THE HEAD'S PERSPECTIVE
Welcome back to Purdue and to the department to all EAS students, faculty and staff! I hope that you had an enjoyable and productive summer and that you are looking forward to another exciting academic year.

I would like to extend a special welcome to all the new members of the EAS community. We have 20 new graduate students and 24 new undergraduate students for the Fall 2010 semester. In addition, we are very pleased to welcome Dr. Nat Lifton as a new Assistant Professor with a joint appointment in Earth and Atmospheric Sciences and Physics. Dr. Lifton received his PhD in Geosciences from the University of Arizona in 1997 and joins us after serving as an Associate Research Scientist in the Department of Geosciences and the Arizona Accelerator Mass Spectrometry Facility at the University of Arizona. His research focuses on developing methods for using in situ cosmogenic nuclides to derive surface exposure ages and/or erosion rates for process-oriented geomorphic studies. Welcome to EAS!

The EAS faculty just held its annual retreat which sets the stage for continued work on achieving growth and improvement, as mapped out in our strategic plan. Faculty and student achievements, alumni support and participation, and departmental research expenditures, gift funds, international press coverage, and our national ranking set new high levels of accomplishment in 2009-10. Quite simply, it was a stellar year for the EAS community. Building on these successes the faculty retreat included discussion of three main themes: 1. adding research faculty to the department (these are faculty appointments focused entirely on research funded by external sources with no teaching duties other than graduate student supervision), 2. revision of our undergraduate curriculum focused primarily on re-establishing a vibrant undergraduate major in environmental geosciences as part of the set of departmental majors, and 3. possible creation of a professional science master’s degree program. Drs. Michalski and Riggs led a very productive discussion of curriculum revision, which will also have an impact on some of the introductory elements of the geology and geophysics major. We decided to move ahead with an aggressive schedule for rejuvenating the environmental geosciences curriculum, and there was a lot of enthusiasm for improving the coordination and sequencing of learning in our undergraduate programs and for making use of research into what motivates students to choose geosciences as a field of study. We have an exciting year of discussion and positive change ahead of us.

Jon Harbor

UPCOMING MEETINGS
Monday, August 30
- EAS Faculty Meeting, CIVL 3201 (11:30 a.m.)
- EAS Primary Committee, CIVL 3201 (~1:30 p.m.)

OUR RECENT PUBLICATIONS


RECENT PRESENTATIONS
Herrera, J., and Ogg, J. -- "Oxfordian Sea-Level Oscillations: 400-kyr periodicity of sequences in British (Subboreal) and French (Sub-Mediterranean) reference sections" -- poster at Eighth International Congress on the Jurassic System (Suining, Sichuan, China; 9-13 July 2010).

Ogg, J., Hinnov, L., Huang, C., and Pryzbylski, P. -- Invited Keynote for Eighth International Congress on the Jurassic System -- "Late Jurassic Time Scale" (Suining, Sichuan, China; 9-13 July 2010).

Wen-Yih Sun presented "Purdue Regional Model" at NASA/GSFL on July 15, 2010.

Prof. Zhuang presented a talk entitled, "Modeling exchanges of methane between terrestrial biosphere and atmosphere" at the 95th ESA Annual meeting, August 1-6, 2010, Pittsburgh, Pennsylvania.

FELLOW OF THE PURDUE TEACHING ACADEMY
We are proud to announce that Larry Braile has been selected as a Fellow of the Purdue Teaching Academy.

As many of you know, Larry began teaching GEOS 100 Planet Earth (now EAS 10000) in 1989. At that time, the enrollment was about 100 and it has grown to 270-450 students in recent semesters. Remarkably, since 2003, Larry has instructed 4500 students in Planet Earth, Computer Aided Analysis in Geoscience, Data Analysis Techniques in Geoscience, and Seismic Exploration and has received excellent teaching scores every semester!

