



NEWS/EVENTS





Ellwood. Owslev and their research team excavate the grave site of "Wild Bill."







Abel Prize winner Jean-Pierre Serre with LSU faculty and graduate students after his colloquium, which served as a precursor of the conference



Cynthia Peterson, biochemistry graduate, and incoming dean of the LSU College of Science participates in a break out discussion with

LSU Museum of Natural Science Research Shows Hummingbird Diversity Is Increasing

Research relying heavily on the genetic tissue collection housed at LSU's Museum of Natural Science (one of the world's largest collections of vertebrate tissues) has provided a newly constructed family tree of hummingbirds, with the research demonstrating that hummingbird diversity appears to be increasing rather than reaching a plateau. The work, started more than 12 years ago at LSU, culminated with a publication in the journal Current Biology.

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LSU Geologist's Innovative Use of Magnetic Susceptibility Helps Uncover Burial Site of Notorious Texas Outlaw

Brooks Ellwood, Robey H. Clark Distinguished Professor of Geology & Geophysics, was featured in a recent edition of Earth, for his innovative use of magnetic susceptibility (MS) for highresolution interpretation of sedimentary sequences. Magnetic susceptibility is essentially how easily a material is magnetized in an inducing magnetic field. MS has proved useful for dating archeological sites more than 40,000 years old. One of Ellwood's more unusual applications of MS was when he was approached by Doug Owsley, forensic anthropologist at the Smithsonian Institution, to help search for the burial site of notorious Texas outlaw William Preston Longley, or 'Wild Bill."

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LSU Alum, MacArthur Fellow Susan Murphy **Gives Porcelli Lectures**

LSU mathematics graduate and 2013 MacArthur Fellow Susan Murphy was the featured speaker for the 2014 Porcelli Lectures held April 28 in the LSU Digital Media Center. Murphy gave two lectures the first of which was "Getting SMART about Adapting Interventions," followed by "Adaptive Confidence Intervals for Non-smooth Parameters."

Murphy was one of 24 MacArthur Fellows named in 2013. Currently, she is the H.E. Robbins Professor of Statistics at the University of Michigan. She received a bachelor's degree in mathematics in 1980 from LSU and a PhD in 1989 from the University of North Carolina.

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Outstanding Students, Faculty Recognized during 39th Choppin Honors Convocation

The College of Science recognized the achievements of its top students and faculty during the 39th Annual Choppin Honors Convocation. More than 60 recognitions were given including awards for College of Science outstanding sophomore, junior, and senior and faculty honors for teaching and research. President and chancellor F. King Alexander welcomed the awardees and thanked them for their contributions to LSU's status as a top research institution.

Complete list of award recipients

More than 100 International Mathematicians Attend Number Theory Conference

The LSU Department of Mathematics brought together more than 100 international mathematicians and researchers for the Applications of Automorphic Forms in Number Theory and Combinatorics Conference, April 12 - 15. The conference was held in honor of Distinguished Professor of Mathematics Wen-Ching Winnie Li for her outstanding contributions to number theory automorphic forms, and applications. Plenary speakers included Abel prize winners Jean-Pierre Serre from the Collège de France and John Tate of Harvard University and the University of Texas, along with six members of the National Academy of Science, one Fields Medalist and three Wolf Prize winners.

The conference was sponsored by the National Science Foundation, the Number Theory Foundation, Clay Mathematics Institute, and Microsoft Research, in conjunction with the LSU Department of Mathematics.

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Science Residential College Co-hosts Women In STEM Panel

The Science Residential College, Engineering Residential College, and Honors College hosted the second annual Women in STEM program, March 27. Panel guests included Yolunda Taylor, biology alumnus and OBGYN; Kelly Poret, geology alumnus and geologist with Stone Energy Corporation; Cynthia Peterson, biochemistry alumnus and incoming dean of the LSU College of Science; Mette Gaarde, LSU professor of physics and astronomy; Evanna Gleeson, LSU professor of biological sciences; and Ginger Brininstool, instructor of biological sciences.

Each panelist shared their experiences as women working in STEM fields and answered questions from the more than 70 students in attendance.



student attendees.





KUDOS

The Women in STEM panel was recently named the Outstanding Educational Program by the Department of Residential Life for 2013-2014.

