AGRICULTURAL & BIOLOGICAL ENGINEERING

Issue 9 - July 3, 2007

Funding Opportunities

Diversity Faculty Fellow - the time has come again for interested faculty to submit their application for consideration as a 2007-2008 Diversity Faculty Fellow. This past academic year we had one Diversity Faculty Fellow, B. Allen Talbert, professor in YDAE who successful completed the program! Our college can support up to two faculty for the upcoming year. Each fellow will receive a \$2000 grant to revise a course by incorporating a diversity component or develop a new diversity related course. For further information contact Pam Morris. Assistant Dean/Director in the Office of Diversity at 494-8293 or via email at pmorris@purdue.edu.

Note: Application deadline is by 5:00 pm., Friday, August 24, 2007!!!!

Grants – Projects Funded

Chang Lu - \$240,000. 2007 Wallace H. Coulter Foundation Early Career Award in Biomedical Engineering, 8/15/2007-8/14/2009.

Chaubeu Indraiget - \$186,409. "Effectiveness and Optimization of Bmps in Improving Water quality from an Agricultural Watershed.

Monika Ivantysynova - \$71,810. "ERC Industrial Funds in Reference to - ERC for Compact, Clean and Efficient Fluid Power Systems"

Osvaldo Campanella - \$9,700. "Moisture Sorption, Vitamin C, and Antioxidant Capacity Assays".

Fulbright Scholar Program - for Faculty and Professionals is offering lecturing awards in agriculture to Hungary for academic year 2008-09. These awards offer unique opportunities for specialists in a variety of fields of agriculture to offer new courses, conduct collaborative research and experimental field work. Opportunities exist in a broad range of specializations in agriculture, including agronomy, horticulture, plant physiology, viticulture, agricultural economics, ecological farming, and food science (food safety and quality, microbiology, preservation, product development.) For specific information about the Hungary

awards, please contact Muriel Joffe, Ph.D., Senior Program Officer, at the Council for International Exchange of Scholars at mjoffe@cies.ije.org or 202-686-6249 or Benjamin Matheny, Program Associate at bmatheny@cies.iie.org or 202-686-6231. For general information about the Fulbright Scholar Program please visit the CIES Web site at http://www.cies.org/. Applicants may apply online or download application materials from the Web site. Applicants may also request a paper copy or CD Rom from apprequest@cies.iie.org. The deadline for application is August 1, 2007.

Papers

Jose M Garcia, Gary W Krutz, John Lumkes Jr. - "Self propelled water hydralic vehicle" - this paper was presented in Tampere, Finland at the 10th Scandinavian International Conference on Fluid Power on May 21, 2007. It was also published in the conference proceedings, Volume 1, session B1 "water hydraulic systems".



Kouassi, G., Wang, P., Irudayaraj, J., Greevatsan, G. - Detection of prion protein on streptavidinaptamer mediated magnetic and gold-coated magnetic nanoparticles. Biotech Progress (accepted).

Krishnamurthy, K., Demirci, A., and Irudayaraj, J. - Inactivation of Staphylococcus aureus in Milk Using Flow-through Pulsed UV-Light Treatment System (accepted 06/07, J Food Science).

Grinivasulu Ale, B. Naz & L. Bowling - recently received a citation of the paper presented by them at the ASABE conference at Minneapolis last week. The paper is titled; "Mapping of tile drains for simulating the effects of drainage water management" - ASABE Annual Meeting Paper No. 072144. St. Joseph, MI: ASABE.

Seminars/Workshops/Lectures



International Conference of Biorefinery - Beijing, China, October 20 - 23, 2007. In the century, biobased industry producing chemicals and fuels from renewable raw materials will play an important role due to the depletion of petroleum oil, and the environmental and energy problems in the world, and biorefinery will greatly contribute to a sustainable development of the world. In the conference, there will be a forum to discuss a variety of topics and present recent scientific researches. The Social Program will also be scheduled, offering ample opportunities to renew standing friendships and forge new ones from all around the world. In addition, Beijing has four world cultural heritages including the Great Wall, the Summer Palace, the Forbidden City, and the Temple of Heaven. October is the golden time for traveling to Beijing. Participants and their families may take advantage of this opportunity to enjoy the visiting of Beijing and the delicious Chinese food.

ABE in the News/Awards

National Air Emissions Monitoring Study - On June 14th, Professor Al Heber participated in a press conference with EPA Administrator Steven Johnson, officially announcing the kickoff of the National Air Emissions Monitoring study. The event was held at the New York State dairy site for NAEMS, and also featured Curt Gooch (the Cornell University PI for the site) and Dirk Young (the dairy owner).

