

March 31, 2014

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EAPS MEETINGS

Tuesday, April 1, 3:00-5:00 pm, HAMP 3201
EAPS Faculty Meeting

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## EAPS COLLOQUIUM

**Thursday, April 3, 3:30 pm, HAMP 1252**  
**Professor Peter Clark**, Oregon State University,  
The IPCC Assessment of Future Sea Level Rise  
<http://goo.gl/9N3yMU>

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EAPS PUBLICATIONS

Kicklighter, D. W., Y. Cai, **Q. Zhuang**, E. I. Parfenova, S. Paltsev, A. P. Sokolov, J. M. Melillo, J. M. Reilly, N. M. Tchebakova and X. Lu (2014) Potential influence of climate-induced vegetation shifts on future land use and associated land carbon fluxes in Northern Eurasia. Environmental Research Letters, 9, 035004, doi: [10.1088/1748-9326/9/3/035004](https://doi.org/10.1088/1748-9326/9/3/035004).

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## EAPS DEFENSES

**Monday, March 31, 12:00 pm., HAMP 3214**  
**Xudong Zhu** (PhD candidate) Modeling Land-Atmospheric Methane and Carbon Dioxide Fluxes in Terrestrial Ecosystems of Northern High Latitudes Using a Model-Data Fusion Approach

**Tuesday, April 1, 2:00 pm., ME1009**  
**Qing Zhu** (PhD candidate) Improving Quantification of Terrestrial Ecosystem Carbon Budget with Models of Biochemistry and Atmospheric Transport using In Situ and Satellite Observational Data

**Friday, April 4, 1:30 pm., ARMS1028**  
**Ian Pope** (MS candidate) Deforestation of Cloud Forest in the Central highlands of Guatemala: Soil Erosion and Sustainability Implications for Q'eqchi' Maya Communities



## EAPS NEWS

### EAPS STUDENT HELPS LOCAL LIBRARY WITH MINECRAFT YOUTH EVENT

Last Wednesday, the Tippecanoe County Public Library held a hands-on youth event centered around the popular computer game, "Minecraft."

Professor Andy Freed's wife, Melissa Freed, a youth librarian, came up with the idea to teach children about real world minerals and mining and how they compare to those in the game.

EAPS student, Megan Neary, brought rocks to show the children and gave a special presentation. <http://goo.gl/tco8kj>



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EAPS ALUMNUS GERARDO ITURRINO PASSED AWAY

Dr. Gerardo "Gerry" Iturrino passed away unexpectedly on March 12. Gerry graduated from the department in 1989. He went on to study at the University of Miami, where he earned his PhD from the Rosenstiel School of Marine and Atmospheric Science. For the last 18 years he was a research scientist and geophysicist at Lamont-Doherty Earth Observatory in Palisades, NY.

You may leave condolences here: <http://goo.gl/gqoGGR>



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PAUL SCHMID AMS BEST STUDENT PAPER AWARD

PhD Candidate, Paul Schmid's, presentation at the 11th Symposium of the Urban Environment at the 2014 Annual Meeting of the American Meteorological Society (AMS) was selected as a students' Best Oral Presentation Award!

Paul and Professor Dev Niyogi's paper is titled, **Modeling the Influences of Local Urban Aerosols on a Derecho in Birmingham, AL**. The abstract can be found here: <http://goo.gl/LRyhpR>.

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NEW GSA PENROSE CONFERENCE

The conference, titled, "Extensional Reactivation of Thrust Fault, Coseismic Surface Rupture, and Crustal Evolution in the Eastern Basin and Range Transition Zone," will be held later this summer. Through a series of presentations and field trips, the conference will be examining nascent processes related to the eastward propagation of extensional deformation at the modern boundary of the Basin and Range province of the U.S.

GSA is actively seeking both speakers and participants to register by **April 4th, 2014**. Follow the link for more information about the conference, support, registration and contact details: <http://goo.gl/9mcGJg>.

CAMPUS NEWS

PURDUE CENTER FOR GLOBAL FOOD SECURITY FACULTY SEED GRANTS

The PCGFS requests Purdue faculty teams to submit research proposals for internal seed grants directed at innovative research approaches for resolving major global food and nutrition security challenges.

