

AGRICULTURAL & BIOLOGICAL ENGINEERING

Issue 6 – May 2, 2007

Funding Opportunities

CSREES Announces the Availability of Grant Funds and Requests Applications for the Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants

Program - closing date: June 1, 2007. Funds available: \$3.5 million. Submission method: Electronic applications through www.grants.gov. Soliciting applications for: (1) Fellowships to train students for Master of Science and doctoral degrees in food and agricultural sciences in the Targeted Expertise Shortage Areas, and (2) for Special International Study or Thesis/Dissertation Research Travel Allowances (IRTA) for eligible USDA National Needs Fellows. See Program Brochure on the Internet at:

http://www.csrees.usda.gov/about/offices/pdfs/natl_needs.pdf.

NIH Director's New Innovator Award - created this year, addresses two important goals: stimulating highly innovative research and supporting promising new investigators. New investigators may have exceptionally innovative research ideas, but not the required preliminary data to fare well in the traditional peer review system. As part of its commitment to increasing the success of new investigators, NIH has created the NIH Director's New Innovator Award to support exceptionally creative new investigators who propose highly innovative approaches that have the potential to produce an unusually high impact. The New Innovator Award program complements the more traditional R01 mechanism, which continues to be the primary source of funding for new investigators. Total funding available for this five-year program is at least \$40 million for the five-year period. It is anticipated that at least 14 awards will be made. For more information visit: http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-07-009.html.

Spring Grants for Study Abroad & International Learning - The Office of International Programs is pleased to announce the Spring 2007 grant competition for development of study abroad courses for Purdue students on the West Lafayette campus. This program will provide awards to individual faculty and groups of interdisciplinary faculty for the development of study abroad components for existing and/or new courses. Awards are intended as seed money, and will generally be in the range of \$5000 - \$7000. More detailed information is available at:

http://www.purdue.edu/elist39/docs/RFPSpring2007SAlLgrants.rtf.

Organization for Economic and Cooperation Development (OECD) - is once again funding travel fellowships between member countries and workshop sponsorships related to OECD themes (Natural Resources Challenge; Sustainability in Practice and The Food Chain). These awards are under the "Biological Resource Management for Sustainable Agricultural Systems" program. Details of the program are available at www.oecd.org/agr/prog.

The OECD sponsors travel fellowships for Ph.D. scientists (or equivalent) between 26 member countries (Austria, Australia, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, The Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, United Kingdom and United States). The average fellowship is for about ten weeks, but the range is from 2 to 26 weeks. A 5-year period is necessary between grants to the same scientist. The individuals must have a permanent position or similar post in a home laboratory to return to after the fellowship (i.e., this is not a short-term postdoc program). It is worth noting that the program is generally intended to help younger scientists gain international experience. Senior scientists are not discouraged from applying, but should recognize the need to prepare a strong application in that the program has been sponsoring fellowships for over 25 years. Approval is based largely on the scientific merit of the proposal. Emphasis is also placed on cross-discipline exchanges that strengthen relations between the scientific community and communities in general. A letter of invitation from the host country must accompany applications. Fellowships will be awarded annually through 2009 - the deadline for 2008 fellowships is September 30, 2007. Individuals receiving OECD fellowships within the past five years are not eligible. Travel for 2008 fellowship recipients cannot begin until February 15 and must be initiated by December 15, 2008 at the latest.

For questions, contact Dr. Jim Schepers (jschepers1@unl.edu or 402-472-1513), who is the national correspondent for the U.S. and one of the scientific coordinators through 2008. You can also contact Dr. John Sadler (John.Sadler@ARS.USDA.GOV) who began a term as scientific coordinator in 2007.

Papers

NCR-SARE - call for Research & Education preproposals. The call is posted on the NCR-SARE website at - http://ncr.sare.org. Potential applicants can also contact the NCR-SARE office in Minnesota at 612-626-3113 or email: ncrsare@umn.edu for more information. If someone is interested in submitting a preproposal on the topic of bioenergy, the NCR-SARE has a position paper on their website that should help potential applicants see the kinds of things that the NCR-SARE are interested in funding. Preproposals are due in the Minnesota NCR-SARE office by 4:30 pm, June 19, 2007.

