

IN THIS ISSUE

Dean's Message	1
Kudos	2
Marquee Publications	2
New Grant Funding	3
Program News	3
Student News	3
Alumni News	4
Development News	4
Comings & Goings	4
Campus News	5
Calendar	5



The College of Science *e-Newsletter* is distributed to all faculty and staff in the College and to campus administrators, alumni, and friends of the college.

If you know someone who should be receiving or would like to receive the *e-Newsletter* and is not, please send their contact information and e-mail address using the link below.

Articles and ideas should be sent to science@lsu.edu. Please include hyperlinks when possible.

Thanks to all who provide the items for this newsletter.

NOTES FROM 336 HATCHER

Dear Friends and Colleagues,

In spite of a seemingly endless barrage of rhetoric, rumors, and news regarding budgets, sabbaticals, and other issues of importance, our faculty and students continue to excel on all fronts. A few examples include...

- College of Science faculty brought in more than \$40M in grants during FY 2009-10 (>85% from federal sources) and funding for the college through the first 4 months of FY 2010-11 is over \$18M.
- Last August over 320 entering freshmen participated in our "boot camps", which are now held by all departments except Geology & Geophysics...and theirs is coming next year. The impact of these programs is well documented and nationally recognized. Drs. Bill and Sheri Wischusen recently gave a presentation to the deans of all other major colleges at LSU, and several are interested in implementing their own boot camps. Our residential college in Evangeline Hall is in its second year and off to another great start.
- Thanks to the efforts of many folks, including Chris Gregg, Gary Byerly, Jami Cates and several faculty who teach Science Residential classes, our students are thriving in this living/learning environment. Notably, Science Res students had the highest residential college GPA and expressed the highest satisfaction with their experience relative to other residential colleges at LSU.
- Jayne Garno (Chemistry) was one of only 85 use scientists to receive the Presidential Early Career Award, and one of only 19 people nominated by the NSF!

As I have mentioned previously, we are engaged with a significant strategic planning exercise for the college and its

departments. While it may seem odd to engage with this process when LSU is facing so many budgetary challenges, I would argue that there may in fact never be a more important time for us to think strategically. A well developed strategic plan will help us identify and focus on our priorities in the face of shrinking resources; it will also help us be prepared to wisely invest new resources when they eventually come. We will submit draft plans for all departments and the college to the Provost by Dec. 15, and final plans are to be completed by March 1, 2011. I have been meeting with department chairs and the college Policy and Planning committee, and will host an open forum in early December. I hope that you will participate in this process as your input is vital.

Legislation passed during the 2009 session requires us to examine all undergraduate degree programs and to convert programs to 120 hours or justify why more hours are required. We recently had a healthy discussion with department chairs wherein we reviewed college requirements as well as those of individual departments. It was a very healthy and productive discussion and I think we identified several areas where we may be able to improve and streamline programs. This will be an important topic of discussion in the coming weeks, and I hope that all faculty members will be engaged.

At a recent meeting of deans we learned that significant changes are coming regarding the Graduate School. For starters, the Graduate School has been moved administratively back into the Office of Research and Economic Development; Dean David Constant now reports to Vice Chancellor Tom Klei. A committee is being established to

KUDOS

Jayne Garno (Chemistry) will receive a Presidential Early Career Awards for Scientists and Engineers (PECASE), the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers.

Gabrielle Allen (Computer Science/CCT) gave a keynote address titled "Importance of Cyberinfrastructure for Numerical Relativity," at TeraGrid 10 in August in Pittsburgh.

Jeff Blackmon (Physics & Astronomy) was selected to serve on the Nuclear Science Advisory Committee, which advises the Department of Energy and NSF on basic nuclear science research.

Susanne Brenner (Mathematics) was named the Michael F. and Roberta Nesbit McDonald Professor in August. She has also been appointed to the National advisory Committee for the Statistical and Applied Mathematical Sciences Institute (SAMSI).

Brent Christner (Biological Sciences) received the Charles C. Randall Lectureship Award from the south central branch of the American Society for Microbiology.

Barb Dutrow (Geology & Geophysics) was a keynote speaker in an IMA session on "Teaching Mineralogy" during the International Mineralogical Association 2010 quadrennial Meeting in Budapest, Hungary.

Joe Giaime and **Parampreet Singh** (Physics & Astronomy) were featured on

the BBC network's "Horizon" program during the second week of October as part of the discussion "What happened before the Big Bang?"

Gabriela Gonzalez (Physics & Astronomy) was selected to chair the search committee for the next director of LIGO.

