

NEWS/EVENTS

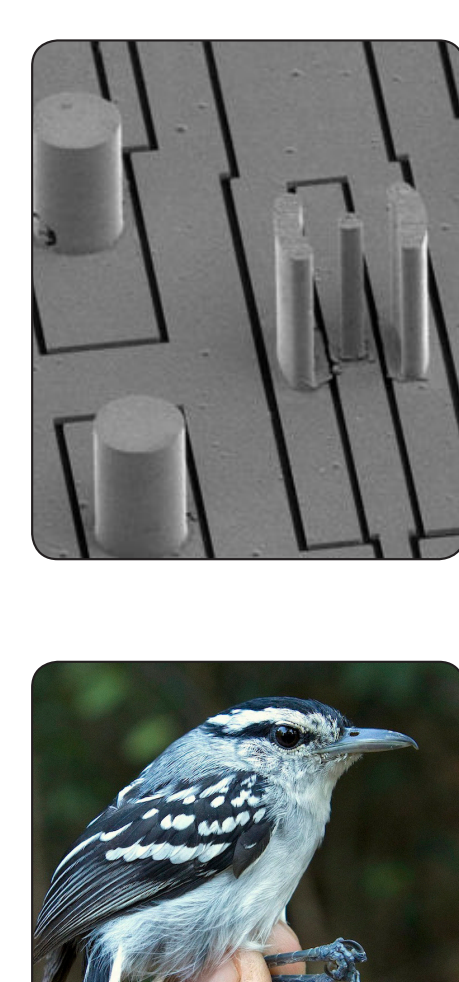


**LSU Researchers Receive \$4 Million MRI Award from NSF**

Researchers at the LSU Center for Computation & Technology, or CCT, have received a \$4 Million Major Research Instrumentation, or MRI, award from the National Science Foundation, or NSF, for the acquisition of SuperMIC, a new supercomputer cluster. This is the largest NSF MRI award LSU has ever received.

The instrumentation, which will be harnessed for a variety of research projects involving discovery of new drugs, modeling coastal processes and forecasting hurricane-generated waves and storm surges, will bring Louisiana to the next level in supercomputing. It will also allow LSU to prepare students and faculty for the next generation of high-performance supercomputers.

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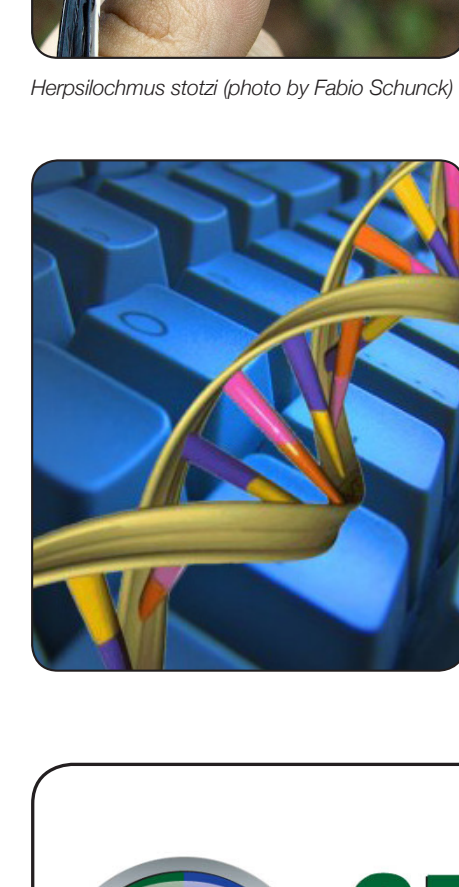
**LSU Alum Coauthors Louisiana's First Birding Guide**

Louisiana has long been a "must see" locale for travellers looking to experience rich history, multicultural heritage, and flavorful cuisine. What many may not know is that birding has an equally rich and exciting history in the pelican state. LSU alum and ornithologist Richard Gibbons, and accomplished birders Roger Breedlove and Charles Lyon have detailed the state's remarkable birding sites in *A Birder's Guide to Louisiana*.

The guide, the first of its kind for the bayou state, is filled with photos of native and migratory birds, and detailed descriptions and maps of Louisiana's key birding sites; some of which are relatively unknown to the national birding community.

