LSU Science

DECEMBER 2011 Official newsletter of the LSU College of Science

NEWS/EVENTS





Dr. Huiming Bao



Three College of Science Faculty Named AAAS Fellows

Five LSU researchers, three from the College of Science and two from the College of Engineering, have been honored with the rank of "Fellow" by the American Association for the Advancement of Science, or AAAS, the world's largest scientific organization.

Having five AAAS Fellows in one year ranks LSU among the top 10 percent of universities with individuals receiving the honor – with 539 fellows selected from more than 230 institutions worldwide.

"LSU has been in the top 10 percent of AAAS Fellow recipient institutions for at least the past three years," said Thomas Klei, interim vice chancellor of research and economic development at LSU. "This is truly demonstrative of the level of research expertise and impact we produce here."

The three AAAS Fellows in the College of Science are James Moroney, Glenda Wooters Streva Memorial LSU Alumni Association Departmental Professor of Biological Sciences; Huiming Bao, associate professor in the Department of Geology & Geophysics; and Gary Byerly, Richard R. & Betty S. Fenton Alumni Professor in the Department of Geology & Geophysics and associate dean for Academic Services in the College of Science.

Election as a fellow is an honor bestowed upon AAAS members by their peers in recognition of their efforts toward advancing science applications deemed scientifically or socially distinguished. More



Dr. Michael Malisoff

Mathematics Professor Develops Marine Robotic Methods for Oil Spill Study

It sounds like a science fiction film: in the wake of an epic disaster, robots are unleashed into a dangerous environment to assess the aftermath, while humans receive and analyze the results from a safe location. No matter how fictional it seems, that's exactly what happened after the 2010 Deepwater Horizon oil spill disaster. Michael Malisoff, LSU professor of mathematics, partnered with a colleague at Georgia Tech, Fumin Zhang, and Mark Patterson from the College of William and Mary, to develop marine robotic methods for conducting surveys on the weathered crude oil off the coast of Louisiana.



Dr. Bradley Schaefer



Dr. Mette Gaarde



Dr. James Matthews



Matthews also joins the growing list of LSU APS fellows, which now totals 16.

In 2010, Matthews was elected co-spokesperson for the Pierre Auger Cosmic Ray Observatory, an international cosmic ray observatory located in western Argentina's Mendoza Province. He is also a co-winner of the 1989 Rossi Prize from the American Astronomical Society for the discovery of neutrinos from supernova SN1987a.



Dr. Prosanta Chakrabarty

Museum of Natural Science Curator of Fishes Recognized During LSU vs Arkansas Game

LSU football fans were introduced to a new species of fish during the November 25 gridiron match between the Tigers and the Arkansas Razorbacks. Curator of fishes for the LSU Museum of Natural Science and assistant professor of biological sciences Prosanta Chakrabarty was recognized on the field for the discovery of the Louisiana Pancake Batfish, or Halieutichthys intermedius, which was named one of the top 10 new species by the International Institute for Species Exploration at Arizona State University.





LSU Professor of Physics & Astronomy Bradley E. Schaefer has been invited to attend the Nobel Prize Award ceremony in Stockholm, Sweden, in recognition of his contribution to this year's Nobel Prize winning research in physics. The research has led to the discovery of the accelerated expansion of the universe due to an unknown form of energy embedded in the fabric of space. This energy, known as "dark energy," has been described as one of the greatest enigmas in physics today.

Two LSU Physicists Named APS Fellows

Associate Professor of Physics & Astronomy Mette Gaarde and Physics & Astronomy Professor James Matthews were named fellows by the American Physical Society, or APS, one the world's largest organizations for physicists.

Gaarde is also a 2011 Tiger Athletic Foundation Undergraduate Teaching Award winner and a 2005 recipient of NSF's Faculty Early Career Development, or CAREER, Award.

Biology Professors Discuss Oil Spill Research on WRKF 89.3

Assistant Professor of Biological Sciences Fernando Galvez and Andrew Whitehead, associate professor of Biological sciences, participated in a radio interview with Swede White of WRKF 89.3 in Baton Rouge to discuss their study of the biological effects of the BP Deepwater Horizon oil spill on sea life in Louisiana Marshes. M_{OTP}

ALUMNI

Math Alum wins Postdoctoral Fellowship at Weirstrass Institute

Santiago Fortes, 2010 mathematics PhD grad has been awarded a Postdoctoral Fellowship at the Weirstrass Institute in Berlin, Germany. This is Santiago's second postdoctoral position following a postdoctoral fellowship at the California Institute of Technology.

NEW FUNDING

MULTI-UNIT/CAMPUS

Kenneth Brown, PhD, biological sciences, "Assessing Long Term Effects of the Deepwater Horizon Spill On Oyster Health and Production," BP, 2012-2015, \$523,047.

STAR SCHOLAR PROFILES



Elena Batista, a PhD candidate in biological sciences, has been awarded a 2011 National Science Foundation Graduate Research Fellowship. Currently, Batista is working in the lab of Aaron Smith, assistant professor of biological sciences, where she is studying the genetic and epigenetic processes that control plant responses and adaptations to environmental stresses, such as nutrient deprivation, arsenic toxicity, and pathogen attack.

The fellowship, which pays \$30,000 annually, helps to ensure the vitality of the human resource base in science and engineering in the U.S. and reinforces its diversity.

DEVELOPMENT HIGHLIGHTS



(I to r): Shane Cone and Lindsay Prothro

Two College of Science Taylor Scholars were highlighted in the Fall 2011 edition of *Cornerstone*, a quarterly publication of the LSU Foundation.

The feature included **Shane Cone**, Charles L. Jones Scholar and Geology & Geophysics major from Dallas, TX, and Natchitoches native **Lindsay Prothro** who is a Patrick F. Taylor Scholar and Geology & Geophysics major.

Taylor Scholars in the College of Science participate in the program on the basis of academic merit and received related scholarship support for one academic year. $\underbrace{V_{More}}_{More}$

Exxon Mobil Gives \$86,000 to LSU Foundation

A portion of the gift will support Computer Science, Geology & Geophysics

Local Exxon Mobil representatives presented the LSU Foundation with an \$86,000 gift on behalf of Exxon Mobil Corporation during a November 14 reception at the LSU Faculty Club. M_{OPP}



We wish you abundance, happiness

and peace in a new year

filled with hope.

Happy Holidays

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College of Science

To submit news items for the upcoming College of Science E-News, email djenkins1@lsu.edu