

February 1, 2010

THE HEAD'S PERSPECTIVE

EAS External Funding continues an amazing pace of growth - awards for the first six months of the 09-10 year are at \$4.62M; by comparison, the total for the entire 08-09 year was \$4.51M. So with another six months to go we have already exceeded last year's total. This tremendous growth in external financial support allows more of our students to be supported on research grants, provides the resources for continued new discoveries through research, and supports important work that we do with teachers, colleges and communities in Indiana and beyond.

EAS graduate applications continue to increase in quality and quantity. We have received about 40% more applications for our graduate program this year compared to last year. With our upcoming graduate expo in March we will aggressively recruit the very best so that we continue to grow the community of exceptional graduate students in EAS.

EAS accomplishments are highly visible. As I am writing this, all of the lead stories on the college home page involve EAS members, and I have just heard that one of our joint-appointment faculty will be highlighted in a Purdue ad that will appear soon in the Indianapolis edition of Newsweek!

OUR RECENT PUBLICATIONS

Riggs, E.M., Balliet, R.N., and Lieder, C.C., 2009: Effectiveness in problem solving during geologic field examinations: Insights from analysis of GPS tracks at variable time scales, in Whitmeyer, S.J., Mogk, D.W., and Pyle, E.J., eds., *Field geology education: historical perspectives and modern approaches*, Volume 461: GSA Special Papers: Boulder, CO, Geological Society of America., p. 323-340.

Rochon, G. L., D. Niyogi, S. Fall, J. E. Quansah, L. Biehl, B. Araya, C. Maringanti, A. Torres Valcarcel, L. Rakotomalala, H. S. Rochon, B. H. Mbongo, and T. Thiam, 2010: Best management practices for corporate, academic and governmental transfer of sustainable technologies to developing countries. *Clean Technologies and Environmental Policy*, 12, 19-30. DOI 10.1007/s10098-009-0218-3

UPCOMING MEETINGS

Monday, February 1

- Alumni & Corporate Relations Committee, CIVL 2201 (3:30 p.m.)

Thursday, February 4

- EAS Leadership Committee, CIVL 2173 (11 a.m.)

Monday, February 8

- EAS Faculty Meeting, CIVL 3201 (11:30 a.m.)

EAS SEMINAR

Thursday, February 4, at 3:30 p.m. in CIVL 1252:

"Drips, Blobs, and Slabs: Lithospheric Evolution of the American Cordillera." Prof. Hersh Gilbert, EAS, Purdue University

Refreshments at 3 p.m. in CIVL 2201

For more information, see the EAS online [calendar](#).

PRE-AWARD CENTER MANAGER TO ATTEND FEBRUARY 8TH FACULTY MEETING

Jessica Lawrence, Center Manager for the College of Science and College of Nursing, Pharmacy, and Health Sciences Pre-Award Center, will be attending the February 8th, 2010 EAS Faculty Meeting to talk about the new Pre-Award Center and answer any questions that you may have.

Faculty - Please plan to attend for this important discussion.

EXTERNAL REVIEW SERVICE

Eric Riggs and Bob Nowack just completed service on the Texas A&M Geology and Geophysics department external review team, College Station, Texas, January 24-27. Also on the team were Robert Tracy (Virginia Tech), David Kohlstedt (U of MN), and Isabel Montañez (UC Davis).

PURDUE TODAY FEATURE

Terry West along with Richard Fisher were featured in the Purdue Today news release of January 28, 2010. It was titled "Geothermal power could be solution to Indiana's coal mines" and it discussed the research project on Indiana's surface and underground water bodies related to coal mining in the southwestern part of the state. The story was

well received and several responses to it have been received to date. Please refer to the January 28 release for full details.

UPCOMING GSA MEETING

Terry West is the convener of a technical session for the GSA North Central Section meeting scheduled for April 11-13, 2010 in Branson, Missouri, titled "Applied Geology for Environmental, Engineering, Geotechnical and Hydrogeology." The half day session is fully subscribed with oral presentations.

Students are encouraged to attend. There are student travel grants available from GSA. For more information, contact Terry West (trwest@purdue.edu), the GSA Student Coordinator.

THE DEPARTMENT OF HOMELAND SECURITY'S ELECTRONIC SYSTEM TRAVEL AUTHORIZATION NOW MANDATORY

The Department of Homeland Security's Electronic System for Travel Authorization (ESTA) program became mandatory as of January 2010.