These seed grants are expected to serve as a path for generating new and novel data and information needed to develop more complete projects that will then be submitted to external donor agencies for competitive funding.

Applications are due on **Wednesday, April 30th at 5:00 pm**. Any questions should be directed to Gary Burniske – grburniske@purdue.edu. See attached flier for details.

POSTDOCS AND GRADUATE STUDENTS

UNIVERSITY OF OKLAHOMA HURRICANE MODELING AND DATA ASSIMILIATION

The School of Meteorology of University of Oklahoma has an opening for a post-doctoral research associate or research scientist in the area of hurricane modeling and data assimilation. Working with one of the leading teams in data assimilation and hurricane modeling, successful candidates will conduct research to advance the science in hurricane dynamics/thermodynamics, predictability, modeling and data assimilation.

Applications should be received by **May 15**. See attached page for details.

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DENALI NATIONAL PARK PHYSICAL SCIENCE TECHNICIAN VACANCY

Denali National Park and Preserve in Alaska is currently seeking to fill a Physical Science Technician vacancy. This

is a GS-7 TERM appointment and may be extended up to 4 years without further competition.

The Physical Science Technician will assist senior resource science and management staff with the collection, management, analysis, and interpretation of a wide range of physical science information.

For complete details and application materials, please see: <http://goo.gl/ipZ76i>.

A NOTE FROM OUR ACADEMIC COUNSELOR

PURDUE LATINO GRADUATE STUDENT ORGANIZATION (LGSO) UNDERGRADUATE MENTORSHIP PROGRAM

Information received from the Latino Graduate Student Organization:

Hello!

Are you interested in graduate school? If you answered 'yes,' then we would like to invite you to participate in an Undergraduate Mentorship Program facilitated developed by the Purdue Latino Graduate Student Organization (LGSO)!

This year, LGSO wishes to pair up undergraduate students interested in graduate school, with graduate students in their field of study. The goal is that you benefit from mentorship by a graduate student who has successfully completed the application process to graduate school in your field of study.

The program will kick-start with a workshop/social. During this event, a representative from the Purdue Graduate School will give offer a presentation on what graduate school admissions are looking for in prospective students, followed by a Q&A session with LGSO graduate students. We hope that after the workshop you will have the opportunity to meet with your prospective mentor, ask questions, and use them as a resource as you begin the grad school application process.

If interested, please email your name, year, and major to herna102@purdue.edu.

THINKING SUMMER?

If you are going to be on campus this summer or are considering it, here's a great place to get information: **Think Summer Information Fair, Tuesday, April 1st from 2:00-6:00 p.m.** in the **Union North Ballroom**. Learn about events, employment, etc. See attached flier.

Online: <http://www.purdue.edu/thinksummer/>

April Birthdays

Maarten de Hoop – April 20th
Dayton Vincent – April 23rd



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 Amy Cooper (ancooper@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>.



Request for Proposals in Global Food Security Faculty Seed Grants Round 1 - Spring 2014

Innovative Approaches to Food Security in Developing Countries

Purdue Center for Global Food Security
Purdue University, West Lafayette Campus
Proposals Due – April 30, 2014

Purpose

The Purdue Center for Global Food Security (PCGFS) requests Purdue faculty *teams* to submit research proposals for internal seed grants directed at innovative research approaches for resolving major global food and nutrition security challenges. These seed grants are to foster collaboration by *interdisciplinary groups* of research faculty taking novel approaches to key, grand challenges impacting global food and nutrition security.

