

July 6, 2010

CONGRATULATIONS TO QIANLAI ZHUANG!



Qianlai Zhuang has been named a William F. and Patty J. Miller Associate Professor in the College of Science, effective July 1 for a five-year term. The professorship, which was created through the generosity of Purdue alumni Bill and Patty Miller, recognizes Qianlai's extraordinary accomplishments as a leading researcher in climate change, and his potential for continuing scholarly accomplishments.

SUCCESSFUL CONCLUSION TO THE AMS/ PRIME LAB SEARCH



Dr. Nat Lifton will be joining Purdue this coming academic year as an assistant professor in Earth and Atmospheric Sciences (75%) and Physics (25%). Nat and his family will be moving to West Lafayette later this summer. Nat brings a wealth of experience and some very exciting new capabilities to our research involving the use of cosmogenic nuclides to address key problems in the earth and atmospheric sciences, and is keen to develop collaborations with his new Purdue colleagues.

OUR RECENT PUBLICATIONS

Caballero, R., and M. Huber (2010), Spontaneous transition to superrotation in warm climates simulated by CAM3, *Geophys. Res. Lett.*, 37, L11701, doi:10.1029/2010GL043468.

Lu, Xiaoliang, and Qianlai Zhuang (2010), Evaluating evapotranspiration and water-use efficiency of terrestrial ecosystems in the conterminous United States using MODIS and AmeriFlux data, *Remote Sensing of Environment*, 114, 1924-1939, ISSN 0034-4257, DOI: 10.1016/j.rse.2010.04.001.

RECENT PRESENTATIONS

Sonia Lasher-Trapp gave an invited seminar at the UK Met Office on May 19 entitled, "CCN vs. Giant Aerosol: Strength in Numbers."

Terry West gave an invited talk to the Elderhostel Group meeting on campus for the week of June 13-19. The talk on June 15 entitled "A New Source of Geothermal Power" was based on the study directed by Dr. West who is working with Richard Fisher, EAS master's degree student, concerning coal mines in southwest Indiana. Where surface and underground bodies of water coincide, the potential exists for geothermal heat exchange and other energy saving devices. About 35 older adults were in attendance and generated lengthy discussions on the subject.

Sonia Lasher-Trapp gave an invited seminar at the University of Leeds on June 15 entitled, "Initiation of Coalescence in a Cumulus Cloud: Influence of Variability in Drop Growth Histories Produced by Entrainment."

Dev Niyogi gave an invited seminar on June 16 at Beijing Normal University on "Land Use Land Cover Change Impacts on Climate." He also met on June 18 with collaborators from Tsinghua University and Chinese Academy of Meteorological Sciences for a project on heavy rain forecasting and WRF/Land Data Assimilation Systems.

Mike Baldwin gave an invited seminar entitled: "Feature-specific analysis and prediction in climate simulation and weather prediction" on June 17 at the National Center for Atmospheric Research in Boulder, Colorado.

Jeff Trapp gave an invited talk at the University of Reading on June 17 entitled, "Vertically rotating cores in quasi-linear convective systems: Implications, formation, and influence of environmental heterogeneity."

Sonia Lasher-Trapp gave an invited seminar at the University of Manchester on June 23 entitled, "Initiation of Coalescence in a Cumulus Cloud: Influence of Variability in Drop Growth Histories Produced by Entrainment."

Dev Niyogi and visitor Prof. UC Mohanty from IIT Delhi visited NOAA AOML Hurricane Research Division (HRD) in Miami June 24-25 and gave an invited seminar on "Modeling Land Falling Tropical Systems and Perspectives for Introducing Advanced Land Surface Features in Hurricane WRF." Two graduate students, Monica Laureano (co-advised by Dev Niyogi and Mike Baldwin) and Olivia Kellner, are working with the HRD/NOAA AOML group on HWRF studies. Monica will be spending two weeks at HRD in July.

Cecille Villanueva-Birriel presented her paper entitled, "Changes in the Productivity of the Warm Rain Process in Deep Convective Clouds Resulting from Regional Climate Change over the Continental U.S." at the AMS Cloud Physics Conference in Portland, Oregon held 28 June- 2 July.

