The Weekly News

August 29, 2011

UPCOMING MEETINGS
Monday, August 29 **TODAY**
• EAS Faculty Mini Retreat, CIVL 3201 (11:30 a.m.)

WELCOME BACK PICNIC
Please join us on Tuesday, September 6, from 4:00 to 6:30 p.m. on the Civil Patio for a welcome back picnic. Dinner will be provided. Please bring a dessert to share.

EAS ALUMNI AND FRIENDS RECEPTIONS!
SEG: Monday, September 19th in San Antonio, TX (flyer)
GSA: Monday, October 10th in Minneapolis, MN (flyer)

RECENT PRESENTATIONS
Gabe Bowen gave two presentations at the Goldschmidt conference in Prague (8/15 – 8/19): “Impacts and feedbacks: Are the PETM and Eocene hyperthermals relevant to future global change?” (invited keynote), and “IsoMAP: A web-GIS workspace for modeling isotope ratios in the environment”

PROVOST FELLOW FOR UNDERGRADUATE RESEARCH
EAS associate professor Greg Michalski has been selected as the Provost Fellow for Undergraduate Research. Professor Michalski will be charged with developing a University-wide plan for making undergraduate research a part of Purdue’s educational mission and culture. He will coordinate with the Vice President for Research Richard O. Buckius, interim Associate Provost of Purdue’s new Honors College, Dennis Savaiano, and the Director of the Discovery Learning Research Center, Gabriela Weaver. His goal is to make undergraduate research at Purdue the best program of any tier one research university.

JOURNAL OF PURDUE UNDERGRADUATE RESEARCH
The inaugural volume of the Journal of Purdue Undergraduate Research will be published August 24th. Founded by EAS associate professor Greg Michalski, the journal highlights the diverse nature and outstanding research accomplishments of Purdue’s undergraduate research community. Articles range from protein structure to understanding Newtonian liquids to accessing high school student performance as a function of class size. EAS was well represented in the first volume with the cover article written by Meghan F. Henschen and eight other undergrads mentored by visiting EAS professor Ki-Hong Min. Ji-hye Soe of Chemistry has an article on the Atacama (mentored by EAS associate professor Greg Michalski) and the distinguished alumni interview is with NASA astronaut and EAS alumni Drew Feustel. The journal is archived in electronic format (http://docs.lib.purdue.edu/jpur/) and 10,000 copies were printed for distribution to incoming freshmen, alumni, and faculty (check your mailbox!) to highlight and encourage undergraduate research at Purdue. The Journal has begun accepting articles for volume two and hopefully EAS’s undergraduate students and their faculty mentors will continue to be at the forefront of undergrad research at Purdue.

STUDENT AWARDS
EAS masters student Mike King has been awarded a prestigious US Environmental Protection Agency's STAR graduate fellowship (Science to Achieve Results). The fellowship award is $42,000 annually and covers tuition, stipend, travel and research funds and is administered by the EPA's National Center for Environmental Research. Since 2000 only three Purdue students have received the STAR fellowship (Alison Goss and Kimberly Hill of EAS, and Luke Jacobus of Entomology). Mike is a member of the Michalski research group and his project will focus on using the isotopic andgeochemical composition of aerosols to understand the emission sources and atmospheric chemistry that generates particulate matter in the four corners regions of the US. He hopes to understand how emissions of nitrogen oxides from gas and mining activities on Native American lands impacts air...
quality and affects the health of tribal communities. In September, Mike will attend the EPA STARS research symposium in Washington DC that is cosponsored by the Association for the Advancement of Science (AAAS), National Council for Science and the Environment (NCSE), and the American Chemical Society (ACS). Mike was previously awarded Purdue’s Knox fellowship and the Sloan foundation's graduate student award.

EAS PhD student Fan Wang has been awarded the Geological Society of America's graduate fellowship with Outstanding Mention. Of the 633 applicants only 220 graduate students were awarded the GSA fellowship and only the top 20 are given the Outstanding Mention designation, putting her research proposal in the top 3%. The Outstanding Mention students will be honored at the upcoming GSA annual meeting this October in Minneapolis. The $4,000 award will be used to travel to the Atacama Desert in northern Chile to collect soil samples along moisture gradients. The research objective is to understand how crypto-biotic crusts (CBCs), a living consortia consisting of cyanobacteria, green algae, lichens, and mosses, influence soil nitrogen cycling in hyper-arid climates. This has implications for how life functions in extreme conditions such as those found in the Atacama and other planets. As part of the Michalski research group, Fan will travel to the Atacama this December and she will be accompanied by undergraduate research assistant Ji-hye Soe whom she has mentored over the past year. Fan was previously recipient of one of only two graduate research fellowships awarded by the Mineralogical Society of America.

