



ABe-Notes



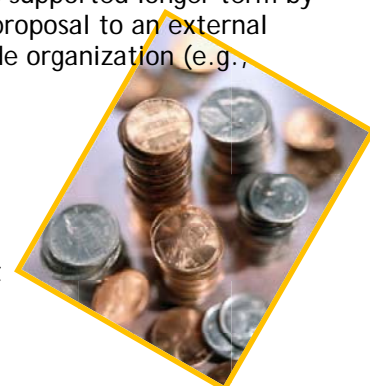
Funding Opportunities

Discovery Park - has initiated a competition for seed grant proposals from Purdue faculty and staff. A total of \$300,000 has been allocated to fund seed grants of up to \$50,000 each for proposals that catalyze new high impact activities at Purdue. This program is not meant to fund complete projects, but rather to provide the necessary support to start new efforts that will be supported longer term by other funding sources. All funded project teams are expected to submit a proposal to an external funding agency through Discovery Park, or to receive support from an outside organization (e.g., company) for continuation of the project effort.

For this competition, the deadlines are as follows:

- Letters of Intent are due Wednesday, January 2.
- Proposals are due Tuesday, January 15.

The guidelines and application process for this competition may be found at <http://www.purdue.edu/research/vpr/funding/dpseedgrants.shtml>.

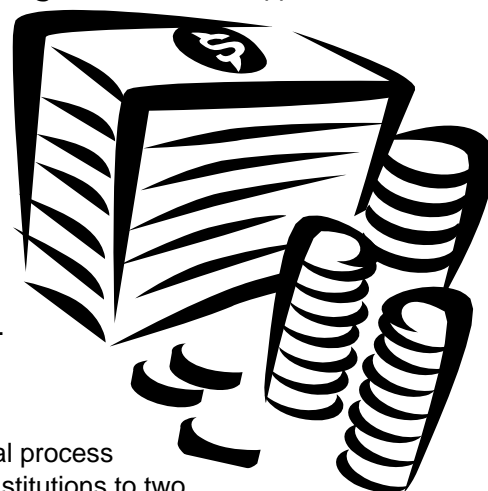


Purdue University and IUPUI - recently agreed to the initiation of a *new* collaborative funding opportunity entitled the Intercampus Applied Research Program (IARP). This program supports collaborative research efforts between faculty at West Lafayette and non-medical school faculty at IUPUI. Specifically, the IARP will support applied, translational research projects and creative activities to accelerate discoveries that have the potential to change people's lives. An expectation is that these awards will lead to increased ability for these teams to develop larger, competitive proposals to federal agencies.

For the IARP, approximately five projects, in the amount of \$50,000 per project, will be funded this year. Tenured, tenure-track, and research faculty from any college or school in West Lafayette are eligible to participate. The Request for Applications and the Application are available at <http://www.purdue.edu/research/vpr/funding/iu-purdue.shtml>. The deadline for receipt of applications is Monday, December 3, 2007.

The Purdue Alumni Association - continues to support the development of junior faculty at Purdue through its Faculty Incentive Grants program. Since July 2004, the Alumni Association has provided start-up funds to faculty members for the initiation of research or professional development projects. In recognition of the creativity and productivity of these faculty members, the Alumni Association will offer five (5) grants in the amount of \$3,000 each for the 2007-08 academic year. Details online: <https://www.purduealum.org/Services/Programs/FacultyIncentiveGrant/tabid/487/Default.aspx>
Application Deadline: November 30, 2007.

International Science and Education (ISE) competitive grants program – The ISE supports research, extension, and teaching activities that will enhance the capabilities of American colleges and universities to conduct international collaborative research, extension and teaching. ISE projects are expected to enhance the international content of curricula; ensure that faculty work beyond the U.S. and bring lessons learned back home; promote international research partnerships; enhance the use and application of foreign technologies in the U.S.; and strengthen the role that colleges and universities play in maintaining U.S. competitiveness. The RFA can be found on the CSREES website at: <http://www.csrees.usda.gov/fo/educationinternationalscience.cfm>. The closing date for this program is January 17, 2008.



The USDA International Science and Education (ISE) - proposal process (http://www.csrees.usda.gov/funding/rfas/intl_science.html) limits institutions to two proposals – to identify the two that will be submitted from Purdue, we will implement the following internal review process:

- Email a two page single space preproposal to Corey Kujawa (ckujawa@purdue.edu) by Friday, Nov. 30.
- The preproposal should include:
 - Justification and motivation of the project
 - Objectives
 - Methods
 - Expected outcomes and impact
 - Partners
- Preproposals will be reviewed by an ad hoc panel of Purdue faculty and administrators
- Those submitting preproposals will be informed by Friday, Dec. 7, whether their proposal will go forward to USDA.

