CoS MEETINGS & EVENTS

SPRING FLING
May 25, 2016
11:30 AM-4:00 PM

EAPS MEETINGS & EVENTS

EAPS FACULTY & STAFF FALL RETREAT
August 18, 2016
Beck Ag Center, Rm 111
8:30 AM – 4:00 PM

EAPS FALL WELCOME BACK PICNIC
August 18, 2016
Happy Hollow Park, Shelter 1
4:30 – 7:00 PM

FALL 2016 - PRIMARY COMMITTEE MEETINGS
Tuesday, Sept. 6, 2016
3:00 PM
HAMP 3201

FALL 2016 - FACULTY MEETINGS
Tuesday, Sept. 13, 2016
Tuesday, Oct.18, 2016
Tuesday, Nov. 29, 2016
3:00 PM
HAMP 3201

EAPS NEWS

HAPPY RETIREMENT TO NANCY STEWART

After more than 23 years of service, Nancy Stewart is retiring from her current position as the Undergraduate Counselor for the EAPS department. Her last day in the department will be May 31, 2016.

We wish her well in her future endeavors!

GLOBE REGIONAL SCIENCE FAIR

The Global Learning Observations to Benefit the Environment (GLOBE) Regional science fair was held Friday and Saturday May 13-14. Approximately 40 students from Indiana, Ohio, Illinois, and Michigan met at the University of Toledo to compete in the Globe Regional science fair. This experience was provided through an NSF in which EAPS Outreach collaborated with the national GLOBE program and partners throughout the U.S. One team represented Indiana by showing their hydrology project. The science fair had middle school and high school divisions. Next year we will host the Midwest Regional GLOBE Science Fair here at Purdue!

UNDERGRADUATE AND GRADUATE STUDENT INFORMATION

PUPS
(Purdue University Planetary Science)

There is a new student club called PUPS (Purdue University Planetary Science)–to provide a sense of community for students who are interested in planetary sciences, as well as, providing encouragement and information about the future of planetary science. The goal is to increase awareness of and the interdisciplinary nature of planetary sciences. Advisor: Briony Horgan.
E-mail: briony@purdue.edu
**2016 CSU SACRAMENTO-GEOLGY FIELD CAMP**

Spring 2016 field course open to senior geology majors. Note that the entire class is conducted from: June 1 - July 10, 2016.

Application forms are available at [www.csus.edu/geology](http://www.csus.edu/geology). Email application PDF and materials to geology@csus.edu (cc: hausback@csus.edu) or mail to:

Geology 188 Application

c/o Geology Department

California State University, Sacramento

6000 J Street

Sacramento, CA 95819-6043

See the attached flyer for more information, schedule, fees, and deadlines. Please contact Brian Hausck at haauscak@csusu.edu if you have questions.

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**SUMMER 3-CREDIT FIELD COURSE OPPORTUNITIES WITH ECOSYSTEM FIELD STUDIES!**

**Caribbean Ecosystem Field Studies** – Study, snorkel & SCUBA dive along the Caribbean coast of Mexico

May 21 - June 9

**Colorado Ecosystem Field Studies** – Study, camp, & hike in the Colorado Rocky Mountains from

June 21 – July 10 or July 18 – August 6

An opportunity to apply classroom & textbook learning while immersed in an incredible ecosystem setting! Gain valuable career skills in hands-on ecosystem field research. Earn 3 undergraduate transfer credits. Also offering post-course, extended credit options of Independent Research & Conservation Internship.

Open to students from all universities & majors. Accredited by the University of Montana at Missoula’s Environmental Studies. Program: ENST 391- for 3 undergraduate semester transfer credits.

For all course information visit the course website: [www.EcoFS.org](http://www.EcoFS.org) or see the attached flyer.

Direct any further questions to Professor Steve Johnson, Course Director at steve@EcoFS.org

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**10th ANNUAL GRADUATE CLIMATE CONFERENCE**

The 10th Annual Graduate Climate Conference, which will be held October 28-30, 2016 at the University of Washington Pack Forest Conference Center.