Darrell Henry (Geology & Geophysics) was elected as a 2010 Fellow of the Geological Society of America. He was also an invited speaker for a session on boron minerals at the quadrennial International Mineralogical Association meeting in Budapest, Hungary, in August.

S. S. Iyengar (Computer Science) was keynote speaker for the International Conference on Computer Science and Education (ICCSE 2010) in August in Hefei, Anhui, China.

Rongying Jin (Physics & Astronomy) was named a Fellow of the American Physical Society.

Juan Lorenzo (Geology & Geophysics) served as technical chair for the American Geophysical Union (AGU) Meeting in Sao Paolo, Brazil in August 2010 where he gave a presentation, "Geophysical Characterization of Flood Protection Barriers, New Orleans." He gave similar presentations in June at the University of Barcelona and the Jaume Almera, National Research Institute for Earth Sciences.

Jorge Pullin (Physics & Astronomy) appointed editor for the space-time and gravity section of Scholarpedia. In July, he co-organized the Quantum Gravity in the Southern Cone in Buenos Aires, Argentina, with funding from NSF.

Parampreet Singh (Physics & Astronomy) received the 2010 S. Chandrasekhar Award from the International Society on General Relativity in Gravitation at the tri-annual meeting in July. He was recently named editor of the *International Journal of Modern Physics D*.

Steve Soper (Chemistry) was named a Fellow of the Society for Applied Spectroscopy and a Fellow of the Royal Society of Chemistry.

Thomas Sterling (Computer Science/CCT) and **Stephen Beck** (Music/CCT) were awarded \$1 million in funding from the US Senate Omnibus Appropriations bill for the "Center for Digital Innovation." The center focuses research in next-generation digital media and computer architecture.

Milen Yakimov (Mathematics) received the Carruth McGeehee Award for Excellent Research for his paper, "Symplectic leaves of complex reductive Poisson-Lie groups," which appeared in the *Duke Mathematics Journal*.

LSU Research Funding Climbs in National Rankings

With federal research funding of \$157.6 million, LSU ranked 65th in the top 100 ranking of federal research funding.

Notes continued from p. 1

streamline graduate school red tape. Also, funds for graduate student enhancements and supplements will be moved from the Graduate School to colleges; this will be a multi-year process as the Graduate School transitions out of commitments that it has made. Details of this transition are not yet finalized and I am assured by Dean Constant that we will have ample opportunity for input as we proceed. Overall, I think these changes will be very positive and will allow us to manage our graduate programs more effectively.

This will be the last newsletter of 2010. Best wishes as we navigate the end of another semester, and best to and yours for a wonderful holiday season.

Regards, Kevin C.

MARQUEE PUBLICATIONS

Mark A. Batzer, Miriam K. Konkel, and Jerilyn A. Walker (Biological Sciences) [The 1000 Genomes Project Consortium] (2010), "A map of human genome variation from population-scale sequencing," *Nature* 467, 1061–1073.

S. S. Iyengar (Computer Sciences), with Nandan Parameshwaran, Vir Phoha, N. Balakrishnan, and Chuka Okoye, (2010) *Fundamentals of Sensor Network Programming*, John-Wiley.

Evangelos Triantaphyllou (Computer Sciences), (2010) *Data Mining and Knowledge Discovery via Logic-Based Methods. Theory, Algorithms, and Applications*, Springer.

NEW GRANT FUNDING NOTICES

MULTI-UNIT/CAMPUS

Mark Jarrell (Physics & Astronomy), **Randy Hall** (Chemistry), et al., "Louisiana Alliance for Simulation-Guided Materials Applications (**La-SIGMA**)," NSF, 2010-2015, \$20,000,000.

BIOLOGICAL SCIENCES

Mark Batzer, "Population Genetics of Mobile Elements," NIH, 2010-2014, \$973,254.

Gary King (Co-PI), "Microbial community responses to Deepwater Horizon oil spill: pre-spill background assessment," BP Exploration & Production, 2010-2011, \$179,937.

Jacqueline Stephens, "Adipocytes and Botanicals," NIH, 2010-2015, \$750,000.

Andrew Whitehead and **Fernando Galvez** (CoPI), "Deepwater Horizon oil exposure effects on marsh fishes in at-risk habitats: Integrated laboratory and field studies," BP Exploration & Production, 2010-2011, \$149,967.

Andrew Whitehead, "RAPID: Collaborative Research: Genetic Impact of the Deepwater Horizon Oil Release," NSF, 2010-2011, \$29,932.

COMPUTER SCIENCE

Gabrielle Allen, Werner Bengler, Peter Diener, Jian Tao, Jim Chen, Carola Kaiser (CCT) (CoPIs), "Modeling and Visualizing the Effect of Severe Storms on Oil Spill Trajectories with the Cactus Framework and LONI," BOR, 8/15/10-11/30/10, \$10,000.