Q. Padalkar, J. Zhao, K. Stuart, A. Panitch, J. Rickus, L. Stanciu - Paper accepted for publication - Preparation of Biomolecule Gel Matrices for Electron Microscopy Ultramicroscopy (2007) in press.

Keith Harmeyer - Keith's paper titled "Embedded Sensors in Rubber and Other Polymer Components" has been accepted for publication in Strain.

Seminars/Workshops/Lectures

International Congress on Biotechnology in the Pulp & Paper Industry - June 10-14, 2007 in Madison, Wisconsin. The 10th annual event will be the premier event this year for papers on biorefining, bioconversion and biopulping for the recovery of fuels, chemicals and fibers. For more information and application visit the web site at: http://www.bact.wisc.edu/ICBPPI 2007/speakers.htm.

FIFTH G. A. LEONARDS LECTURE - The Role of Geotechnics in Supplying Future Energy Needs - Dr. Suzanne Lacasse Director, Norwegian Geotechnical Institute Oslo, Norway. May 7th Stewart Center Room #206 beginning at 4:00 pm.

This lecture will focus on: engineering more cost-effective, yet technologically improved and safer, solutions, encouraging innovation and preserving the environment. The examples will illustrate that the profession needs, more than before, to act proactively in encouraging dialogue among client, designer, consultant, contractor and scientist, to include automatically the environmental component and to integrate hazard and risk assessment in the decision-making for the selection of optimum solutions. Sponsored by - Purdue Geotechnical Society, Purdue School of Civil Engineering and Purdue University chapter of Sigma Xi.



ABE in the News



SpringFest - I would like to thank everyone for volunteering their time at Springfest 2007! Even though the weather did not cooperate with us this year, I think everyone had a good time. (At least we now know that everyone can fit under the tent when necessary!)

I would like to thank Isaac Serbin for joining us this year! His banjo



picking helped make the weather a little more bearable! We were also joined by the Recreational Fishing Club and we hope they come back next year. Thanks to Don Fultz for bringing his 1953 Cockshutt tractor for display.



Thanks to Alpha Mu for the pork and buffalo burgers, Alpha Epsilon for the sodas and water, and the BFPE Club for the bake sale goodies.

Thanks to the Breaking New Ground program for their display and also the coloring books for the tractor obstacle course. Thanks to Micky Creech and Dirk Maier for braving the elements and helping those who came through on the tractors! Thanks to Al Heber and Tammy Lee and their group for the popular "sniffer table". The face painting was once again a hit and I would like to thank Anne Maier, Catherine Cantley, JD McClurkin, and Carol Sikler for helping out! Thanks to Mack Strickland, the ASM 570 class, and the ASM Club for their playhouse construction. The playhouse question this year was "How many ABE travel mugs will fit in one playhouse?" The winner is yet to be determined...

Thanks to the following groups and individuals who volunteered: Alpha Epsilon, Alpha Mu, ASM Club, ASM 570, BFPE Club, Recreational Fishing Club, Majdi Abou-Najm, Lindsay Birt, Scott Brand, Kayla Brewer, Dennis Buckmaster, Carlos Campabadal, Catherine Cantley, Elizabeth Casey, Micky Creech, Barb Davies, Larry Davies, Rebecca Davis, Bernie Engel, Dan Ess, Quincy Ess, Bill Field, Don Fultz, Margaret Gitau, Carol Glotzbach, Yvonne Hardebeck, Stan Harlow, Denise Heath, Al Heber, Brian Hoover, Paul Jones, Tammy Lee, Anne Maier, Dirk Maier, JD McClurkin, Becky Peer, Isaac Serbin, Cami Sikler, Carol Sikler, Mack Strickland, Steve Swain, Dan Taylor, Larry Theller, Mark Thomas, Kaiying Wang and Garry Williams.

THANKS AGAIN TO EVERYONE!! I really appreciate your hard work. If you have ideas for Springfest 2008, please let me know!