In addition, he has been involved in a large number of outreach programs in the past 15 years and regularly devotes significant time to education workshops for K-16 teachers and developing curricular materials for teaching about earthquakes, seismology, plate tectonics and related Earth science. His Earth science teaching activities (over 50 separate activities, lessons and educational resources consisting of over 800 pages of materials) are widely used in K-16 classrooms throughout the world. Some examples are Seismic Waves and the Slinky, Plate Puzzle, Every Pebble Tells a Story, Journey to the Center of the Earth, Seismic Waves Demonstrations and Animations, Using AmaSeis, and Interpreting Seismograms.

Larry has also been a faculty member in the award-winning SAGE (Summer of Applied Geophysical Experience) program since 1985 and has been Co-Director since 2007. SAGE is a unique 5-week program of education and research in geophysical field methods for undergraduate and graduate students from any university and for selected professionals. Each year approximately 30 students participate in SAGE.

Congratulations to Larry on this well deserved award.

ARTICLE NOTED ON COVER OF NATURE
The New Madrid Earthquakes Spreading the Risk
New Madrid seismic zone, in a now heavily populated area of the central United States, was responsible for the 1811–12 New Madrid earthquakes of magnitudes of 7 or greater. The extent of the current seismic hazard in the region is hotly debated. Eric Calais and colleagues present evidence that the geologically recent sequence of large earthquakes in this region was triggered by the rapid removal of sediments by the rivers of the northern Mississippi embayment at the end of the last ice age. Read more...

WELCOME TO OUR NEW GRADUATE STUDENTS
Matthew Bowers received his Bachelor's degree from Purdue. He is working on his Master's with Prof. Tung.

Jonathan Buzan received his Bachelor's degree from the University of California/Santa Cruz. Jonathan began his Ph.D. program this summer working with Professor Huber.

Christine Chung also received her Bachelor's degree from Purdue and is working on a Master's with Prof. Niyogi.

Roby Douilly received his Bachelor's degree from the Faculte des Sciences in Haiti and is working in collaboration with Profs. Calais and Freed on his Master's degree.

Nicholas Farny, one of our undergraduates, is continuing his studies on a Master's degree working with Prof. West.

Michael King received his Bachelor's degree from Haskell Indian Nations University. He is working on a Master's with Prof. Michalski.
Kelvin Koster is working on his Master's degree with Prof. Haq. He received his Bachelor's degree from Grand Valley State University.

Thomas Lovell received his Bachelor's degree from the University of Tennessee/Chattanooga and his Master's from the University of Alabama/Tuscaloosa. He is working on his Ph.D. with Prof. B. Bowen.

Qianwen Luo received her Bachelor's degree from Sun Yat-Sen University in China and is working on her Ph.D. with Prof. Tung.

Russell Martin, another of our undergraduates, is working with Prof. Haq on his Master's degree.

Tenille Medley received her Bachelor's degree from the University of Illinois/Chicago and her Master's here at Purdue. She is pursuing another Master's degree working with Prof. Haase.

Brian Murphy is working on a Ph.D. with Prof. Haase. He received his Bachelor's from Hanover College and his Master's from Purdue.

Zhangcai Qin received his Baccalaureate degree from China Agricultural University. He is working with Prof. Zhuang on his Ph.D.

Darryl Reano received his Bachelor's degree from New Mexico State University/Las Cruces. He will be working on a Master's with Prof. Ridgway.

Paul Schmid received his Bachelor's degree from Valparaiso University and his Master's from the University of Alabama/Huntsville. He is working on a Ph.D. with Prof. Niyogi.

Steeve Symilthe is another student from Haiti working on his Master's in collaboration with Profs. Calais and Freed. He also received his Bachelor's degree from the Faculte Des Sciences.

Wanchen Wu received her Baccalaureate degree from National Taiwan University and is working on her Ph.D. with Prof. Tung.

Xudong Zhu is working on a Ph.D. degree with Prof. Zhuang. He received his Bachelor's degree from East China Normal University and his Master's from Academia Sinica-China.