Nathan Brener (CoPI), **Sumanta Acharya** (Mechanical Engineering) (PI), Werner Bengler (CCT), **Sundaraj Iyengar** and **Supratik Mukhopadhyay** (CSC), Haosheng Huang and William Stone (Coastal Sciences) (CoPIs), "Modeling, Data and Visualization of Deepwater Horizon Oil Spill," BP Exploration & Production, 2010-2011, \$250,002.

Konstantin Busch, **Rajgopal Kannan**, and **Shuangqing Wei**, "NeTS: Small: Modeling and Analysis of Multilayer Jamming Games in Wireless Networks," NSF, 2010-2013, \$300,000.

Rajgopal Kannan, "Efficient Spectrum Management in Cognitive Radio Networks: Game-Theoretic Analysis on Online Mechanisms," USAF, 2010-2013, \$90,000.

Bijaya Karki PI, Sumanta Acharya (Mechanical Engineering), and Werner Bengler (CCT) (CoPIs), "Visualization of Oil Spill Related Data," BOR, 2010-2010, \$10,000.

Supratik Mukhopadhyay PI and **S.S. Iyengar** (CoPI), "Algorithms for Indexing Videos," Schafer Corporation, 2010-2011, \$10,000.

Rahul Shah, "AF: DC: Collaborative Research: Pattern Matching for Massive Data Sets," NSF, 2010-2013, \$500,000.

Thomas Sterling, "Chasm: Challenge problems And Scalable Metrics," DARPA through Georgia Institute of Technology, 2010 to 2014, \$750,000.

GEOLOGY & GEOPHYSICS

Sophie Bart, **Laurie Anderson**, and **Annette Engel** (CoPIs), Eugene Turner (Coastal Science) (PI), "Analysis of Samples Collected to Measure Effects of Stressors on Coastal Wetlands," BP Exploration & Production, 2010-2011, \$150,000.

MATHEMATICS

Michael Malisoff, "Collaborative Research: RAPID: Autonomous Control and Sensing Algorithms for Surveying the Impacts of Oil Spills on Coastal Environments," NSF, 2010-2011, \$49,558.

Nell McAnelly and **Brenda Nixon** (Cain Center), "Ensuring Numeracy for All," LA Dept of Education, 2010-2011, \$29,998.

Hongchao Zhang, (CCT) "The Analysis and Design of Gradient Methods for Large-Scale Nonlinear Optimization and Applications," NSF, 2010 to 2013, \$141,602.

PHYSICS & ASTRONOMY

Jeffrey Clayton (PI) and **Jennifer Andrews** CoPI, "The Formation and Evolution of Dust in Core-Collapse Supernovae," NASA, 2010-2011, \$5,000.

Kenneth Hogstrom (PI) and **Kenneth Matthews** (CoPI), "Web-based Instructional Module on the Topic of Ethics in Graduate and Resident Education," American Board of Radiology Foundation, 2010-2011, \$4,000.

Richard Kurtz (Phys/CAMD), Kyungmin Ham, Orhan Kizilkaya, and Amitava Roy (CAMD) (CoPIs), "Elementally Resolved Chemistry of the Evolution of the Gulf Spill Oil," BP Exploration & Production, 2010-2011, \$149,999.

Be sure to send us your grants for listing here. Information should include PI(s), project title, funding agency, term years, and amount of award.

PROGRAM NEWS

The 2010 freshman "boot camp" programs within the College of Science (BIOS, PHIOS, CIOS, Chemis) included 320 entering freshmen that gained early exposure to course content and learn valuable study skills in their various disciplines.

STUDENT IN THE NEWS

Sherrisse Bryant, a graduate student in Gillman Lab in the Department of Chemistry, was selected for NASA's [Jenkins Pre-doctoral Fellow Program](#).

Mustafa Hajj, a graduate student in Dasbach Lab in the Department of Mathematics, received the Dean's Scholarship Award at the 2010 Digital Media Festival.

Christopher Steinmuller, an undergraduate in the Department of Computer Science, received an Honorable Mention in the Computing Research Association's Outstanding Undergraduate Researcher Award competition for 2011.

Michael Thomas, an undergraduate student working with Schmetter lab in the Department of Physics & Astronomy, won the Best Undergraduate Poster award for his poster "Simulation Factory: Simplified Simulation Management" at TeraGrid (TG10).