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►► PDF of Birder's Guide

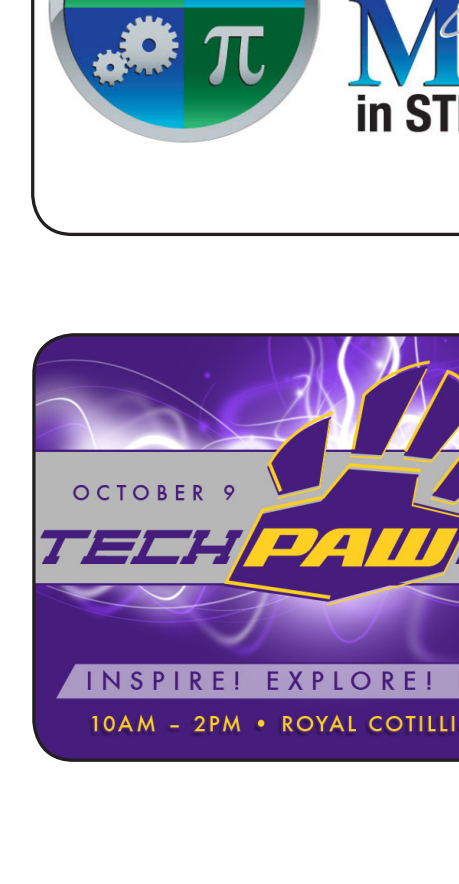


**CAMD Microstructures to be Used in Nobel Laureate's Research**

The National Institute of Standards and Technology (NIST) have enlisted the LSU Center for Advanced Microstructures and Devices (CAMD) to build the next generation of a surface-electrode trap that will confine ionized atoms and measure their response optically or to applied electric magnetic fields.

Dustin Hite, former CAMD research associate, never imagined that his research interests would land him in the research group of a Nobel Laureate. After graduating from LSU with a PhD in physics and astronomy in 2001, Hite spent three years as a postdoctoral researcher at NIST. In 2012, his group leader at NIST, David J. Wineland, shared the Nobel Prize in physics with Serge Haroche of the Ecole Normale Supérieure in Paris for their "ground-breaking experimental methods that enable measuring and manipulation of individual quantum systems."

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**LSU Research Responsible for Naming 15 New Species of Amazonian Birds**

An international team of researchers coordinated by ornithologist Bret Whitney of the LSU Museum of Natural Science, or LSMUNS, recently published 15 species of birds previously unknown to science. The formal description of these birds has been printed in a special volume of the "Handbook of the Birds of the World" series. Not since 1871 have so many new species of birds been introduced under a single cover, and all 15 discoveries involve a current or former LSU researcher or student.

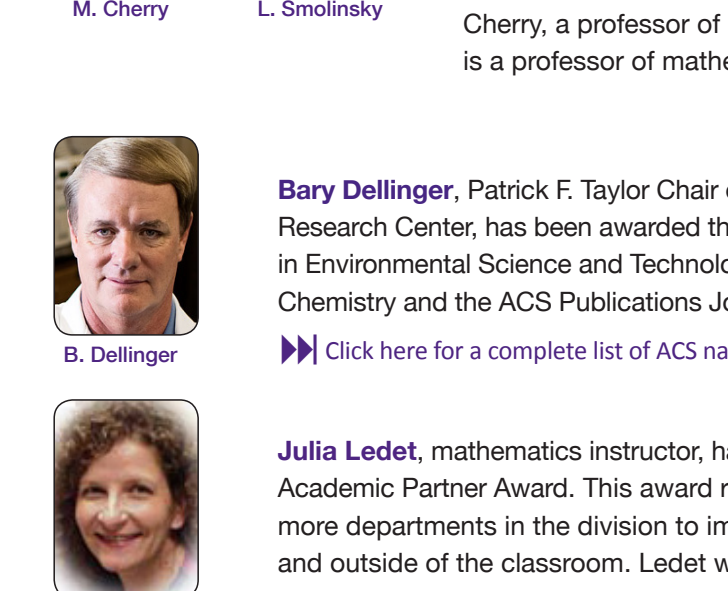
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**Biological Sciences and CCT Host Computational Biology Seminar Series**

The LSU Department of Biological Sciences and the Center for Computation & Technology launched a Computational Biology Seminar Series for Undergraduates September 9. The seminars, led by LSU biology faculty, will expose students to the latest computational approaches to modern biological research.

