

e-NEWS

NEWS/EVENTS





Michael Cherry

Aaron Mills Brian Kay





The College of Science Dean's Search Committee invited three candidates to visit the campus and meet with College of Science students, faculty, staff, and university administrators. Each candidate also hosted an open forum where they discussed their administrative and research experience, and vision for the College. Invited were LSU Physics & Astronomy Chair Michael Cherry, Chicago Biomedical Consortium Director Brian Kay, and University of Virginia Environmental Sciences Professor Aaron Mills.

More



The gills of fish collected at an unoiled site and an oiled site at Grande Terre, Louisiana.



The black dots in this image are nanoGUMBOS, some forms of which have been shown to selectively kill cancer cells using in vitro studies.



Complete list of awards

LSU-led Research Finds Developmental Defect In Fish Species Impacted By Deepwater Oil Spill

Three years after the Deepwater Horizon oil spill, researchers are forming insights on the long-term impacts of coastal ecosystems. A research team from LSU, University of California, Davis, and Clemson University, found that Gulf killifish embryos exposed to sediments from oiled locations experienced cardiovascular defects, delayed hatching and reduced overall hatching success. "Although the Deepwater Horizon oil spill has passed the attention of most of the nation, our data warn of developmental abnormalities in coastal fish that should be further investigated," said Fernando Galvez, LSU associate professor in the Department of Biological Sciences and one of the principle investigators on the supporting grant.

Boyd Professor Isiah Warner Discusses Innovations in the Development of GUMBOS-Based Materials

LSU System Boyd Professor and Vice Chancellor of Strategic Initiatives Isiah Warner recently led a team in developing GUMBOS, tiny particles that could be used for a variety of applications, including the elimination of cancer cells and drugresistant bacteria.

Warner presented his research at the 245th American Chemical Society meeting and expo held in New Orleans. GUMBOS, or Group of Uniform Materials Based on Organic Salts, are particles so small that 100,000 could fit across the width of a human hair.

In 2008, Warner and his research team began using organic salts and making tiny particles out of them, labeling them GUMBOS in honor of Louisiana's most popular dishes. The team started using the particles along with other compounds, designing them for specific uses. For example, researchers coated the GUMBOS with toxic substances and tuned them to be selectively toxic to cancer cells. In lab studies, the GUMBOS destroyed cancer cells and left other cells alone, sparing the healthy tissue. Existing chemical compounds can be used to make the GUMBOS sensitive for the pH level of a site, making them ideal for delivering medication.

College Hosts 2013 A.R. Choppin Honors Convocation

The College of Science recognized the achievements of some of LSU's top students and faculty during its 38th Annual Dean Arthur R. Choppin Honors Convocation, Monday, April 22, in the Atchafalaya Room of the LSU Student Union.

Student awards included the College of Science outstanding sophomore, junior, and senior awards, the Dean's Award, the Barry M. Goldwater Scholar and Honorable Mention, Outstanding GeauxTeach Student, the Truman Scholar, Udall Scholar, and a number of other student recognitions. Among the faculty award winners were TAF Undergraduate Teaching Award winners Patricia Moroney and Debra Kopsco, Graduate Teaching Award winner Carol Taylor, and Research Award winner Parampreet Singh.

Congratulations to all the award recipients!



Biology Class Works to Fight Invasive Plant Species in Bluebonnet Swamp

LSU Biology Professor Barry Aronhime and the students in his Principles of Ecology Laboratory class have been working to eradicate elephant ear, an invasive species of plant found at the Bluebonnet Swamp Nature Center, or BSNC. The plant has become overbearing in the swamp. Its prevalence could potentially reduce the amount of native species found there and disrupt diversity and stability in the ecosystem.

More



UNR to Replicate Boot Camp Programs

The University of Nevada Reno (UNR) plans to replicate LSU's successful boot camp programs in an effort to increase the number of students who graduate and the quality of their education. Boot camp creators Sheri Wischusen, LSU College of Science director of undergraduate research, and her husband Bill Wischusen, LSU associate chair of biological sciences, visited UNR in March to discuss plans for the university's first boot camp. Kevin Carman, former LSU College of Science dean helped to champion the boot camps at LSU and made starting the boot camps a top priority when he assumed the provost position at UNR in February.