ESTA is an automated system used to determine the eligibility of visitors to travel to the United States under the Visa Waiver Program (VWP).

Such passengers are advised to apply for an ESTA no later than 72 hours prior to departure. They can apply for an ESTA even if they do not have a ticket booked to the U.S. Applications and details are available on the [ESTA](#) Web site.

The VWP enables qualifying citizens of participating countries to apply for admission to the U.S. for 90 days or less as non-immigrant visitors for business or pleasure without obtaining a U.S. non-immigrant visa.

Participating countries include many European Union countries, Australia, New Zealand, South Korea, Singapore, Japan, etc. While the ESTA requirement itself went into place in January 2009, it will now be enforced.

PORT-AU-PRINCE, HAITI

If you are interested in following the three-week geodetic survey trip that a group of researchers from Purdue is leading in Haiti, go to: <http://haitigps.wordpress.com>.

Also, the NSF press release for their work may be found at: http://www.nsf.gov/news/news_summ.jsp?cntn_id=116282

INTEGRATING CRITICAL THINKING INTO THE CLASSROOM

The Center for Instructional Excellence has invited noted scholar, Patti Clayton, to campus to speak on incorporating critical thinking into college classes. In her talk on March 10, Clayton will explain the opportunities and challenges associated with integrating critical thinking and reflection into student learning. Besides being a speaker at the national level, Clayton is the senior scholar for the Center for Service and Learning, Indiana University-Purdue University Indianapolis. A morning workshop will be at 9:00-11 a.m., and an afternoon open forum will be at 1:00-3:30 p.m. A flier describing the workshop can be found at www.cie.purdue.edu/workshop/index.cfm?workshop=3. To register online for the workshop, go to www.itap.purdue.edu/training/registration/?offeringid=4269

EAS TECHNOLOGY SUPPORT NEWS

Student positions available

Position: Information Technology Assistant
Current vacancies: One

Description: Work as a part of the EAS Technology Support team providing Windows, Macintosh, and Linux support to EAS faculty, staff, and students. Resolve help desk tickets and work on assigned projects related to technology support.

Experience: No experience required, but experience in enterprise computer support preferred. Web design experience preferred. Training is available in many areas, on-the-job training will be provided for all routine tasks and procedures.

Majors: All majors welcome.

Hours: 5-12 hours per week, scheduled.

Pay: \$8.00/hour, with yearly raises based on performance.

Send resumes to:

E-mail: wang16@purdue.edu

Campus mail: Lingyun Wang/EAS/CIVL

ITaP Offers Option for Additional Email Storage Space

When ITaP upgraded its Exchange service in October, each user's default mailbox-storage quota increased from 500 megabytes to 1 gigabyte. Now, ITaP also can provide additional storage to Purdue faculty and staff who routinely require more than 1 gigabyte of mailbox storage on ITaP's Exchange servers.

Additional storage space is provided for \$55.30 per gigabyte per year. The cost is transferred from the applicable Purdue department general fund account. Departments wishing to pay for additional storage will process non-recurring budget transfers. The cost for the additional storage is an unallowable charge on sponsored project accounts.

Requests for additional space on an ITaP Exchange email account may be directed to [the ITaP Web page for service requests](#). Each request needs to indicate the career account for which the quota should be increased, the number of gigabytes by which the quota should be increased and a general fund cost center number. Requests will be answered within one business day.

FUNDING OPPORTUNITY

NSF Water Sustainability and Climate (WSC)
<http://www.nsf.gov/pubs/2010/nsf10524/nsf10524.htm> Deadlines: Required Letter of Intent – March 15, 2010; Full Proposal – April 15, 2010. Total funding available: \$16 million for 8-14 awards. The goal of the Water Sustainability and Climate (WSC) solicitation is to understand and predict the interactions between the water system and climate change, land use, the built environment, and ecosystem function and services through place-based research and integrative models. Studies of the water system using observations at specific sites in combination with models that allow for spatial and temporal extrapolation to other regions, as well as integration across the different processes in that system are encouraged, especially to the extent that they advance the development of theoretical frameworks and predictive understanding. Specific topics of interest include:

- Determining the inputs, outputs, and potential changes in water budgets in response to both climate variability and change, and human activity, and the effect of these changes on biogeochemical cycles, water quality, long-term chemical transport and transformation, terrestrial, aquatic and coastal ecosystems, landscape evolution and human settlements and behavior.
- Developing theoretical frameworks and models that incorporate the linkages and feedbacks among atmospheric, terrestrial, aquatic, oceanic, and social processes that can be used to predict the potential impact of climate variability and change, land use and human activity on water systems on decadal to centennial scales in order to provide a basis for adaptive management of water resources.