Assistant Professor of Biological Sciences and head of the LSU Phylaeuxgenetics Laboratory Jeremy Brown was the September 9 speaker. Others scheduled to speak are Michal Brylinski, assistant professor of biological sciences and head of the LSU Computational Systems Biology Group (October 7), and assistant professors of biological sciences Maheshi Dassanayake (November 4) and Cameron Thrash (December 2). ►► More

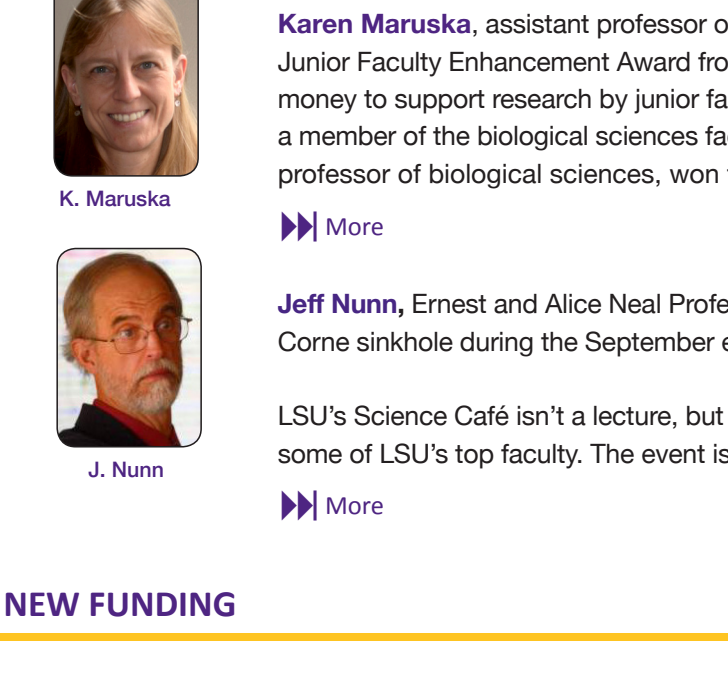


**LSU to Co-Host Great Minds In STEM Conference**

The LSU Graduate School has been invited to serve as an academic co-host of the Great Minds in STEM™ Conference, "Forged by Tradition, Fueled for Tomorrow," October 3 – 5 at the Hyatt Regency Hotel in New Orleans.

On Saturday, October 4th, there will be a Graduate School Panel that will focus on a broad range of topics relative to graduate school preparation including, navigating the application process, writing an effective personal statement, securing financial support, and other topics to help students prepare and succeed in graduate school.

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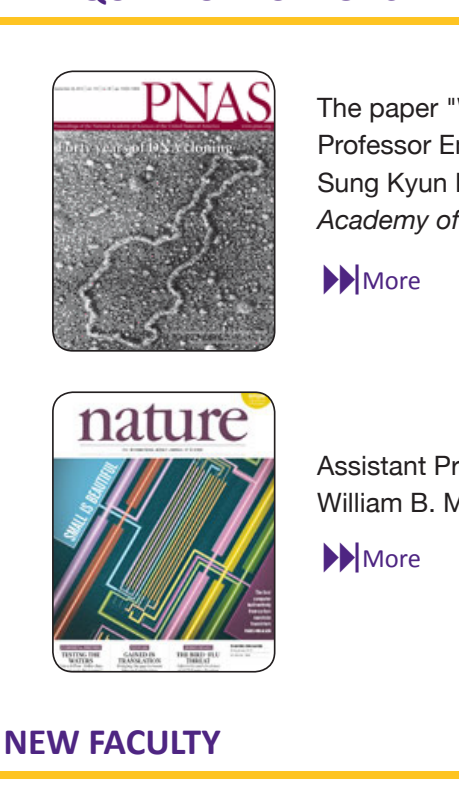


**LSU Presents Third Annual TechPawLooza**

Explore the abundance of technology used at LSU during TechPawLooza, Wednesday, October 9, from 10 a.m. to 2 p.m. at the LSU Royal Cotillion Ballroom. TechPawLooza is a fun-filled day devoted to connecting with LSU students, faculty and staff, and celebrating the technology used in academia for student support and retention, technology support, and community engagement.

