EAPS MEETINGS

Tuesday, November 12, 3:00 pm, HAMP 2173
Executive Council Meeting

~ ~ ~ ~ ~ ~

EAPS SEMINARS

Thursday, November 14, 3:30 pm, HAMP 1252

~ ~ ~ ~ ~ ~

EAPS PRESENTATIONS


Dr. Colleen Milbury, “Using Hydrocode Simulations to Match GRAIL Observations of the Transition in Crater Morphology from Complex Crater to Peak-Ring Basin,” presented at the NASA GRAIL Team Meeting, Nov. 6, 2013, Annapolis, MD.

Professor Laura Pyrak-Nolte gave the Distinguish Scientist Seminar in the Earth Sciences Division at Lawrence Berkeley National Laboratory, Berkeley, California on Oct. 25, 2013. The topic of her seminar was “The Critical Link: Fracture Stiffness as Nexus”.


Professor Qianlai Zhuang presented an invited seminar entitled “Quantifying feedbacks of greenhouse gas dynamics in the Arctic to the global climate system”, to the Geography Department of Northern Illinois University, November 1, 2013.

~ ~ ~ ~ ~

EAPS NEWS

PRF International Travel Grants for FY13-14
The purpose of the International Travel Grant Program is to assist Purdue faculty members in scholarly attainment by providing a portion of the travel costs for tenured, tenure-track, or research faculty who will play an active role (presenting papers or serving as officials) at recognized international meetings. The awards provide $1,000 to defray any/all approved travel expenses up to the award limit. Puerto Rico, Mexico and Canada are NOT considered international travel and do not qualify for this grant.

An application form can be obtained by selecting appropriate links on the following Web page: http://www.purdue.edu/research/vpr/funding/itg.php. Refer to this page, especially the “Important Reminders”, to determine if the intended travel is eligible for support and for other general information.

The College requests the following additional information:
1. Invited speakers should include a copy of the letter of invitation.
2. The College has traditionally observed the following order of priorities:
   1. Give a major platform address attended by a large audience;
   2. Serve as a meeting or session chairperson;
   3. Give a minor address or present a contributed paper;

Please note: mere attendance at a meeting does not justify support. In addition, poster presentations are not highly valued.

Deadline to submit to Department Head (via Barbara at barbara@purdue.edu): Monday, Dec 2nd.

~ ~ ~ ~ ~

2014 NORTH-CENTRAL GEOLOGICAL SOCIETY MEETING

North-Central Geological Society of America in Lincoln Nebraska, April 24-25, 2014, promises to be a rewarding experience for all. The meeting needs you, however, in order to be successful, so please submit an abstract! Examine the list of interesting and highly relevant theme sessions that have been proposed and remember that we will have discipline sessions as well! (see attached flyer for further information)
EAPS IN PURDUE TODAY

In the Spotlight

Purdue Profiles: Andy Freed

A hiking trip to the Northern Cascade Mountains in Washington led then aeronautical engineer Andy Freed to discover a new challenge and career path: researching and teaching geophysics. Freed is a professor of earth, atmospheric, and planetary sciences. As a researcher, he studies earthquakes and planetary surfaces, but as a professor he has fun teaching undergraduate non-majors about science through a class called Geosciences in the Cinema.

POSTDOCS AND GRADUATE STUDENTS

NATIONAL PHYSICAL SCIENCE CONSORTIUM
Graduate Fellowship in the Physical Sciences

The National Physical Science Consortium (NPSC) is a unique partnership of industry, government and higher education. NPSC helps its partners to recruit, identify, select, and support outstanding U.S. doctoral students. The Fellowship Program of the National Physical Science Consortium (NPSC) is again open for receipt of applications. NPSC offers two programs.

1. The Traditional NPSC Program provides a two-phase, six-year fellowship. Initial support is for two or three years, depending on the employer-sponsor. If the student makes satisfactory progress and continues to meet the conditions of the award, support may continue for a total of up to six years. Students typically apply while seniors in college.