For teams not selected for submission from Purdue, this preproposal process should help avoid unnecessary work and it would allow time to consider submission from partner institutions.

Dr. Phillip E. Nelson Prize - Governor Mitch Daniels recently hosted a luncheon in honor of Dr. Phil Nelson to celebrate his winning the 2007 World Food Prize. The Governor surprised Dr. Nelson when he announced that the State will create the Dr. Phillip E. Nelson Prize to recognize outstanding Hoosier scientists for their unique discoveries, research and innovations. This award will be given annually - for more information visit: http://www.in.gov/rde/xfw/in_pre/hs.xsl/125_12563.htm.



Purdue's Engineer of 2020 - Seed Grant Funding for 2008-2009. The intent of this Seed Grant Program is to provide start-up funding to conduct pilot studies in the areas of the target attribute development. Funding amounts will range from \$40,000-\$50,000 for one year. Electronic submissions can be sent to martinr@purdue.edu or hardcopies send to Associate Dean Mike Harris, attn. Engineer of 2020 Committee, ARMS 3007. Submission Deadline is January 25, 2008.

Grants



Monika Iwantysynova - \$1,000 Travel Grant. "10th Scandinavian International Conference on Fluid Power 2007 - Tampere, Finland.

Marshall Porterfield - \$1,000 Travel Grant. "International Congress of Respiratory Biology (ICRB) - Bonn, Germany.

Bernie Engel - \$6,500. University of Illinois. "A Water Supply and Groundwater Module for the Long-Term Hydrologic Impact Assessment (L-THIA) Model".

Michael Ladisch & Nathan Mosier - \$200,000. Defense Life Sciences, LLC. "TGER Systems".

John Lumkes - \$39,532. Frito-Lay Inc. "Evaluation of Truck and Fleet performance of Biodiesel (B20)".

Dirk Maier, Dennis Buckmaster, Klein Ileleji & Richard Strochine - \$200,000. Indiana State Department of Agriculture. "Processing, Handling, and Utilization of DDGS- an Integrated Ethanol Co-Product Research and Extension Effort".

Parker Hannifin Project Funded - \$66,000 for Smart Seal Phase Two.

Papers



Cho, B.-K., W. Chayaprasert, and R.L. Stroshine - Effects of internal browning and watercore on low field (5.45 MHz) proton magnetic resonance measurements of T2 values of whole apples. Postharvest Biology and Technology 47:81-89.



Haddish-B. N., Ashkan F., Nyquist, C., Haghighi, K., Keshavarzian A. - Mechanism dependent physiologically-based drug absorption and biotransformation simulation tool (Simdot-Abs) for 5-ASA. 2007 AAPS Annual Meeting and Exposition, San Diego, CA, Nov 11-15, 2007. This paper won an outstanding abstract travel award from the Pharmacokinetics, Pharmacodynamics and Drug Metabolism (PPDM) Section of AAPS.

Hoff K., Haddish-B. N., Rickus, J., Haghighi, K. - Feasibility of K⁺ depletion and hypotonic shock method to suppress endocytosis in Caco-2 cell lines. 2007 AAPS Annual Meeting and Exposition, San Diego, CA, Nov 11-15, 2007.

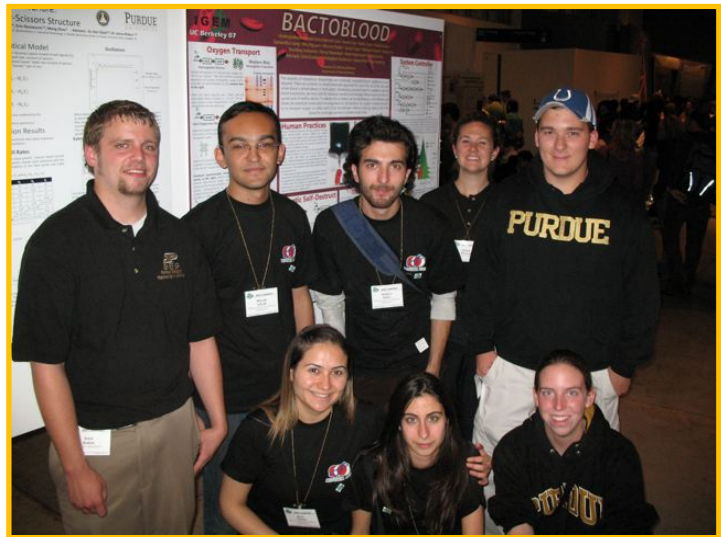
ABE in the News/Awards



Breaking New Ground - Breaking New Ground and the Hazardous Occupations Safety Training in Agriculture Program (HOSTA) presented a display at the 2007 National FFA Convention in Indianapolis on October 24-26, 2007. The display included the Grain Bin Tug-of-War, a John Deere tractor with a Life Essentials lift, BNG and AgrAbility information and resources, and HOSTA information. Bill Field, Paul Jones, Gail Deboy, Steve Swain, Myron McClure, Brian Hoover, all from ABE, along with consultants from BNG staffed the display.

