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The **College of Basic Sciences 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 for the e-Newsletter should be sent to [bascdean@lsu.edu](mailto:bascdean@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,**

Hopefully everyone is aware that the college office has moved to the 3<sup>rd</sup> floor of Hatcher Hall. This is phase one of a long anticipated move to alleviate chronic deficiencies in both the quantity and quality of space for BASC administrative offices. The move gives us much-needed space, but the old Hatcher dorm rooms that are now our offices are certainly not glamorous. The longer-term plan is to move into newly renovated space on the 1<sup>st</sup> floor of Hatcher. Given the budget landscape, that next move may take longer than we had hoped for. Regardless, I invite you to come over to Hatcher and visit us in our new offices.

Budget uncertainties have made for a tumultuous summer. The general breakdown of the college's budget cuts were described in a broadcast e-mails to BASC faculty and staff a couple of weeks ago. Our over all cut of \$737k was much less than we had feared, but nevertheless forced some difficult decisions by academic departments and the college. Nothing will be official until the Board of Supervisors gives final approval to LSU's proposed cuts. We have already been told to expect and plan for additional cuts next year, and we will do so. I am hopeful that the gloomy economic forecasts on which our reductions are based are as accurate as the ones that failed to predict the current state deficits.

Although the budget cuts were painful, we have implemented them in a way that allows us to move forward with critical faculty and staff hires. In particular, I note that we have been authorized to complete negotiations with three faculty candidates from searches conducted last spring in the departments of Biological Sciences, Computer Science, and Physics & Astronomy. These negotiations appear to be going well, and I'm optimistic that they will be successfully wrapped up soon.

LSU's policies regarding faculty searches in the upcoming year are still not resolved. I am hopeful that we will be able to proceed with at least a few strategic searches.

Although an official announcement has not yet been authorized, Mathematics has moved into the college in every tangible way. We're excited to welcome the outstanding faculty and students that are associated with this "Foundations of Excellence" department, and look forward to enhancing collaborative research and educational programs between Math and other BASC departments.

Regards, Kevin C.

## KUDOS

**Sue Brenner** (Mathematics) was selected by the Society for Industrial and Applied Mathematics (SIAM) to serve as Vice President for Publications beginning January 1, 2010.

**Barry Dellinger** (Chemistry) received the Adel Sarofim Award for Excellence in Combustion Research from the 11<sup>th</sup> International Congress on Combustion By-Products and Their Health Effects.

**Jonathan Dowling** (Physics & Astronomy) has been invited to speak to a meeting in Washington, D.C. organized by the White House on the National Quantum Information Science Initiative.

**Mette Gaarde** (Physics & Astronomy) was elected as a member of the Executive Committee of the American Physical Society Topical Group on Few-Body Systems.

**Jayne Garno** (Chemistry) received the 2009 Howard Hughes Medical Institute Distinguished Mentor Award.

**Steve Hand** (Biological Sciences) was appointed to the LSU Council on Research.

**Andy Maverick** (Chemistry) received the [Coates Award](#) from the Baton Rouge Section of the American Chemical Society.

**Gestur Olafsson** (Mathematics) was named LSU Science & Technology [Distinguished Research Master](#) for 2009.

A team from LSU comprised of **Erik Schnetter** (Physics & Astronomy), **Gabrielle Allen** (Computer Science/CCT), **Eloisa Bentivegna**, **Alex Clary**, **Peter Diener**, **Oleg Korobkin**, **Jian Tao**, **Andrei Hutanu**, **Werner Benger**, **Jinghua Ge**, **Kexi Liu**, **Robert Kooima**, **Cornelius Toole**, **Ravi Paruchuri**, **Jorge Ucan**, **Debra Waters**, **Sam White**, and **Adam Yates** won the IEEE SCALE09 competition (International Scalable Computing Challenge) held at CCGrid09 in Shanghai, China.

**Edward Seidel** (Physics & Astronomy) was named interim assistant director for the National Science Foundation's Mathematical and Physical Sciences (MPS) Directorate.

**Isiah Warner** (Chemistry/Vice Chancellor for Strategic Initiatives) and **James Traynham** (Professor Emeritus of Chemistry) were named [Inaugural Fellows in the American Chemical Society](#). Warner was also selected

to participate in the [Howard Hughes Medical Institute's Exceptional Research Opportunities Program](#) (HHMI EXROP).