We also have two students admitted to the Ecological Science & Engineering Interdisciplinary Graduate Program who will be working with EAS faculty. They are:

Yujie He who is pursuing her Ph.D. degree with Prof. Zhuang. Yujie received her Bachelor's degree from Fudan University-China.

Jianhua Huang received both his Bachelor's and Master's degree from Shandong University-China and will be working on his Ph.D. with Prof. Gurney.

**BOGGESS AWARD RECIPIENTS**

Congratulations to EAS alumni Lauren Patterson (BS, 2004) and Martin Doyle (PhD, 2002) for receiving the 2010 Boggess Award from the American Water Resources Association. The Boggess Award was established in 1973 to "honor the author of the best paper published in the Journal of the American Water Resources Association" (JAWRA). JAWRA publishes several hundred papers per year, ranging from environmental policy to water resources engineering. Lauren and Martin's paper sat at the interface of hydrology, policy, remote sensing, and demography using an interesting way of analyzing population distribution, all within the context of post-Katrina floodplain management policy. The method they developed will be described in detail in a forthcoming issue of *Professional Geographer*. This award is for a paper that was the first chapter of Lauren's master's thesis working with Martin as her advisor. Patterson, L., and M.W. Doyle (2009). Assessing effectiveness of national flood policy through spatiotemporal monitoring of socioeconomic exposure. *Journal of the American Water Resources Association*, 45:1-16.

**RESEARCH FIELD TRIP**

On August 20, 2010, Terry West led a group of students to a field site in Mt. Vernon, Posey County, Indiana, located east of Evansville in the pocket area of the state between the Ohio and Wabash Rivers. Dane Dudley, undergraduate major, did a directed research study this summer on this project, under Dr. West's direction, but he had not visited the site. Richard Fisher, M.S. student and Yinghui Sui, Ph.D. graduate of EAS, also made the long one-day trip to the project site. Groundwater wells in an area east of Mt. Vernon were found to contain elevated levels of arsenic and the study was conducted to determine the source of this contamination. A final report to landowners in the area who requested the study is under preparation.

**EAS ALUMNI AD HOC EVENT**

Building 33 at NASA Goddard Space Flight Center, the Earth Science Building, may hold the distinction of having the highest density of EAS alumni (measured in units of EAS Boilermakers per square meter of floor space) in the world. On his annual summer pilgrimage to Goddard, Prof. Harshvardhan met most of them over lunch at a Korean buffet in Beltsville, MD (Gah Ram – highly recommended for lunch; dinner involves cooking your own meal so not for everyone). The photo below shows the group of
Boilermakers (degree, year and adviser in parenthesis).

Two other alumni in Building 33 were not able to join us. Michael Bosilovich (M.S. 1992, Ph.D. 1997, Sun) was on vacation and Jui-Yuan (Christine) Chiu (Ph.D. 2003, Petty/Harshvardhan) was busy packing in preparation for her departure for the United Kingdom. We were able to snap a photo in the hallway across from the elevators on the third floor of C wing.

Christine deserves our heartiest congratulations – she starts next month as a Lecturer in Meteorology at the University of Reading. For those not in the know, Reading probably has the number one comprehensive program in meteorology in the UK (http://www.met.reading.ac.uk/).

OMBUDSMAN SERVICES IN EAS
Dee Gillespie serves as our Ombudsman in the EAS Department.

The Ombudsman serves as a neutral third party providing assistance to students, staff, and faculty who have University/Department-related complaints and/or concerns of a non-legal nature and as a resource for information regarding University/Department-related policies and procedures.

Please see the description to better understand the role of the ombudsman in our department. If you would like to meet with Dee, please call her to request an appointment at x44753 (please do not send a description of your concern via email). Meetings can be arranged at a suitable location outside of the EAS Department if desired.

