Projects Funded

Bernard Tao - $18,530 - Indiana Soybean Alliance - “Student Soybean New Products Innovation Competition”.

Jenna Rickus - will be receiving one of the first research grants issued by the Indiana Spinal Cord and Brain Injury Research Board. One of the main purposes of the fund is to support research related to the treatment and cure of spinal cord and brain injuries, including acute management, medical complications, rehabilitative techniques and neural recovery. The grants are worth $120,000 each over the course of two years. Although collaborations are encouraged, the research must all be done in Indiana. Project Title: “Bio-inorganic Coatings to Reduce Tissue Reaction in Cortical Neural Prosthesis.” Co-PIs: Jenna Rickus and Kevin Otto.

Michael Ladisch - $48,312 - University of California-Riverside - “Development and Evaluation of Leading Biomass Pretreatment Technologies for Biological conversion of Switchgrass to Ethanol - Amendment 1”.

Bernard Engel, Larry Biehl, Gilbert Rochon and Lawrence Theller - $65,768 - Indiana University-Purdue University at Indianapolis - “FEMA 100 Year Storm Scenario Modeling”.

William Field - $549,376 - from Cooperative State Research Service for the National Agrability Project.

Bernard Tao - $18,118 - Indiana Soybean Alliance - “Biodiesel Refining and Quality”.


Bernard Tao - $100,165 - Indiana Soybean Alliance - “Student Soybean Products Innovation Competition 2008-09”.
Bernard Engel, Larry Biehl, Gilbert Rochon and Lawrence Theller - $38,000 - Indiana University-Purdue University at Indianapolis - “FEMA 100 Year Storm Scenario Modeling”.

Jane Frankenberger - $128,500 - Indiana Department of Environmental Management - “Strengthening Watershed Leaders Capacity to Reduce Nonpoint Source Pollution Program: IDEM 319 Program”.

International Travel Grants

Klein Ileleji - 9th International Conference on Bulk Materials Storage, Handling and Transportation - Callaghan NSW, Australia.

Monika Ivantysynova - Bath Power Transmission and Motion Control Symposium (PTMC) - Bath, UK.


Bernard Tao - International Congress on Biodiesel: Science and Technologies - Vienna, Austria.

Funding Opportunities

PRF IT Grant Program - operates on a July-June fiscal calendar. The plan is to announce the PRF IT awardees by early March, 2009. To meet this timetable, faculty should submit an original and five (5) copies of their PRF IT Grant application and supporting documentation to Lonni Kucik in the International Programs in Agriculture office, AGAD, room 26, on or before 5:00 p.m. Thursday, February 12, 2009. The 2009 Application Form and Award Guidelines can be found at: http://www.purdue.edu/research/vpr/funding/itg.shtml.

The Summer Undergraduate Research Fellowships (SURF) program - is accepting applications for the 2009 summer program. The program dates are May 26 – August 7, 2009. All faculty members are encouraged to consider mentoring an undergraduate student during the summer. Again this year, professors may either recruit individual students for specific projects or post a research project on the SURF website and select from a pool of applicants. More information for faculty is available at - https://engineering.purdue.edu/Engr/Research/SURF/Faculty.

The goal of the SURF program is to provide hands-on research experience for undergraduates that will stimulate their interest in advanced education and possibly in research careers. Students are paid a stipend of $3600 total for 11 weeks, approximately 40 hours per week. This year, with approval from the Engineering Leadership Team, all students will receive a housing benefit which will increase the total per student compensation to $4200. This increase will provide a more equitable situation for all students and make the SURF program more competitive with similar programs around the country. The program continues to use a funding model that splits the per-student cost equally between three entities - the professor, the professor’s school/department, and the professor’s college. For 2009, each entity will provide $1400 in support per participant.
The Department of Defense's (DoD) Environmental Security Technology Certification Program (ESTCP) released its FY 2010 solicitation on January 8, 2009.

**DOD ORGANIZATIONS:** The DoD Call for Proposals requests pre-proposals related to each of the ESTCP focus areas: (1) Environmental Restoration; (2) Munitions Management; (3) Sustainable Infrastructure; and (4) Weapons Systems and Platforms.

**BAA and NON-DOD FEDERAL ORGANIZATIONS:** The Broad Agency Announcement (BAA) and Non-DoD Federal Call for Proposals requests pre-proposals in the following topics only: (1) Remediation of Contaminated Groundwater; (2) In Situ Management of Contaminated Sediments; (3) Characterization, Control, and Treatment of Range Contamination; (4) Military Munitions Detection, Discrimination, and Remediation; and (5) Energy Efficiency and Renewable Energy for DoD Installations.

