

November 15, 2010

## EAS SEMINAR

**Wednesday, November 17, at 3:30 p.m. in PFEN Hall:** "Results from NASA's Nov. 4, 2010 flyby of Comet Hartley 2." Jay Melosh, Purdue University, *Sigma Xi Lecture*

Reception at 4:30 p.m. following the talk

For more information, see the EAS online [calendar](#).

## THESIS DEFENSE

**Monday, November 22, at 10:30 a.m. in CIVL 2201:** "A Coupled Modeling and Observational Approach to Understanding Oxygen-18 in Atmospheric Nitrate." MS Defense for David Mase; Advisor: Greg Michalski

## PRELIMINARY EXAM

**Wednesday, November 17, at 2 p.m. in CIVL 2201:** "Kinematics and dynamics of the East African Rift." PhD Preliminary Exam Presentation for D. Sarah Stamps; Advisor: Eric Calais

## OUR RECENT PUBLICATIONS

Agee, E. M., E. Cornett, K. Gleason, 2010: An Extended Solar Cycle 23 with Deep Minimum Transition to Cycle 24: Assessments and Climate Ramifications. *J. Climate*, 23, 6110-6114.

## RECENT PRESENTATION

Shepardson, D.P. (2010). Climate Change Education. Environmental Education Association of Indiana Annual Conference, Nov 5, Shakamak State Park, Indiana. (Invited).

## SUNSPOT STORY

Chief Meteorologist, Mike Hoffman, at WNDU TV in South Bend interviewed Ernie Agee and Kandace (Gleason) Kiefer and put together a story on the Agee, et al. solar variability paper. (Kandace Gleason and Emily Cornett are co-authors on this paper, which will appear this month in the *Journal of Climate*.) To see the video, go to [http://www.wndu.com/weather/headlines/Whats\\_up\\_with\\_the\\_Sun\\_107066194.html](http://www.wndu.com/weather/headlines/Whats_up_with_the_Sun_107066194.html) and click on  **Purdue scientists concerned about solar activity on the Sun.**

## PURDUE STUDENT SUPERCOMPUTING TEAM UP FOR THE CHALLENGE OF INTERNATIONAL COMPETITION

Three years of being somewhat tied to a keyboard for most of three days trying to coax a supercomputer and the complex scientific software running on it to function optimally might seem to be enough, but Purdue University senior Alex Younts is at it a fourth time. [Read more...](#)

## 2011 2ND WORLD CONGRESS ON COMPUTER SCIENCE AND INFORMATION ENGINEERING (CSIE 2011)

17-19 June 2011, Changchun, China

### Call for Papers & Exhibits

CSIE 2011 intends to be a global forum for researchers and engineers to present and discuss recent advances and new techniques in computer science and information engineering. Topics of interests include, but are not limited to, data mining & data engineering, intelligent systems, software engineering, computer applications, communications & networking, computer hardware, VLSI, & embedded systems, multimedia & signal processing, computer control, robotics, and automation. [Read more...](#)

## TSA SECURE FLIGHT DATA REQUIREMENTS NOW IN EFFECT FOR ALL AIR PASSENGERS

Purdue's Central Travel Office reminds University travelers to be sure the name on their airline ticket matches the name on their government-issued photo ID. [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.

## NSF AND NASA FUNDING FOR STUDENTS

*For Undergraduates:* Paid Summer 2011 Undergrad Research Placements: Over 400 programs – REU and Other Summer Research Opportunities for Undergrads  
<http://www.pathwaystoscience.org/Summerresearch.asp>

*For Financial Support in Graduate School Opportunities:* Bridges, GK-12, IGERT and NSF Grad Research Fellowship programs provide generous stipend and tuition support for students through the National Science Foundation:

<http://www.pathwaystoscience.org/Grad.asp>

*For Postdoc opportunities:*

[http://www.pathwaystoscience.org/Postdocs\\_portal.asp](http://www.pathwaystoscience.org/Postdocs_portal.asp)

*For NASA-supported internships, fellowships and scholarships:* <http://intern.nasa.gov/>

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## A NOTE FROM OUR ACADEMIC COUNSELOR

### RISE Internships

The German Academic Exchange Service (DAAD) is pleased to announce that for summer 2011 they will again offer three internship programs: **RISE** (Research Internships in Science and Engineering), **RISE professional** and **RISE worldwide**. RISE has established itself as an outstanding opportunity to combine serious research with a rewarding study-abroad experience. All three programs are targeted to students from the fields of engineering, physics, chemistry, biology, **earth sciences (geology)** and related disciplines.