Dan Arthur presented his paper entitled. "Effects of Environmental Temperature and Humidity on Ice Nucleation and Resulting Precipitation in Idealized Supercell Simulations" at the AMS Cloud Physics Conference in Portland, Oregon held 28 June- 2 July.

NCAR/ASP SUMMER COLLOQUIUM

From June 6 through 18, Mike Baldwin was one of the lead instructors and co-organizer of a colloquium entitled: "Forecast Verification in the Atmospheric Sciences and Beyond," jointly sponsored by NCAR's Advanced Study Program and Research Application Laboratory. The colloquium addressed the many facets of forecast evaluation. Invited lecturers discussed verification from the varied perspectives of meteorologists, climatologists, statisticians, and decision makers. EAS graduate students Kim Hoogewind and Ben Schwedler were among the participating students that were provided opportunities to implement ideas from the lectures, and presented results from group research projects accomplished during the colloquium. (For more information, see <http://www.asp.ucar.edu/colloquium/2010/ral/index.php>.)

EXTERNAL REVIEW COMMITTEE MEMBER

Laura Pyrak-Nolte was a member of the external review committee for the Physical and Life Sciences Directorate (PLS) at Lawrence Livermore National Laboratory on June 21-24, 2010 in Livermore, California.

2009 ABSTRACTS

The 2009 abstracts of journal papers by EAS faculty can be found [here](#).

DTC SERVICE

Mike Baldwin has recently accepted an invitation to serve on the Developmental Testbed Center (DTC) Science Advisory Board for a two-year term. The DTC is a distributed facility sponsored by NOAA, US Air Force, FAA, NSF, and NCAR, with a primary mission to serve as a coordinating mechanism bridging the research and operational NWP communities. The Science Advisory Board provides advice to the DTC Director on a variety of issues, such as emerging numerical weather prediction technologies, strategic computer resource issues, and selection of code for testing and evaluation. More information on the DTC can be found at: <http://www.dtcenter.org/>.

PURDUE GRADUATE ASSISTING COAST GUARD DURING GULF OIL SPILL RESPONSE

Lieutenant Karl E. Garman is a Coast Guard Reservist, currently on active duty recall for the Deepwater Horizon response in the Gulf of Mexico region. Originally from the Chicagoland area, he earned two degrees at Purdue – a Ph.D. in Earth & Atmospheric Sciences in 2009 and a M.S. in Aerospace Engineering in 2003. While at Purdue, he was a research pilot for the Airborne Laboratory for Atmospheric Research (ALAR) in the Shepson Tropospheric Chemistry Group, and was president of Purdue Graduate Student Government (PGSG) from 2003-04. [Read more...](#)

CONGRATULATIONS!

- Olivia Kellner, a graduate student with Dev Niyogi, has received the competitive NWS Student Career Employment Program (SCEP) internship position. She is interning with the Indianapolis National Weather Service office.
- Olivia Kellner and Lei Ming, both working with Dev Niyogi's group, have received a NASA Earth System Science Fellowship starting Fall 2010.

GROUNDWATER CONTAMINATION STUDY

Terry West and Richard Fisher have been asked by local citizens to study a groundwater contamination problem in Mt. Vernon, Posey County, Indiana. A site visit provided the necessary details to evaluate the situation. Several groundwater wells were found to contain high values of arsenic, well above the MCL (maximum concentration level) in an area adjacent to the floodplain of the Ohio River. Two or three sources for the contamination are being considered. Groundwater data are being evaluated to determine flow directions and velocities. An

undergraduate student, Dane Dudley, has agreed to study the problem as a summer research topic, under Dr. West's direction.

FALL "WELCOME" PICNIC AT HAPPY HOLLOW PARK

Tuesday, August 17
4:00-7:00p Shelter 4

Mark your calendar now!!!
The Boilermaker Special train will provide transportation to and from campus as well as offer rides at the Park!



PLEASE MARK YOUR CALENDARS FOR THE EAS FACULTY RETREAT

Wednesday, August 18
8:00a – 5:00p
Holiday Inn Select, Lafayette

Breakfast and lunch will be served

(If you have not already done so, please RSVP now for planning purposes.)