Gaining Ground on Arthritis - There will be a premier showing of the new DVD titled "Gaining Ground on Arthritis" on May 11, 2007 at 6:00 pm at the Rossville Presbyterian Church on St. Rd. 26. This educational DVD is a joint effort between the BNG staff, Ag Communications, and the Arthritis Foundation. (You will recognize a few faces.) The evening will begin with a pork dinner following by the film showing and an autograph opportunity. The cost for dinner is \$10.00 with all proceeds going to the Arthritis Foundation. Call Denise Heath at 494-6577 by May 7th to make a reservation.



Biofuels - two groups of Southwestern middle school students toured some of our "Biofuels" areas in April. Dennis Buckmaster, Nate Mosier, Clairmont Clementson, and Cedric Ogden demonstrated various areas.



Student News

Indiana Virtual Job Fair - the virtual fair is an event that offers employers and job seekers the opportunity to connect with career opportunities that will allow them to be successful. The virtual fair will close at midnight on May 6th - the fair is FREE for all students and alumni. For more information visit https://asp.symplicity.com/indianavirtualfair.

Amy Penner - was recently selected as the Student Responder for Graduation and will be speaking at the Engineering/Education/Vet Graduation on Saturday, May 12th at 9:30 am.

Alpha Mu - hosted their annual "End of Spring" cookout on April 26th - Mack Strickland grilled hamburgers for the group.



The 17th Annual Emily Mauzy Vogel Sophomore Leadership

Development Conference (EMV) - this conference is for outstanding students who will be *sophomores* in the fall and allows them to attend a leadership experience on September 14 and 15, 2007 at Camp Tecumseh located in Brookston, Indiana. Sponsored by the Office of the Dean of Students, this conference is an intensive overnight program involving team-building, mobile initiatives, personal development, and networking. University faculty and staff as well as successful leaders and national speakers from outside the Purdue community will be presenting on a variety of topics. In the past, programs included topics such as diversity, problem solving, ethics, and student leadership at Purdue. This conference has played an instrumental role in the personal growth of many young leaders and subsequently their involvement on campus. I encourage you to nominate your students.

The conference is made possible by a generous gift for leadership development from the late Robert and Ruth Mauzy, Purdue alumni, in honor of their late daughter and Purdue alumna, Emily Mauzy Vogel, for whom the conference is named. Each student who participates will pay a registration of \$20. Included in this nominal fee are transportation, four meals, conference materials, a t-shirt, and overnight lodging. Nominated students will receive an invitation to attend the conference. Space at the conference is limited so students are accepted on a first-come basis. Nominations of students from diverse backgrounds and interests are welcomed and highly encouraged. If you have any questions about the conference or wish to nominate students, please send them to Shelly Dunk at sdunk@purdue.edu or via campus mail at ODOS/SCHL 250 or call 494-1232. Nominations must contain the student's name and e-mail address and be submitted by Friday, May 4th. You can find more information and a nomination form online at

http://www.purdue.edu/odos/sao/leadership/programs/emilymauzy.htm.

ABE Outstanding Graduate Student Awards -



Yulin Lu - received the top score in the ASABE graduate student research competition and will be present the paper at the oral competition in Minneapolis - Good Luck!

Bereket Araya - placed in the top four in the ASABE Graduate Student Research Award written competition!

 $Di \ Wu$ - received his College of Agriculture "Leadership Development Certificate" on April 26th at a ceremony in the Pfendler Gallery, his coach is Assistant Professor Klein Ileleji.



National Society of Black Engineers Annual International Conference - ABE's Lindsay Birt and Clairmont Clementson were involved in the recruitment efforts in Columbus, Ohio.



Chad Cepeda - The Colleges of Science, Agriculture, Engineering, and Technology, along with the College of Science Student Council successfully hosted the Undergraduate Research and Poster Symposium on April 4th, 2007. This event was open to any undergraduate student, and was held in

the North and South Ballrooms of the Purdue Memorial Union. Chad's poster displayed a summary of the research he had been doing under Dr. Jenna Rickus this year. The project was to begin the initial development for a GABA molecular probe sensor. GABA is a neural inhibitor within the brain. Chad was testing the functionality of a fluorescent dye to be used to detect concentrations of GABA. Also, he was working on the chemistry for the creation of a silica gel microenvironment. With future development, a probe sensor for the molecule could help give insight into many neurological disorders. **Great Job!**



2007 Outstanding Alumni Award Recipients -

Del Bottcher (ABE PhD. '78) - President, Soil & Water Engineering Technology, Inc. Gainesville, Florida.