**RISE** undergrads have the opportunity to work on cutting edge research projects at top research institutions (e.g., Max-Planck-Institutes) and universities in Germany. Students are paired with German PhD students in a unique mentoring partnership to ensure immediate integration into hands-on lab work and built-in social network with an excellent opportunity to develop new technical skills. RISE participants receive a scholarship to cover living expenses. To learn more about RISE, please visit: [www.daad.de/rise](http://www.daad.de/rise) or email: [rise@daad.de](mailto:rise@daad.de).

**RISE professional** is designed for recent graduates, Master's and PhD students, and alumni of the RISE program who are matched with a well-known German company, where they gain insight into the professional applications of science and engineering and develop practical skills. Internships can last from 1.5 to 6 months. Similar to RISE, this new program features a scholarship to cover living expenses.

Online registration is currently available. To learn more about RISE professional, please visit: [www.daad.de/rise-pro](http://www.daad.de/rise-pro) or email: [rise-pro@daad.de](mailto:rise-pro@daad.de).

Online registration and the internship database for RISE and RISE professional open on **December 6th**. The application deadline for both programs is **January 31, 2011**.

Additionally, after the successful implementation of RISE in North America 2009 and 2010, the program is returning in an extended version in 2011: **RISE worldwide**. German students in the early stages of their studies who have the ambition to work abroad and gain hands-on research experience in their fields will be matched with researchers worldwide who wish to engage in a meaningful cooperation with a young German scholar. These German interns receive a DAAD scholarship to help cover living expenses and travel costs. Participating hosts receive invaluable assistance with their own work - they profit both professionally and personally from contact with the intern, having the opportunity to deepen their knowledge of the culture, lifestyle and higher education system in Germany.

Research groups interested in hosting a German research assistant in the summer of 2011 are invited to participate in **RISE worldwide** and to submit project proposals at: [www.daad.de/rise-weltweit](http://www.daad.de/rise-weltweit). The time frame for the submission of project proposals is **October 11, 2010 to November 26, 2010**.

### Interested in Entrepreneurship?

Liberal Arts Career Development is hosting a 'Networking Happy Hour' next Wednesday, **November 17** from 4-5 p.m. in BRNG 1284. Students will have the opportunity to speak with local business owners and leaders face-to-face and learn how they became successful in their field. All Purdue students are invited; many of the entrepreneurs have backgrounds in areas other than liberal arts. Business casual attire is appropriate, and free refreshments will be provided.

Nancy

## A Flow Cytometry and Cell Separation Facility

### MINI -SYMPOSIUM

## *Single cell analysis with cytometry*

*November 30, 2010 - Burton Morgan Center for Entrepreneurship, Room 121*

- 8:30 a.m.**                      *Coffee and continental breakfast*  
*Provided by the Bindley Bioscience Center*
- 8:45 a.m.**                      *"Welcome and overview of the Purdue FCCSF"*  
*Justin Meyers, facility manager*
- 9:00 - 9:30 a.m.**              *"Cell sorting for evaluation of cancer cell types"*  
*Tim Ratliff, PhD*
- 9:30 - 10:00 a.m.**              *"Use of Flow Cytometry in Pre-Clinical In Vitro Studies"*  
*Torian Williams, MS from Endocyte*
- 10:00 - 10:30 a.m.**              *"Multi-parametric differential high content screening for mitochondrial toxicity"*  
*Maria Tsiper, PhD*
- 10:30 - 10:45 a.m.**              *Break*
- 10:45 - 11:15 a.m.**              *"Flow cytometry for plant biology"*  
*Brian Dilkes, PhD*
- 11:15 - 12:00 p.m.**              *"Adherent cell sorting with the laser-enabled analysis and processing (LEAP) instrument"*  
*Jim Leary, PhD*
- 12:00 - 12:30 p.m.**              *"Ask the expert – Q & A session"*  
*Bring your questions about using flow cytometry and cell sorting in your research projects!*  
*Speaker panel*



**L'ORÉAL USA ANNOUNCES CALL FOR APPLICATIONS FOR  
2011 FELLOWSHIPS FOR WOMEN IN SCIENCE PROGRAM**

***FELLOWSHIP GRANTS HELP WOMEN SHAPE THE FUTURE OF SCIENCE***

**NEW YORK, NY, November 1, 2010** – L'Oréal USA announced today the start of the application period for its esteemed **L'Oréal USA Fellowships For Women in Science** program. Now entering its eighth year, this national program annually recognizes, rewards and provides support to five women postdoctoral researchers in the U.S. who are pursuing careers in the life and physical/material sciences, as well as mathematics, engineering and computer science. As part of L'Oréal's commitment to further help women scientists achieve their goals, L'Oréal USA awards each recipient up to \$60,000 to apply toward their postdoctoral research.