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KUDOS



**Remsen Receives Prestigious William Brewster Award**

Van Remsen, John S. Mcllhenny Professor of Biological Sciences and curator of birds for the LSU Museum of Natural Science, is the 2013 recipient of the William Brewster Memorial Award, one of the highest honors given annually by the American Ornithologist's Union (AOU). The award recognizes the author or co-authors of an exceptional body of work on birds of the Western Hemisphere.

Remsen, one of the world's foremost authorities on Neotropical ornithology, has more than 40 years of research, teaching, and service in the field. He started his Neotropical career as a PhD student working in Colombia and Bolivia. His research focuses on the ecology, evolution, and biogeography of Neotropical birds, particularly those of the Andes and Amazon basin.

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Left to right: Robb Brumfield, director LSU Museum of Natural Science; Fred Sheldon, curator of genetic resources; and Van Remsen, curator of birds.

M. Cherry L. Smolinsky

**College Appoints Two New Roy Paul Daniels Professors**

In honor of their stellar research efforts and contributions to science and mathematics education, the College of Science is pleased to announce the appointments of Michael Cherry and Lawrence Smolinsky as Roy Paul Daniels Professors.

Cherry, a professor of physics, is chair of the Department of Physics & Astronomy. Smolinsky is a professor of mathematics and director of actuarial science. ►► More

B. Dellinger

J. Ledet

K. Maruska

J. Nunn

**Bary Dellinger**, Patrick F. Taylor Chair of Environmental Chemistry and director of the LSU Superfund Research Center, has been awarded the 2014 American Chemical Society Award for Creative Advances in Environmental Science and Technology. The award is sponsored by the ACS Division of Environmental Chemistry and the ACS Publications Journal *Environmental Science & Technology*.

►► Click here for a complete list of ACS national award winners

**Julia Ledet**, mathematics instructor, has been presented with the annual Student Life and Enrollment Academic Partner Award. This award recognizes a staff or faculty member who has collaborated with one or more departments in the division to improve the overall quality of the student experience at LSU both inside and outside of the classroom. Ledet was nominated by Disability Services.

**Karen Maruska**, assistant professor of biological sciences, is a recipient of the national Ralph E. Power Junior Faculty Enhancement Award from Oak Ridge Associated Universities (ORAU). The award provides seed money to support research by junior faculty at ORAU member institutions. This is the second year in a row that a member of the biological sciences faculty has received this competitive award. Michal Brylinski, assistant professor of biological sciences, won the award in 2012.

**Jeff Nunn**, Ernest and Alice Neal Professor of Geology & Geophysics, provided a geological look at the Bayou Come sinkhole during the September edition of the LSU Science Café.

LSU's Science Café isn't a lecture, but a lively talk meant to give the community an opportunity to interact with some of LSU's top faculty. The event is held each month at Chelsea's Café.

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NEW FUNDING

**Jeremy Brown**, assistant professor of biological sciences, "*ABI Innovation: Quantifying and Exploiting the Structure of Phylogenetic Tree Space Through Network Analyses*," NSF, 36 months, \$190,333.

**David Donze**, associate professor of biological sciences, "*Extra-transcriptional regulatory functions of the RNA polymerase III system*," NSF, 36 months, \$510,000.

**Jorge Pullin**, Horace Hearne Chair in Theoretical Physics, "*The Dynamics of Quantum Gravity: Symmetry Reduced Models*," NSF, 36 months, \$120,000.

MARQUEE PUBLICATIONS

The paper "Weighted Means and Karcher Equations of Positive Operators" by Jimmie Lawson, Boyd Professor Emeritus of Mathematics, and Yongdo Lim, LSU alum and professor of Mathematics at Sung Kyun Kwan University, is featured in the September edition of the *Proceedings of the National Academy of Sciences*.