DEVELOPMENT/FUNDRAISING HIGHLIGHTS

Individual Gifts

Dr. James Andrews: \$100,000 to the Science Honors Scholars Program

Dr. Mary Lou Applewhite: \$15,000 for the College of Science Development Fund

Mr. Scott Brodie & Mrs. Susan Brodie: \$121,000 to the Science Honors Scholarship Fund and the Science Development Fund

Mrs. Joanne Clark: \$1,500 to the Robey H. Clark Distinguished Professorship in Geology & Geophysics

Dr. & Mrs. Michael Griffith: \$6,000 to the William A. Pryor Distinguished Professorship in Chemistry

Mr. Frank W. Harrison III: \$1,000 to the Professor W. A. van den Bold LSU Geology Field Camp Scholarship

Mr. & Mrs. Jeff Lewis: \$20,000 to the Science Honors Scholars Program

Mr. Ron Neal & Dr. Mary Neal: \$7,200 to the Neal Distinguished Professorship in Biological Sciences

Mr. Edward B. Picou, Jr.: \$5,000 to the Science Development Fund

Dr. & Mrs. William Stickle: \$3,000 to the Biological Sciences Development Fund

Dr. Eugene C. St. Martin: \$1,500 to the Science Development Fund

Mr. Mike van den Bold and Mrs. Lea Ann van den Bold: \$50,000 to the W. A. van den Bold LSU Geology Field Camp Scholarship

Anonymous: \$300,000 for a new professorship in Biological Sciences

Organizational Gifts

ACS Baton Rouge Section: \$1,000 the Chemistry Development Fund

Chevron Inc: \$40,000 to ADG Support Fund, the AAPG Student Chapter Support Fund, and the Chevron Computer Science Scholarships

Coypu Foundation: \$50,000 to the Argentina Field Research Support Fund and the Peruvian Bird Field Research Support Fund

Estate of Beverly Lazarus: \$10,000 to the Adrian Virginia Lazarus Memorial Award Fund.

Halliburton Foundation: \$20,000 to the Halliburton Field Camp Scholars Scholarship Fund

Newfield Exploration Company: \$12,500 to the Geology Scholarship Fund

Pearson Education Foundation: \$20,000 to the Biology Intensive Orientation for Students program and \$2,500 to the Physics & Astronomy Development Fund

Shell Oil Co.: \$27,160 to the ADG Support Fund and the Shell Undergraduate Recruitment and Geoscience Education Fund.

Springmeyer Foundation: \$1,000 to the Professor W. A. van den Bold LSU Geology Field Camp Scholarship

ALUMNI NEWS

Dr. Nageswara “Nagi” Rao (PhD, Computer Science, 1988), with co-authors J. C. Chin, D. K. Y. Yau, C. Y. T. Ma, and R. N. Madan, received the best paper award for “Cyber physical trade-offs in distributed detection networks,” at the 2010 International Conference on Multisensor Fusion and Integration.

Ed Picou (BS, Geology, 1955) received the Don R. Boyd Medal for Excellence in Gulf Coast Geology from the Gulf Coast Association of Geological Societies.

COMINGS & GOINGS

Maggie Edwards moved from the Dean’s Office to the Department of Computer Science in August.

Dr. Sam Bentley will be joining the faculty (Geology & Geophysics) in January 2011 as the new Billy & Ann Harrison Chair in Geology. He returns to LSU from the Memorial University of Newfoundland in St. John’s and previously held a faculty position with the LSU Department of Oceanography & Coastal Sciences.

Dr. Kurt Svoboda (Biological Sciences) has accepted a faculty position at the University of Wisconsin-Milwaukee.

New Dean Circle Members

The Dean’s Circle is a circle of friends and donors who contribute a minimum of \$1,000 in unrestricted funds annually to the Science Development Fund. Welcome to our newest members!

Dr. Gregory J. Ardoin

Dr. Eric L. Abraham

Mr. Bruce A. Adams, Jr.

Mr. Baylus R. Albritton, Jr.

Dr. Larry Arthur & Mrs. Alice Arthur

Dr. David J. Bailey

Mr. Byrd Ball & Mrs. Alice Ball

Mr. Jeremy Bariola

Mr. Brad A. Broussard

**Mr. Stephen L. Brown/
Brown Catastrophe Management
Group**

Dr. George M. Frame & Dr. Eileen Skelly Frame

Mr. Leo T. Happel

Dr. Gordon P. Marshall

Ms. Bonnie M. Muro

Dr. Beverly Ogden & Mr. C. Bayne Dickinson

Mr. Stuart L. Oden

Mrs. Angela LaGrange Scott

Dr. Maud Walsh & Dr. Gary Byerly

Dr. Jan Wampold

NOTES FROM AROUND CAMPUS

News from CxC

The Wikipedia Foundation is partnering with prominent universities on a national project to create class assignments that engage students in improving the content of articles on Wikipedia, particularly articles related to public policy. LSU CxC has been invited to be a part of this exciting project and in doing so, Wikipedia will provide LSU faculty with the training and support needed to develop and deploy Wikipedia-based assignments.