PCGFS seed grants are meant to encourage development of more integrated and holistic approaches to food security research with clear testable hypotheses. These seed grants are expected to serve as a path for generating new and novel data and information needed to develop more complete projects that will then be submitted to external donor agencies for competitive funding. Teams are highly encouraged to establish or strengthen national and international collaboration with scientists at other research and development institutions including universities, international research centers, private, non-profit, federal or global agencies for long-term team building. While the intent of these seed grants is global improvement, proposals that describe research on clearly defined food security challenges in particular geographical domains are also encouraged. Applications need to indicate target potential donor sources for supporting such research and development activities beyond the seed grant award period. Proposals that have elements of training/engaging young professionals in interdisciplinary research are particularly encouraged. Examples of themes include, but are not limited to, food security concerns around:

- The intersections between food, water, climate, and the environment
- The food, nutrition and health nexus
- Agricultural ecosystems, natural resources management, and productivity increases
- Building resilience in farming and the ecosystem
- Connecting innovations to markets
- Socio-cultural issues in the intersection between science, economics and policy

In this round \$200,000 will be provided for up to four research awards at a maximum of \$50,000 each. Faculty seed grants for global food security are *not* travel grants (no travel will be awarded); they are intended to support research and data generation activities that will lead to the submission in 2014-2015 of competitive grants for federal, or other external sources of support.

Eligibility

The PI must be a faculty member of Purdue, West Lafayette engaged in food security research and education, and approved by Sponsored Program Services to serve as a Principal Investigator to an outside agency. Proposals must include collaborating faculty from other Purdue departments and colleges. Collaborations with other national and international institutions are also highly encouraged.

Application and Submission Process

Proposals: The deadline for receipt of proposals is ***5:00 p.m. Wednesday, April 30, 2014.*** Proposals should be submitted as a single PDF file attachment to an e-mail message addressed to foodsecurity@purdue.edu. Projects typically will have a start date of June 1, 2014, for a period of one year, although other timing will be considered. **Please note that no-cost extensions will NOT be considered so teams should ensure that the proposed project can be completed within one year.**

Budget Requirements

Proposals must include a budget prepared by the investigator's pre-award office. A COEUS budget is to be included with the proposal. **Due to the source of funding, F&A charges, all fringe benefits and graduate student fee remits will *not* be charged to the award and, therefore, should not be included in the COEUS budget.**

Cover Page

Proposals must be attached to a completed Proposal Submission Form (the pre-awards office will prepare this form) and should be organized as follows:

Page 1: Face page, including:

- Proposal Title
- Principal investigators
- Total budget
- Project period

Pages 2-6: Research plan, limited to 5 pages, single-spaced, one-inch margins, and no smaller than 11 point font. Proposals ***must*** address the technical and general review criteria listed below and include the following labeled sections:

- Problem Statement
- Objectives and Rationale
- Materials and Methods
- Summary and Conclusion
- Metrics that will be used to measure success/impact

Attachments:

- References (one page or less)
- Two-page (max) biographical sketch for each PI or co-PI/investigator

- Two-page (max) current and pending support for each participant
- Budget, as prepared through COEUS by the college's pre-award office

Review Criteria

Technical:

- Explicit description of how the project aligns with CGFS goals, which are to 1) provide global leadership, 2) create global public good, 3) build human and institutional capacity, 4) strengthen and grow partnerships, and 5) develop entrepreneurial capacity. Additional information on CGFS can be found at www.purdue.edu/discoverypark/food **(required)**
- High potential for submission to funding agencies, foundations and/or other sources of funding support in 2014-2015. **(required)**
- Reasonable probability of project success. **(required)**
- Clearly-defined, cross-campus/cross-disciplinary collaborative team. **(required)**
- Explicit capacity building with international collaborators. **(required)**
- Possibilities for private sector support and participation. **(desired)**

General:

- *Quality:* The proposed research must meet high standards of scientific merit and scholarship.
- *Leadership:* The investigators must have a strong research track record, and show initiative in addressing the proposed opportunity.
- *Interdisciplinary team approach:* Multiple investigators with the combined skills needed for a holistic approach, within the intent of the solicitation (including technical, social and economic factors where appropriate). **Projects focused on a single discipline will not be funded.**
- *Leverage:* Proposals will be judged on how well and creatively resources are leveraged (intellectually and internationally) to enhance research success and build research and education capacity among the participating institutions.
- *Partnerships:* Proposal teams are strongly encouraged that promote partnerships among centers and institutes engaged in the targeted regions/countries.
- *Continuation:* Potential means for sustaining the research project ***after*** the grant period with follow-on resources must be identified.
- *Deliverables:* Publications and communications produced with the funding provided must acknowledge the CGFS. Electronic copies (or summaries, in the case of publications where copyright would otherwise prevent a full copy) must be delivered to CGFS for possible linking to the CGFS website.