**Donghui Zhang** (Chemistry) received the [Ralph E. Powe Junior Faculty Enhancement Award](#) from ORAU.

## PROGRAM NEWS

### NEW DUAL DEGREE PROGRAM ESTABLISHED

A delegation from LSU comprised of **Dean Kevin Carman**, **Ward Plummer**, and **Rongying Jin** (Physics & Astronomy) traveled to China to sign an agreement with the Institute of Physics, which is part of the Chinese Academy of Sciences. The agreement creates what is believed to be the first dual-PhD program between the US and China.

### SURF

More than 90 science and engineering students participated in the SURF (Summer Undergraduate Research Forum) in the LSU Union on July 30. Students representing the Howard Hughes Medical Institute Summer Research Program (in its 20<sup>th</sup> year), the Louisiana Biomedical Research Network program (NIH, 8<sup>th</sup> year), and the Chemistry REU Program (NSF, 3<sup>rd</sup> year of latest funding cycle) as well several students conducting independent research programs with faculty members participated. Participating students came from 42 colleges and universities nationwide and nearly every college and university in Louisiana.

### BOOT CAMPS

The [Biology Intensive Orientation for Students](#) (BIOS) begins its 5<sup>th</sup> year on August 9 for incoming freshman biology and related majors. In the first four years, nearly 700 students participated in the "biology boot camp." The [BIOS Program](#) has teamed with the Pearson Foundation as part of the "Digital Arts Alliance". The partnership includes scholarships and digital arts equipment to enable students to document their experiences and pass them along to future participants.

The [Chemistry Intensive Orientation for Students](#) (CHEMIS) begins August 9<sup>th</sup>. The program helps teach incoming freshman chemistry majors how to be successful in their courses at LSU and use their education toward a professional career.

The [Computer Science Intensive Orientation for Students](#) (CIOS) begins August 10<sup>th</sup>. CIOS provides an introduction to the computer science department, a first look at the computer science curriculum, and offers a broad overview of elementary computer science concepts and basic math skills.

The [Physics Intensive Orientation for Students](#) (PHI-OS) begins August 9<sup>th</sup>. The one-week intensive program is specifically for incoming Physics, Astronomy, or Medical Physics majors, and is designed to prepare them for their college coursework and enhance their study skills.

### HHMI

**Adrienne Lopez**, LSU Scope-On-A-Rope Program Coordinator, is working with Real Curriculum, Inc., to produce a series of educational curriculum guides. *SOAR Into Inquiry* is geared for elementary teachers (grades K-5) looking to incorporate this video microscope into their science curriculum in a meaningful way. All lessons include hands-on activities for students as well as science content for teachers, and they are tied to the National Science Education Standards. For more information, contact Adrienne Lopez at 225-578-3080 or [alopez@lsu.edu](mailto:alopez@lsu.edu).

### CCT

The LSU Center for Computation & Technology (CCT) hosted the [Beowulf Boot Camp](#) in June. Twenty-four students from 10 Louisiana high schools worked with LSU researchers to learn the basics of supercomputing and computational science research.

The Center for Computation and Technology co-sponsored the ninth annual [International Conference on Computational Science](#) (ICCS) May 25-27.

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## NEW GRANT FUNDING NOTICES

### BIOLOGICAL SCIENCES

**Bryan Carstens** and **Robb Brumfield**, “EAGER-Developing bioinformatics tools for the application of next-generation sequencing technologies to phylogeography,” NSF, October 1, 2009 to September 30, 2011, \$225,394.

**Pat DiMario**, “Nucleolar Protein Function in Cell Growth and Stress,” NSF, October 1, 2009 to September 30, 2012, \$434,167.

**Steve Hand**, with co-PI Michael Menze, “Mechanisms of Animal Desiccation Tolerance,” NSF, September 1, 2009 to August 31, 2013, \$600,000.

**Naohiro Kato**, “Functional analysis of SNAREs involved in the PIN2 recycling pathway in Arabidopsis,” BOR, February 2009 to January 2010, \$10,000.