Jason Shonk (Ag Mech B.S. '87 ABE M.S. '90) - Product Evaluation Manager for North American Crop Harvesting, CNH, Global, New Holland, Pennsylvania.

Ernest Streicher (ABE M.S. '83) - Manager of Electronic Component Engineering, John Deere, Waterloo, Iowa.

Ed Vondell (ABE BS '85) - Director of Product Engineering & Quality, DaimlerChrysler, Mexico City, Mexico.

<u>Undergraduate Scholarship & Award Recipients</u> -

Agricultural and Biological Engineering Scholarships - Robert Gordon, Wyatt Roth, Jessica Widjaja, Alice Wilson, Di Wu

ADM Scholarships - Ben Alyea, Kyle Draper, Beau Froderman, Ken Gibbs, Matt Gillespie, Seth Lawrence, Dwight Ludwig, Bill McQuinn, Wade Miller, Scott Riggins

Bart and Karen Nelson Scholarship - Jeramy Simpson

Bridgestone/Firestone Scholarship - Katie Jones, Ryan Smith, Matthew Wolf

Caterpillar Scholarships - Garret Clark, Joe Dynes, Clark Jordan, Alex Mehl, Lucas Powlen, Peter Schmitt

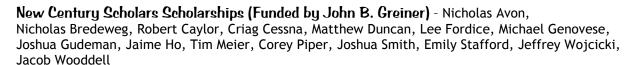
Clarence B. Richey Scholarship - Eric O'Farrell

Don Bline Memorial Scholarships - David Bittner, Eric Kaiser

GEAPS Scholarship - Wade Miller

G.W. Krutz Scholarships - James Bartlett, Matthew Londergan, Michael McCoy, Joseph Neukam, John Schildmier

Larry & Lola Huggins Scholarships - Kristen Gill, Erin Rosswurm



Parker Hannifin Scholarships - Zach Dougherty, Dustin Lindahl, Evan Schlegelmilch, Isaac Serbin, Kristi Sheldon, Evan Steele

Matthew & Lesa Reynolds Scholarships - Nicholas Avon, Danielle Carpenter, Krista Eakins, Joshua Gudeman, Jaime Ho, Brittany Phillips, Jeffrey Wojcicki

Reynolds Field of Dreams Scholarships - Ruth Pinto, Jessica Sloan

Spillman ABE Scholarships - Kathryn Hoff, Leonard Kim

Purdue Student Engineering Foundation Outstanding Senior - John Mahrenholz

2006-2007 Outstanding Department Students - Senior: Chelsea Mohler, Junior: John Schumm, Sophomore: Erin Rosswurm, Freshman: Jaime Ho



Graduate Student Recognition and Awards -

Magoon Award Honoree - Brian Hoover

Celebration of Graduate Student Teaching Honoree - Clifford Racz

Purdue Student Engineering Foundation Outstanding Graduate Student - Mark Thomas

ABE Outstanding Graduate Student M.S. - John Koehler

ABE Outstanding Graduate Student Ph.D - Majdi Abou Najm

Andrews Fellowship - Mark Batdorff

Special Initiatives Fellowship - Majdi Abou Najm

Purdue Doctoral Fellowship - Lindsay Birt, Cedric Ogden

Lynn Graduate Fellowship - Vimal Mishra

Ross Fellowships - Thomas Cservenak, Timu Gallien, Richard Klop, Janie McClurkin

USDA National Needs Fellowship - Jessica Sharp

NSF Fellowships - Elizabeth Casey, Janie McClurkin







2006-2007 Outstanding Department Teacher - Agriculture
Don Jones

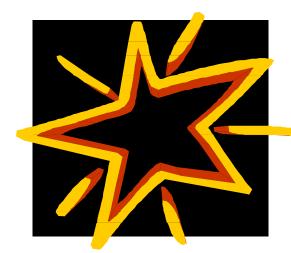
2006-2007 Outstanding Department Teacher - Engineering
Rabi Mohtar

