MARCH/APRIL 2013 • Official newsletter of the LSU College of Science

LSU College of Science

# <u>e - NEWS</u>

### **NEWS/EVENTS**



## LSU Foundation Secures \$2 million endowment for GeauxTeach

The National Math and Science Initiative (NMSI) presented a check for \$1 million to the LSU Foundation for the GeauxTeach Math/ Science teacher preparation program during a reception, March 12, at LSU Memorial Tower. The donation was a result of a challenge issued by NMSI to raise \$1 million in endowment to sustain and grow the GeauxTeach program. LSU alumni, corporate partners, and a private foundation made gifts to support students, faculty and programmatic needs. The NMSI match has resulted in a total endowment of \$2 million. More

Left to right: Guillermo Ferreyra, interim dean, College of Science; William Jenkins, interim president and chancellor; Laura Lindsay, dean, College of Human Sciences and Education; Patty Pickard, NMSI CFO; Stuart Bell, provost; Bill Wischusen, associate professor, biological sciences; Heather Bass, GeauxTeach graduate; and Jeff McLain, vice president for development, LSU Foundation



# Morehouse Hopps Scholars Explore Research, Graduate Programs at LSU

The Morehouse College Hopps Defense Research Scholars toured LSU, March 12, to learn more about the research and graduate opportunities available at Louisiana's flagship university.

The Dr. John Hopps Defense Research Scholars program is an initiative to double the number of underrepresented minority males pursuing graduate study in science, technology, engineering, and mathematics. Each year, the scholars tour graduate schools and research labs across the U.S., with this year's tour kicking off in New Orleans at Tulane University and the LSU Health Center, followed by LSU, and ending at Rice and Baylor University in Houston.



# **BIOS and CAS Receive National Award**

The LSU Biology Boot Camp (BIOS) and the Center for Academic Success (CAS) have been selected to receive the 2013 Promising Practices Award from the National Association of Student Personnel Administrators (NASPA). The award is in recognition of the successful collaboration between the Department of Biological Sciences and the CAS in the nationally successful BIOS Program. The Promising Practices award recognizes programs and services that contribute to collaborative and/or integration of student and academic affairs in a college or university setting.



# **Discover the Nano-sized World During Nanodays**

LSU faculty, students, and staff, will host a number of activities for Nanodays 2013, a nation-wide festival celebrating the science of ultra-small matter. Nanodays includes two days of family-friendly learning experiences through which children and adults explore the miniscule world of atoms, molecules, and nanoscale forces.

Festival activities will take place at the Highland Road Park Observatory, Saturday, March 30, and the Louisiana Arts & Science Museum (LASM), Saturday, April 6.

LSU Professor of Physics & Astronomy and Associate Dean of the College of Science Richard Kurtz will present Nanotechnology for Improved Energy Generation, Storage and Transmission, at the Highland Road Observatory, Saturday, March 30, at 4 p.m. Professor of Physics & Astronomy John DiTusa, will present Nanomagnets as a Path to New Computers, at the LASM, Saturday, April 6, at 12 p.m. and Associate Professor of Physics & Astronomy Juana Moreno, will be displaying a Scanning Tunneling Microscope several times throughout the day.



# LSU to Host Southeastern Lie Theory Workshop

The Sixth Southeastern Lie Theory Workshop Noncommutative Algebraic Geometry and Representation Theory will take place May 10-12 at LSU.

This workshop is part of a series funded by NSF. Local organizers are LSU mathematicians Pramod Achar, Gestur Olafsson, and Milen Yakimov.

Research talks will be given by:

- Rina Anno (Pittsburgh)
- Christof Geiss (National Autonomous University Mexico)
- Allen Knutson (Cornell) •
- Tomasz Przebinda (Oklahoma)
- Daniel Rogalski (UC San Diego)
- Travis Schedler (UT Austin)
- Robert Stanton (Ohio State University)
- Birgit Speh (Cornell)
- David Vogan (MIT)
- James Zhang (Washington)
- Xinwen Zhu (Northwestern)

#### More

#### **KUDOS**









J. Caprio P. Chakrabarty R. Jin

N. McAnelly

P. Russo

This year, Prosanta Chakrabarty, assistant professor of biological sciences and curator of fishes in the Museum of Natural Science; and Rongying Jin, professor of physics & astronomy, were among the distinguished faculty honored during the 2012 Rainmakers Awards ceremony and reception, March 13.

John Caprio, George C. Kent Professor of Biological Sciences, was interviewed as part of a New York Times article on the history of fishing lures.

Nell McAnelly, co-director of the LSU Gordon A. Cain Center for Scientific, Engineering, and Mathematical Literacy, participated in a series of training events on behalf of the New York State Education Department designed to help educators implement the Common Core Learning Standards statewide. The Common Core details the Instructional Shifts in the new standards and how to best utilize A Story of Units, a new comprehensive prekindergarten through fifth grade mathematics curriculum. The curricula design is based on work pioneered by Scott Baldridge, LSU associate professor of mathematics.

John Pojman, professor of macromolecular chemistry, and founder of Pojman Polymer Products, held a workshop with 40 Glasgow Middle School Talented Visual Arts students, to present 3P QuickCure Clay, the only cure-on-demand modeling clay that has the properties of kiln-fired clay. The students used the polymer to create sculptures and other works of art.

The Glasgow students also began a collaborative art project with Paul Russo, Roy Paul Daniels Professor of Chemistry, and his students in the Department of Chemistry's Macromolecular Studies program. The LSU team held a bubble demonstration about

dispersants, which showed students how oil pastels react to watercolor paints.

