

December 13, 2010

DECEMBER 2010 GRADUATES



Laura Bennati – M.S.

Advisor: Eric Calais

Thesis Title: Geodetic study of an active rifting event in Afar, Ethiopia



Erica Erlanger – M.S.

Advisor: Darryl Granger

Thesis Title: Rock uplift, erosion, and tectonic uplift of South Africa determined with cosmogenic ²⁶Al and ¹⁰Be



Nathan Hitchens – Ph.D.

Advisor: Jeff Trapp

Thesis Title: The characterization and prediction of sub-diurnal extreme precipitation in the Midwestern United States



Heather Houlton – M.S.

Advisor: Eric Riggs

Thesis Title: Academic provenance: Investigation of pathways that lead students into the geosciences



David Mase – M.S.

Advisor: Greg Michalski

Thesis Title: A coupled modeling and observational approach to understanding Oxygen-18 in atmospheric nitrate



Raul Ochoa – M.S.

Advisor: Brenda Bowen

Thesis Title: Porosity characterization and diagenetic facies analysis of the Cambrian Mount Simon Sandstone: Implications for a regional CO₂ sequestration reservoir



Kathleen Quardokus – M.S.

Co-Advisors: Sonia Lasher-Trapp and Eric Riggs

Thesis Title: Design and evaluation of an undergraduate laboratory course in atmospheric science research



RECENT PRESENTATIONS

Terry West and Richard Fisher attended the 24th annual meeting of the Indiana Society of Mining and Reclamation (ISMR) on December 6 & 7, 2010 in Jasper, Indiana at the Jasper Convention Center. Richard presented the co-authored poster paper entitled, "Energy Supply Opportunities Resulting from Surface and Subsurface Water Bodies in Old Coal Mine Areas, Southwest Indiana." This is the subject of his master's degree research. Terry West also attended the Board of Director's meeting for ISMR and served as a moderator for one of the technical sessions on December 7. Dr. West is the university-based member of the Executive Council that plans and oversees this annual meeting. Both West and Fisher also attended a half-day short course on Stream Morphology Classification. Stream evaluation and restoration is a major part of land reclamation that follows a strip mining operation.

NWS COLLEGE ROAD TOUR



Personnel from four National Weather Service (NWS) Offices were on campus Tuesday to provide information on employment opportunities in the NWS, and in general to share their insight on careers in meteorology. About 40 students attended the presentations. Shown in the photo is Mike Sabones, Meteorologist-in-Charge of the Northern Indiana NWS Office, and Purdue/EAS alumnus.

PURDUE AISES WINS NATIONAL AWARD

Congratulations to Purdue University's chapter of the American Indian Science and Engineering Society (AISES) for winning a national award at the AISES National Conference in Albuquerque, New Mexico on November 12, 2010. Purdue AISES was the recipient of the "Professional and Chapter Development Award," an award selected for successfully hosting the AISES Regional Conference for Region VI in March 2010. The award criteria was based on the chapter that offers programs and opportunities for professional and leadership development for their members through chapter activities, seminars, guest speakers, etc.

Purdue AISES is a chapter of the national AISES organization which is designed to increase the representation of American Indian and Alaskan Natives in engineering, science and other related technology disciplines. Purdue AISES has existed on campus since the early 1990s but was inactive due to lack of membership. In the fall of 2008, Purdue AISES was reactivated by students and has since become a leading student organization on campus and across Indian country. Purdue AISES is Co-Advised by **Eric Riggs** in EAS and Felica Ahasteen-Bryant, Director of the NAECC. **Ken Ridgway** is also involved with the chapter, and is a past faculty advisor for this group.

EAS TECHNOLOGY SUPPORT NEWS

New printer installations

The two new departmental printers have arrived and will be assembled and tested during the next two weeks. Installation is planned for a time during the holiday break to minimize disruption of necessary printing at the end of this semester. These new printers will likely be in production sometime in the first week of January. We will provide an update during that week. Thanks, and Happy Holidays!

NANOTECHNOLOGY NEW VENTURES COMPETITION DEADLINE EXTENDED

The deadline to register for the Nanotechnology New Ventures Competition has been extended to December 10th. [Read more...](#)

EAS LIBRARY'S NEWEST BOOKS

Click [here](#) to see a list of new books in the EAS library in the last two weeks.

HYDROLOGISTS HELPING OTHERS (H2O) PROJECTS

Goal

The program goal is to foster involvement by Purdue students in water related projects in distressed areas by providing international and national travel grants to Purdue undergraduate and first year master students. The program is directed towards water related research or infrastructure building in undeveloped countries in Africa, Asia, and the Americas, as well as distressed areas in the United States such as Appalachia and Native lands.

Plan

The University will fund summer projects that will encourage students to travel to third world nations where water availability is a societal issue and help solve water related problems or providing water related services by utilizing their education and expertise. The program is intended to provide advanced undergraduate and master's degree seeking students an opportunity to expand their learning environment and experience different cultural and environmental settings while helping others.

Grant Levels

Grants will be made to individual students, teams of students, or student organizations. Grant sizes will range up to \$10,000 per student. **It is anticipated that \$10,000 will be available for the 2011 year.**

Click [here](#) for guidelines and application.

GRADUATE, POSTDOCTORAL AND SENIOR RESEARCH AWARDS

The National Research Council of the National Academies sponsors a number of awards for graduate, postdoctoral and senior researchers at federal laboratories and affiliated institutions. These awards include generous stipends ranging from \$42,000 – \$75,000 per year for recent Ph.D. recipients, and higher for additional experience and graduate entry level stipends beginning at \$30,000 and higher for additional experience. The awards provide the opportunity for recipients to do independent research in some of the best-equipped and staffed laboratories in the U.S. Research opportunities are open to U.S. citizens, permanent residents, and for some of the laboratories, foreign nationals.