ABET Review - on October 28th through the 30th the ABE department hosted reviewers from the ABET Accreditation section of the American Society for Agricultural and Biological Engineers (ASABE). This is a six-year cycle of accreditation that Purdue pursues for all of its Engineering degrees. Our reviewers met with faculty, staff, and students to ensure that we are meeting our educational objectives and our program outcomes, as well as to ensure that these satisfy the ABET requirements. To better represent our program, the faculty has decided to have two separate degree titles and we are currently working on how best to implement this plan. Many thanks to our faculty, staff, and students who cooperated so freely both with our committee and with our reviewers.

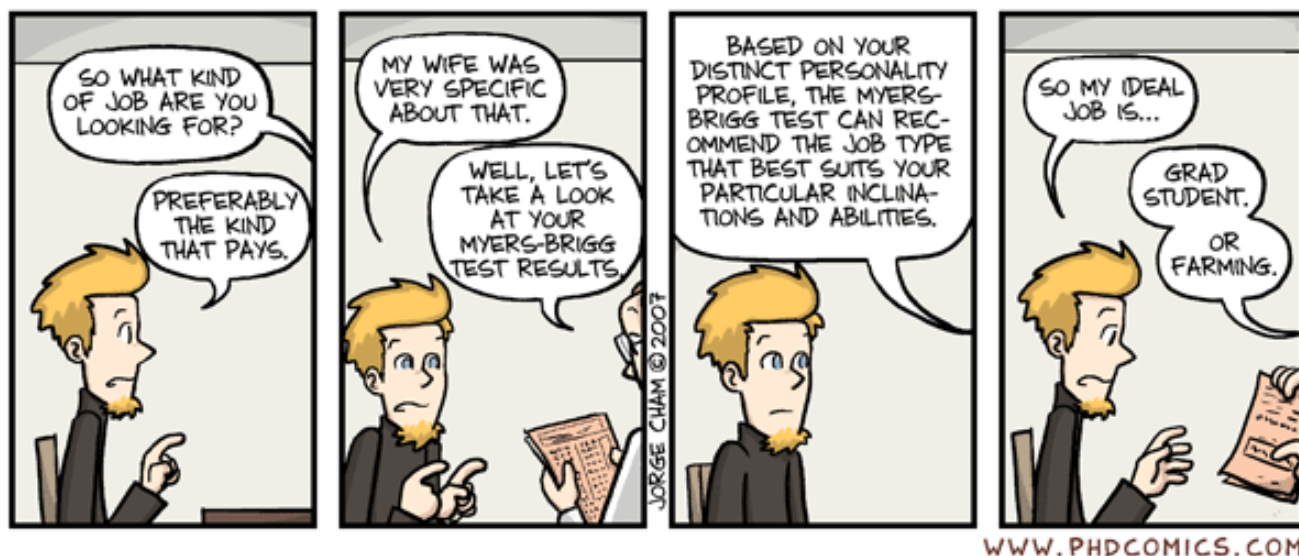
iGEM Team - Purdue was a bronze medalist this year at the International Genetically Engineered Machine Competition, held Nov 3-4 at MIT. Team members are; Craig Barcus (ABE), Dan Shiek (Chemistry/Biochemistry), Janie Stine (ABE), Aaron Young (BME), Erin Rosswurm (ABE), John Shumm (ABE) and Meng Zhou (Chemistry). The team worked on engineering bacteria to participate in bacterial warfare in a "rock-paper-scissors" type structure. The team designed and engineered killing mechanisms in *E. coli* from "standard biological parts" (dna components in the BioBricks database) and mathematically modeled the system using logistic growth and 3 species Lotka-Volterra models. The team accomplished many things this year including: 1) adding modeling to their approach 2) increasing the number of team members and participating departments such as Chemistry 3) becoming affiliated with the national professional organization IBE: Institute of Biological Engineers 4) Interacting with scientists and other students from around the world (*see the team from Turkey in the photo*) at the competition to get good feedback and ideas for next year. Next year the team plans to continue their warfare project. They have a good shot at a gold medal. We want to give extra thanks this year to: Purdue Alumni Association for funding the establishment of the team/project through a PAA Faculty Development Grant, Bindley Bioscience for travel support and laboratory space. Agricultural & Biological Engineering for travel support and Chemistry for support in the form of a scholarship.