**Richard Stevens**, “Determinants of Phenotypic Evolution in the New World Vesper Bats,” BOR, February 2009 to January 2010, \$10,000.

### CHEMISTRY

**Jayne Garno**, “Molecular-Level Investigations of the Conductive Properties of Designed Test Platforms of Porphyrins and Pthalocyanines using Current-Sensing AFM,” NSF, August 2009 to August 2012, \$312,762.

**Zakiya Wilson**, “GAANN Fellowships in Chemistry,” US Department of Education, August 2009 to July 2012, \$514,512.

### COMPUTER SCIENCE

**Brygg Ullmer** and Rod Parker (Art), “Tangible Interaction Kiosks: Integrating Physical/Digital Interaction and Visual Design to Support Creativity in K-12 Informal Science Education,” NSF, July 15, 2009 to June 30, 2011, \$199,711.

### GEOLOGY & GEOPHYSICS

**Brooks Ellwood**, “Chemostratigraphic Analysis of Panthalassic and Tethyan Permian-Triassic Boundary Sections: Assessment of Global Paleooceanographic Dynamics,” NSF, April 2009 to March 2010, \$20,580.

**Annette Engel**, Alexander Prange, and Josef Hormes (CAMD), “The Speciation and Behavior of Sulfur Gases in Biogeochemical Processes,” NSF-Geobiology and Low Temperature Geochemistry, July 1, 2009 to June 30, 2013, \$278,154.

### MATHEMATICS

**Blaise Bourdin**, “Applications of Variational Fracture: Enhanced Geothermal Systems,” NSF, Fall 2009 to Spring 2012, \$314,139.

### PHYSICS & ASTRONOMY

**Jeffrey Clayton** and Co-PI **Jennifer Andrews**, “A Comprehensive Study of Dust Formation in Type II Supernovae with HST, Spitzer and Gemini,” Space Telescope Science Institute, March 2009 to February 2011, \$25,840.

**Greg Guzik**, “The Physics and Aerospace Catalyst Experiences Research Program for Minority Institutions,” NSF, June 1, 2009 to May 31, 2012, \$696,705.

**Ward Plummer**, “Emerging Functionality in Transition-Metal Compounds Driven by Spatial Confinement,” DOE, September 15, 2009 to September 14, 2012, \$1,140,000.

**Jiandi Zhang**, CAREER: New Phases at the Surfaces/Interfaces of Transition-Metal Oxides,” NSF, January 1, 2009 through May, 31, 2010, \$89,467.

## DEVELOPMENT HIGHLIGHTS

**Michael & Donna Griffith** of Brevard, North Carolina made a gift of \$5,000 to the William A. Pryor Professorship in Chemistry.

**Jeff Lewis** made a gift of \$20,000 to the College for the Science Honors Scholars and Pre-Medical Scholars Programs.

**Dr. Michael Ribaud** made a gift of \$10,000 for the Pre-Medical Scholars Program.

### NEW DEAN'S CIRCLE MEMBERS

**Ms. Peggy Battalora**, Greenwood Village, CO

**Dr. Charles Black, Jr. & Joey Black**, Shreveport

**Dr. Elliot Black**, Metairie

**Mr. William Blake**, Lake Charles

**Mr. Peter Burland**, Hempstead, TX

**Dr. Amanda Kogos**, New Orleans

**Dr. Rachel Reina**, Covington

**Dr. John Sardisco**, Baton Rouge

**Dr. Lehrue Stevens**, Lake Charles

**Mrs. Margaret Vail**, Baton Rouge

The **Hubert Charitable Foundation** made a gift of \$10,000 to the Vertebrate Paleontology Research Fund in the Museum of Natural Science.

**Marathon Oil Company** made a gift of \$60,000 for the Applied Depositional Geosystems (ADG) program in the Department of Geology & Geophysics.

**Sasol Olefins and Surfactants** of Lake Charles made a gift of \$1,500 to the Chemistry Development Fund.

The **Patrick F. Taylor Foundation** made a gift of \$18,000 for the Patrick F. Taylor Scholarships in Chemistry and Geology, and to the Charles L. Jones Scholarship in Geology.

The **US Army Corps of Engineers** made a gift of \$1,500 to the Friends of the Herbarium Fund.

