordinate the evaluation process for a broad range of DLC sponsored initiatives. Besides working in the field of assessment for over six years, he has taught history and writing, managed curriculum, and worked in program administration. Randal holds an Ed.D. in Higher-educational Administration from Montana State University and an MA in History from the University of Virginia.



Amy Childress

Amy Childress is an Intern Coordinator for the Discovery Learning Center. She served previously as the Coordinator of Advising for the Krannert School of Management Undergraduate Advising Office. She has also worked in the Agricultural & Biological Engineering Department as a Multimedia Supervisor for educational software development. Amy earned her MBA from Krannert and B.S. Biology/B.A. History from Purdue University. She is currently pursuing a Ph.D. in Higher Education Administration.

Chris Ramsey

Chris Ramsey is the Administrative Assistant for the Learning Center. She came to the Center in May from the NSF Network for Computational Nanotechnology and the NASA Institute for Nanoelectronics and Computing. She brings over 20 years of Purdue experience to her position and has attended Southern Illinois University and Purdue University.



Kirk Smiley

Kirk Smiley is an Assistant Intern Coordinator for the Discovery Learning Center. He is a former IfI intern, a 2005 graduate from Purdue with a B.A. in English and Religious Studies and a B.S. in Management. Kirk is a Steven C. Beering Scholar/Fellow and is currently in the MBA program at Krannert.

Stacy Brown

Stacy Brown is the Business Manager for the Discovery Learning Center. She has been a Business Manager in Discovery Park for 2 years, prior to this she spent 3 ½ years in the Electrical and Computer Engineering Business Office. Stacy earned her Bachelor Degree in Finance from Ball State University.



Jennifer Maxson

Jennifer Maxson is the Learning Center Account Clerk. She recently transferred from the Discovery Park Sponsored Program Services office to join the Discovery Park business office. Jennifer has been at Purdue University for 6 years.

Upcoming Events

The Learning Center will host a reception/poster session showcasing externally and seed grant funded projects, followed by working sessions to initiate technology focused new projects. The reception is planned for Wednesday, December 7, 2005 from 3:00-4:30 in the Venture Cafe (MRGN 102) at the Burton D. Morgan Center for Entrepreneurship entitled "Research on Learning at Purdue." For more information contact Chris Ramsey, 46717 or cramsey@purdue.edu.