EAS TECHNOLOGY SUPPORT NEWS
Purdue Network 2010 Upgrade for CIVL
On Thursday, September 16; Friday, September 17; Wednesday, September 22; Thursday, September 23; and Friday, September 24 from 3:00 a.m. to 6:59 a.m. each day, the IT Networks & Security Data Team will be upgrading a portion of the BoilerNet network to meet the new Purdue Network 2010 standard. Specifically the network will be upgraded in the Civil Engineering Building (CIVL).

Affected Clients: Clients within CIVL should plan to experience disruption of both wired network connectivity (via data PIC) and wireless network connectivity (via PAL/PAL2.0).

Scope of Work: During the scheduled outage window, affected clients should plan to experience service disruptions for up to two hours in duration.

If you have any concerns or questions about this scheduled work please email us with your concerns and we will be happy to address them (eas-itap@purdue.edu).

INTERNATIONAL PROGRAMS ANNOUNCES FALL 2010 FACULTY GRANT PROGRAMS
International Programs is offering three competitive grant programs for faculty this fall semester related to
- Study Abroad and International Learning (SAIL);
- Purdue University-Moi University (PUMU) Partnership; and
- Purdue University-Tsinghua University Strategic Partnership.

An RFP for each area can be found at www.ippu.purdue.edu/Aid/index.cfm. Proposals are due September 15.

KNOVEL EARTH SCIENCE COLLECTION (electronic)
The Libraries just purchased a one year subscription to the electronic Knovel collection for Earth Sciences. (See: http://www.knovel.com/web/portal/main, choose EARTH SCIENCES. Active as of 8/17/10.)

After the one year subscription lapses, they will review the usage stats to see if it is worth renewing the following year. Originally we were looking to purchase the electronic version of Treatise on Geophysics, v.1-11, from Elsevier, for $5245. However, the Libraries decided to subscribe to the entire Knovel Earth Science electronic collection for us instead. (The funding will come from the Libraries “Big Ticket Fund,” not the EAS Library monograph fund.) Please check it out!
EAS LIBRARY'S NEWMEST BOOKS
Click here to see a list of new books in the EAS library in the last two weeks.

FUNDING OPPORTUNITIES
NOAA Environmental Literacy Grants for Formal K-12 Education
Deadlines: pre-proposal – September 8; application – January 12. Anticipated funding: $8 million to fund 10 awards. Read more...

NSF Mathematical Sciences Research Institutes
Deadline: February 4, 2011. Anticipated funding: $12,000,000 to fund three to four institutes. Read more...

NSF Opportunities for Enhancing Diversity in the Geosciences (OEDG)
Deadlines: letter of intent (Track 1 and 2) – October 1; full proposal (Track 1 and 2) - November 10; planning grant – October 5, 2011. Read more...

NSF Arctic Research Opportunities
Deadline: November 10. The goal of the NSF Division of Arctic Sciences is to gain a better understanding of the Arctic's physical, biological, geological, chemical, social and cultural processes; Read more...

BEVERAGES AT ON-CAMPUS DEPARTMENTAL EVENTS
Since Purdue is entering into the third year of the current Coca-Cola beverage agreement, we are being reminded of the contractual obligations. Read more...

FAQ

PURDUE MONUMENTAL 5K DOG JOG AND15K RACE
The School of Veterinary Medicine is organizing the second Purdue Monumental 5K Dog Jog and 15K Race on October 2nd, 2010. You are invited to participate in this event that wants to promote the benefits of physical exercise and the importance of the human-animal bond. Proceeds will benefit several local charities.


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. The next deadline is November 1, 2010.

NSF'S EAST ASIA AND PACIFIC SUMMER INSTITUTES (EAPSI) FOR U.S. GRADUATE STUDENTS
The East Asia and Pacific Summer Institutes (EAPSI) provide U.S. graduate students in science and engineering:
1) first-hand research experiences in Australia, China, Japan, Korea, New Zealand, Singapore or Taiwan; 2) an introduction to the science, science policy, and scientific infrastructure of the respective location; and 3) an orientation to the society, culture and language. The primary goals of EAPSI are to introduce students to East Asia and Pacific science and engineering in the context of a research setting, and to help students initiate scientific relationships that will better enable future collaboration with foreign counterparts. Read more...