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A Big Day about Small Science: Nanodays 2014

The LSU Center for Computation and Technology, Department of Physics & Astronomy, and LA-SIGMA co-hosted Nanodays 2014, April 5 at the Highland Road Observatory. The free and family-friendly event featured hands-on activities to help children of all ages explore the world of small-scale science. Participants built models of nanoscale structures, learned how scientists use Scanning Probe Microscopes to explore the nanoworld, and explored liquid crystals.

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Colleges of Engineering and Science Host LSU Space Day LSU provided a unique learning opportunity for more than 175 middle school students from six area schools during LSU Space Day, March 28. The students competed in various space-themed competitions and discovered space-related college and career

opportunities in science, technology, engineering, and math at LSU.

"LSU Space Day is a fun way to ignite students' interest in STEM disciplines and expose them to the programs at LSU in these areas," said Guillermo Ferreyra, interim dean, LSU College of Science. "Science drives innovation and economic growth. To increase the number and quality of students enrolling in and completing STEM programs at LSU we engage them earlier than high school with activities such as those offered at LSU Space Day."

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Pictured left to right (front row): Stuart Bell, LSU executive vice chancellor and provost; F. King Alexander, LSU president and chancellor; Hongchao Zhang, assistant professor of mathematics; Sharon Weltman, professor of English; Dawn Harris, Campus Federal Credit Union; K.T. Valsaraj, vice chancellor for research & economic development; (second row) Michael Pasquier, associate professor of religious studies and history; Brian Shaw, associate professor of trumpet and jazz studies; Troy Blanchard, professor of sociology; and Michael Malisoff, Roy Paul Daniels Professor of Mathematics.

Math Faculty Named 2014 Rainmakers

LSU's Office of Research & Economic Development, with the support of Campus Federal Credit Union, recognized two College of Science faculty among this year's six Rainmaker Awards recipients.

Hongchao Zhang, assistant professor in the Department of Mathematics and the Center for Computation and Technology (CCT), was honored with the Emerging Scholar Award in Science, Technology, Engineering and Mathematics (STEM) and Michael Malisoff, Roy Paul Daniels Professor of Mathematics, received the Mid-Career Scholar Award in STEM.

Rainmakers are faculty who balance their extensive responsibilities, which extend far beyond the classroom, with external expectations such as securing funding for their research and establishing the impact of their findings to the scholarly community and society as a whole. These exemplary representatives of LSU garner national and international recognition for innovative research and creative scholarship, compete for external funding at the highest levels and attract and mentor exceptional graduate students.



Mark Batzer, LSU Boyd Professor and Dr. Mary Lou Applewhite Distinguished Professor of Biological Sciences was one of 14 recipients of the 2014 SEC Faculty Achievement Award. These annual awards recognize a faculty member from every SEC university who demonstrates outstanding records of teaching, research and scholarship.

Susanne Brenner, Michael F. and Roberta Nesbit McDonald Professor of Mathematics, was named the 2013 Distinguished Research Master by the LSU Office of Research and Economic Development.

Robby Bowen, College of Science academic counselor and LSU pre-health advisor, has been named LSU Advisor of the Year and the 2014 National Academic Advising Association (NACADA) Outstanding Advising Award-Primary Advising Role winner. Bowen received the LSU advisor of the year award during University College's annual "Celebration of Excellence" Spring Awards program. Bowen will also be recognized during a special awards ceremony and reception during NACADA's annual conference, October 8, in Minneapolis, MN.

Peter Clift, Charles T. McCord Professor of Geology & Geophysics, was quoted in a syndicated Inside Science article, "Sea Level Shifts Helped Shape Galapagos' Biological Diversity.

G. Martin Forrest, instructor of mathematics; Pamela Garretson, instructor of biological sciences; Aaron Grocholski, instructor of physics & astronomy; Ambar Sengupta, Hubert Butts Memorial Alumni Professor of Mathematics; and George Stanley, Alumni Professor of Chemistry received University College Tiger Athletic Foundation Teaching Awards.

Louis Haber, assistant professor of chemistry, was honored by a joint award from the LSU Alumni Association and the LSU Chapter of the Honor Society of Phi Kappa Phi. The honor is given each year to the university's brightest young scholars and artists.

