

## NEWS/EVENTS



### Biological Sciences Boyd Professor Meredith Blackwell Named to American Academy of Arts & Sciences

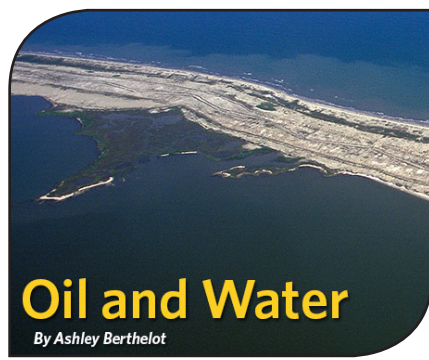
Meredith Blackwell, LSU System Boyd Professor of Biological Sciences, joins the ranks of some of the world's most accomplished leaders from academia, business, public affairs, the humanities and the arts with election to the American Academy of Arts and Sciences. She will be inducted at a ceremony on Oct. 6, at the Academy's headquarters in Cambridge, Mass.

"I still remember when Professor C. J. Alexopoulos, my major professor at the University of Texas, received word that he had been elected to the American Academy of Arts and Sciences in 1976. He was thrilled, and I am just as thrilled in 2012," said Blackwell. [More](#)



### Research Collaboration Featured on Discover Magazine Cover

A group of researchers including LSU physicists and biologists, more than 20 undergraduate and graduate students, plus collaborators from Southern University, Louisiana Tech, NASA-Ames and Aarhus University in Denmark, has taken the cover of *Discover*, one of the world's leading popular science publications. The project, called MARS LIFE, or Modes of Adaptation, Resistance and Survival for Life Inhabiting a Freeze-dried-radiation-bathed Environment, essentially studies earthly microorganisms that tolerate conditions similar to those found in extra-terrestrial environments. [More](#)



### LSU Looks Back at the Deepwater Horizon Oil Spill

*College of Science researchers among the first to report damage to killfish larvae*

April 20, 2012, marks two years since an explosion rocked the Deepwater Horizon oil rig, killing 11 men and signaling the beginning of one of the most controversial ecological disasters ever recorded.

LSU researchers from the College of Science were among the first to report damage in the larvae of killfish, a study widely believed to be evidence of reproductive-level damage to fish native to the impacted areas. Researchers there also developed marine robotic methods to survey the oil off the coast of Louisiana.

"A number of faculty in the College of Science rapidly mobilized research teams to examine the impact of the oil spill," said LSU College of Science Dean Kevin Carman. "Their assessments have garnered local and national attention, including an invitation to testify before the House Committee on Natural Resources. Our scientists continue to play an important role in communicating the effects of the spill on the local economy, environment and ecology." [More](#)

## College Hosts 37th Annual Choppin Honors Convocation

The College of Science hosted its annual Dean Arthur R. Choppin Honors Convocation Tuesday, April 24, at the LSU Faculty Club. More than 50 awards were presented to students and faculty members for their outstanding achievements.

[Click here for a complete list of this year's winners.](#)

## NEW FUNDING

### BIOLOGICAL SCIENCES

**Christopher Gregg**, "Gulf Coast Regional Summer Institute," HHMI, 2012-2013, \$160,000.

**Gary King**, "A Multidisciplinary analysis of linkages among wetland vegetation, Rhizosphere Microbial Communities and Soil Stability in Response to Oiling," BP, 2012-2013, \$571,380.

**John C. Larkin**, "Cell Differentiation and the Plant Cell Cycle," NSF, 2012-2016, \$459,903.

**Marcia Newcomer**, "The Structural Basis for Control of 5-Lipoxygenase Activity," NIH, 2012-2013, \$370,000.

### GEOLOGY

**Barbara Dutrow**, "Collaborative Research: Precambrian Crustal Evolution in Western Laurentia: Implications from the Sawtooth Metamorphic Complex," NSF, 2012-2015, \$198,458.

### PHYSICS

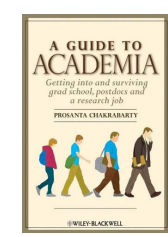
**Gabriela Gonzalez**, "Support of Advanced LIGO Upgrade," California Institute of Technology, \$219,396.

**Wayne Newhauser**, "Investigation of Late Effects for Patients Recovering Proton Beam Therapy," Northern Illinois University, \$467,510.