2. The Dissertation Support Program provides support while the graduate student conducts dissertation research. Students should apply in the year prior to the beginning of their dissertation research program, but not until they can describe their research at least in general terms.

To learn more and to apply online, go to www.npsc.org. The deadline for the online application is November 30, 2013.

ENVIRONMENTAL GEOLOGY
ASSISTANT PROFESSOR POSITION

The University of North Carolina at Pembroke invites applications for a tenure-track Assistant Professor in the Department of Geology & Geography beginning August 15, 2014. We seek applicants in any specialization of environmental geology. The successful candidate will teach environmental geology, general education classes, and courses in their area of expertise as part of our new major in Geo-Environmental Studies. Applicants should be strongly committed to excellence in teaching, advising, and mentoring undergraduates, and to working in a multicultural environment that fosters diversity. Please visit our website (http://www.uncp.edu/geo/) to learn more about departmental facilities including GPR. The Ph.D. is required at the time of appointment. Applicants should submit materials at https://jobs.uncp.edu including cover letter, curriculum vitae, copies of transcripts, statements of teaching and research interests (1 page each), and contact information (address, email, phone number) for three references.

Address inquiries to: Dr. Martin B. Farley, Department of Geology & Geography, martin.farley@uncp.edu. Review of applications will start on December 2, 2013 and will continue until the position is filled. EEO/AA Employer

UNDERGRADUATE AND GRADUATE STUDENT INFORMATION

2014 SUMMER TERM INTERNSHIP/FELLOWSHIP OPPORTUNITIES

The Office of Science / Office of Workforce Development for Teachers and Scientists (WDTS) is pleased to announce that it is accepting applications to its 2014 Summer Term internship/fellowship opportunities at Department of Energy (DOE) Laboratories. These competitive, paid internships, are for 10 weeks during the Summer Term (May to August timeframe), and include support for travel and housing.

The three programs accepting applications are:

- Science Undergraduate Laboratory Internship (SULI). More information about SULI and access to the online application can be found at http://science.energy.gov/wdts/suli/
- Community College Internships (CCI) More information about CCI and access to the online application can be found at http://science.energy.gov/wdts/cci/
- Visiting Faculty Program (VFP). More information about the VFP and access to the online application can be found at http://science.energy.gov/wdts/vfp/

Applications for these three programs must be completed and submitted online by 5:00 PM ET on January 10, 2014 (including all required application materials and recommendations).

2014 COLLEGE OF SCIENCE GRADUATE STUDENT INTERNATIONAL TRAVEL AWARDS

For full time PhD student travel between January 1, 2014 and June 30, 2014. Two or three awards ranging from $600-$800 for international travel will be awarded. Deadline: December 2, 2013. See attached flyer for additional information.
DEPARTMENT OF ENERGY SCHOLARS PROGRAM

The Department of Energy (DOE) Scholars Program is now accepting applications for Summer 2014. Application deadline is January 12, 2014. The DOE Scholars Program offers unique opportunities that introduce students or post-graduates to the agency's mission and operations. Applicants must be US Citizens and undergraduates, graduates or post-graduates of an accredited college or university. For application information and questions contact: Leslie Fox, Project Manager, (865) 241-3319 or Leslie.Fox@orau.org.

Want to learn more about the DOE Scholars program? E-mail doescholars@orise.orau.gov or visit http://orise.orau.gov/doescholars.

AMS TRAVEL GRANT

The American Meteorological Society (AMS) will provide annual meeting travel opportunities for students. The 94th AMS Annual Meeting and 13th Annual AMS Student Conference will be held in Atlanta, Georgia, 1 February - 6 February 2014. The AMS strongly encourages student participation at the annual meeting. Therefore, AMS has established programs that help provide partial travel support to students wishing to attend. This year we are offering the Student Assistant Program and the Student Travel Grant Program. Further information can be found on the AMS web site annual meeting pages at www.ametsoc.org <http://www.ametsoc.org/>. On the AMS home page click the annual meeting logo.