Juan Lorenzo, associate professor of geology & geophysics, was featured on WWLTV helping explain the processes involved in hydraulic fracturing. Citizens in St. Tammany Parish have begun to educate themselves on the process with the rise in interest of the Tuscaloosa Marine Shale. Lorenzo, along with petroleum engineering professor Arash Dahi-Taleghani, were both interviewed about their collaborative work in developing a hydraulic fracturing lab at LSU.

Luigi Marzilli, William White Tison Professor of Chemistry and chemistry department chair, has been awarded the 2014 Charles H. Herty Medal, recognizing outstanding chemists in the Southeastern United States since 1933. The Herty Medal remains the most prestigious award given annually to an outstanding southeastern chemist.

Ward Plummer, professor of physics & astronomy, has been named a member of the American Academy of Arts and Sciences. The 2014 class includes Pulitzer Prize-winning journalist Ann Marie Lipinski, atmospheric scientist Inez Fung, 2011 Nobel Prize winner in Chemistry Dan Shechtman, novelist and screenwriter John Irving, and actor/director Al Pacino.

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John Pojman's work with the three-toed amphiuma has earned the LSU chemistry professor airtime on an Animal Planet broadcast with British naturalist Nigel Marven. The segment focuses on animals that can be found in port cities such as New Orleans. The show will be aired in the United Kingdom and may also receive some U.S. airtime.

Jacqueline Stephens, professor of biological sciences and director of basic research at Pennington Biomedical Research Center was a featured speaker during TEDxLSU, March 29th. TEDxLSU is a platform that brings local, regional, and state communities together to discuss new innovative ideas. The event also included a video presentation by biological sciences instructor Barry **Aronhime** regarding the restoration of Bluebonnet Swamp.

STAR SCHOLARS



Pictured left to right: Brandon Oubre, Paul Koenig, Paxton Turner Rachael Keller



Tiger Twelve students at the April 2 baseball game against McNeese State



LSU Math Circle Team

Two LSU Students Named Goldwater Scholars, Two Receive Honorable Mention

Math and computer science major Brandon Oubre and math major Paxton Turner have been awarded the prestigious, nationally competitive Goldwater Scholarship by the Barry M. Goldwater Scholarship and Excellence in Education Program. Rachael Keller, also a math major, and Paul Koenig, a chemistry major received Honorable Mention. All four students are members of the LSU Honors College, and Oubre is also a LA-STEM Research Scholar.

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Three College of Science Students Named to Tiger Twelve

Catherine Fontenot (biological sciences), Morgan Matchett (mathematics), and Tuan Tran (biological sciences) were named to Tiger Twelve, which recognizes 12 outstanding seniors who contribute positively to the life of the LSU campus and surrounding community. The students were recognized at the April 2 LSU baseball game as the Tigers took on McNeese State.

MathCircle Participant Takes Top Honors in Harvard, MIT Competition

LSU MathCircle Team member, Scott Wu, came in first place overall against 671 other students in the Harvard MIT Math Tournament (HHMT). Wu, a junior at Baton Rouge High School, received a cash prize and an opportunity to participate in a follow up competition. In it's third year, the MathCircle team placed 16th in the Guts Round and 26th overall. To prepare for the competition, the team met every Sunday during the school year with their coaches, LSU graduate assistants Alisina Azhang, Farid Bouya, Maitreyee Kulkarni, and Jesse Levitt, and undergraduate Steven Olsen. They look forward to returning to the competition next year and continuing their march towards the top ten.

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Congratulations to the 2014 winners of the Department of Geology & Geophysics 2014 Rockstar Poster Competition!

Graduate level winners: first place, Suraj Bajgain, "Water speciation and properties of hydrous model basalt melt at high pressure;" second place, Madison Kymes,"Palynological evolution of Oligocene and Miocene sections from King George Island, Antarctic;" and third place Adam Turner, "Developing U as a paleoredox proxy, modern analogs."

Undergraduate level winners: first place, James Smith, "Patterns of sediment accumulation over decadal time scales in the Brenton Sound basin;" second place, Matthew Smith, "On the amount of sediment deposited in floodplains from the Mississippi River: A case study in Cat Island National Wildlife Refuge, Louisiana;" and tied for third place Ingrid Eckhoff, "Kinematics of active surface salt structures in western China: field observations and topographic analysis;" and Shelby Johnston: "Low-temperature history of the Tethyan Himalayan Sequence, NW Himalaya."