In addition to contributing to Wikipedia's content, Wikipedia-based assignments serve to:

- engage students in a meaningful class assignment that allow them to contribute to greater global knowledge,
- enable student to interact with the course content while improving their written and visual communication skills, and,
- expose students to feedback from a diverse and public community of editors.

The educational team from Wikipedia will be at LSU on Monday, December 6 to talk with faculty about this initiative and establish partnerships with faculty interested in participating in this exciting project. Several universities are already onboard for the collaboration, including Harvard, George Mason, Georgetown, Indiana, Syracuse, and UC Berkeley, and national press on the project is circulating, including recent articles in NPR and Chronicle of Higher Ed.

While Wikipedia is currently focused on working with courses involving public policy, they have agreed to provide support to all LSU faculty in any discipline interested in

integrating Wikipedia projects into their courses. If you are interested in learning more or participating in the LSU-Wikipedia project, please plan to attend this session, contact Rebecca Burdette, rburdette@lsu.edu.

Using Wikipedia in Your Classroom for Enhanced Teaching & Learning

Monday, December 6
3:00-4:30 p.m.
151 Coates Hall

Recycling and Sustainability

The *Guide to 286 Green Colleges* has selected LSU as a university that demonstrates an above average commitment to sustainability in terms of campus infrastructure, activities and initiatives. LSU was also included in *Princeton Review's* "Best 371 Colleges" with a green rating of 87 on a scale from 60-99.

Donate Your Paper to the Child Care Center

Mailing Services, in partnership with the LSU Child Care Center, is inviting students, faculty and staff to participate in a new recycling program.

- Collect outdated letterhead and copy paper that is printed on one side
- Remove staples and paper clips
- Label as "Donated Paper" and send to Mailing Services via campus mail

Mailing Services will deliver the paper to the Child Care Center, where children and teachers can reuse the materials for projects. The Child Care Center also accepts envelopes and manila folders for reuse. This program allows teachers to introduce young children at the center to

recycling and other environmental issues. For more information, please contact Sharla Myers at 578-8673 or sharla@lsu.edu.

As the holidays approach...

Just a reminder that University policy statements (PS-91 and PS-101) govern delivery of personal items to employees on campus. More information is available on the [PAS website](#).

Printing Services Closing

Effective Jan. 3, 2011, Printing Services will no longer be in operation. In preparation for this closure, the final date to initiate printing projects is Friday, Dec. 10, 2010. The only exceptions to the above timeline are as follows:

LSU Business System items (official University letterhead, envelopes, business cards, notecards, and memo pads)

Fall 2010 Commencement ceremony programs (main and individual colleges)

For printing project initiated after December 10, the following procedures apply:

Printing orders less than \$5,000 may be submitted to outside vendors without a bid or a release from Printing Services. Please consult your department's business manager to coordinate payment.

Printing orders more than \$5,000 must be submitted as a requisition to the Office of Purchasing via PRO. For assistance with these projects, please contact Tiffany Carter (tcarter12@lsu.edu, 225-578-2739).

Reputation-defining publications still require the approval of the Office of Communications & University Relations. Examples include, but are not limited to: printing for student, faculty and staff recruitment; fundraising or donor communications; any communication targeted to chancellors, provosts, deans, or other key decision makers; and magazines, annual reports, and newsletters distributed to external audiences. Please send a PDF of artwork to approvals@lsu.edu, or contact Margo Jolet (mjolet1@lsu.edu, 225-578-4473) with questions.

For questions about transitioning projects to outside vendors, please contact Sharla Myers at 578-8673 or sharla@lsu.edu.

CALENDAR OF EVENTS

December 6-11	Final Exam Period
December 17	SCI Diploma Ceremony 12:30 pm UREC Facility
Dec. 23 - Dec. 31	Winter Holiday (University offices closed)
January 17	Martin Luther King Holiday (University offices closed)
January 18	Classes Begin
January 21	Distinguished Dissertation Award Nominations due in Dean's Office (e-submission to Dean Kurtz)
January 25	Reports on 120 hr. standardized degree program due in Dean's Office
February 11	College Research and Teaching Award nominations due in Dean's Office (original only to Sara)

Have news to share? Received a new grant? E-mail to science@lsu.edu.