**Thomas Kutter**, "Proposal to Upgrade the T2K Time Synchronization System," DOE, 2012-2013, \$250,000.

## KUDOS

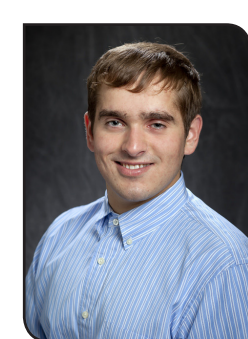
**Michal Brylinski**, assistant professor, biological sciences, is the winner of the Ralph E. Powe Junior Faculty Enhancement Award.



**Prosanta Chakrabarty**, assistant professor of biological sciences and curator of ichthyology at the Museum of Natural Science, has published *A Guide to Academia: Getting into and Surviving Graduate School, Postdocs and a Research Job*.

**Simon Chang**, LSU Professor Emeritus, biological sciences, was invited to speak at a symposium in memory of H. Gobine Khorana, Alfred P. Sloan Professor of Biology and Chemistry Emeritus at MIT and Nobel Laureate. Chang was Khorana's postdoctoral researcher.

## STAR SCHOLARS



### Chemistry Major Named Prestigious Goldwater Scholar

LSU junior **Carl Sabottke** of Baton Rouge has been awarded the prestigious, nationally competitive Goldwater Scholarship by the Barry M. Goldwater Scholarship and Excellence in Education Program, and sophomore **Zachary Fitzpatrick** of Holden, La.; sophomore **Corey Landry** of Denham Springs, La.; and junior **Tiffany Lemon** of Opelousas, La., received Honorable Mention. All four students are members of the LSU Honors College and LA-STEM Research Scholars.

"We are extremely proud of all four of these students for being recognized by the Barry M. Goldwater Scholarship and Excellence in Education Foundation for their academic achievements," said LSU Chancellor Michael Martin. "These students are among the best in the nation, and we are pleased to see them taking advantage of the opportunities presented to them and applaud their hard work and commitment to pursuing careers in the STEM – science, technology, engineering and math – disciplines."

The Goldwater Scholarship can be used to cover the cost of tuition, fees, books and room and board up to a maximum of \$7,500 per year.

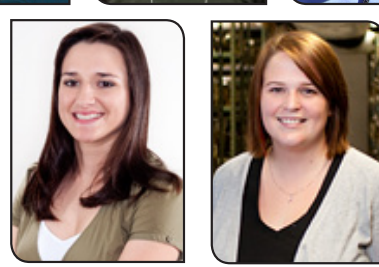
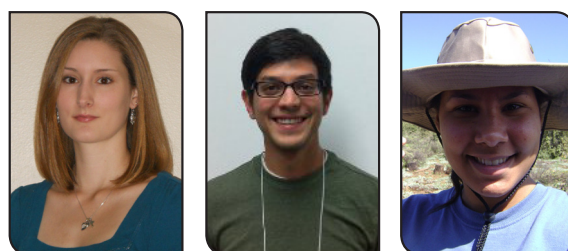
[More](#)

### NSF Awards Graduate Research Fellowships to College of Science Students, Alumna

The National Science Foundation has recognized five outstanding student researchers in the College of Science through the NSF Graduate Research Fellowship Program (GRFP). This year's fellowship recipients are **Amanda Achberger**, Ph.D. student in microbiology; **Carlos Chavez**, Ph.D. student in chemistry; **Valerie Derouen**, master of natural science student; **Anna Normand**, Ph.D. student in biogeochemistry at the University of Florida; and **Lauren Oliver**, senior biological sciences student.

The GRFP recognizes outstanding students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based masters and doctoral degrees at accredited U.S. institutions. The Fellows receive three years of support, an annual stipend of \$30,000 and a \$10,500 cost-of-education allowance to the institution. Fellows also receive international research and professional development opportunities.

[Click here for more information on the NSF Graduate Research Fellows](#)



First Row (left to right): Amanda Achberger, Carlos Chavez, Valerie Derouen; bottom row (left to right): Anna Normand and Lauren Oliver

**Cullen Doody**, senior biological sciences major, has been named a 2011-2012 Brad Davis Southeastern Conference Community Service Leader of the Year. Doody is also a recipient of the LSU Wally Pontiff Jr. Academic Excellence Award, the 2009-2011 Chancellor's Award, and three-time member of the Southeastern Conference Academic Honor Roll.