ALUMNI



A. Leder

Two College of Science alumni, Alexander Leder and Carl Sabottke, received Graduate Fellowships from the National Science Foundation (NSF). In 2012, Leder earned a Bachelor of Science degree in mathematics and physics. Presently, he is pursuing a doctoral degree at MIT.

A 2013 graduate, Sabottke received a Bachelor of Science degree in chemistry and was a 2012 Goldwater Scholar amongst other achievements. He is currently pursuing a doctoral degree from the University of Maryland.

DEVELOPMENT



College of Science Graduates Honored During LSU Alumni Association Hall of Distinction

The LSU Alumni Association recognized three College of Science graduates during its 2014 Hall of Distinction event. John Havens, geology, class of 1978, and Dr. Charles Kaufman, microbiology, class of 1971 and LSU Medical Center, class of 1975; were among this year's inductees. Patricia Bodin, mathematics, class of 1972 was named Alumna of the Year.

Including the 2014 inductees, 274 individuals representing a cross-section of LSU graduates have been recognized by the LSU Alumni Association. The College of Science salutes all of this year's Alumni Association Hall of Distinction inductees.

Photo: College of Science Dean's Circle Executive Committee member Pat Bodin



Pictured (left to right): Robert Perlis, chair, Department of Mathematics; Stephen Shipman, associate professor of mathematics; Guillermo Ferreyra, interim dean, College of Science; and Terry Latiolais, former chair of the College of Science Dean's Circle Executive Committee.



Pictured (left to right): Director of Development Emi Gilbert, Kuni Hara, Reinosuke Hara, and Vice President of Development for the LSU Foundation Ann Marie Marmande

speaks at the LSU Alumni Association's 2014 Hall of Distinction banquet.

Math Professor Receives Inaugural Marion "Soc" Socolofsky Teaching Award

Stephen Shipman, associate professor of mathematics, is the recipient of the first annual Dr. Marion "Soc" Socolofsky Award for Teaching Excellence.

On a Monday morning, Shipman was caught unaware as Math Department Chair Robert Perlis entered his 11:30 a.m. class with Guillermo Ferreyra, interim dean of the College of Science, and Terry Latiolais, former chair of the college's Dean's Circle Executive Committee. Shipman took a seat next to his students assuming the dean was there to make an important announcement, but was guite surprised when he went on to speak of Shipman's accomplishments and commitment to his students.

The LSU College of Science Executive Committee established the Dr. Marion "Soc" Socolofsky Award for Teaching Excellence in 2013 to recognize faculty that have shown a commitment to teaching that goes above and beyond. Award nominations are initiated by student and faculty recommendations and recipients are selected by College of Science alumni and friends.

Former CEO of Seiko Visits LSU

Reinosuke Hara, former president and CEO of Seiko instruments and long-time friend of the LSU College of Science, travelled from Japan to visit his old stomping grounds at LSU this past March. In the early 1950s, Hara was a postdoctoral researcher under late Boyd Professor Emeritus Philip West, and served many years on the College of Science Development Council as president of the Japan chapter of the LSU Alumni Association. During his week-long visit, Hara attended the College of Science Tenth Annual Hall of Distinction celebration and hosted a lecture for college faculty and students titled "From Science to New Business: The Role of Science in Manufacturing Industry."

Hara, who recently celebrated his 90th birthday, continues to be an active promoter of nanotechnology bringing an exceptional wealth of business experience and technical knowledge to his endeavors. Currently, he serves as senior advisor of Japan Capital Management Company Ltd.

<u>NEW DEAN'S CIRCLE MEMBERS</u>

The College of Science would like to welcome the newest members of the Dean's Circle. Thank you for your contribution to the teaching and research activities in the College of Science.

Jack and Anna Lea Woods, March 2014

Click here for a complete list of DC members



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 Formula for Excellence Strategic Plan. Our DC provides the working capital needed to fund pursuits of the College including, but not limited to:

- scholarships for first-time freshmen 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.

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.

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/givetoscience.

CONTACT US:

For more information on the Dean's Circle, please contact Adrian Owen, aowen@lsu.edu., 225.578.5100.

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

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