Bill and Sheri have traveled throughout the US promoting the boot camps, and have helped about 30 colleges and universities to establish the programs. The couple began BIOS, a boot camp for first-time freshmen in biology at LSU, in 2005. The boot camps are now held throughout the College. UNR will hold its inaugural boot camp Aug. 16-20 for students majoring in biology and neuroscience. More



Museum of Natural Science Hosts **Genomics Workshop**

Frederick Sheldon, director of the Museum of Natural Science, and Robb Brumfield, museum curator of genetic resources, along with collaborators from other institutions, were recently awarded a National Science Foundation grant to study the diversification of all suboscine passerine birds (a group that includes woodcreepers and ovenbirds, antbirds, and flycatchers). During the week of 18-22 March 2013, 15 collaborators from around the country came to the LSUMNS to learn a new genetic approach pioneered by Robb Brumfield and collaborators. This approach involves

sequencing thousands of ultraconserved elements in the genome, or parts of the genome that are very similar across unrelated species. The DNA sequences of these ultraconserved elements (UCEs) are then compared across species in order to determine their phylogeny and evolutionary history.

Read the full article in the LSU Museum of Natural Science Quarterly



Read a year's worth of news, events, research, innovations and more in the College of Science annual magazine.

KUDOS

Distinguished Faculty Awards

Each year the University recognizes outstanding faculty for their accomplishments, superb teaching, research, and service at LSU. Award winners from the College of Science are:

- Bradley Schaefer, physics and astronomy, LSU Alumni Professorship
- Guoli Ding, mathematics, LSU Distinguished Faculty Award
- Christopher Austin, biological sciences, LSU Alumni Association Faculty Award
- Kathy Thompson, biological sciences, Tiger Athletic Foundation President's Award
- Donghui Zhang, chemistry, Phi Kappa Phi Non-Tenured Faculty Award
- Debra Kopsco, mathematics, TAF Undergraduate Teaching Award
- Patricia Moroney, biological sciences, TAF Undergraduate Teaching Award
- Patrick Kolniak, chemistry, TAF Undergraduate Teaching Award
- Steven Pomarico, biological sciences, TAF Undergraduate Teaching Award
- Bill Wischusen, biological sciences, TAF Undergraduate Teaching Award

Complete list of awards



Gabriella Gonzalez, professor of physics & astronomy, was re-elected spokesperson for the Laser-Interferometer Gravitational-Wave Observatory (LIGO) Scientific Collaboration, which consists of more than 900 members worldwide. She held the two-year appointment in 2011-13 and will now hold it again from 2013-15.

NEW FUNDING

Craig Hart, associate professor of biological sciences, "Investigating the link between gene regulation and nuclear organization," NSF MCB Gene Expression Program, 2012-2016, \$925,809.

ALUMNI UPDATE



Marco Moran, Dewmar International BMC Inc.

Keith Jordan, Indigo Minerals LLC

Dr. Rachel Reina

Baldone Reina Dermatology

Daniel Strecker, C-K Associates





STAR SCHOLARS

The College of Science is pleased to announce that four former students were recognized at this year's LSU 100: Fastest Growing Tiger Businesses event, April 26. CEO and president of Dewmar International BMC Inc. Marco Moran was honored along with Keith Jordan, CEO and president of Indigo Minerals LLC. This is the second year that Indigo Minerals has made the list. Other honorees included Dr. Rachel Reina of Baldone Reina Dermatology, and Daniel Strecker, CEO of C-K Associates.

LSU 100: Fastest Growing Tiger Businesses recognizes the fastest growing Tiger businesses that are either owned or operated by former LSU students.