In addition to touring the facility and discussing the monitoring setup at the site, Professor Heber, Administrator Johnson and EPA Ag Liaison Jon Scholl took calls from several national media outlets, including NPR Radio, Reuters, and Energy and Ag.





One of the highlights of the event was Dr. Johnson's visit inside the on-site instrument shelter itself (one of the trailers that have been parked behind ABE over the last couple of months to be outfitted and customized). Dr. Johnson was very interested in the real-time data on PM concentrations in the exhaust air that were displayed on the data acquisition computer in the instrument shelter. This led to some great discussion about the advantages of dynamic real-time data, the importance of collecting data on all of the other barn operating parameters that are being measured in the study, and what can be learned from pulling all the pieces together.

PAAQL staff members spent about 18 "person-days" at the site during the two weeks prior to Administrator Johnson's visit to assist Cornell University with the site setup. These efforts, including those of Teng Lim, Jiqin Ni, Erin Cortus, and Claude Diehl, helped to make the event a successful national debut for the 24-month monitoring phase of the project.

Dr. Kevin Keener - recently received the Nolan Mitchell Young Extension Workers Award from the American society of Agricultural and Biological Engineers (ASABE) at its annual meeting. This award is named after a crop drying pioneer; Nolan Mitchell, and recognizes "outstanding success in motivating people to acquire knowledge and skills for the understanding of agricultural operations.

Yu C. and J. Irudayaraj - 2007. Single cell identity profiling. Third place award in the Cancer prevention and therapy poster session. May 2007.

Yu, C. and J. Irudayaraj - 2006. Detection and identification of pathogenic microorganisms in mixed cultures by FTIR spectroscopy. Trans of ASABE, 49(5):1623-1632. Honorable mention award at the 2007 ASABE Annual meeting (Minneapolis).

1907-2007



ASABE Fellow - Congratulations to Don Jones who was named an ASABE Fellow at the ASAPE Annual International Meeting. The ASABE Fellow Award honors unusual professional distinction, outstanding and extra-ordinary qualifications and experience in agricultural engineering, and requires 20 years as a member, and 20 years of active practice.

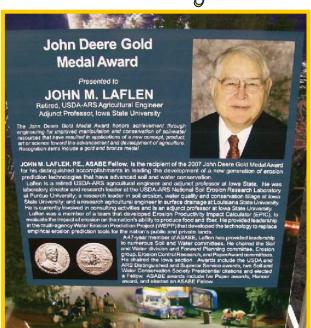
Don was honored for outstanding contributions and achievement in extension, applied research and teaching in the area of agricultural structures and environmental systems. For more than thirty years, Don has specialized in the area of computer applications in agriculture and water resources and management, especially as applied to agricultural livestock, production systems and waste management. Don has served as an extension leader at Purdue and has developed a unique program in rural waste management that has provided service to the

state of Indiana and to the profession.

ASABE 2007 New Holland - Young Researcher Award - Congratulations to Indrajeet Chaubey who received the 2007 New Holland Young Researcher Award, this award is given to an individual under the age of 40 at the time of selection and honors dedicated use of scientific methodology to seek out facts or principles significant to agricultural engineering.

Indrajeet has developed a multidisciplinary and multiinstitutional soil and water research program in the area of nonpoint source pollution and watershed modeling that has enabled numerous state and federal agencies to effectively address complex water quality problems at local, region and state levels.

From Dennis Flanagan John M. Laflen - One of our former adjunct ABE professors, and the



former laboratory director of the National Soil Erosion Research Laboratory (NSERL) was honored last week at the Centennial ASABE Meeting in Minneapolis with the ASABE John Deere Gold Medal Award. Dr. John M. Laflen received this prestigious award from the society for "distinguished achievements in the application of science and art to the soil".

John was an agricultural engineer as well as research leader and laboratory director at the USDA-ARS NSERL from 1987-1995. He was also an adjunct professor of Agricultural Engineering in the Department during that time, and served on several graduate student committees. He retired from USDA-ARS in 1999, but currently holds an adjunct Professor appointment with the Iowa State University Department of Agricultural & Biosystems Engineering. He continues to be active in soil and water conservation engineering consulting, as well as in application and training activities with the Water Erosion Prediction Project (WEPP) model.