The Graduate Climate Conference (GCC) is an interdisciplinary climate conference run by graduate students, for graduate students, with the goal of assembling a broad range of talks and posters featuring high-quality research focused on past, present, and future climate change and its impacts.

They encourage students at all stages of their graduate career to apply and we seek abstracts on climate research from a variety of disciplines from the physical, natural, and social sciences and humanities, including: anthropology, atmospheric sciences, biology, Earth and environmental sciences, economics, engineering, ethics, geography, law, oceanography, public policy, and resource management.

They highly encourage abstracts from students with traditionally under-represented backgrounds.

The abstract submission period opens April 11 and closes June 1. Lodging and meals are covered for all participants. Limited travel funding is also available. Please see our website for more information and for submitting abstracts: [www.graduateclimateconference.com](http://www.graduateclimateconference.com)

The GCC 2016 organizing committee.

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**UNIVERSITY NEWS**

**SPRING FLING SET FOR MAY 25**

Spring Fling and many of its traditional events will return this year to Memorial Mall.

The annual appreciation day for faculty, staff, graduate student staff and retirees will be 11:30 a.m. – 4:00 p.m. May 25, 2016.

Spring Fling will offer many of the same activities as in years past, including lunch, a car show, fitness walk, DJ, and yard games. “Purdue's Got Talent,” a talent-show activity, will be held in Stewart Center with several other indoor activities, including bingo, Zumba and others to be determined later. The registration table and finish line for the annual fitness walk will be in Stewart Center.

Food service and eating space will be outside. Participants also will have the opportunity to give back by donating blood at the bloodmobile or to the Food Finders canned food drive.

[http://www.purdue.edu/springfling/Register/index.html](http://www.purdue.edu/springfling/Register/index.html)  
[http://www.purdue.edu/springfling/Events/#freePlay](http://www.purdue.edu/springfling/Events/#freePlay)

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**“SKILLS PERFORMANCE” TRAINING OPPORTUNITIES AVAILABLE FOR STAFF**

Purdue University – Training offers a wide selection of extension courses for both personal and professional growth. Taught by experts in their fields, the courses provide practical, hands-on experience. And, best of all, anyone can afford them. Take a look through their online catalog for
courses that interest you. Then, register for the courses you want right now using the web site below!

Please click here to sign up for upcoming classes: https://www.eventreg.purdue.edu/training/Home.aspx

OTHER NEWS

SKATEBOARDS ON CAMPUS

With the nicer weather, we have been asked to remind folks that it is against Purdue Regulations to bring bicycles in to buildings/offices/classrooms (need to be parked in bicycle racks), and you may not ride skateboards or use in-line skates in buildings (see attached in Chapter 7.3). Many thanks for your cooperation!

7.3 SPECIAL UNIVERSITY REGULATIONS

7.4

c) Bicycles may be parked on campus only in bicycle racks and on bicycle pads provided specifically for this purpose.

Motorcycles are not allowed in bicycle parking areas.

Bicycles must be ridden on designated campus drives and bike paths. Any bicycles found in violation of these regulations may be removed and/or ticketed with a violation notice.

b) Bicycles are not permitted inside any University building, without permission from the Building Deputy. Bicycles approved for building storage must not block hallways, doorways, or other building egress. The Senior Director of Environmental Health and Public Safety, or designee will have final determination for approval of bicycles stored in buildings.

c) Use of skates, skateboards, and in-line skates is prohibited in any University building or on any surface where damage may occur.

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iThenticate

For Thesis advisors, graduate coordinators, and support staff

Topics Covered:

What is iThenticate?

How it works

How to Interpret Similarity Reports

How to Deal with Issues of Potential Plagiarism in Graduate Student Theses & Dissertations

May 23, 2016 11:30-1:30

May 24, 2016 11:30-1:30

(Lunch provided)

PGSC 105AB

Register online:

https://purdue.qualtrics.com/jfe/form/SV_eLnLi2yL6AgeBtH

ENDOWMENT FUND CREATED IN REMEMBRANCE OF PAUL BIRKHIMER (SUZANNE ZURN-BIRKHIMER’S HUSBAND)

As you may know, Paul Birkhimer, Suzanne Zurn-Birkhimer’s husband, lost his battle with pancreatic cancer last summer. An endowment has been set up in his name, with the funds being intended to support the professional development for advisors in the School of Engineering Education, Paul’s home school, where he was an advisor in the First Year Engineering Program. If you would like to contribute to this endowment, you may use the on-line form at https://goo.gl/tiq42l or you can set up a payroll deduction online through the OnePurdue Portal.