Determining how our built water systems and our governance systems can be made more reliable, resilient and sustainable to meet diverse and often conflicting needs, such as minimizing consumption of water for energy generation, industrial and agricultural production and built environment requirements, reuse for both potable and non-potable needs, ecosystem protection, and flood control and storm water management.

INTERNATIONAL POLAR YEAR TRAVEL GRANT OPPORTUNITY

Applications are sought from students, post-doctoral researchers, faculty, and investigators at U.S. institutions for partial travel support for expenses to participate in the IPY Oslo Science Conference. Young investigators, students and members of under-represented groups are especially encouraged to apply. Travel support will also be offered to a small number of educators who are actively engaged in presenting information on polar studies in their classrooms.

Eligibility and Application: Successful applicants must present a talk or poster at the symposium and must be enrolled at or employed by a U.S. institution. Selection of applicants will be based upon relevance of research topic to conference themes. The awards are expected to be in the \$1500 to \$3000 range with lesser amounts awarded to more well-established applicants. The application form can be downloaded at <http://www.iarc.uaf.edu/workshops/2010/osc/>.

➡ ATTENTION GRADUATE STUDENTS ⬅

The last day to declare candidacy for May graduation is **February 19, 2010**

BILSLAND DISSERTATION FELLOWSHIP

The Bilsland Dissertation Fellowship provides support to outstanding Ph.D. candidates in their final year of doctoral degree completion. Bilsland fellows are expected to devote full-time effort to the completion of all doctoral degree requirements and to receive the doctoral degree at the conclusion of the fellowship tenure. A Bilsland Dissertation Fellowship provides an \$18,000 stipend, payment of tuition and most fees, and includes a medical insurance supplement. The Bilsland Dissertation Fellowship may be administered as two six-month awards or as a one-year award.

Recipients of Bilsland Dissertation Fellowships must be enrolled as Ph.D. candidates in a degree-granting doctoral program at Purdue and have

demonstrated superior academic abilities and scholarly achievements. The recipients must have completed all degree requirements, except for the dissertation.

If you are interested in applying for the 2010-11 Bilslund Dissertation Fellowship, please submit the following to Kathy Kincade, Room 2169D/CIVL **by Friday, February 12.**

- 1) A one-page write-up of your research and indicate your anticipated date of graduation,
- 2) An updated CV, and
- 3) A supporting letter from your Advisor which also indicates your anticipated date of graduation.

PEER OMBUDSMAN OFFICE AND GRADSHARE.COM

Fellow Graduate Student:

We hope that your return or arrival to Purdue this past January went well. As the new semester is in its first weeks, we would like to remind you of two great resources that the Graduate School offers: The Peer Ombudsman Office and GradShare.com.

The Peer Ombudsman Office was created in August 2009 to serve as a resource for graduate students to receive peer feedback on any issues related to graduate education at Purdue. There are three Peer Ombuds that regularly meet with students to discuss a host of topics including relationship issues with major professors, sources of funding, and adequate housing options. The Peer Ombuds are neutral persons that will listen, provide information, offer options, seek explanations, make referrals, and advise regarding rights and responsibilities. If you would like to share, and perhaps, make better a concern that you have about your graduate education, please contact the Peer Ombuds through the Graduate School website (<http://www.gradschool.purdue.edu/ombuds>).

Secondly, an email was sent out this past Fall that introduced GradShare.com. GradShare is a free online resource to help you make the most of the graduate school experience by offering expert advice and peer discussions pertaining to topics such as: Dissertation Development, Teaching, Financial Aid/Grants, Work-Life Balance, Research, Career Development. To learn more about GradShare visit the site at <http://www.GradShare.com>.

Please make use of these great resources. Best wishes on a successful semester!