EAS LIBRARY'S NEWEST BOOKS

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

EAS TECHNOLOGY SUPPORT NEWS ITaP makes changes to instructional labs

ITaP instructional labs are migrating from Microsoft Windows XP to the Microsoft Windows 7 operating system over the summer. By the beginning of the fall 2010 semester, ITaP will deploy Windows 7 to all of its computer labs and all centrally scheduled classroom PCs that it supports.

ITaP encourages faculty and staff to visit one of its computer labs during summer hours after the Windows 7 upgrade to test any of the standard software for Macs or PCs prior to the fall semester.

Additional information on other changes, including print-release stations and software updates may be found at:

<http://www.itap.purdue.edu/newsroom/detail.cfm?newsId=2167>

Call for Software in 4th Floor Instructional Lab

If you will be teaching fall classes and need software installed in the 4th floor instructional lab (Civil 4247), please contact the EAS Technology Support staff at: eas-itap@purdue.edu

A list of applications available on EAS Linux machines may be found at:

http://www.purdue.edu/eas/info_tech/faq/faq_linux.php#linux_software

A list of applications available on the lab's Windows machines may be found at:

<http://www.itap.purdue.edu/newsroom/detail.cfm?newsId=2167>

PURDUE GLOBAL POLICY INSTITUTE (GPRI)

The Purdue Global Policy Institute (GPRI), in partnership with the Office of the Vice President for Research, requests seed grant proposals for three types of activities: (a) research projects, (2) international workshops, and (3) international conferences relevant to GPRI's mission and theme areas. Letters of intent are due by August 15, 2010, while the proposal deadline is September 20, 2010. For full details, click [here](#).

CONGRESS ON INTELLIGENT SYSTEMS AND SOFTWARE ENGINEERING

In response to many requests, the submission deadline has been extended to 15 July.

2010 Second Global Congress on Intelligent Systems (GCIS 2010)

<http://world-research-institutes.org/conferences/GCIS/2010>
16-17 December 2010, Wuhan, China

2010 Second World Congress on Software Engineering (WCSE 2010)

<http://world-research-institutes.org/conferences/WCSE/2010>
19-20 December 2010, Wuhan, China

Important Dates:

Paper Submission Deadline: 15 July 2010

Review Notification: 1 September 2010

Final Papers and Author Registration Deadline: 15 September 2010

FUNDING OPPORTUNITIES

- **NSF Frontiers in Earth System Dynamics** <http://www.nsf.gov/pubs/2010/nsf10577/nsf10577.htm>. **Deadlines: Preliminary proposals – October 1; Full proposals – March 15, 2011.** The goals of the Frontiers in Earth-System Dynamics (FESD) program are to: (1) foster an inter-disciplinary and multi-scale understanding of the interplay among and within the various sub-systems of the Earth, (2) catalyze research in areas poised for a major advance, (3) improve data resolution and modeling capabilities to more realistically simulate complex processes and forecast disruptive or threshold events, and (4) improve knowledge of the resilience of the Earth and its subsystems. Total expected program funding: \$28,000,000.
- There is a new joint venture at NSF that is a collaboration between the Directorates for Education and Human Resources (EHR) and Geosciences (GEO). It stems from a Congressionally-mandated initiative within the STEM Talent Expansion Program (STEP), which is focused on increasing the number of undergraduate students enrolled in science, technology, engineering, and math (STEM) courses and completing degrees in those fields. A new STEP Center program solicitation (NSF 10-569) is available at: <http://www.nsf.gov/pubs/2010/nsf10569/nsf10569.htm>

- **Funding resources:** The OVPR website includes a link entitled *Funding Resources*, which may be found at http://www.purdue.edu/research/vpr/funding/funding_resources.php. This link includes sections entitled “E-mail Alerts” and “Search Tools.” Those who would like assistance in setting up their COS e-mail funding alerts may want to take advantage of our tutorial, which may be found on the *Funding Resources* link above.

POSITION VACANCY UNIVERSITY OF WISCONSIN-MADISON

The Center for Climatic Research (CCR) (<http://ccr.aos.wisc.edu/>) at the University of Wisconsin-Madison is seeking an Assistant or Associate Scientist. [Read more...](#)

HAPPY BIRTHDAY!!!

Steve Smith – July 7
Andy Freed – July 8
Alex Gluhovsky – July 13
Bill Hinze – July 26
Stacie Cordell – July 31



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>.