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COEUSLITE IRB TRAINING FOR INVESTIGATORS AT WL CAMPUS

CoeusLite training sessions for Purdue research faculty and staff are scheduled during the months of April and May. Human Research Protection Program (HRPP) and Coeus staff will demonstrate how to submit a new Institutional Research Board (IRB) protocol application through CoeusLite, followed by a question-and-answer session and one-to-one assistance on submissions.

The training sessions are scheduled, as follows:

May 26 (TH): 9:30 a.m. – 12:00 p.m.

June 3 (F): 10 a.m. – 12:30 p.m.

Registration is needed. Click here to register for CoeusLite IRB trainings. Individuals will be notified of corresponding training locations after registration is initiated.

Group trainings may be requested by sending an email to IRBCoeusLiteTraining@purdue.edu, or calling the HRPP office at 765-494-5942.

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SUMMER WORKSHOP IN MATHEMATICAL MODELING OF EARTH’S DYNAMIC SYSTEMS

This workshop will be an intense, hands-on introduction to the creation and use of numerical models as a method for investigating the dynamics of Earth systems. Participants will learn how to translate their understanding of Earth processes into systems of differential equations, and solve them to test hypotheses concerning both modern and ancient systems. In addition, participants will learn how to apply and evaluate selected existing Earth system models. The short course is open to graduate students and faculty. The event is from July 31- Aug 5, 2016 in University Park, PA. See the attached flyer for additional details and registration information.
INTERNATIONAL WEBINAR ON NSSEFF PROGRAM

The Institute for Defense Analyses will present a webinar on the National Security Science and Engineering Faculty Fellowship (NSSEFF) program. NSSEFF is a single PI grant program sponsored by the Office of the Secretary of Defense (OSD). It provides extensive, long-term financial support to distinguished university faculty and staff scientists and engineers to conduct bold and ambitious basic research.

Tuesday, May 24, 2016
2:00 pm

Tuesday, May 31, 2016
2:00 pm

Please see attached fliers for more information.

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 http://www.eaps.purdue.edu/news/newsletters.html and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Fallon McQuern (fmcquern@purdue.edu) by 5:00pm on 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.eaps.purdue.edu/resources/information_technology/index.htm

Also, as an additional resource for information about departmental events, seminars, etc., see our departmental calendar at http://www.EAPS.purdue.edu/events-calendar.html
Informational Webinar on NSSEFF Program

The Institute for Defense Analyses will present a webinar on the National Security Science and Engineering Faculty Fellowship (NSSEFF) program. NSSEFF is a single PI grant program sponsored by the Office of the Secretary of Defense (OSD). It provides extensive, long-term financial support to distinguished university faculty and staff scientists and engineers to conduct bold and ambitious basic research.

At this webinar you will learn:

- An overview of the NSSEFF program
- Grant application information
- Topic areas of interest
- Q&A with NSSEFF program managers

For on-line registration visit: https://acqutrak.noblis.org/nsseff/webreg.nsf/Intro
U.S. DEPARTMENT OF DEFENSE (DOD)
BASIC RESEARCH 101
DOD BASIC SCIENTIFIC RESEARCH

• Definition
  • The systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed towards increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long term national security needs. It is farsighted high payoff research that provide the basis for technological progress.
  • Basic research may lead to: (a) subsequent applied research and advanced technology development in Defense-related technologies, and (b) new and improved military functional capabilities in areas such as communications, detection, tracking, surveillance, propulsion, mobility, guidance and control, navigation, energy conversion, materials and structures, and personnel support.
FY 16 DOD BASIC RESEARCH
BY THE NUMBERS