EMILY CORNETT – FROM PURDUE TO THE U.S. MARINE CORPS
When Emily Cornett received her BS degree in Atmospheric Science this August, she also completed her summer program in the U.S. Marine Corps at Quantico, Virginia. Emily's summer platoon of 49 potential officers ended with only 15 graduates. (She definitely did a "Boiler Up"!) Next up for Emily – Officers Candidate School, back at Quantico, as a Second Lieutenant in the United States Marine Corps. Congratulations to Emily and best wishes in her chosen career path.
A NOTE FROM OUR ACADEMIC COUNSELOR

Schedule Revision and Fall 2010 Dates

Adding

Sunday, August 29, is the last day to add a class with no signatures and through myPurdue. To add from August 30 through September 20 (last day) requires instructor approval and signature plus advisor signature and paperwork to Hovde Hall.

Dropping

CHECK with your Advisor before dropping a class… and know your semester classification so you know what dates apply to you.

Monday, September 6, is the last day to drop a class through myPurdue with no record of the course.

Monday, September 20, is the last day to drop a class with a grade of “W” for those with a semester classification of 3 or above. You need advisor signature, and paperwork must be processed at Room 45 Hovde – you cannot process this yourself through myPurdue.

Wednesday, October 27, is the last day for anyone to drop a class for fall. Paperwork is needed with instructor and advisor signature, and the instructor will determine “grade” – if semester classification is 03 or above. If your semester classification is 02 or below, you still need paperwork but only advisor’s signature and the correct paperwork, which you take to Hovde Room 45 for final processing.

Math: The last day a student in MA 15200, 15300, 15400, or 15900 can change to a different level math course is Thursday, September 23.

Discovery Park Undergraduate Research Internships – DURI

Discovery Park Undergraduate Research Internship Opportunities are available now. With a part-time paid internship you can engage in cutting edge interdisciplinary projects, gain valuable skills and knowledge for a possible career in research, become part of a community of researchers, and receive a $500 scholarship for the Fall Semester. You can search project descriptions and submit applications online at http://www.purdue.edu/dp/duri. Student applications will be accepted August 23 – September 3, 2010. In order to qualify you must have sophomore status and a minimum 3.0 GPA. Informational Callouts will be held in UNIV Room 101 from 3:30-4:30 on August 25th, 26th, 30th, and 31st.

Welcome to the Fall Semester!

Nancy

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.
CALL OUT

GRADUATE STUDENTS

An Opportunity to Enhance MS/PhD degree with Area of Concentration in

Computational Science
Computational Engineering
Computational Life Sciences

Through CS&E and CLS Interdisciplinary Programs

Joint CS&E-CLS Reception and Information Session
Wednesday August 25; LWSN 3102; 3:30PM

CS&E/CLS Showcase at Convocation for New Grad Students
Friday Aug 20; Stew Center 202; 10:30 - 11:30 AM

www.purdue.edu/gradschool/cse
www.purdue.edu/gradschool/cls

Refreshments provided. Please RSVP to Julie Thompson (jdharper@purdue.edu) by August 23rd 10:00 AM.
COMPUTATIONAL SCIENCES and ENGINEERING PROGRAMS
Interdisciplinary Concentration within MS and PhD programs of affiliated departments

CS&E
Computational Science & Engineering
www.purdue.edu/gradschool/cse

The aim of the program is to train students in high performance computing and its use in large scale simulations so they are ready to tackle the "Grand Challenge"-type problems in a multi-disciplinary environment.

ESTABLISHED in 1995
ENROLLMENT: 120 students, 156 faculty, 23 departments, 6 colleges. Graduates: 101 students with MS/PhD concentration in CS&E.