Post-Award and Reporting Requirements

- 6 months after the start of the project:
 - All proposal teams are required to submit a progress report with budget status (2 page max plus a one page budget summary).

- All proposal teams are required to give a 1-hour status presentation to the CGFS Director, Managing Director and members of the CGFS Executive Committee. This will provide the means for constructive feedback.
- 30 days after the end of the project period:
 - All proposal teams are required to submit a final written report.
 - All proposal teams are required to submit a policy brief.

Contact Information

Questions about proposal submission should be directed to Gary Burniske at grburniske@purdue.edu

Post-doctoral research associate or research scientist position in hurricane modeling and data assimilation

The School of Meteorology of University of Oklahoma has an opening for a post-doctoral research associate or research scientist in the area of hurricane modeling and data assimilation. The work will be performed at University of Oklahoma in collaboration with scientists in Naval Research Laboratory at Monterey. Working with one of the leading teams in data assimilation and hurricane modeling, successful candidates will conduct research to advance the science in hurricane dynamics/thermodynamics, predictability, modeling and data assimilation.

The candidate will conduct research to investigate the mechanism of hurricane intensification, in particular the impact of outflow on hurricane intensification, through ensemble-based data assimilation and ensemble simulations, study the impact of data from HS3 (Hurricane and Severe Storms Sentinel) field experiments on the estimation and prediction of hurricane outflow and intensification, and extend ensemble-based data assimilation and simulation system to include multiple numerical models.

Desired Qualification:

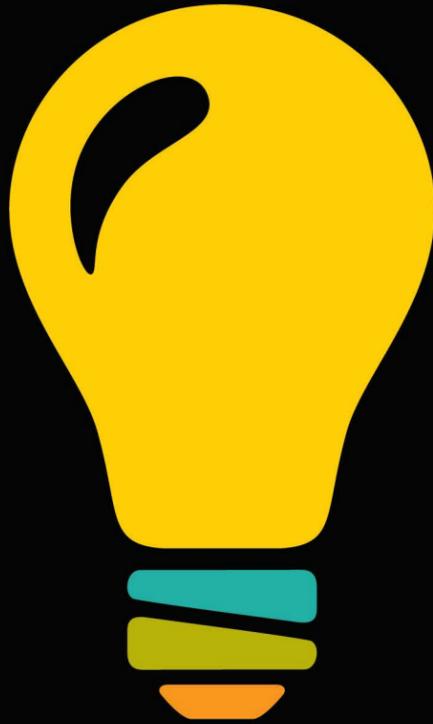
- Education and Experience:
 - ✓ Ph.D. in atmospheric science, Meteorology, Engineering, Computer Sciences, Physics, mathematics or related disciplines
 - ✓ Experience in numerical modeling

- Skills and Proficiencies:
 - ✓ Demonstrated ability to work independently and collaboratively
 - ✓ Excellent written and oral communication skills
 - ✓ Fortran 90/95 programming experience in UNIX/LINUX environment
 - ✓ Familiarity with scripting and plotting languages

Depending on experience and qualification, the position can be either a postdoctoral research associate or a research scientist. Salary will be competitive based on experience and qualification. University of Oklahoma offers competitive benefits. Position is open now until filled and full consideration will be given to applications received by 15 May 2014.

To apply for the position, please submit electronic applications, including a letter of research interest and experience, CV, and three names of references including their contact information to Prof. Xuguang Wang, at xuguang.wang@ou.edu and https://jobs.ou.edu/applicants/jsp/shared/position/JobDetails_css.jsp?postingId=303969 (job 18908)

**NOT SURE WHAT
YOU'RE DOING OVER
THE SUMMER?**



THINK SUMMER

I N F O F A I R

Get the low-down on financial aid, housing, summer events,
job and internship info — And more!

**TUESDAY, APRIL 1ST
2-6 P.M.
UNION NORTH BALLROOM**

Free food and prizes!