• Total DOD Basic Research: $2.3 billion
• Army Basic Research: $469 million
• Navy Basic Research: $671.8 million
• Air Force Basic Research: $530.2 million
• Defense-Wide Basic Research: $637.9 million
  • Chemical and Biological Defense Program: $47.7 million
  • Defense Advanced Research Projects Agency (DARPA): $389.6 million
  • Defense Threat Reduction Agency (DTRA): $38.4 million
  • Office of the Secretary of Defense (OSD): $162.1 million

• DOD Basic Research accounted for 3.1% of the total RDT&E budget
DOD BASIC RESEARCH RANKINGS

- DOD is the 5\textsuperscript{th} largest sponsor of basic research among federal agencies (NIH 1\textsuperscript{st}; NSF 2\textsuperscript{nd}; DOE 3\textsuperscript{rd}; NASA 4\textsuperscript{th})

- DOD is the 3\textsuperscript{rd} largest sponsor of basic research performed by universities and colleges (NIH 1\textsuperscript{st}; NSF 2\textsuperscript{nd}; DOD 3\textsuperscript{rd}; DOE 4\textsuperscript{th})

- DOD is the 3\textsuperscript{rd} largest sponsor of basic research performed by industry (NASA 1\textsuperscript{st}; NIH 2\textsuperscript{nd}; DOD 3\textsuperscript{rd}; NSF 4\textsuperscript{th}; DOE 5\textsuperscript{th})

- DOD is the 3\textsuperscript{rd} largest sponsor of basic research performed by nonprofits (NIH 1\textsuperscript{st}; NSF 2\textsuperscript{nd}; NASA 3\textsuperscript{rd})
DOD BASIC RESEARCH RANKINGS
(CONTIN.)

• DOD is the 3rd largest sponsor of computer sciences and mathematics basic research (NSF 1st; DOE 2nd)

• DOD is the 4th largest sponsor of engineering basic research (DOE 1st; NIH 2nd; NSF 3rd)

• DOD is the 5th largest sponsor of life sciences basic research (NIH 1st; USDA 2nd; NSF 3rd; DOE 4th)

• DOD is the 4th largest sponsor of physical sciences basic research (DOE 1st; NASA 2nd; NSF 3rd)
DOD BASIC RESEARCH ORGANIZATIONS

• Air Force Office of Scientific Research (AFOSR) – handles all basic research

• Office of Naval Research (ONR) – handles all basic research

• Defense Advanced Research Projects Agency (DARPA)

• Defense Threat Reduction Agency (DTRA)

• DOD Laboratories

• Chemical and Biological Defense Program (CBDP) – involves dozens of DOD organizations
DOD BASIC RESEARCH ORGANIZATIONS (CONTIN.)

• U.S. Army Basic Research Organizations
  • Research, Development, and Engineering Command (RDECOM) – executes approximately 85% of Army basic research
    • Within RDECOM, the Army Research Laboratory (ARL) executes both intramural basic research and extramural basic research
    • Within ARL resides the Army Research Office (ARO), executes the majority of extramural basic research funding of RDECOM
  • Medical Research and Materiel Command (MRMC) – executes approximately 9% of Army basic research
  • Engineer Research and Development Center (ERDC) – under the Army Corps of Engineers – executes approximately 4% of Army basic research
  • Army Research Institute (ARI) for the Behavioral and Social Sciences – executes approximately 2% of Army basic research
  • Army Space and Missile Defense Technical Center – executes less than 1% of Army Basic Research
BASIC RESEARCH BUDGET ACTIVITIES

• For organizational purposes, the programs within RDT&E are assigned a number, which is referred to as a “Program Element (P.E.) Number”

• DOD Financial Management Regulations state that all RDT&E P.E.’s start with “6” and all P.E.’s related to basic research fall under the “6.1” budget activity

• 6.1 is the aggregate of all basic research P.E.’s within DOD

• Congress does not provide funding at the 6.1 level, rather funding is provided at the individual basic research P.E. level
ARMY BASIC RESEARCH PROGRAM ELEMENTS