REQUEST FOR EXPLORATORY RESEARCH PROPOSALS

The Product Lifecycle Management (PLM) Center of Excellence is soliciting research proposals from faculty in all Colleges and Schools with interests related to PLM. Read more...

NEW PURDUE GRIEF LEAVE POLICY FOR STUDENTS

Purdue University recognizes that a time of bereavement is very difficult for a student. The University therefore provides rights to students facing the loss of a family member through the Grief Absence Policy for Students (GAPS). Read more...

A NOTE FROM OUR ACADEMIC COUNSELOR

Staying Motivated – A Workshop
Wednesday, August 31, 4:30-5:30 pm STEW 318.
Learn tips to stay focused and improve your motivation and concentration. Free and open to all Purdue students.

Supplemental Instruction Times
Click here to see when the review sessions are for math, chemistry, physics, etc. One of our own EAS students is an SI leader for MA 161. Congratulations, Juan! Read more below.

Summer Research
Juan Crespo, a junior in atmospheric science, had an REU this summer at the University of Michigan; here is a brief summary of his experience: “This summer I worked with my adviser, Dr. Derek Posselt, along with a student from Cornell University on 'Satellite and Analysis Based Examination of the Warm Conveyor Belt in Extratropical Cyclones' at The University of Michigan's Department of Atmospheric, Oceanic and Space Sciences. I will still be employed by U of M to continue this project remotely at Purdue throughout the school year with plans to present at the AMS Student Conference in January 2012.”

More on Research...
The Purdue Journal of Undergraduate Research is now online and around campus: http://docs.lib.purdue.edu/jpur/, and there is a paper by current and former EAS students:

Do Wind Turbines Affect Weather Conditions?: A Case Study in Indiana 10 by Meghan F. Henschen, Brittany Herrholtz, Lacey Rhudy, Kathryn Demchak, Brian Doogs, Joshua Holland, Erik Larson, Johnny Martin, and Matthew Rudkin.

Do you have a paper you want to submit for the next issue? The deadline is November 15, 2011 for the 2012 issue. Use link above.

Reminders:
Study Abroad Fair – Wednesday, August 31, 10 a.m. – 3 p.m. on the Memorial Mall. September 15 is the deadline to apply for a spring 2012 program.
August 29 – Starting Aug. 29 you need paperwork and signatures to add a class or modify your fall schedule.
September 5 – You have through Sept. 5 to drop a course through myPurdue; course not recorded on your transcript. Any fall schedule drops after this date will require paperwork and signatures.

September 5 – Labor Day – No classes!

Nancy

HAPPY BIRTHDAY!!!
Katie Levitt – September 2

IMPORTANT NOTICE ABOUT THIS NEWSLETTER
This newsletter will now be used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well. Those using paper copies of the newsletter should go to our newsletter archive on the EAS website at www.purdue.edu/eas/ and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Gina Richey (grichey@purdue.edu) by Friday noon of each week for inclusion in the Monday issue. If it is in the newsletter, we assume you know about it and no other reminders are needed.

For answers to common technology questions and the latest updates from the EAS Technology Support staff, please visit http://www.purdue.edu/eas/info_tech/index.php.

Also, as an additional resource for information about departmental events, seminars, deadlines, etc., see our departmental calendar at http://calendar.science.purdue.edu/eas/seminars.
Program Goals: The MS PHD’S® Professional Development Program facilitates mentoring and networking activities for minority undergraduate and graduate earth system science and engineering (ESSE) majors; and provides a supportive environment in which participants develop strategies and professional skills necessary to excel in Earth system science and engineering fields.