**Trevor Fanning**, senior geology major, won the College of Science's Dean's Award for his Digital Portfolio at the 2012 LSU Student Digital Media Festival Dean's Award event. [More](#)

**Nathan Gilbert**, Ph.D. student in biological sciences, was awarded the LSU Alumni Association Distinguished Dissertation Award in Science, Engineering and Technology.

**Hannah Manuel**, senior mathematics major, has been awarded a National Defense Science and Engineering Graduate (NDSEG) Fellowship. Of the 3,000 students who usually apply for this prestigious award, only 200 fellowships are awarded.

**Keith Motes**, senior applied physics major, is participating in the Undergraduate School of Quantum Information Processing at the Waterloo Institute of Quantum Computing in Waterloo, Ontario in Canada. Motes will spend the summer in Waterloo as an intern with Professor Lutkenhaus in quantum computing applications.

**Hector Urbina**, Ph.D. student in biological sciences, received a Mentor Student Travel Award (MSTA) to attend the Mycological Society of America annual meeting at Yale University, July 15-18.

## ALUMNI & DEVELOPMENT HIGHLIGHTS

### Academic Boot Camps

*Investing in the Success of Tomorrow's Scientists*



As the spring semester draws to an end, we are switching gears and preparing for the hundreds of incoming freshmen who will be participating in this summer's pre-college academic boot camps, August 5-10. BIOS (biology), CHEMIS (chemistry), GIOS (geology and geophysics), Tiger Prep Math Camp, and PHIOS (physics and astronomy) offer incoming students a tangible head start in their introductory classes by exposing them to real college lectures and exams in their chosen field. Boot camp participants are more successful in their coursework than non-participants, have higher retention rates in science majors, and usually graduate within four years.

Last summer, Dean Kevin Carman decided to use donations made by the College's Dean's Circle members (DC) to sponsor scholarships for 50 boot camp participants. Thanks to the generosity of our DC, these scholars received a head start at higher education. Dean Carman also invited our local DC members to attend the opening boot-camp dinner. Among those who attended were DC members Drs. Neil and Arlene Kestner. This is what Chemistry Professor Emeritus Neil Kestner had this to say about the dinner.

*"I have followed the implementation and success of the boot camp since its inception. However, I did not fully appreciate this program until I was given the opportunity to attend dinner with the actual students. They are an amazing group of very motivated and intelligent students. I urge you as alumni, friends, and retired faculty of the College of Science to join Arlene and me this August and visit personally with this unique group at their opening dinner. You too will be impressed by the students and the program."*

Since then, the Kesters have created their own scholarship endowment at the LSU Foundation to support students attending camp. In addition to their generous financial support, the Kesters hope this article will encourage other alumni, friends, and retired faculty of the College of Science to donate.

*"Through our personal experience, we are absolutely convinced that the Science Boot Camp Programs help ensure a successful academic career in science at LSU. We view our support as an investment in the future of science students, and we hope you will consider donating to this program."*

The boot camp scholarships are examples of how investments from DC members, and gifts from all of the College's alumni and friends, are tangibly impacting students in the College of Science. The college-wide annual capacity is approximately 450 students with a total cost of \$500 per student. Many of the boot camp participants supported with Dean's Circle funds may not have been able to attend boot camp without some level of financial support, so continued support of the Dean's Circle members is integral to the success of the boot camps.

The College of Science would like to invite alumni and DC members to greet the boot campers and meet some of the future innovators in science. The opening dinner will be held Sunday, August 5th. If you are interested in attending the dinner or if you would like to give to the College of Science pre-college boot camps, contact Eric Guerin at 225.578.7602 or email [annmarie@lsu.edu](mailto:annmarie@lsu.edu).

[2012 Application for Science Boot camps](#)

## COMINGS & GOINGS

### College of Science Welcomes New Assistant Professors, Postdoctoral Researchers in Department of Mathematics

Assistant Professor **Elizabeth Dan-Cohen** works on the representation theory of Lie algebras. She was a student of Vera Serganova and Joe Wolf in Berkeley, and comes to us from a postdoc in Bremen, Germany.

Assistant Professor **Karl Mahlburg** works in number theory and combinatorics. Karl was a student of Ken Ono in Wisconsin and has done postdoctoral work at MIT and at Princeton.

Four new postdoctoral researchers have also joined the Mathematics Department: **Chris Davis** (Ph.D., UNC-Charlotte; numerical analysis), **Ben Harris** (Ph.D., MIT; representation theory), **Kate Kearney** (Ph.D., Indiana University; topology), and **Aaron Welters** (Ph.D., UC Irvine; math of materials).