Congratulations to Daphne s Chang Lu on the arrival of their daughter -

Radia Wanqiao Lu

Born: 06/17/2007 - Father's Day
6 pounds 3 ounces
Her middle name (Wanqiao) is Chinese and roughly translated means "a winding beautiful tree".



Student News

PGSG (Purdue Graduate Student Government) - PGSG will be hosting a Summer Social from 6:00pm to 8:30pm on July 14 at Pickett Park. This event will allow graduate students, their spouses, and children to cool off, relax, and enjoy some frozen treats. Afterward, the group plans to head to Slayter Hill for a FREE concert under the stars at 9:00pm.

Arun Athmanathan - while in India Arun visited the Bandhavgarh tiger sanctuary. Tiger sightings elsewhere in India are few and difficult to capture, in Bandhavgarh he managed to see approximately 12 tigers in 3 days, and has recorded videos which can be seen at http://youtube.com/profile?user=aathmanathan.

Yulin Lu - current ABE PhD student working with Dr. Mosier, took home first place in the Graduate Student Research Award (GSRA) Competition at the 2007 Annual International ASABE meeting in Minneapolis. Yulin presented work from the MS thesis titled "Biomimetic Catalysis for Hemicellulose Hydrolysis in Corn Stover." Congratulations Yulin!

Fountain Wars - At the Annual ASABE International Meeting held in Minneapolis, MN last week, Purdue competed against four other schools in the Fountain Wars competition. This was Purdue's first ever entry in the competition. ASABE members Anne Dare, Ryan Smith, and Joseph Neukam participated in the competition, and the team won the "Economy of Design" award.

Wat Chayaprasert - At the '07 ASABE meeting, Wat's paper; "Evaluating the effects of weather conditions on the performance of structural fumigation in a flour mill using computational fluid dynamics simulations", received an Information and Electrical Technologies Division Select Paper Award. The award was given in recognition of authorship of an outstanding ASABE annual meeting paper.



Jamie Briggs, Ryan Engleking, Dale Moog & Chad Musser - you may have seen this group recently on Channel 13 after the trailer they were hauling disengaged from the ABE department's Ford Expedition - traffic on I-65 was backed up for several miles but all the students are fine and want to remind everyone to wear their seat belts at all times.

Retiree & Alumni News



Let's Make A Deal! Remember to visit our web page at www.purdue.edu/ABE and fill out the Alumni survey to receive your FREE ABE hat or long sleeve tee shirt.

Rob D. Smith (MS '83, PhD '85) - moved from Zimbabwe to Cape Town, South Africa, where he is working on agricultural development projects.



ABE Hallways to be Painted - Starting July 8th., Butz Painting Services will begin painting the hallways and stairwells of the ABE building. The painters are planning to work 7-5 Monday-Friday.

The project will start with painting the hallway next phase will be to apply a primer coat to and stairwells. This will be followed by 2 applications. The last phase will be to hallway side of the door frames on each project is to be completed by August likely be limited access to the student offices and Faculty offices being spray painted.

ceilings. The the hallways topcoat paint the office. The 1st. There will computer labs, Grad while the ceilings are

The issue of fumes and odor will be dealt with as needed. The plan is to use ventilation fans to vent the fumes out of the building. The strongest odor will come from the primer coat. Anyone with allergies, asthma or a sensitivity to paint fumes should contact Scott Brand at brand@purdue.edu or 494-1218 about special considerations during the project.

Purdue Libraries - Purdue University along with all members of the Committee on Institutional Cooperation (CIC) has entered into an agreement with Google, Inc., to digitize the most distinctive collections across all 12 member libraries -- as many as 10 million volumes over the next six years. This agreement nearly doubles the number of universities participating in the Google Book Search project - http://books.google.com/googlebooks/partners.html.



The CIC is a consortium of 12 research universities: University of Chicago, University of Illinois, Indiana University, University of Iowa, University of Michigan, Michigan State University, University of Minnesota, Northwestern University, Ohio State University, Pennsylvania State University, Purdue University and the University of Wisconsin - Madison.

This collaborative approach will bring together the holdings of some of the world's largest libraries into one massive digital resource. This initiative is an important step to preserve and stabilize the libraries' legacy collections, providing both broader and more in-depth access to historically significant print resources.

OnePurdue Human Resources & Payroll Implementation - The first OnePurdue biweekly payroll will be disbursed on July 3, generating more than 13,000 biweekly pays and on-line salary statements in the process. July 31 will bring the first monthly payroll for another 13,000 employees.