Ranked 2013 LSU 100 list

College of Science alumni Keith Comeaux and Dr. Ronald B. Marks were inducted into the LSU Alumni Association Hall of Distinction Friday, April 12 at the Lod Cook Alumni Center. Keith Comeaux, 1989 graduate with bachelor's degrees in mechanical engineering and physics, was the flight director for Curiosity's August 2012 entry, descent and landing on Mars. Dr. Ronald B. Marks, 1964 graduate in chemistry, is a partner in Alexandria Oral Surgery Associates and a clinical professor of oral and maxillofacial surgery at LSU School of Medicine in Shreveport.

Physics Ph.D. graduate Ashley Pagnotta was recently featured in LSU's Ask 5 Video Series. The series features students, faculty, and staff of the LSU community, answering five questions related to LSU or their field of study.

View video



Fifty-two LSU seniors received University Medals for graduating with the highest undergraduate grade-point averages during the University's spring commencement exercises. Of the 52, 22 were from the College of Science.

First Row: T. Gilmour Reeve, LSU vice provost for academic programs; Carl Sabottke; Daniel Case; Christine Derbins; Arundhati Bakshi; Corey Bretz; Charles Halliburton III; and College of Science Interim Dean Guillermo Ferreyra. Second Row: Leon Albert Flettrich IV; Blake Richard; Olivia Gioe; Heather Lynn Geoffroy; Megan Ranck; Julie Cronan; Tricia Rood; and Jared Robichaux. Third Row: Cade Daughenbach; Jonathon Moss; Matthew Cade Moss; Alfonso Croeze; Daniel Nelson; Quinn Thibodeaux; and Colton Walker







Bruno Beltran, mathematics and computer science major, is one of two LSU students to receive the nationally competitive Goldwater Scholarship by the Barry M. Goldwater Scholarship and Excellence in Education Program. Biochemistry major Zachary Fitzpatrick and math major Paxton Turner received honorable mention. More



Senior biochemistry major Tiffany Lemon was recently featured in LSU's Big Opportunities star student blog. Lemon shared her LSU experiences and future plans after graduation.

Read interview

ALUMNI & DEVELOPMENT



Geology Alumnus James Painter Urges Graduates to Give Back

Oil and gas exploration veteran and geology alumnus James Painter was the speaker for the College of Science's 280th commencement exercises Friday, May 17. Painter has more than 33 years experience in the oil and gas exploration industry and is currently the executive vice president of Cobalt International Energy Inc.



Top: James Painter

Above: Major General Jasper Welch (center) is presented with an honorary doctorate of human letters during LSU's main commencement ceremony, May 16.

University Commencement Coverage

As the graduates prepare for life after college, Painter encouraged them to find jobs that fall in line with their passion. "Find something that really gets you going in the morning," Painter said. "Find something that allows you to work harder and go that extra mile."

Painter also urged the graduates to look for a workplace that shares their values and goals, find a mentor, and stay connected to LSU.

"Early in my career I did not (stay connected), but as I look back at the things that the university and the community did for me, I realized that it was time to give back," Painter said.

The College conferred 389 bachelors and masters degrees during the ceremony. Twenty-eight doctoral students received their degrees at the university's main commencement Thursday, May 16. LSU Interim President and Chancellor William Jenkins and Air Force Major General Jasper Welch were presented honorary doctorate degrees during the event. Welch was recognized for his distinguished career as a scientist and military and policy expert.



2013 Hall of Distinction Photos



The College is saddened to report the death of Dr. Charles Egedy Jr., instructor of mathematics.

Dr. Egedy graduated from LSU with a bachelor's of science in chemistry in 1972. After graduation he began his career in the lab of the Grant Chemical Division of Ferro Corporation. While there, he became the director of research and development and completed his masters of science in chemical engineering. He also began teaching mathematics part-time at LSU. He later assumed the teaching position full time and returned to graduate school where he completed his Ph.D. in mathematics.

Dr. Egedy taught calculus classes in the LSU Science Residential College (SRC) and was dedicated to helping his students get through a very tough course.

If you would like to give to the Charles R. Egedy Jr. SRC Enhancement Fund, please make your check payable to "LSU Foundation Egedy SRC Fund[®] and mail to: LSU Foundation, 3838 West Lakeshore Drive, Baton Rouge, LA 70808.



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





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