Since its inception in 2003, the **L'Oréal USA Fellowships For Women in Science** program has awarded 35 fellowships to women scientists across the U.S. Each year, the program attracts a number of talented applicants from diverse scientific fields, representing some of the nation's leading academic institutions and laboratories. A distinguished jury of nine eminent scientists reviews the applications and selects the **L'Oréal USA Fellowships For Women in Science** recipients.

The five beneficiaries of the 2011 **L'Oréal USA Fellowships For Women in Science** program will be invited to attend a week of events that include an awards ceremony, professional development workshops, media training and networking opportunities. In 2011, these workshops, which are facilitated by the American Association for the Advancement of Science (AAAS), will encompass job search techniques, interviewing skills, budget development for grant requests and strategies for peer-reviewed publication.

The **L'Oréal USA Fellowships For Women in Science** program is open to women postdoctoral researchers only. Candidates interested in applying may visit the **L'Oréal USA Fellowships For Women in Science** website at <http://www.lorealusa.com/forwomeninscience> to obtain more information about program eligibility and requirements. Applications must be submitted online by December 13, 2010 and transcripts must be postmarked no later than December 15, 2010.

The **L'Oréal USA Fellowships For Women in Science** program complements the international **L'ORÉAL-UNESCO For Women in Science** program which annually awards \$100,000 to each of five leading women career scientists; one from Europe, Asia, North America, South America and Africa. In addition, the **UNESCO-L'ORÉAL International Fellowships** annually grants, over a two year period, up to \$40,000 each to 15 promising young women scientists from around the world, at the doctoral or postdoctoral levels.

The **L'Oréal USA Fellowships For Women in Science** program and its aim to advance the careers of women postdoctoral researchers in the U.S., is especially relevant in light of America's waning competitiveness in the global marketplace. There is an urgent need to increase both the funding for basic science research in the U.S. and also the number of students, particularly girls and young women, majoring in science, mathematics and engineering.

Earlier this year, L'Oréal USA commissioned a national survey, fielded by the American Association for the Advancement of Women in Science (AAAS), of 1,300 male and female scientists. This survey exposed the insurmountable barriers women encounter in the pursuit of scientific careers. Survey respondents included male and female scientists who hold doctoral degrees and are registered users of Science online, including members of AAAS. The survey revealed:

- Nearly all female scientists (98 percent) know a female colleague who left the science field because she encountered barriers to her professional success
- More than half of female scientists (52 percent) have experienced gender bias during their career
- More than one in three female scientists (37 percent) faced barriers in having/raising children

L'Oréal understands the need to attract more women to science. In developing programs such as the **L'Oréal USA Fellowships For Women in Science**, L'Oréal's goal is to support today's women scientists, develop female role models for generations to come, and help shape the public's perception of science in a positive light, particularly among young women.

For more information, please visit: <http://www.lorealusa.com/forwomeninscience>

#### **ABOUT L'ORÉAL**

A worldwide leader in the cosmetics industry, L'Oréal develops innovative products to meet the diverse needs of customers in 130 countries worldwide. Nearly 3,000 people work in the Group's 16 research centers, located in France, Asia and America. Their findings are responsible for the registration of hundreds of patents annually. Women represent 55% of the research workforce – a percentage unmatched anywhere else in the industry. [www.loreal.com](http://www.loreal.com)

#### **ABOUT AAAS**

The American Association for the Advancement of Science (AAAS) is the world's largest general scientific society, and publisher of the journal, *Science* ([www.sciencemag.org](http://www.sciencemag.org)) as well as *Science Translational Medicine* ([www.sciencetranslationalmedicine.org](http://www.sciencetranslationalmedicine.org)) and *Science Signaling* ([www.sciencesignaling.org](http://www.sciencesignaling.org)). AAAS was founded in 1848, and includes some 262 affiliated societies and academies of science, serving 10 million individuals. *Science* has the largest paid circulation of any peer-reviewed general science journal in the world, with an estimated total readership of 1 million. The non-profit AAAS ([www.aaas.org](http://www.aaas.org)) is open to all and fulfills its mission to "advance science and serve society" through initiatives in science policy; international programs; science education; and more. For the latest research news, log onto EurekAlert!, [www.eurekalert.org](http://www.eurekalert.org), the premier science-news Web site, a service of AAAS.

#### **ABOUT UNESCO**

Since its creation in 1945, UNESCO has been dedicated to eliminating all forms of discrimination and promoting equality between men and women. While designing scientific education programs intended especially for young women, UNESCO has created several academic chairs that connect women of science around the world. With 191 Member States, UNESCO functions as a laboratory of ideas and a standard-setter to forge universal agreements on emerging ethical issues. UNESCO works to create the conditions for true dialogue, based upon respect for commonly shared values and the dignity of each culture. [www.unesco.org](http://www.unesco.org)

*For more information please contact:*

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