## MARQUEE PUBLICATIONS



Sophie Warny, assistant professor of palynology and curator for the Museum of Natural Science published a letter in the March 8 edition of Science magazinetitled Museum's Role: Pollen and Forensic Science.

More

#### **NEW FUNDING**

## Grant Supports Construction of Hydraulic Fracturing Lab at LSU

## The Colleges of Science and Engineering collaborate to optimize oil production

Juan Lorenzo, associate professor of geology & geophysics, and Arash Dahi Taleghani, assistant professor of petroleum engineering, recently received funding to simulate real fracturing treatments through the establishment of a hydraulics fracturing lab, the first of its kind at LSU.

The duo received this nationally competitive award through Research Partnership to Secure Energy for America (RPSEA). Over the next two years, the Gas Technology Institute in Chicago will head a team of experts from Lawrence Berkeley National Laboratory, University of California at Berkeley, LSU and the private sector to develop advanced methods and techniques for design and execution of environmentally safe and economically efficient hydraulic fracturing.



#### **ALUMNI UPDATE**



## LSU Alum Recognized for Outstanding Achievement in Dentistry

Dr. George Arch Jr. of New Orleans is named this year's recipient of the New Dentist Award that was awarded during the 133rd House of Delegates of the Louisiana Dental Association (LDA) on March 9. The New Dentist Award is presented annually to one LDA member who has practiced less than 10 years, and who has given their time and talents for the betterment of mankind. Arch graduated from LSU with a BS in microbiology and earned a DDS from the LSU School of Dentistry.

#### **STAR SCHOLARS**



Carlissa Wells, senior biological sciences major and project coordinator for the LSU Community University Partnership's Fresh Cuts Clean Health initiative, participated in an eight-week summer internship at the California Academy of Sciences Summer Systematics Institute. Wells' work for the Academy's Department of Ornithology and Mammalogy focused on the biogeography of New Guinea birds. Because her research was based on molecular DNA, Wells also had the opportunity to work for the research division's Center for Comparative Genomics.



Catherine Fontenot, biological sciences major and LSU Honors College student is a finalist for the nationally competitive Truman Scholarship, awarded by the Harry S. Truman Foundation. Fontenot plans to pursue Doctor of Medicine and Master of Public Health, with concentrations in internal medicine and infectious disease/global health, through Harvard Medical School's Scholars in Medicine program after she graduates from LSU in May 2014. Truman Scholarship recipients will be announced Thursday, April 11, online at www.truman.gov.



Laura Rider, Ph.D. student in mathematics, has been awarded an NSF Postdoctoral Fellowship, with which she will attend MIT. Rider's research interests include categories of perverse sheaves and dg-modules coming from representation theory.



Malcom Davidson, senior chemistry major, is participating in a Science Undergraduate Laboratory Internship at the National Renewable Energy Lab (NREL) in Golden, Colorado. While interning at NREL, Davidson participated in the Colorado School of Mines Conference on Earth and Energy Research, where he won Best Presentation from a visiting university for his project, Energy: Colloidal 3C-SiC Quantum Dots through a Room Temperature Bottom-up Method.



The following students were recently selected for membership in Phi Beta Kappa, the oldest and most prestigious honorary scholastic society in the United States:

#### **Biochemistry**

- Brian Kelley
- Mason Westmoreland

#### **Biological Sciences**

- Kari Carlson
- Angela Collins
- **Riley Dean**
- Catherine Fontenot

## Mary Laborde

- Kvle Paulk
- Kyle Planchard Aaron Ackley
- Reece Boyd
- Kelly Breaux
- Caroline Broussard
- Lauren Carter
- Julie Cronan
- Leon Flettrich
- Cristina Giles
- Olivia Gioe Ciera Johnson
- Alexandra Knowles
- Lauren Macke
- Holly Mouton
- Sara Pederson

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- Edwin Trauth
- Carlissa Wells
- Eric Wendel

#### Chemistry

Ann Mari Finney Laura Ann Clesi

#### **Mathematics**

CariAnne Brouillette

The College of Science salutes its student athletes who were recognized during the 2013 Tiger Athletic Foundation Academic **Excellence** Gala:

2013 Wally Pontiff Jr. Academic Excellence Award Winners

- Christine Derbins, track & field, math/mass comm major, 4.0 GPA
- Cullen Doody, track & field, biological sciences major, 3.93 GPA
- Elaine, Lainie" Fleming, gymnastics, microbiology major, 3.93

#### 2012 TAF Male & Female Scholar Athletes of the Year

- Philip Dempsey, track & field, biological sciences major, 4.0 GPA
- Alexandra Boulet, softball, mathematics major, 4.0 GPA

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## **ALUMNI & DEVELOPMENT**

# College of Science Salutes 2013 Hall of Distinction Inductees

The LSU College of Science will induct five new members during its 2013 Hall of Distinction ceremony, April 26, at the Lod Cook Alumni Center. This year's inductees are:



Patricia Curtis Bodin Chief Information Officer (retired), ExxonMobil



George Boudreaux Founder, Boudreaux's Butt Paste



John Franks Founder, Franks Petroleum Inc.



Gary Grest Scientist, Sandia National Laboratories



**Michael Griffith** Vice President of R&D (retired), **ARCO** Chemicals

The College of Science established the Hall of Distinction in 2004 to honor individuals who have made significant contributions to science. the community, the college, and the university by demonstrating sustained excellence in their scientific, business, educational, governmental, and community service activities.

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



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