<table>
<thead>
<tr>
<th>Professional Organization</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
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<tr>
<td>Professional Organization</td>
<td>AGU Fall Meeting, California Academy of Sciences, Aquarium of the Bay</td>
<td>AGU, AMS, ASLO, NABGG, Consortium for Ocean Leadership IODP, On the Cutting Edge Professional Development for Geoscience Faculty program</td>
<td>Capstone Event at The National Academies, NSF, NASA, EPA, NOAA, Consortium for Ocean Leadership, USGS, USDA, Capitol Hill</td>
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<tr>
<td>Location</td>
<td>San Francisco, CA</td>
<td>Organization Specific</td>
<td>Washington, D.C. area</td>
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<td>Dates</td>
<td>Dec. 2-9, 2011</td>
<td>Spring-Fall 2012</td>
<td>Spring 2013</td>
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Student Benefits:  
• Mentoring & Professional development  
• Actual & Virtual community building activities  
• Networking at two international professional society meetings  
• ESSE exposure & field trips  
• $1,000 Fellowship award

Scientist Benefits:  
• Mentor highly talented minority students who are committed to achieving successful ESSE careers  
• Contribute to the professional and academic development of student participants through actual and virtual community activities

APPLY TODAY!  
Visit [www.msphds.org](http://www.msphds.org) for details, student participant applications & mentor surveys  
Deadline: Aug. 31, 2011

Funding and support provided by  
• NASA Earth Science  
• NSF Directorate for Geosciences  
• Institute for Broadening Participation
2012 MAYMESTER IN TANZANIA CALLOUT

Monday, September 19, 2011
6:30 pm
BRNG 1284
Pizza Served ©

Visit Africa! Work in Local Schools! Enjoy a Safari!

- Earn 9 credits in four weeks
- 15 days working in local schools
- Language, history, and culture seminars
- Three exciting weekend excursions

- Fulfills the College of Science language and culture requirements and the general education sequence.
- Fulfills the requirements for the global studies minor and/or a social studies course in the College of Education.
- Mathematics Education majors can also take EDCI 425.

Program Leader: Jill Newton (janewton@purdue.edu)
Program Website: http://www.edci.purdue.edu/studyabroad/tanzania/
Prospects and Challenges of Growing the Biology Based Economy

The EcoPartnership China-US Joint Research Center for Ecosystem and Environmental Change (http://jrcceec.utk.edu) is a partnership among six Chinese and US research institutions including the University of Tennessee, Oak Ridge National Laboratory, and Purdue University in the US, and in China the Research Center for Eco-Environmental Science of the Chinese Academy of Science (CAS), the Institute of Geographical Science and Natural Resources Research (CAS) and The Institute of Applied Ecology (CAS). The focus of the China-US Joint Research Center is to promote research collaboration, academic exchange, student education, and technology training and transfer in areas of environmental concern. The China-US Joint Research Center was established in 2006 when a 5-year agreement was signed. In May 2011 it was accepted into the China-US EcoPartnership program established by the U.S. Department of State and the Chinese National Development and Reform Commission (http://www.ecopartnerships.gov/). Among the activities of the Center is an annual research symposium held in alternate years in the US and China. Previous meetings have been in Knoxville TN, Beijing, Oak Ridge TN, and again in Beijing. In September 2011 the inaugural meeting of the EcoPartnership will be held at Purdue University.

The meeting annually brings together top Chinese and American researchers in the areas of biofuels and alternative energy, environmental impacts, and climate. The program has shown steady growth and the 2011 meeting is expected to include up to 150 scientists and graduate students, including 25-30 Chinese participants.

Background

The economies of the US and China are the globally dominant drivers of fossil fuel consumption and the release of greenhouse gases. These two nations are thus strategically linked to the challenges of global climate change and sustainable development. And, they share responsibility for developing realistic goals, effective strategies, and practical protocols for the best solutions for global energy, climate, and environmental problems. More than ever before, the US and China need to exchange perspectives at all levels and develop a sustainable, mutually beneficial joint agenda on sustainable development and the mitigation of greenhouse gas emissions. Collaboration in energy, environment and climate is necessary for the success of the bilateral agreements signed at the US-China Strategic Economic Dialogue (SED), creating new economic opportunities through technology transfer under the established goals of clean and sustainable development.

Symposium Goals and Objectives

The symposium will strengthen China-US public and private research and development partnerships through specific joint initiatives related to growing the biology-based economy. It will also generate a research, policy and economic agenda to realize this goal. Two over-riding themes of the meeting will be Biofuels and Co-Products. Specifically, conference sessions will be organized around the following topics:

- Renewable Energy and Products from biomass;
- Ecological processes and management of Agricultural and Natural Ecosystems in a bio-based economy;
- Environmental impacts of biofuels production;
- Applications of systems engineering for sustainable biofuels;
- Policy options and a framework for developing the bio-based economy.

For additional information please contact:
Center for the Environment
Purdue University
environment@purdue.edu