CAMPUS NEWS

URGENT NOTICE REGARDING FEDERAL EXPRESS

Please be advised that Purdue University’s Federal Express main account number is changing, effective immediately. Unfortunately, this is being done because of some fraudulent charges that were made using Purdue’s current FedEx account number. The current account number will be disabled Nov. 16, 2013. FedEx will no longer accept airway bills with the old pre-printed account numbers on them. Packages being shipped with the old account number will NOT be shipped. Please recycle or destroy old slips. New slips are available in the EAPS main office.

A Note from Our Academic Counselor

Pardon Me?! A Lesson in Cross Cultural Communication

Dr. Derald Wing Sue will visit Purdue to present this conversation designed to enhance our ability to improve cross-cultural communications. Thursday, November 14, 2013 from 3:00 - 5:00 p.m. in Fowler Hall (Stewart Center).

MGMT 401

Where can you hear from and interact with top-level executives from such organizations as Deere, Eli Lilly, Michael Kors, Apple, Caterpillar and the United Way? The answer is the Krannert Executive Forum (MGMT 40100). Round out your spring semester with one of the highest-rated classes at Purdue. Listen as speakers share their experiences and benefit from their advice and observations about their personal career decisions. Enjoy one-on-one interaction with the speakers by acting as a student host or share breakfast and/or lunch with them (food provided).

Now celebrating its 40th year, the Krannert Executive Forum provides you with insight on what it takes to be successful in any career you choose. MGMT 40100 meets Fridays from 11:30 a.m.-12:20 p.m. and is taught by Dean Emeritus Rick Cosier. For more information, go to http://www.krannert.purdue.edu/events/exec-forum/home.asp. To register use MGMT 40100 and CRN 22574.

Taiwan Spring Break Trip

Krannert has a great short-term study abroad program (held during Spring Break) in Taipei, Taiwan; this will be its 7th year. The program is open to Krannert and non-Krannert students and is a great opportunity for students to be exposed to Asian business and culture through a highly structured program. The program is well-known for its "buddy system" with National Chengchi University students as Purdue students experience Taiwan in a unique way through their interactions with local students.

Flyer attached and information is available on the Krannert website: http://www.krannert.purdue.edu/undergraduate/study-abroad/short-term-programs/taiwan/home.asp. There is a great YouTube video on the website produced by the "buddies" of NCCU last year which gives a great idea as to the quality of the program.

Deadline for applications is November 15th.

Cartagena Summer Internship 2014

The callout is on November 14th in BRNG Rm. 1245 at 6 PM. There is more information on the flyer.

The purpose of the Cartagena: Live, Learn and Work Global Internship experience is to introduce participants to South American culture, language, and business/professional practices in Cartagena, Colombia. Cartagena is a booming business and cultural center with much opportunity for participants to engage in the business marketplace through internships, as well as to participate in cultural and language information exchange with peer partners (students) from the Universidad de Cartagena and various non-profit organizations throughout the area through community service projects.

You earn 6-9 credits and take classes here at Purdue and also in Columbia:

May 19-May 31, 2013 - Classes at Purdue University, West Lafayette
June 1 - July 12, 2014 - Classes and Internship in Cartagena, Colombia.
U.S. Department of Homeland Security (DHS)
2014 HS-STEM Summer Internships
Application deadline: January 6, 2014

Undergraduate students receive a $5,000 stipend plus travel expenses.

10-week research experiences are offered at: Argonne, Idaho, Berkeley, Livermore, Oak Ridge, Pacific Northwest, and Sandia National Laboratories; as well as at Homeland Security Studies and Analysis Institute, National Institute of Standards and Technology, Coast Guard Research and Development Center, Customs and Borders Protection Laboratories and Scientific Services, Naval Research Laboratory, Engineer Research and Development Center, National Security Technologies Remote Sensing Laboratory, Transportation Security Laboratory, and more...

Areas of research: Engineering, computer science, mathematics, physics, chemistry, biological / life sciences, environmental science, emergency and incident management, social sciences, and more.