GRADUATE STUDENT GRANTS AVAILABLE SOCIETY OF PETROPHYSICISTS AND WELL LOG ANALYSTS

The Foundation of the Society of Petrophysicists and Well Log Analysts (SPWLA), an international organization dedicated to the science of formation evaluation in oil, gas, and minerals applications has funds available for graduate student grants during 2010. Application deadline is April 1, 2010 and the award effective on October 1, 2010. Grant information and application forms are available at www.spwla.org under the Foundation button.

MAYMESTER OPPORTUNITY IN TANZANIA

Education students can earn 6-9 undergraduate or graduate credits for nearly a month of immersion in Tanzanian culture, including work in local schools, cultural excursions, a safari, and a chance to learn Swahili. This program also allows students in the College of Science to fulfill the language/culture requirements, and two of the courses offered in the program can be used to meet the two-course general education sequence for Science Education majors **only** (this is a one-time approval). Contact Jill Newton soon if interested: jnewton@purdue.edu

A NOTE FROM OUR ACADEMIC COUNSELOR MyPurdue Not Available in Mid-February

The myPurdue portal will be down from **February 10th, 6:00 p.m. through February 15th, 7:00 a.m.** This scheduled downtime is needed to install an upgrade to the Banner student system. Blackboard will be available during the Banner upgrade. Please plan ahead if you need transcripts or other information from Banner.

Business and Innovation in China

Study Abroad-China Informational Session: An informational session will be held for any students interested in participating in a Study Abroad trip to Shanghai and Beijing with a focus on global business on May 15-30, 2010. Costs, airfare, registration, and itinerary will be discussed. The session will take place on **Thursday, February 4th, from 5:00-6:00 p.m. in MRGN 121.** More information here under Featured Events: <http://www.purdue.edu/discoverypark/entrepreneurs/hip/certificate.php>.

Class of 1937 Scholarships Available to Purdue Students

Current Purdue undergraduate students are invited to apply for Class of 1937 scholarships for the 2010-11 school year. The number of scholarships awarded and their amounts for 2010-11 will be

determined by the interest earned on the Class of 1937 endowment during the past year. An average of 15 scholarships has been awarded each year since 1987-88, with individual scholarship amounts ranging from \$500 to \$4000. Each scholarship amount for 2010-11 will be equally divided between fall and spring semesters.

To be eligible for a scholarship, an applicant must:

1. Be enrolled at the West Lafayette campus of Purdue University;
2. Be registered for 12 or more credit hours;
3. Classified as a sophomore, junior, or senior during the 2010-11 school year;
4. Have a cumulative grade index of 2.0 or higher on a 4.0 scale;
5. Be in good academic and social standing with the University;
6. Show evidence of leadership ability and leadership potential;
7. Describe financial need for the scholarship*

*(This does not mean an applicant must qualify for financial assistance)

Applications are available here: <http://www.purdue.edu/odos/sao/awards/2010%20PURDUE%20CLASS%20OF%201937%20SCHOLARSHIP2.pdf>. Applications must be submitted to the Office of the Dean of Students, Room 207, Schleman Hall, by **FRIDAY, February 12, 2010**. For information, contact Lou Ann Hamilton, Class of 1937 Scholarship Program representative, at (765) 494-1252, lahamilton@purdue.edu.

Support Your Local Rube Goldberg Team

"Our team is the Purdue Society of Professional Engineers (PSPE) Rube Goldberg Team lead by Captain Zach Umperovitch (Geology Major... leading Engineering students lol) with 16 fantastic members.

The Regional Competition will be held **Saturday, February 20th at 10:30 a.m.** at the Purdue Armory. We recommend arrival by 9:30 a.m. for decent seating due to an estimated attendance of 1,500 - 2000 people.

Our team is looking for as many supporters as it can get to be there at the competition, since we are looking to reclaim our title as National Champions. At the Regional Competition (coming up shortly) the team that receives the greatest crowd support wins an additional \$500 towards construction cost which would be extremely helpful to upgrade the machine for Nationals.

The goal of a Rube Goldberg Machine is to take a simple every day task (like dispensing hand

sanitizer) and make it extremely challenging in a completely zany and crazy way.

We have won the national competition the past three out of five years, in 2005, 2006, 2008 and placed 2nd at Nationals in 2007. The team has appeared on Jimmy Kimmel Live in 2005 and 2006, with showing on ABC World News Tonight, The Today Show, FOX, CBS, NBC, & GSN. We are featured in the 2007 Guinness Book of World Records.