Detailed program information, including instructions on how to apply online and a list of participating laboratories, is available on the NRC Research Associateship Programs Web site at: www.national-academies.org/rap. Questions should be directed to the NRC at 202-334-2760 (phone) or rap@nas.edu.

A NOTE FROM OUR ACADEMIC COUNSELOR



Congratulations to EAS Undergraduate December Candidates

Micah J. Chase
Trenton A. Johnson
Christopher C. Stewart
August A. Veron
David J. Wade

Winter Commencement for the College of Science is Sunday, December 19, 2010, at 9:30 a.m. in the Elliott Hall of Music. The College of Science Reception is immediately following from approximately 11:30 a.m. ~ 1:00 p.m. in the Purdue Memorial Union, East/West Faculty Lounge. RSVP by December 14; please [Register](#). Congratulations to all graduates.

New Undergraduate Research Journal at Purdue

Students are invited to submit proposals to have their work highlighted in a new journal that will feature the best of undergraduate research taking place at Purdue University. [The Journal of Purdue Undergraduate Research](#) (founding editor, Greg Michalski), which will feature selected student articles from faculty-mentored research projects, will

be published by the [Purdue University Press](#). The press is a part of Purdue Libraries, and the project is supported by the Office of the Provost. [Read more](#) and listen to the [WBAA interview](#).

Purdue students, as well as high school students who participated in a Purdue research internship program, are invited to submit their article proposals by **February 15**. Submissions can be made at <http://www.jpur.org>, and the faculty advisory board led by Greg Michalski, assistant professor of earth and atmospheric sciences, will review articles. About six students initially will be invited to submit full articles. In addition, the journal also will include interviews with leading faculty and Purdue alumni whose successful careers have been shaped by being participants in undergraduate research projects themselves. A list of other Purdue undergraduate research projects that are published in academic journals outside of the university also will be included in the journal.

The journal, which will be published in print and available to the public online next fall, will be used as a recruiting tool to connect with prospective students. The online edition, published through the Purdue Libraries' e-Pubs system, will be available for free to readers.

Nancy

HAPPY BIRTHDAY!!!

Eric Riggs – December 29
Ling Wang – December 29
Harshvardhan – January 1
Qianlai Zhuang – January 2



Note: This is the last newsletter of the semester. The next issue is planned for Monday, January 10.

Indiana University of Pennsylvania

Tenure Track Assistant Professor – Energy Resource Geology

The Department of Geoscience at Indiana University of Pennsylvania invites applications for a full-time tenure-track appointment at the Assistant Professor level beginning August 2011. Our department is committed to innovative teaching and research in an undergraduate-only setting.

Qualifications: We seek an individual who is broadly trained in the area of Energy Resource Geology. Individuals in the sub-disciplines of basin analysis, subsurface geology and sequence stratigraphy are encouraged to apply; preference will be given to those with experience in the oil and gas sector. Candidates should demonstrate outstanding skill and enthusiasm for undergraduate education with particular emphasis on developing an active research program involving undergraduate students. A Ph.D. is required at the time of appointment. Candidates must communicate effectively and perform well during the interview(s), which will include a teaching demonstration and a research seminar. All applicants must be work-eligible.

Responsibilities: The successful candidate will be expected to teach twelve contact hours each semester. Teaching responsibilities include: non-majors geoscience classes for general education; an introductory majors class in energy geology; and upper-level undergraduate courses in the candidate's area of expertise. He/she will also be expected to advise undergraduate research projects and develop a joint faculty-student research program.

Application Materials: Applicants should send a cover letter discussing qualifications, curriculum vitae, statements of teaching and research interests, three reference letters, and copies of academic transcripts to: Dr. Jonathan C. Lewis, Chair, Energy Geology Search Committee, IUP Department of Geoscience, 114 Walsh Hall, Indiana, PA 15705.

Complete applications are due January 14, 2011. IUP is in the town of Indiana, situated on the flanks of the Allegheny Mountains. Salaries and benefits are competitive. Additional information about IUP and the Department is available at <http://www.iup.edu>.

IUP is an equal opportunity employer M/F/H/V. IUP is a member of the Pennsylvania State System of Higher Education.



Cascades to Coast GK12 Fellowship at Portland State University



**Join Portland State University's
Cascades to Coast GK12 program - an
innovative doctoral fellowship in
environmental sustainability research
and education.**

This National Science Foundation-funded program supports doctoral students in PSU's School of the Environment pursuing environmental sustainability research across the fields of environmental science, geology, chemistry, biology and physics.

Cascades to Coast PhD Fellows will collaborate with middle schools and high schools in the Portland metropolitan region to develop, enhance and lead environmental science curriculum and field trips.



GK12 Doctoral Fellow



Portland, Oregon

For more Information:

www.pdx.edu/soe-gk12

Contact:

Patrick Edwards
Project Coordinator
patrick.edwards@pdx.edu
(503)725-8303

Doctoral Fellowship Information:

Qualified Candidates can receive up to four years of funding and tuition support.

Incoming doctoral students will be supported with teaching assistantships for up to two years, including tuition remission and an annual stipend of \$15,000.

Advanced doctoral students may receive up to two years of Fellowship support, including a \$30,000 annual stipend and full tuition remission.

Other benefits include travel funds, research support and equipment.



*Wishing you
safe and happy
holidays!!!*