U.S. citizenship required. Detailed information about the internships can be found at: http://www.orau.gov/dhseducation/internships/

DHS has partnered with the Oak Ridge Institute for Science and Education (ORISE) to manage the program. For questions please email us at dhsed@orau.org.

November Birthdays
Tim Filley – 10th
Frank Bakhit – 11th
Gerald Krockover – 12th
Kenneth Ridgway – 12th
James Ogg – 25th
Paul Shepson – 29th

IMPORTANT NOTICE ABOUT THIS NEWSLETTER
This newsletter is 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 EAPS 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 Terri Moore (terri@purdue.edu) by 5:00pm Thursday 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 EAPS 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, etc., see our departmental calendar at http://eaps.purdue.edu.
Data-driven Methods for Dynamical Systems: Quantifying Predictability and Extracting Spatiotemporal Patterns

Dimitrios Giannakis
Center for Atmosphere Ocean Science Courant Institute of Mathematical Science
New York University

Large-scale datasets generated by dynamical systems arise in many applications in science and engineering. Two research topics of current interest in this area involve using data collected through observational networks or output by numerical models to quantify the uncertainty in long-range forecasting, and improve understanding of the operating dynamics. In this talk we discuss applied mathematics techniques to address these topics blending ideas from machine learning, delay-coordinate embeddings of dynamical systems, and information theory.

We illustrate these techniques with applications to climate atmosphere ocean science.

Thursday, November 14, 2013
3:30 pm
Room 1252, HAMP Bldg.

Refreshments at 3:00pm
Room 2201/HAMP
WE NEED YOU!

Please present your work in Lincoln in April.

Technical Program Chairs
Dr. Paul Hanson (phanson2@unl.edu) & Dr. David Loope (dloope1@unl.edu)

PROPOSED TECHNICAL SESSIONS

Rivers, Past and Present: Sediments, Stratigraphy, and Geomorphology
Chris Fielding (University of Nebraska-Lincoln)
Jim Best (University of Illinois at Urbana-Champaign)
cfielding2@unl.edu; jimbeste@uiuc.edu

Cenozoic Stratigraphy of the Great Plains
Greg Ludvigson (University of Kansas), Jon Smith (University of Kansas), Robert M. Jockel (University of Nebraska-Lincoln)
gludvigson@kgs.ku.edu; jsmith@kgs.ku.edu; rjoeckel3@unl.edu

Vertebrate Paleontology from the Appalachians to the Rockies
Shane Tucker (University of Nebraska-Lincoln),
George Corner (University of Nebraska-Lincoln),
Robert M. Jockel (University of Nebraska-Lincoln)
stucker3@unl.edu; rcorner1@unl.edu; rjoeckel3@unl.edu

Frontiers in Geomicrobiology and Biogeochemistry
Karrie A. Weber (University of Nebraska-Lincoln)
kweber2@unl.edu

Structure, Tectonics and Geologic Evolution of the North American Interior
Caroline M. Burberry (University of Nebraska-Lincoln),
Robert M. Jockel (University of Nebraska-Lincoln) and
Jesse T. Korus (University of Nebraska-Lincoln)
cburberry2@unl.edu; rjoeckel3@unl.edu; jkorus3@unl.edu

Carbonatites and Other Alkaline Rocks
Richard M. Kettler (University of Nebraska-Lincoln),
Philip Verplanck (USGS) and Benjamin Drenth (USGS)
rkettler1@unl.edu; pvl@usgs.gov; bdrenth@usgs.gov

New Insights into the White River Chronofauna
Clint Boyd (South Dakota School of Mines)
clintboyd@stratfit.org

Quaternary Time Machine: Methods and Analyses of Soils and Sediments to Reveal Secrets of Past Environments
Maija Sipola (University of Iowa) and
M. Kathryn Rocheford (University of Iowa)
majia-sipola@uiowa.edu; kat-rocheford@uiowa.edu

Advances in Invertebrate Paleontology, Taphonomy, and Ichnology: Insights from the North American Midcontinent and Beyond
James R. Thomka (University of Cincinnati) and
Rebecca L. Freeman (University of Kentucky)
thomkajr@mail.uc.edu; rebecca.freeman@uky.edu