The due date for all pre-proposals from both the federal and non-federal sectors is Thursday, March 5, 2009. More information about the solicitation, deadlines, and detailed instructions are available on the ESTCP web site under Opportunities: [http://www.estcp.org/opportunities](http://www.estcp.org/opportunities).

**Community of Service Learning Faculty Fellows Grant Program** - this grant is designed for faculty members who have demonstrated a strong commitment to, and desire to, play a leadership role in Service-Learning. Up to five faculty members will be chosen for this sixth round of grants, each grant for $5,000. Applicants must submit a completed proposal to CIE, 730 YONG, on or before Friday, February 20th. For questions, contact Marne Helgesen, Director of the Center for Instructional Excellence at 496-6424 or via email at helgesen@purdue.edu.

**National Science Foundation** - just released their solicitation for the Nanotechnology Undergraduate Education (NUE) in Engineering program. A description of this program states: “This solicitation aims at introducing nanoscale science, engineering, and technology through a variety of interdisciplinary approaches into undergraduate engineering education. The focus of this year’s competition is on nanoscale engineering education with relevance to devices and systems and/or on the societal, ethical, economic and/or environmental issues relevant to nanotechnology.” The full solicitation can be accessed at: [http://www.nsf.gov/pubs/2009/nsf09533/nsf09533.pdf](http://www.nsf.gov/pubs/2009/nsf09533/nsf09533.pdf).

**USDA-CSREES has released the RFA for the Organic Agriculture Research and Extension Initiative** - see [www.csrees.usda.gov/funding/rfas/pdfs/PAS_OREI_RFA.pdf](http://www.csrees.usda.gov/funding/rfas/pdfs/PAS_OREI_RFA.pdf).

**The Emerging Innovations Fund** - provides financial and other support to entrepreneurial members of the Purdue community, including faculty, staff, students and incubating companies in Purdue Parks. The Fund is not a traditional research grant. Instead, it is structured as an early stage investment with a rigorous application/qualification process. Award recipients must meet specific performance-based milestones to ensure progress is being made. The ultimate goal of the Emerging Innovations Fund is to make more Purdue-generated startups “investor ready” and commercially successful. The Emerging Innovation Fund is part of a growing portfolio of support available to the Purdue community to help create, license, protect, promote, and commercialize new technologies that meet market needs and solve global challenges. If you have specific questions about the Fund, how it works or if you would like to explore opportunities to advance your startup, please contact Julie Goonewardene, director, Business Development Office. We also encourage you to visit [www.emerginginnovationsfund.org](http://www.emerginginnovationsfund.org).
Publications & Papers Presented

Geng, T., Bao, N., Gall, O.Z. and Lu, C. - Modulating DNA adsorption on silica beads using an electrical switch. Chemical Communications, accepted.

Clementson, C., K. E. Ileleji and R. L. Stroshine - Particle segregation within a pile of bulk dried distillers grains with soluble (DDGS) formed by gravity-driven discharge and variability of nutrient content. Accepted in December 10, 2008 for Cereal Chemistry, Manuscript Ref# cc-04-08-0069.


ABE News

Don Jones - retired after 32 years of service. A reception was held on Friday, January 16th at the Beck Agricultural Center where many, many friends, family and co-workers stopped by to wish Don the best. You can see a movie of the celebration at https://engineering.purdue.edu/ABE/AboutUs/Photos.

Marshall Porterfield - was recently featured in Purdue Today for helping create a precise biosensor that detects blood glucose and potentially other biological molecules by using hollow structures called single-wall carbon nanotubes anchored to gold-coated “nanocubes” - the full story is available at the ABE web page at www.purdue.edu/ABE.

Monika Ivantysynova - gave a presentation entitled “Prius Without a Battery - An effective way to save fuel and reduce emissions with hydraulic power trains” in the Light Duty Hybrid Vehicle Technology Session of the 2009 SAE Government\Industry meeting held in Washington DC.