## ALUMNI NEWS

**Dr. James Andrews**, (BS, PMED, 1963) was installed as President of the [American Orthopaedic Society for Sports Medicine](#).

**Dr. Dale Poulter** (BS, Chemistry, 1964) was named to [National Academy of Science](#). He is a Professor at the University of Utah.

**Dr. Alanna Small** (BS, Microbiology, 2002) was named 2009 Tulane Resident of the Year at the Medical Center of Louisiana-New Orleans.

## STUDENT NEWS

### CHANCELLOR'S FUTURE LEADERS

Thirteen Basic Sciences students presented posters at the Chancellor's Future Leaders in Research (CFLR) Poster Session in April. The CFLR offers a unique opportunity for students to participate in research throughout their college career:

#### CFLR Student Name

**Cody Christopher Arceneaux** (Physics & Astronomy)

**Erin Conlin** (Biological Sciences)

**Zachary Paul Cummings** (Physics & Astronomy)

**John Robert Frank, III** (Biological Sciences)

**Hannah Elizabeth Fullerton** (Biological Sciences)

**Danielle Fuselier** (Biological Sciences)

**Jenny Lee Herman** (Biological Sciences)

**James Allen Hostetter** (Physics & Astronomy)

**Shirley Wang Leu** (Chemistry)

**James Donald Major, III** (Biological Sciences)

**Michelle Nguyen** (Biological Sciences)

**Michael Calvin Parent** (Chemistry)

**Nabil K. Thalji** (Biological Sciences)

#### CFLR Mentor Name

**Joel Tohline**

**Mark Batzer**

**Greg Guzik**

**Meredith Blackwell**

**Bryan Carstens**

**Bryan Carstens**

**Grover Waldrop**

**Mette Gaarde**

**Julia Chan**

**Mark Batzer**

**Brent Christner**

**Julia Chan**

**Grover Waldrop**

**Shantenu Jha** received a \$35,000 award from the National Science Foundation to provide funding for U.S. Students to attend the International Summer School on Grid Computing.

**Khayyam Sahir Kahan** was awarded a \$150 scholarship for his digital photography submission "Don't Box in Beauty" during the Digital Media Festival sponsored by LSU's Communications Across the Curriculum (CxC).

**Collin Miller**, a sophomore in biological sciences, is one of 63 students nationwide to participate in the [Howard Hughes Medical Institute's Exceptional Research Opportunities Program](#) (HHMI EXROP).

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## IN MEMORIAM

[Hulen B. Williams](#) (1920-2009) passed away May 16. A native of Lauratown, Arkansas, he served in the US Navy as an officer in WWII in the Pacific Theater. He joined the LSU faculty in 1943 and became professor and head of the Department of Chemistry in 1956. He retired in 1983.

[Jack O. Colle](#) (1916-2009) passed away June 5. A native of Pascagoula, Mississippi, he received his Bachelor of Science degree in Geology in 1938. He served the US Air Corps in 1942-46. He opened Jack Colle and Associates in 1949 and founded Lynbrook Oil Company. He closed Lynbrook on March 31, 2009 with his retirement.

## NEWSLINKS

The hyperlinks below direct your Internet browser to the web pages for the college's departments and the museum. News highlights also appear on the college's [Home Page](#):

[Biological Sciences](#)

[Chemistry](#)

[Computer Science](#)

[Geology & Geophysics](#)

[Mathematics](#)

[Physics & Astronomy](#)

[Museum of Natural Sciences](#)

## COMINGS AND GOINGS

**Matt Bollich** joined the Department of Biological Sciences as Senior Computer Analyst and System Administrator.

**Cheryl Chapman** joined the Department of Chemistry as a coordinator in Dr. Isiah Warner's office.

**Tim Hallin** joined the Department of Chemistry as Computer Manager.

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Keep the good news coming to us!

[bascd dean@lsu.edu](mailto:bascd dean@lsu.edu)

## CALENDAR OF EVENTS

August 7	Summer Commencement PMAC
August 24	Fall Semester classes begin
Sept. 2	Last day to add credit courses and make section changes
Sept. 7	Labor Day Holiday
Sept. 30-Oct. 4	Fall Holiday

The Registrar's Office has released a revised 2009-10 Academic Calendar. You can find the revised [calendar here](#).