From the beginning, the OnePurdue project team has focused on meeting the needs of Purdue's schools, colleges and departments. Building on the foundation of the Financial System modules released in February, the new HR and payroll applications now going into production will provide an unparalleled level of integration for the University's business systems and processes.

The release of this latest SAP component, formally referred to as Human Capital Management (HCM), marks the culmination of considerable effort. These technology and business application transitions pose a significant challenge for the entire Purdue organization. A robust user support network has been established to assist in facilitating the adoption of these changes. As questions or issues arise, you are encouraged to contact any of these user support resources. You can contact your unit's business office or payroll staff. Online support is available via the "Get Help" button on OnePurdue's home page www.purdue.edu/onepurdue). And, the OnePurdue Support Center can answer many of your questions about OnePurdue; contact it at 765-494-6000 or onephelp@purdue.edu.

Summer Construction - for summer campus construction visit the web site at http://www.purdue.edu/physicalfacilities/campusconstruction.

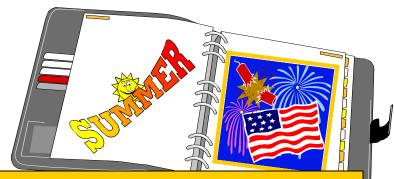
ABE Department - No parking will be allowed behind the ABE building due to masonry repairs, this restriction will be in effect until August 15.

Electrical Utilities Project - Contractors will be working in and around the manholes located along Oval Drive, installing a small section of ductbank north of Oval Drive, and performing some preliminary work at Stewart Center in preparation for planned vault upgrades this winter.

On Oval Drive, contractors will move from manhole to manhole throughout the duration of the project. The road will remain open, although traffic will be routed around areas where the contractors are working. Short sections of sidewalk may need to be closed temporarily, and some parking spots will be relocated while construction takes place in each area. Vehicles and pedestrians will be directed with the appropriate signage.

At Stewart Center, a short section of underground conduit will be installed across Marstellar St. on the west side of Stewart. Any necessary lane closures will be brief, and traffic will be re-routed accordingly. Work will also be performed at the electrical vault below the Stewart Center loading dock. The loading dock will remain accessible during construction. The expected completion date for this phase of the project is August 17, 2007. A map of the area is available at: http://www.purdue.edu/physicalfacilities/pdf/ductbank_ph2.pdf.





<u>Calendar</u>

July 2007	
4	University Holiday
16	Indiana Black Expo Children's Day – contact D. Kirkpatrick at 494-9113
17	Agronomy Turf Field Day at the Daniels Center - contact J. Biehl at 494-8039
20	Purdue Day at the Elkhart County Fair - contact D. Kirkpatrick at 494-9113
August 2007	
2-3	New Faculty Tour to Southern Indiana - contact D. Claeys at 494-7894
8-19	Indiana State Fair - contact D. Kirkpatrick at 494-9113
14	Faculty Retreat to prepare for CSREES Fall 2008 Review (may be some ABET too) -
	location to be determined
15	Purdue Day at the State Fair - contact D. Kirkpatrick at 494-9113
15	Dave Petritz Retirement Celebration in the Hospitality Tents near Gate 12 on the
	Indiana State Fairgrounds.
21	Annual College of Agriculture Ice Cream Social at 6:00 pm on the lawn in front of Lilly
20.20	Hall - contact T. Egger at 494-8470
28-30	,
30	ABE Welcome Back Picnic
September	
1	Purdue Football - vs Toledo (Away Game)
	University Holiday
6-8	Farm World Expo in Terre Haute, Indiana - contact D. Kirkpatrick at 494-9113 Purdue Football - vs Eastern Illinois (Home Game)
15	, , ,
18-20	
22	Purdue Football - vs Minnesota (Away Game)
29	i f
October 2007	
	College of Agriculture Career Fair - PMU - contact L. Barber at 494-8470
6	Purdue Football - vs Ohio State (Home Game)
7	,
13	Purdue Football - vs Michigan (Away Game)
20	Purdue Football - vs Iowa (Hall of Fame Weekend) - (Home Game)
24-27	
27	Purdue Football - vs Northwestern (Homecoming/Varsity P Club Weekend) - (Home
	Game)
November	
3	Purdue Football - vs Penn State (Away Game)
10	Purdue Football - vs Michigan State (Home Game)
14	
16-17 17	Agronomy Centennial Celebration at the Beck Center - contact K. Delp at 494-6586 Purdue Football - vs Indiana (Away Game)
17	rui uue i ootbatt - vs iiiulalla (Away Gallie)