John Lumkes - received the first NFPA Education and Technology Foundation Award for the project titled - “Design, Simulation and Control of Hydraulic System Topographies with Integrated Energy Recovery”. In addition to strengthening ties between individual researchers and industry, NFPA’s grant program seeks to stimulate interest in fluid power on campuses across the country and attract some of the best and brightest students to the field. The program also seeks to provide world-class university research on pre-competitive problems and wide interest to the fluid power industry.
**Indiana AgrAbility/Breaking New Ground Outreach Program** - staffed a display at the Fort Wayne Farm Show in Fort Wayne, Indiana. The Fort Wayne Farm Show is a three-day indoor show offering the latest farm technology the industry has to offer, but also the area's largest variety of farm machinery and equipment in one location. Educational seminars were offered daily by Northeastern Indiana Soil and Water Conservation Districts and Purdue Cooperative Extension Services. Attendees came from Indiana, Michigan, and Ohio. In addition to BNG staff and staff from The League, Ned Stoller from the Michigan AgrAbility Project staffed a display which included a John Deere tractor with a Life Essentials lift and a Sta-Fast Hitch, AgrAbility resources, and the BNG tabletop display.

The group also staffed a display at the 2009 Indiana Horticulture Congress in Indianapolis. This conference was sponsored by the Indiana Horticultural Society, the Indiana Vegetable Growers Association, the Indiana Farm Market Association, the Indiana Raw Products Conference, the Indiana Wine Grape Council, the Indiana Winegrower’s Guild, the Hoosier Organic Marketing Education Center for New Crops and Plant Products, and the Purdue University Cooperative Extension Service. The BNG display included resources and a tri-fold tabletop display. Also at the show was BNG partner, Transition Resources, providing information and training resources for migrant farm workers and their employers.

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**Student News**

**Welcome New Graduate Students!**  John Andruch, Jonathan Claussen, Anne Dare, Michael Holland, Zita Holland, Shivangi Kelkar, Chao Ma, Kyle Merrill, Dhananjay Pai and Chia-Ling Wu.

**Boiler Gold Rush** - is looking for students who want to share their enthusiasm about Purdue to apply for a Team Leader position. Team Leaders serve as mentors for groups of 10-15 first-year and transfer students during the Boiler Gold Rush program, August 15-19, 2009. Applicants must be enrolled at Purdue for the spring and fall semesters of 2009 and must have a minimum 2.5 GPA. Applications are due online by 5:00 pm on February 6th. For more information visit: [www.purdue.edu/sats](http://www.purdue.edu/sats) and click on Boiler Gold Rush.

**Student Service Grants** - funds are available to provide grants to students or student organizations for work on community service learning projects. This program is sponsored by the vice provost for engagement, has the goal to expand the community involvement of Purdue students in partnerships with communities, non-profit agencies, schools and governmental bodies. A copy of the Application and Guidelines can be found online at: [www.purdue.edu/engagement/service/sgpcs.shtml](http://www.purdue.edu/engagement/service/sgpcs.shtml). Applications are due for the spring semester projects on or before February 13, 2009.

**Proposal Writing Workshop for Graduate Students** - February 5, 2009 from 7:00 pm to 8:00 pm in the Stewart Center Room #214. Online registration will be available at the Graduate School’s Professional Development Web site at: [www.gradschool.purdue.edu/development](http://www.gradschool.purdue.edu/development).
Jischke Outstanding International Student of the Year - faculty and staff are invited to nominate a graduating senior for this award. Nominees must be graduating seniors who have attained a minimum of a 3.0 graduation index. Nominees must have graduated in December 2008 or be set to graduate in May 2009. Nominations should attest to the student’s scholarship, leadership, campus, character and community service. Community service will receive the greatest emphasis. Nominations are due February 6 and nomination forms and additional information is available at: www.iss.purdue.edu/Resources/NominationForm.pdf.

Helping Students Learn Award - nominations are invited for this award from all faculty, staff, and graduate students who have developed innovative techniques to “help students learn.” You can download more information and a nomination form at - https://engineering.purdue.edu/Intranet/Groups/Administration/AA/Awards/Helping%20Students%20Learn%202009.pdf. Nominations are due no later than Friday, February 13, 2009.

Kyle Williams - was selected to be a member of Next Energy’s Hydraulic Hybrid Vehicles Working Group. As a member, he traveled to Washington DC on February 2, 2009 where he met with industry and research leaders around the nation.

Grand Alternative Grants – Purdue student organizations and campus offices are eligible to apply for grants in order to sponsor substance-free events and activities during this year’s Grand Alternative, which will take place April 19-26. All recognized student organizations in good standing are invited to apply for the mini-grants. Applications are available at – http://www.getinvolved.purdue.edu/Community?action=viewOrgNewsItem&orgID=877&itemID=332 applications are due by February 13.