AFFILIATED DEPARTMENTS (23):
Engineering: AAE, ABE, CE, CHE, ECE, ME, MSE, NE, Professional Engr.
Science: BIO, CHEM, CS, EAS, MATH, PHYS, STAT
Pharmacy: MCMP, IPPH
Agriculture: AgE, FS
Technology: ECET, IT, C&IT
Liberal Arts: PSYC

CONCENTRATION:
‘Computational Engineering’ in ENGR
‘Computational Science’ in other colleges

REQUIREMENTS:
MS: 2 core, 1 relevant, seminar
PhD: 2 core, 2 relevant, seminar, committee

Core courses (listed online) from the following different groups:
- Introduction to CS&E
- Computational Mathematics
- High Performance Computing
- Intelligent Computing
- Scientific Visualization
- Computational Optimization

Relevant courses (listed online): substantial computing component from various departments.

OPPORTUNITIES
FELLOWSHIPS: GAANN, Lynn, Purdue Doctoral, DOE-Computational Science
TRAVEL GRANT: Ismail Interdisciplinary grant
RESEARCH GRANT: Bilsland Dissertation, CRI-SIRG Grants
AFFILIATED CENTERS: CRI, NNSA-PRISM, CCAM, NCN, RCAC, Statistical Bioinformatics
STUDENT ACTIVITIES: SIAM student chapter, Student conference, Posters presentations

Contact: Dr. Jyoti Mathur, mathurj@purdue.edu
CS&E and CLS Interdisciplinary Programs
Young Hall, Room 922 | 155 S. Grant Street | West Lafayette, IN 47907
Phone: 765-494-0379

CLS
Computational Life Science
www.purdue.edu/gradschool/cls

The aim of the program is to train students to get proficient in computational tools and techniques in the life sciences so that they are prepared for discovery and implementation of algorithms that facilitate the understanding of biological processes.

ESTABLISHED in 2005
ENROLLMENT: 19 students, 54 faculty, 12 departments, 5 colleges. Graduates: 3 MS and 1 PhD with concentration in CLS.

AFFILIATED DEPARTMENTS (10):
Engineering: CHE, ECE, BME
Science: BIO, CHEM, CS, MATH, PHYS, STAT
Pharmacy: MCMP
Agriculture: AGRO
Technology: C&IT

CONCENTRATION:
‘Computational Life Science’

REQUIREMENTS:
MS: 3 CLS courses, seminar
PhD: 4 CLS courses, seminar, committee

CLS Core courses (listed online) cover topics:
- Bioinformatics
- Computational Biology
- Systems Biology

Selected from Life Science, Computational Methods, Engineering, Statistics, Information Systems

August 2010 update
Food provided by the Department of Earth and Atmospheric Sciences

SCIENCE

on tap

I KNOW WHAT YOU
DID LAST SUMMER...

and where you were and what you
te and what you drank

How chemistry records the
history of people and products

Dr. Gabe Bowen
August 26, 6:00pm
Lafayette Brewing Company
622 Main St.
Age 21+

An informal conversation about science.

www.facebook.com/scienceontaplafayette • scienceontaplafayette@gmail.com
24th Annual Burton D. Morgan Business Plan Competition

Presented by The Burton D. Morgan Center for Entrepreneurship

TOTAL PRIZE PACKAGE OF $100,000

We are seeking PURDUE students with a unique idea for a new product or service from any discipline.

Call-Out Competition Guidelines with Q&A

September 7, 6-7:00 RAWLS Room 2070 or September 8, 5-6:00 Burton D. Morgan Center for Entrepreneurship Room 121, or September 9, 7-8:00 BDMCE Room 121

Do you have what it takes to succeed as an entrepreneur?

http://www.purdue.edu/discoverypark/entrepreneurship/programs/competition/bdmcompetition/

For Additional Information contact:
Jackie Lanter
(765) 494-1335
BDMCenter@purdue.edu