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Assistant Professor of Geology & Geophysics Alexander Webb and Hampton University Professor William B. Moore have published "Heat-pipe Earth" in the September edition of *Nature*.

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NEW FACULTY

Assistant Professor of Physics **Ivan Agullo** teaches Classical Mechanics for Graduates at LSU. The Elche, Spain native received a bachelor's degree and doctoral degree in physics from the University of Valencia. His research targets the interface of gravitation and quantum physics, particularly focusing on the interaction between classical gravitate and quantized fields. His main interest surrounds these interactions in relation to cosmology and black hole physics. "The elegant mathematical techniques and the fascinating physical consequences make these areas of physics particularly beautiful," said Agullo. "LSU has a very strong group in quantum and joining it was an attractive opportunity for my career," said Agullo.

**Jacob Esselstyn**, assistant professor of biological sciences and curator of mammals in the Museum of Natural Science, began teaching Mammalogy at LSU this fall. Esselstyn hails from Springfield, OR. He received a bachelor's degree from Oregon State University and a PhD from the University of Kansas. The sizeable population of colleagues with similar interests in systematics attracted Esselstyn to LSU. His research involves the evolution of small mammals from the Old World era in Southeast Asia. With this research, Esselstyn hopes to gain better understanding of how mammals react and interact to their environment. "I am especially interested in the effects of ecological opportunity, time of colonization, and incumbency on the tempo and mode of speciation in island-dwelling lineages," said Esselstyn.

**Ling Long**, associate professor of mathematics, is from Shaoguan, China. She currently teaches Math 2057 and Calculus III. Her area of research involves number theory and its practical and theoretical implications. In 1997, she received a B.S. degree in Mathematics from Tsinghua University in China. Shortly thereafter, she obtained her PhD in Mathematics from Pennsylvania State University in 2002. Long shared that the "LSU mathematics department and the weather" attracted her to the campus. She added that the weather "is very similar to my hometown."

**Amy Luther**, assistant professor of geology and geophysics, earned a bachelors degree from the University of Urbana-Champaign, master's degree from the University of New Mexico, and a PhD from the New Mexico Institute of Mining and Technology. Luther specializes in structural geology, field geology, and fault mechanics of low-angle normal faults. She was previously a Visiting Assistant Professor where she taught a variety of courses from the New Mexico State University Geology Department.

**Karen Luttrell**, assistant professor of geology and geophysics, earned a bachelor's degree from Texas A&M University in physics and geophysics and a PhD in Geophysics at the Scripps Institution of Oceanography. Her research involves the monitoring and modeling of deformation and the stress in the lithosphere, with particular focus on seismic and volcanic hazards. Luttrell comes to LSU from the U.S. Geological Survey in Menlo Park, where she was a Mendenhall Postdoctoral Fellow.

**Jianwei Wang**, assistant professor of geology and geophysics, earned a PhD in earth materials at the University of Illinois at Urbana-Champaign. Wang brings his expertise in molecular modeling of earth materials using first-principles and molecular dynamics simulations. His research focuses on surface chemistry of minerals, defect and pressure effects of complex oxides, materials under extreme conditions, gas hydrates, and actinides materials. Wang was a post-doctoral fellow and research faculty at University of California and University of Michigan.

**Mark Wilde**, assistant professor of physics and astronomy, teaches quantum communication and masters to teach quantum computation in the spring. He holds a bachelor's degree from Texas A&M University, a master's degree from Tulane University, and a PhD from the University of Southern California. Wilde's research interests focus on finding new methods to exceed the limits placed on communication and computation. While LSU he wishes to contribute to the prevailing research with the assistance of some of his colleagues. Wilde commends the program on its interdisciplinary nature. "My ultimate vision is for LSU to become a leading center of research in quantum communication and computation within the next few years," said Wilde.

ALUMNI UPDATE



**Math Alumnus Awarded MacArthur Fellowship**

LSU mathematics graduate Susan Murphy was named one of two dozen MacArthur Fellowship recipients. The John D. and Catherine T. MacArthur Foundation annually hands out the grants to exceptionally creative individuals across a range of disciplines. This year's crop includes scientists, musicians and writers, a doctor, a lawyer and a couple of historians.