CCO Ambassador - are you looking for an opportunity to develop your professional and interpersonal skills in a fast-paced, dynamic environment - if so serving as a CCO Ambassador might be for you, an information session is scheduled for February 11th at 6:00 pm in WTHR #172 - application deadline is February 18, 2009.

Looking for a job or internship - be sure to visit our web page at - https://engineering.purdue.edu/ABE/InfoFor/CurrentStudents/job_opportunities.html opportunities are added daily! Another resource is the “Job Opportunity” board across from ABE 204 and ABE 205. Also feel free to contact Micky Creech at mcreech@purdue.edu or stop by her office in ABE #201 with questions or concerns.

Alumni News

Corey Arrick (BS ABE ’00) - is a Senior Process Engineer with Barry-Wehmiller Design Group located in Philadelphia.

Levon Mathews (BS ABE ’81) - was recently promoted to President and Chief Executive Officer of Vantus Bank, a savings bank headquartered in Sioux City, Iowa.

Purdue Alumni Association - keep up to date on all alumni activities - www.purdue.alum.org.
FYI

**Inspiring Families and Building Communities Award** - this award is sponsored by Purdue’s College of Consumer and Family Science and it honors organizations that support or unify families and directly impact the community. Organizations that affect the whole family are encouraged to apply. Any youth program serving both caregivers and children will also be considered for the award. Nominations will be accepted until March 31, 2009. For more information visit the web page at: www.cfs.purdue.edu/pages/news_events/IFBCaward.htm.

**ABE Job Opportunities** - in these tough economic times, employment opportunities have slowed, if you know of any job opportunities or if your company is looking for excellent Purdue ABE candidates, please let me know at mcreech@purdue.edu - if you are aware of any internship opportunities, I would appreciate knowing about them and will post them on our web page at www.purdue.edu/ABE.

**ABE Alumni Update** - We like to keep our alumni updated on upcoming departmental and College events, as well as employment opportunities, so be sure and keep all your information updated by emailing it to me at mcreech@purdue.edu and keep an eye on the ABE web page for opportunities, events and more detailed information.

**Purdue Heroes** - in conjunction with the Office of the Dean of Students, a committee of Purdue faculty and students is working on an initiative to honor members of the Purdue Family. The committee is seeking individuals who have acted with persistence, selflessness and integrity to overcome adversity, achieve an ambitious goal, or positively influence those around them in their lifetime. The committee is asking leaders on campus to nominate past or present students, faculty or staff who meet these criteria and deserve to be recognized for their accomplishments. More information and nomination information can be found at www.purdueheroes.com.

**Purdue has strong web presence** - an international higher education search engine and directory reviewing accredited universities and colleges, placed Purdue sixth among its list of the top 200 institutions.
### February 2009

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<tr>
<td>7</td>
<td>Ag Alumni Fish Fry at the Indiana State Fairgrounds - contact Donya Lester at 494-8593</td>
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<tr>
<td>11-14</td>
<td>National Farm Machinery Show and Tractor Pull - Kentucky Exposition Center - contact Danica Kirkpatrick at 494-9113</td>
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<tr>
<td>13</td>
<td>ABE Faculty Meeting - ABE #301 at 11:30 am</td>
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<td>14</td>
<td>Valentine’s Day</td>
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<td>16</td>
<td>Presidents Day</td>
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### March 2009

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<tr>
<td>6</td>
<td>Distinguished Agriculture Alumni Awards - contact Debbie Claey at 496-7894</td>
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<tr>
<td>8</td>
<td>Daylight Savings Time Begins</td>
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<td>13</td>
<td>ABE Faculty Meeting - ABE #301 at 11:30 am</td>
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<tr>
<td>16</td>
<td>Student Spring Break Begins</td>
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<tr>
<td>21</td>
<td>Student Spring Break Ends</td>
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<tr>
<td>26-28</td>
<td>24th Career Fair and Training Conference - Indianapolis Marriott Downtown - 765-494-9586</td>
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<tr>
<td>27</td>
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### April 2009

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<td>ABE Faculty Meeting - ABE #301 at 11:30 am</td>
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<tr>
<td>18-19</td>
<td>Spring Fest - 10:00 am to 4:00 pm - contact Danica Kirkpatrick at 494-9113</td>
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<td>23</td>
<td>ABE Outstanding Alumni Reception, Senior Poster Contest and ABE Student Banquet</td>
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### May 2009

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