• In-House Laboratory Independent Research (FY17 P.E. - 0601101A)
  • Supports Materiel Command; Medical Research and Material Command, Corps of Engineers; and Space and Missile Defense Command labs

• Defense Research Sciences (FY17 P.E. – 0601102A)
  • Supports Army Research Lab; RDECOM; Medical Research and Materiel Command; Engineer R&D Center; and Behavioral and Social Sciences

• University Research Initiatives (FY17 P.E. – 0601103A)
  • Supports Multidisciplinary University Research Initiative (MURI); Defense University Research Instrumentation Program (DURIP); Presidential Early Career Awards for Scientists and Engineers (PECASE); and Minerva

• University & Industry Research Centers (FY17 P.E. – 0601104A)
  • Supports Collaborative Technology Alliance/Collaborative Research Alliances; University Centers of Excellence and University Affiliated Research Centers (UARCs)
NAVY BASIC RESEARCH PROGRAM ELEMENTS

• University Research Initiatives (FY17 P.E. - 0601103N)
  • Supports Multidisciplinary University Research Initiative (MURI); Defense University Research Instrumentation Program (DURIP); and Presidential Early Career Awards for Scientists and Engineers (PECASE)

• In-House Laboratory Independent Research (FY17 P.E. - 0601152N)
  • Supports Naval Warfare Centers and Laboratories

• Defense Research Sciences (FY17 P.E. - 0601153N)
  • Supports a variety of scientific research efforts at ONR including the Basic Research Challenge Program
AIR FORCE BASIC RESEARCH PROGRAM ELEMENTS

• Defense Research Sciences (FY17 P.E. – 0601102F)
  • Supports a variety of scientific research efforts at the Air Force Office of Scientific Research (AFOSR)

• University Research Initiatives (FY17 P.E. – 0601103F)
  • Supports Multidisciplinary University Research Initiative (MURI); Presidential Early Career Award for Scientists and Engineers (PECASE); National Defense Science and Engineering Graduate (NDSEG) program; Awards to Stimulate and Support Undergraduate Research Experiences (ASSURE) program; and Defense University Research Instrumentation Program (DURIP)

• High Energy Laser Research Initiatives (FY17 P.E. – 0601108F)
  • Supports developing fundamental scientific knowledge for DOD high energy laser systems including educational grants to stimulate interest in lasers
DEFENSE-WIDE BASIC RESEARCH PROGRAM ELEMENTS

- DTRA Basic Research Initiative (FY17 P.E. – 060100BR)
  - Supports basic research dedicated to countering WMDs
- Defense Research Sciences (FY17 P.E. – 0601101E)
  - DARPA PE that supports knowledge and understanding in information, electronic, mathematical, computer, biological and materials sciences; and Young Faculty Award (YFA) Program
- Basic Research Initiatives (FY17 P.E. – 060110D8Z)
  - OSD PE that supports Strategic Support for Basic Research (SSBR); Minerva; and the National Security Science & Engineering Faculty Fellowship (NSSEFF) Program
- Basic Operational Medical Research Science (FY17 P.E. – 0601117E)
  - DARPA PE that supports basic research in medical-related applications for DOD challenges
DEFENSE-WIDE BASIC RESEARCH PROGRAM ELEMENTS (CONTIN.)

• National Defense Education Program (NDEP) (FY17 P.E. – 0601120D8Z)
  • OSD PE that supports DOD’s STEM efforts and the Science, Mathematics, and Research for Transformation (SMART) Defense Education Program

• Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) (FY17 P.E. – 0601228D8Z)
  • OSD PE that supports research, education, instrumentation purchases and provides technical assistance to HBCU/MI in areas of importance to national defense

• Chemical and Biological Defense Program (FY17 P.E. – 0601384BP)
  • OSD PE that supports research in life and physical sciences
WHERE CAN I LEARN MORE?!?


• Research Development, Test & Evaluation Programs (R-1)

• Individual Service R-2 Budget Documents
  • R-2s provide a description of the activities each P.E. would undertake if funding is appropriated as requested
  • Links to each individual Service’s R-2 can be found on the Comptroller’s website
QUESTIONS?