Currently, Murphy is the H.E. Robbins Professor of Statistics and the University of Michigan. She received her bachelor's degree in mathematics in 1980 from LSU and a PhD in 1989 from the University of North Carolina.

►► Video

►► Advocate Article



**IBA Awards President's Medal to LSU Geology Alumnus**

**Alan H. Cheetham**, paleobiologist and geology alumnus has been awarded the President's Medal from the International Bryozology Association (IBA) for his significant role in the founding and history of the IBA. Cheetham co-founded the society while a visiting professor of geology at the University of Stockholm, Sweden in 1965. He served as the organization's first president from 1965 to 1968, and then as a councilor until 1974. Presently, the IBA membership spans 40 countries and includes scientists who study all aspects of living and fossil Bryozoa.

Cheetham, scientist emeritus and curator of invertebrate paleontology at the Smithsonian Institution's National Museum of Natural History, retired in 2002 and currently resides in Santa Fe, New Mexico.

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►► Cheetham Bio

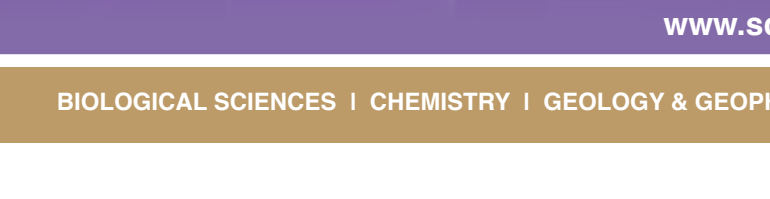


**Spring LSU graduate Randeve Young made significant contributions to evolutionary studies with her work in Jeremy Brown's Phylaeuxgenetics Laboratory. The promising student joined Brown's lab in January with the assistance of postdoctoral researcher Vinson Doyle. She has since assumed a research technician position in the Phadnis Lab at the University of Utah.**

During the summer of 2013, Young became the recipient of two undergraduate awards, one to attend the Evolution meeting in Snowbird, Utah as well as an award to attend the Society for Molecular Biology and Evolution meeting in Chicago, Illinois. During these meetings, she shared her research findings through poster presentations. Young is grateful for the opportunity to present at these meetings and attributes the experience to bolstering her love for her work.

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STAR SCHOLARS



**LSU Medical Brigades Chapter to Provide Medical, Dental Services in Rural Nicaraguan Community**

"It feels good to make a difference and change lives," said Danielle Raslan, junior biology major and president of LSU's Global Brigades Medical Chapter.

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This spring, 25 LSU students will spend nine days in Nicaragua as part of the Global Brigades program, one of the world's largest student-led global health and sustainable development organizations.

Since 2004, Global Brigades has mobilized thousands of students, volunteers, and healthcare professionals to provide health and economic solutions to more than 300,000 people in developing countries such as Honduras, Panama, Ghana, and Nicaragua.



**The College of Science welcomed nearly 2000 to the Science Residence College (SRC) as part of LSU's annual Move-In Day, August 22. The students were welcomed by SRC rector Chris Gregg and Interim College of Science Dean Guillermo Ferreyra.**

The SRC helps first-year students adjust to the rigors of science and math courses all while living and studying in a living-learning community of peers with similar interests. SRC students live in Evangeline Hall, which is centrally located on campus not far from the science complex.

This year the university welcomed approximately 2,500 new and returning students to the on-campus residence halls and apartments.



**Melanie Carroll**, physics major, interned with St. Jude Research Hospital in Memphis, TN this summer as a research assistant in their Radiation Oncology division. Her research involves measuring distortion in MR images and quantifying its effects on radiation treatment planning in patients with brain tumors.

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**Aimee Landry**, biochemistry major, spent the summer in Tubingen, Germany working the DAAD (German Academic Exchange Service). Landry assisted a PhD student at the Max Planck Institute for Developmental Biology. While there, she studied a protein that is part of the pathway for neuronal migration.

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ALUMNI & DEVELOPMENT



**Shell Gives More Than \$150,000 in Support of LSU Foundation**

LSU College of Science faculty and staff joined the LSU Foundation Aug. 23 in thanking Shell for its annual giving to LSU.