Links:

2005 Jimmy Kimmel Appearance:

http://www.youtube.com/watch?v=D-vPGVZmC7Y&feature=PlayList&p=48A9D7226DC26C13&playnext=1&playnext_from=PL&index=56

2006 Jimmy Kimmel Appearance:

<http://www.youtube.com/watch?v=0PNqKMIAZpQ>

Our Team's Website:

<http://web.ics.purdue.edu/~pe/>

--Zach Umperovitch"

Research and Internship Opportunities Research Experience for Undergraduates at Miami University

Miami University presents opportunities for eight undergraduates to conduct research in ecology and environmental science through a Research Experiences for Undergraduates (REU) program funded by the National Science Foundation and Miami University.

Students focus on collaborative research projects but the summer also includes field trips and guest speakers. Each student works on an individual project within a team of other students and faculty. Location: Miami University in the college town of Oxford, Ohio.

Each student receives:

- \$4200 stipend
- 12 tuition-free credits (transferable to their home institution)
- Free housing in Miami University residence halls
- Travel to and from Miami University
- Research funds

The focus of this REU is the Ecology of Human-Dominated Landscapes. Students can work in several habitats at nearby Miami University's Ecology Research Center or in local parks, forests, fields, agro-ecosystems, lakes, ponds, or streams. ECO REU Summer 2010 is for ten weeks between May 24 and August 6, 2010. Apply on-line.

Applications are being accepted now until spring of 2010. Applications will begin to be reviewed February 1, 2010. Visit the website for more information. www.muohio.edu/ecoreu.

Eligibility:

Undergraduates interested in ecology and environmental science.
Coursework in biology, ecology, or the environmental sciences is recommended.
You must be a US citizen or permanent resident.
Women and minority students are encouraged to apply. Miami University is an Equal Opportunity Employer

Internships Available with MATRIC, a Research & Development Organization

MATRIC (Mid-Atlantic Technology, Research & Innovation Center), a research and development organization headquartered in South Charleston, West Virginia, plans to offer both undergraduate and graduate student internships at three of their locations during the Spring, Summer and Fall of 2010.

Renewable Energy - Discovery and development of new processes for energy and chemicals from renewable feedstocks. Work with PhD level researchers in MATRIC's world-class labs. Location: Charleston, West Virginia.

Environmental Management - Science and engineering to solve challenging environmental issues. Work with world class environmental engineers focusing on clean water, air and soils. Location: Charleston, West Virginia and Oak Ridge, Tennessee.

Geographic Information Systems - Development of cutting edge geospatial, modeling and simulation systems to provide actionable knowledge and to improve situational awareness. Work with world class engineers on state-of-the-art research projects. Location: Morgantown, West Virginia and Charleston, West Virginia.

One position per semester available for each department. Apply at www.matricresearch.com/employment.asp.

Competitive stipend and travel/relocation expenses will be provided.

Ancient DNA Training Program

The Lakehead University Paleo – DNA Laboratory is offering an intensive training program in molecular techniques applied to degraded, forensic and archaeological material. The program will run May 10-28, 2010, and cover topics including extraction chemistry, PCR, mtDNA, STR's, sequencing and analysis software. The course is comprised of hands-on laboratory training sessions and lectures by eminent researchers in the fields of ancient DNA, archaeology, genetics and forensics. For more information and/or application forms contact: URL: www.ancientdna.com; Email: cjaspers@lakeheadu.ca; Phone: 1-807-343-8862 – Toll Free: 1-866-DNA-LABS – Fax: 1-807-343-8619.

CONVO

Vouchers for certain Purdue convocations are available and may be picked up in MATH 231. Once you have your voucher take it to the Stewart Center box office where you sign the voucher, present your Purdue ID, and purchase your ticket(s) for \$10 each. There are a limited number of vouchers for each show. This is a list of spring convocation vouchers available:

- Kronos Quartet, FEB 4
- Jesus Christ Superstar, FEB 12
- The Hobbit, FEB 20
- An Enemy of the People, FEB 25
- Martha Graham Dance Company, FEB 27
- Chaconne Klaverenga, MAR 28
- Miguel Zenon's Esta Plena, APR 9
- Nancy

HAPPY BIRTHDAY!!!

Mike Baldwin – February 7



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/resources/it>.

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>.