Quaternary Evolution of the Central Lowlands and Great Plains
Charles W. Rovey III (Missouri State University) and J. Elmo Rawling, III
CharlesRovey@missouristate.edu; rawlingj@uwplatt.edu

Applications of Optically Stimulated Luminescence Dating in Quaternary Studies
Joel Q. Spencer (Kansas State University) and
Paul R. Hanson (University of Nebraska-Lincoln)
joelspen@ksu.edu; phanson2@unl.edu

The Midcontinent Rift System and Beyond: New Developments in Central North American Precambrian Geology
Benjamin J. Drenth (USGS), G. Randy Keller (University of Oklahoma), and
Joshua M. Feinburg (University of Minnesota)
bdrenth@usgs.gov; grkeller@ou.edu; feinberge@umn.edu

Applied Geology: Environmental, Engineering, Hydrogeology, Geotechnical and Exploration Geophysics
Terry West (Purdue University)
twest@purdue.edu

Cultural geology: Capitol buildings, heritage stone, parks, and more
Joe Hannibal (Cleveland Museum of Natural History) and
Nelson R. Shaffer (Indiana Geological Survey)
jhanniba@cmnh.org; shafferine@indiana.edu

Undergraduate Research poster session, sponsored by the Council on Undergraduate Research, Geoscience Division
Robert Shuster (University of Nebraska-Omaha)
rshuster@unomaha.edu

Pennsylvanian Cyclothems and Stratigraphy of the Midcontinent and Illinois Basins
John P. Pope (Northwest Missouri State University)
jpope@nwmissouri.edu

Geoscience Education for K-16: Novel Approaches and Current Research
Katie Lewandowski (Eastern Illinois University) and
Mindil Sears (University of Nebraska-Lincoln)
kjlewandowski@eiu.edu; msesars2@unl.edu

REMEMBER: There will be general discipline sessions as well! All of the geosciences will be represented.
2014 College of Science
Graduate Student International Travel Awards

**Deadline:** December 2, 2013
*For travel between January 1, 2014 and June 30, 2014*

~ 2 or 3 awards ranging from $600 to $800 for international travel will be awarded~

**Prerequisites:**
• must be a full-time PhD student
• must be making an oral or poster presentation at an international conference

**Priority will be given to:**
• travel to make an oral presentation at a conference
• attendance at an interdisciplinary conference
• students who have passed their prelims

**To apply, please send electronically as one file:**
• CV (2 page limit)
• brief summary of research (1 page limit)
• brief statement of purpose for attending conference specifying whether your presentation is oral or poster
• provide web link to conference
• with a letter of support from research advisor as a separate electronic document

Send applications to Ranae Wetli at rjwetli@purdue.edu
Spring Break 2014 Study Abroad program

**When:** March 14-22, 2014  
**Where:** Taipei, Taiwan  
**Hosts:** National Chengchi University and the Krannert School of Management  
**Who’s Eligible:** Undergraduate Students with a 2.5 GPA

**What Activities:**
- 6 half-day lectures on Asian economic developments, financial markets in Taiwan, Taiwan and Mainland China relations, venture capital, information technology, language and culture  
- One-day visit to Hsinchu Science Park, one of the world’s most significant areas for semiconductor manufacturing, housing Acer, Taiwan Semiconductor, Logiteck, Foxconn, BenQ, etc.  
- One-half day visit to Nankang Software Park, housing many start-up and established companies  
- Interactions with local businesses and students  
- Visit to night markets and business districts

**What’s Included:**
- Roundtrip airfare, transportation, tuition/fees, excursions, and most meals  
- Room for 7 nights (double rooms)

**Course Credits:** 1

**Total Trip Cost:** The charges for this program are $2500. The program costs are subsidized through financial support from sponsors and the hosting institutions.

