DEPARTMENT NEWS

DR. SURESH MUTHUKRISHNAN (EAPS ALUMNI) VISITING PURDUE!

Informal talk title: “Use of GIS and UAV’s in Teaching, Research, and Community Engagement”
When: MAY 11 (2:00-3:00 PM)
Where: HAMP 2201

Dr. Suresh Muthukrishnan has been having a very successful career as a faculty member in the department of Earth and Environmental Sciences at Furman University. Suresh is an Associate Professor and Director of a GIS and Remote Sensing Center, and has a very strong program of mentoring undergraduate research. He has also been involved in setting up a sustainability major and a rivers research and engagement initiative.

Suresh will be giving an informal talk titled “Use of GIS and UAV’s in Teaching, Research, and Community Engagement” and is also happy to talk with graduate students interested in learning more about what it is like to be a faculty member at a teaching-focused university.
The Black & Golden Jubilee website is now open for registration. For more information on the event: go to the event website. To register, go to the registration website.

UPCOMING OUTREACH EVENTS!

The GLOBE Midwest Student Research Symposium will be held here on campus, in Stewart Center May 19 - 20, 2017.

We need help with the earth cache event on Friday, May 19th! Also, if you would be interested in judging posters and interacting with students on May 20th, please let Steven Smith know. mrsmith@purdue.edu

Please sign up to volunteer for any of these events on the following google sheet: https://goo.gl/LReWG1

1ST MIDWEST STUDENT CONFERENCE ON ATMOSPHERIC RESEARCH
7-8 October 2017
Urbana, IL

The 1st Midwest Student Conference on Atmospheric Research, sponsored by the Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign, will be held 7-8 October, 2017. Information including registration, abstract submission, schedule of events, and hotel block reservations is posted on the conference website http://www.atmos.illinois.edu/mscar.

Calling all graduate students studying climate:

Graduate students in MIT's Program in Atmospheres, Oceans and Climate and the Woods Hole Oceanographic Institution are pleased to announce the 11th Graduate Climate Conference! GCC11 is scheduled for November 10-12, 2017 at the Marine Biological Laboratory on the south shores of Cape Cod, MA. This is a unique conference for grad students, organized and run by grad students.

This year's conference is focused on bringing together graduate researchers who think about climate from all disciplines, including but not limited to atmospheric, biological, earth, and ocean sciences, geography, anthropology, public policy, and economics. The conference is unique because only students attend, providing a rare opportunity for the next generation of climate researchers to interact without the inhibitions that accompany the presence of faculty and senior scientists.

Applications will open by the end of April and the deadline for abstract submission will be in June. Food, lodging, and conference registration fees are provided by our generous sponsors; travel grants will be provided on an as-needed basis to as many participants as possible.

For more information, and a link to the application page, visit the official website: http://gradclimateconf.mit.edu. Feel free to contact the organizing committee with questions at gcc-2017@mit.edu.

http://www.eaps.purdue.edu/
UNIVERSITY NEWS

PROFESSOR MIRIAM HASSON MEMORIAL LECTURE

D. Allan Drummond, Ph.D.
Assistant Professor
Department of Human Genetics
University of Chicago
Tuesday, May 9, 2017
2:00 PM
MRGN 121

Please see attached flier for more details.

ITaP ANNOUNCEMENT: PURDUE WILL BE PHASING VCRs OUT OF CLASSROOMS

Current plans call for slowly eliminating VCRs from classrooms, removing the outdated technology as it breaks, or not replacing it as a classroom’s technology is upgraded to digital systems, such as Blu-Ray. To read the full article, please click here: https://goo.gl/3Gmtrw

PATHWAYS TO SCIENCE.ORG

PathwaysToScience.org has 167 different postdoc and early career opportunities posted on the site, including postdoctoral fellowships, grants, travel awards, mentoring opportunities, and more.

Browse the full list of opportunities here: http://pathwaystoscience.org/programs.aspx?u=Postdoc%26Postdoc+%26Early+Career&submit=y&all=all Or use their advanced search page to narrow your results: http://pathwaystoscience.org/programs.aspx?adv=adv

The mission of the Institute for Broadening Participation is to increase diversity in the Science, Technology, Engineering and Mathematics (STEM) workforce. They design and implement strategies to increase access to STEM education, funding, and careers, with special emphasis on reaching and supporting individuals from underserved communities and underrepresented groups, including underrepresented minorities, women, persons with disabilities, first-generation college students, and students from underserved communities. The Institute for Broadening Participation is a 501(c)(3) organization, tax ID #20-1891162. Your contribution is tax-deductible to the extent allowed by law: http://pathwaystoscience.org/giving.aspx

OTHER NEWS

COLLEGE OF SCIENCE STRATEGIC PLAN INITIATIVES

Curious to know the status of the Strategic Plan Initiatives? Please be sure to regularly check out the Strategic Plan page on the website (https://www.science.purdue.edu/strategic-plan.html). It has now been updated to include the finalized plan and two versions of the plan’s initiatives. Each file contains blue highlights indicating progress on specific items.

http://www.eaps.purdue.edu/
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
1st Midwest Student Conference on Atmospheric Research
7-8 October 2017, Urbana, IL

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This cross-disciplinary conference is open to undergraduate and graduate students from universities across the Midwest. Oral and poster presentations are invited in the following research areas:

- Remote Sensing of Mesoscale Systems
- Observations of Cloud Microphysics
- Urban Environment and Society
- Short-term Predictability and Long-term Variability of Mesoscale Systems
- Weather and Climate Impacts on the Midwestern United States

The deadline to submit abstracts and register for the conference is 1 September 2017. Any questions regarding abstracts should be directed to mscar-abstracts@atmos.illinois.edu and questions involving registration should be sent to mscar-register@atmos.illinois.edu. Authors of accepted presentations will be notified in early September. The cost of registration is $60, which includes the keynote banquet and lunch on Sunday. Presenting a talk or poster is not a requirement to attend the conference and there is no fee for abstract submission.

For additional information, please contact mscar@atmos.illinois.edu.
Rethinking the cellular response to stress

Abstract
To survive, cells must rapidly sense and respond to changes in their environment. Sudden maladaptive changes -- stresses -- trigger swift responses shared across all cellular life. Along with well-studied transcriptional responses, stress triggers coalescence of RNA-binding proteins into massive intracellular clumps. In vitro, stress-granule-associated RNA-binding proteins can demix to form liquids, hydrogels, and other assemblies lacking fixed stoichiometry. Observing these phenomena has generally required conditions far removed from physiological stresses. We have discovered that poly(A)-binding protein (Pab1 in yeast), a defining marker of stress granules, phase separates and forms hydrogels in vitro upon exposure to physiological stress conditions. Poly(A)-binding protein acts as a physiological stress sensor, exploiting phase separation to precisely mark stress onset. Unlike many other RNA-binding proteins, Pab1 releases RNA upon phase separation, and multiple lines of evidence indicate that this is central to its function in stress: phase separation relieves translational repression of specific mRNAs, promoting their translation during stress. Mutations that impede phase separation reduce organism fitness during prolonged stress, indicating that phase separation is adaptive. Our observations expand the functional repertoire of phase separation processes and suggest that stressed cells use these processes for both sensing and responding to environmental change.