2006-2007 Outstanding Department Counselor
Mack Strickland

2006-2007 Outstanding Graduate Educator
Ganesan Narsimhan

Purdue University Faculty Scholar - Osvaldo Campanella

Major Research Initiatives - Al Heber, Monika Ivantysynova











"Piled Higher and Deeper" by Jorge Cham

WWW.PHDCOMICS.COM

Faculty & Staff News

Congratulations

Rabi Mohtar - recently visited the University of Agricultural Sciences in Bangalore - which included discussions with their Vice Chancellor, deans, directors, and department heads. Rabi along with several other professors discussed specific areas of their interest - water, sustainability and environmental issues, biotechnology/molecular biology, biofuels including ethanol/biodiesel, sandwich graduate programs; value added endeavors and economic development. In the realm of biofuels, the state of Karnataka is investing significantly in each of three districts to enhance production of two species of oil bearing shrubs/trees (Jatropha, a new world species, and Pongamia).

Rabi and several of the group attended the water resource management workshop to develop the proposed AKI research and also to develop an international graduate program. There were representatives from Iowa State, Cornell, Illinois, and several Indian institutions. The focus is not only on the technical aspects of water, but also the policy, political, sociological, and economic issues. Rabi was in charge of setting the framework for the graduate program, and he did an outstanding job.

Jane Frankenberger - congratulations on being promoted to full professor.

Scott Brand - congratulations on his recent promotion to Rank 5.

Retiree & Alumni News

Brandon Loffus (ABE BQ '04) - has relocated to Georgia and now works for ZF Industries as a Project Manager for the Off Highway division.

Dave Smith (ABE BS '67 ABE MS '69) - has recently retired from Deere and Company. Dave has been an excellent supporter of ASABE and the ABE department at Purdue University and has helped with the ABET advisory board and freshman recruiting.

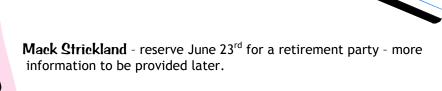


FYI

Purdue Phising Email - receiving Purdue emails about Purdue Research emails ask you to click on article. This is a phishing username and password, do to go directly to information and/or news.

it has been reported that employees are that look official and contain information Park or general news about Purdue, these links in the email to go to the mentioned scam to get your Purdue career account not provide that information - it is better www.purdue.edu to get any

Clerical and Service Staff Advisory Committee (CSSAC) - Spring is the time when the Clerical and Service Staff Advisory Committee (CSSAC) conducts its annual membership drive. This year, CSSAC is seeking candidates for all four districts on the West Lafayette campus to fill a total of seven vacancies. CSSAC will be sending an application to West Lafayette campus clerical and service staff in these districts asking them to complete and return the form no later than May 25, 2007. The CSSAC Membership Subcommittee will then review each application and interview candidates who best fit the needs of the Committee. Successful candidates will be appointed and begin their terms in September 2007. Members serve a three-year term with approximately one-third of the membership replaced annually.





<u>Calendar</u>

2-3 Pioneering Biotechnology Forum at the Bindley Bioscience Center - contact Kathy Beaver at kbeaver@purdue.edu 3 Secretary's Day 9 Faculty/Staff Meeting - 11:30 am - ABE #301 13 Purdue Agriculture Commencement Exercises at 9:30 am, Elliott Hall of Music. Reception to follow in he Ross-Ade Pavilion - contact D. Lester at 494-8593 16 Spring Fling June 2007 13-15 4-H Science Workshop - contact C. Rusk at 494-8427 25-27 4-H Youth Round-up - contact C. Broady at 494-8435 July 2007
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July 2007
August 2007
8-19 Indiana State Fair - contact D. Kirkpatrick at 494-9113
28-30 Farm Progress Show in Decatur, Illinois - contact D. Kirkpatrick at 494-9113
September 2007
6-8 Farm World Expo in Terre Haute, Indiana - contact D. Kirkpatrick at 494-9113
15 Family Day - contact J. Alexander at 494-8480
18-20 Ohio State Farm Science Review in London, Ohio - contact D. Kirkpatrick at 494-9113
October 2007
27 Purdue Homecoming
November 2007
16-17 Agronomy Centennial Celebration at the Beck Center - contact K. Delp at 494-6586