Shell announced its \$151,500 annual gift to the LSU Foundation at an Aug. 23 reception held at LSU's Club at Union Square. LSU students, faculty and staff joined the LSU Foundation in thanking local Shell representatives for the company's ongoing support of LSU.

Shell's gift provides funding for Career Services; the Center for Community Engagement, Learning and Leadership; the College of Engineering in the areas of chemical, computer, electrical, mechanical and petroleum engineering, as well as the student organization Engineers Without Borders and the college's Minority Engineering Program; the College of Science's geoscience programs; Communication across the Curriculum; Disability Services; the E. J. Ourso College of Business for several student development and development programs; and the Honors College.

**Chevron to Fund Materials Characterization Lab in Geology & Geophysics as Part of a Nearly \$3 Million Commitment to Engineering and Multiple LSU Initiatives**

Chevron has announced a \$2 million commitment in support of the renovation of Patrick F. Taylor Hall and engineering expansion for the College of Science. Chevron's contribution will establish an engineering student academic support center, as well as a reservoir mechanics and rock and fluids property teaching laboratory in the Craft and Hawkins Department of Petroleum Engineering. Chevron's gift bolsters the private fundraising effort in support of the college's "Breaking New Ground" campaign, to which donors have generously committed more than \$30 million.



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**A SPECIAL THANK YOU...**

The College of Science would like to thank Dean's Circle Members Pat Bodin and Clarence Cazalot for their service to LSU as part of the University's Transition Advisory Team.



Pat Bodin

Clarence Cazalot

We appreciate your commitment to LSU!

NEW DEAN'S CIRCLE MEMBERS

The College of Science would like to welcome the newest members of the Dean's Circle. Check to see if you are among them.

- Byron R. Ayra, joined July 2013
- Elywn F. Cavin, joined April 2013
- Hope Jordan, joined September 2013
- Hope Langer Gertler, joined July 2013
- Bert Langer Goldberg, joined July 2013
- Rowdy C. Lemoine, joined April 2013
- James J. McKinnie, joined August 2013
- John D. Reeves, joined July 2013

►► Click here for a complete list of DC members

Support Research and Scholarship at LSU



The Dean's Circle (DC) is a loyal group of alumni and friends who share a passion for advancing scholarship and research at LSU. DC members are playing an ever-increasing role in supporting the college's Strategic Plan *Formula for Excellence*.

Dean's Circle membership recognizes the generosity of alumni and friends who make annual gifts of \$1,000 or more to the Science Development Fund. Members enjoy invitations to events hosted by the college, including the annual Dean's Circle dinner and Hall of Distinction Ceremony, special communications from the dean throughout the year, and opportunities to meet and network with college leadership and other members.

Our DC provides the working capital needed to fund pursuits of the College including, but not limited to:

- scholarships for first-year students to attend pre-college boot camps,
- student organizations and educational travel expenses,
- faculty recruitment and recognition activities, and
- development initiatives that build alumni and community relations.

To join by mail, make your check payable to "LSU Foundation-Science Dean's Circle" and mail your check to: LSU Foundation, 3838 West Lakeshore Drive, Baton Rouge, LA 70808

To donate online go to [www.lsufoundation.org/give-to-science](http://www.lsufoundation.org/give-to-science).

**CONTACT US:** For more information on the Dean's Circle, please contact Adrian Owen, [aowen@lsu.edu](mailto:aowen@lsu.edu), 225.578.5100.



**JOIN US FOR FRIENDS, FUN, AND JAMBALAYA**

at the **LSU COLLEGE OF SCIENCE ALUMNI HOMECOMING TAILGATE**

Saturday, October 26th

11:30 a.m. - 2:30 p.m.

Lobby of the

LSU Life Sciences Annex

(Corner of South Campus Drive and Highland Road, across from the French House)

RSVP to [sciencealumni@lsu.edu](mailto:sciencealumni@lsu.edu)

OR 225.578.6925

by Friday, October 18th

►► To submit news items for the upcoming College of Science E-News, e-mail [djenkins1@lsu.edu](mailto:djenkins1@lsu.edu)

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