Grad Student News

Mark Thomas - recently participated in the Center for the Environment's 1st Annual Ecological Sciences & Engineering Symposium and earned 1st Place in the Poster Presentation for his entry titled "Unintended Consequences of Biofuel Production on Water Quality."

Vimal Mishra - who is working with Dr. Keith Cherkauer attended a Graduate Climate Conference held at the University of Washington. Vimal presented a talk titled "Variation of Surface Soil Moisture and its Implications Under Changing Climatic Conditions". Vimal earned a travel award for this conference.



Student News

Recruitment - Freshmen Lectures - Drs. John Lumkes and Jenna Rickus headed up Freshmen Lectures this year with the help from several students: Rebecca Albrecht, Craig Barcus, Ben Dietrich, Eric Hodgman, Greg Long, Keith Mears, Amy Penner, Emily Raderer, and John Schumm. The result: We had 48 students attend our second information session Thursday November 15th (BFPE - 15; ENRE - 16; MSE - 17). In addition, Drs. Lumkes and Mohtar took 8 prospective students to lunch and visited about our MSE and ENRE programs.

Alumni News

Michael Duncan - has been promoted to International Sales & Marketing Manager with Global Forest Products.

Sympathy

To the family of Edward G. Sheets (ABE BS '63) - who passed away Friday, November 16, 2007. Ed worked for International Harvester from 1965 until 2003. Memorials may be made to the LIVESTRONG-Lance Armstrong Foundation.

FYI

Departmental Photos - In anticipation of a new web page (and new design), we need new (current) pictures of all ABE personnel. A Purdue photographer will be visiting the ABE department on December 5 (**LAST CHANCE**) to take photos in ABE #212 from 8:30 am to noon. These sessions will take 5 minute or less and we ask that you take the time to get your photo updated even if you think the one we are currently using is okay. Please contact Barb Davies to schedule your appointment; she can be reached at 41167 or via email at daviesb@purdue.edu.



IT Networks & Security Incident Response - group is warning the Purdue community about reports of a targeted e-mail scam. The e-mail appears to come from the Purdue Webmail Team and asks users to confirm their e-mail address by responding with their password information. The e-mail also states that if the user does not respond their e-mail account will be deactivated from the database. Rob Stanfield, Identity and Access Management Office director, said "Users should immediately delete the email and to not reply." Stanfield explains that this is a targeted e-mail scam or phishing email that attempts to fraudulently acquire sensitive information by masquerading as an authoritative entity such as the Purdue Webmail Team. Stanfield further recommends that people who have already responded to the e-mail to immediately reset their password. Users can go to the password reset page located at <http://www.purdue.edu/securepurdue>.

Burton D. Morgan Entrepreneurial Competition Callout - The Burton D. Morgan Center for Entrepreneurship and Krannert School of Management are pleased to announce the 21st annual Burton D. Morgan Entrepreneurial Competition. The competition is open to graduate and undergraduate students of Purdue University. The Center invites interested students with a business idea to enter and to attend a call out on: January 8, 2008 or January 9, 2008, MRGN 121, 6:30pm to 8:00pm. Questions will be answered and the registration process will be discussed. Students from all academic disciplines are encouraged to enter. Register at: <http://www.purdue.edu/dp/Entrepreneurship/programs/competition/bdmCompetition>.



Photocopying Changes - In March 2007, the Libraries implemented a new photocopying system. In response to feedback, the original photocopiers were left in commission for an extended period of time to allow remaining balances on copy cards to be spent. Since we are now entering the final stage of the copier replacement throughout the Libraries, the copiers that accept copy cards **will be removed at the end of 2007**. By the beginning of spring semester 2008 all copying must be paid for with the online copy accounts.

Calendar

| December 2007 | |
|---------------|--|
| 8 | Fall Classes End |
| 11 | Faculty/Staff meeting ABE #301 |
| 15 | Fall Semester Ends |
| 24 | University Holiday - Christmas Eve |
| 25 | University Holiday - Christmas |
| 31 | University Holiday - New Year's Eve |
| January 2008 | |
| 1 | University Holiday - New Year's Day |
| 7 | Spring Classes Begin |
| 21 | University Holiday - Martin Luther King, Jr. Day |