**Scholarships:** Up to $1000 may be available through the Purdue Study Abroad office online application!!

**Deadline to apply:** November 15, 2014

**Contact:** Krannert Undergraduate Study Abroad at kranugsa@purdue.edu

Visit the Program Web site for detailed information and to apply:  
http://www.krannert.purdue.edu/undergraduate/Academics/studyabroad/taiwan/Home.asp
Live, Learn & Work: Cartagena, Colombia

Live the local lifestyle by learning the culture and helping the community. Learn at the beautiful Universidad de Cartagena just steps away from the Caribbean Sea. Work for influential Cartagena, Colombia businesses.

Program Description

Are you searching for the ultimate INTERNSHIP program? Do you want to gain international business experience? Do you want to build professionalism by interning for successful international companies and engage in a meaningful, hands-on internship experience and your resume all at the same time? Do you want to live in a tropical paradise? Then read on - this program is for you!!

The purpose of the Cartagena: Live, Learn and Work Global Internship experience is to introduce participants to South American culture, language, and business/professional practices in Cartagena, Colombia. Cartagena is a booming business and cultural center with much opportunity for participants to engage in the business marketplace through internships, as well as to participate in cultural and language information exchange with peer partners (students) from the Universidad de Cartagena and various non-profit organizations throughout the area through community service projects.

Program Timeline

May 19-May 31, 2013 - Classes at Purdue University, West Lafayette
June 1 - July 12, 2014 - Classes and Internship in Cartagena, Colombia

Classes

Earn 6 to 9 credit hours of

- IDIS 491*: Global Business Perspectives and Practices
- IDIS 490*: Global Internship
- Spanish 201, 202, 301 or **arrange Spanish language credits
- LALS 250: Latin American Culture

Earn 9 credit hours toward the Global Studies minor by completing 9 credit hours and this SA experience. **Talk to your academic advisor about how to complete final course to complete the major.

* All participants must take this course.

**Please note that program directors are willing to work with students at the undergraduate and graduate level on independent study courses as part of this program.

Internship Opportunities

Lisa Lambert Snodgrass will work with each individual participant to match an internship experience. We have more than 40 internships available!!
Below is a sample list of the types of internship opportunities available to Purdue students:

- Event planning
- News reporting, journalism
- Television: broadcasting, reporting, editing, production
- Advertising
- Nursing, medical assisting
- Engineering - industrial
- Human resources
- Fashion design - apparel design
- Sales and retail
- Tourism and Hospitality
- Social work
- Non-profit, community engagement
- and many, many more!

**Program Structure**

May 19 - May 31: Program participants will attend classes on Purdue’s campus. Class times and locations will be announced at a later date, but will follow a typical Maymester time period.

June 1 - July 12, 2014: Program participants will report to their internship placements from 8AM - 1PM Monday-Friday. Participants will engage in coursework from 3-5PM Monday-Friday.

**Program Costs**

This 8 week program includes

- 4 cities, 2 countries: Panama City, Panama, Barranquilla, Santa Marta and Cartagena, Colombia
- professional internship tailored to your career interest with some of Cartagena's top companies
- guest lectures and networking with Colombian business leaders, Cartagena city officials, Purdue Alumni and Purdue and Universidad de Cartagena award winning faculty and staff
- luxury/boutique hotel accommodations (double/triple occupancy), at the Casa de las Palmas in the heart of Cartagena with old world flare and all the modern conveniences, WiFi, air conditioning, television, dipping pool, laundry services, breakfast buffet 7 days a week, lunch 4 days a week and access to kitchen facilities
- 2 weeks of pre-travel education - orientation and coursework
- 6-9 Purdue credits - tuition is included in the total cost
- Weekly group dinner with a local ‘surprise’ quest
- all excursion entrance fees and transportation
- airport arrival and departure transportation
- welcome and farewell receptions
All this and so much more, for just $4600-4700 (approx)
Airfare and any additional personal travel or expenditures not included.
**A $500 deposit is required to secure your internship placement. The non-refundable deposit will be applied to the total cost of the program.

So what are you waiting for? Apply today!!

Contact Lisa Lambert Snodgrass at lsnodgra@purdue.edu or Cody Hanson at chanson@purdue.edu