

Winter  
2014

## NEW WAVE NEWS

Tulane Awarded  
\$3.7 Million to Study  
Osteoporosis, Mental  
Disease »

Birdwatcher »

Get Ready for  
Computational  
Thinking »

Big Plans for Reducing  
Carbon Footprint »

Tulane to Test NOLA  
Mockingbirds for Lead »

What Role for  
Renewables in an Oil  
and Gas State? »

Read Other News »

## ACCOLADES

Biomedical Engineering Associate Professor Damir Khismatullin was awarded \$223,800 from the NSF to develop a new noncontact method and device to measure the time-dependent rheological properties of reactive polymers, biological fluids and soft tissue without artifacts such as contamination, biological activation or gelation due to contact with solid walls.

## Message from the Dean

*Nicholas J. Altiero, Dean*

What a year this has been! As I look back on 2014, I can't help but take enormous pride in the success of the School of Science and Engineering at Tulane University. This academic year, undergraduate enrollment in our School is 1737, a record high and 38% higher than our post-Katrina low. Graduate enrollment stands at 480, also a record high and more than 36% higher than the post-Katrina low. Please take a little time to browse our [web site](#) and this and past issues of our quarterly [Newsletter](#) to see the many examples of [student](#) achievements as well as those of our [faculty](#) and [staff](#) and our continued success in [research](#), [technology transfer](#), and [K-12 STEM education outreach](#).

[Read Dean's Message »](#)



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## Gifts Pave the Way for Programs at the Interface of the Earth Sciences and Engineering

*Article by Kirby Messinger*

There are arguably no more vital concerns to South Louisiana and the Gulf Coast than energy production and coastal protection and restoration. Now, thanks to two recent gifts, the Tulane University School of Science and Engineering will begin developing a

strong relationship between the earth sciences and engineering to build programs that address many issues of importance to efficient energy production and environmental sustainability.

[Read Full Story »](#)

## Professors Aim to Open On-Campus Makerspace for Collaborative Projects

*Article by Maricela Murillo*

Two professors proposed transforming the 120-year-old mechanical services workshop into a "makerspace" complete with 3-D printers, woodworking equipment and other tools to give students a 24/7 accessible area for creating. Timothy Schuler, senior professor of practice and lab supervisor, and Cedric F. Walker, a biomedical engineering professor,

Chemical and Biomolecular Engineering Associate Professor Hank Ashbaugh and Chemistry Professor Bruce Gibb were awarded \$347,897 from the NSF to study the molecular rules for assembling bowl shaped cavitand molecules into a wide range of capsule shapes using a combination of molecular simulations and synthetic experiments. Depending on the structure of the capsules formed, these virus-like assemblies can be used in a range of applications from targeted drug capture and release to high purity separations to smart material design.

Earth and Environmental Sciences Assistant Professor Kyle Straub was awarded \$166,516 from the NSF to study how large and how long sea level cycles need to be to influence the architecture of deltaic stratigraphy.

Ecology and Evolutionary Biology Assistant Professor Jordan Karubian was awarded \$320,000 from the NSF to explore why females of white-shouldered fairywrens in Papua New Guinea have evolved highly ornamented plumage in some populations, but not others. The research is also used as a vehicle for environmental education and conservation of grassland habitats the birds live in.

## CONTACT US

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## FEEDBACK

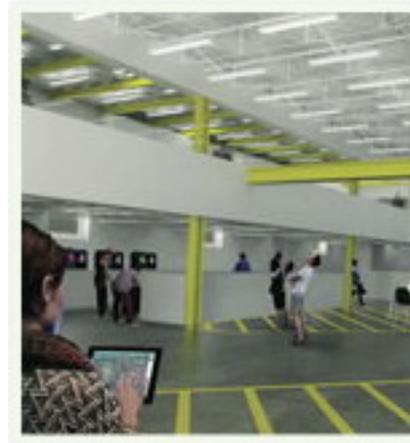
We Want to Hear From You!

Please send us your feedback on the newsletter to:

✉ [candy@tulane.edu](mailto:candy@tulane.edu)

gave an official presentation of the Tulane makerspace on Maker's Row Friday.

[Read Full Story »](#)



## Black Women Less Likely to Associate STEM with Men, Tulane Study Says

*Article by Barri Bronston*

Black women are less likely than white women to subconsciously associate the STEM fields of science, technology, engineering and mathematics with males and masculinity, according to a study led by Tulane University psychology professor Laurie O'Brien.

[Read Full Story »](#)

## Research at the Intersection of Academia, Government, and Industry

*Article by Christina Carr*

In 2011, the National Institutes of Health and the U.S. Food and Drug Administration announced a comprehensive joint study to gauge the behavioral and health impacts of new government tobacco regulations. In order to qualify for funding from this initiative, investigators need to have considerable training in tobacco regulatory research.



Little is known about the long-term effects of new tobacco products, such as e-cigarettes and second-hand vapor exposure. Yet perhaps due to tobacco's well-documented health risks or the stigma associated with accepting funds from tobacco companies, few scientists are entering the field.

[Read Full Story »](#)

## Science and Engineering Staff Key to School's Success

*Article by Christina Carr*

Tulane University School of Science and Engineering is riding high on the momentum of the Physics and Engineering Physics Department, especially the growth of its materials

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Tulane  
empowers



science and engineering program. Meaningful investments in facilities and equipment at the forefront of technology have laid the foundation for advancements in research and discovery. At the heart of this success is the dedication of Tulane staff members like Michael Johnson.

[Read Full Story »](#)

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## 7th Annual Science & Engineering Alumni Awards Celebration

*Thursday, April 9, 2015*

[Submit Your Nomination »](#)

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## 2015 Tulane Engineering Forum

*Friday, April 17, 2015*

**Keynote Speaker:** Jean-François Poupeau, Executive Vice President, Corporate Development and Communication, Schlumberger Limited

Earn 8 PDHs, including 1 Ethics. [Visit the TEF Website for Details »](#)

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## Upcoming Events

*School of Science and Engineering Highlights*

### **The Cochran Family Professorship Investiture Honoring Earth and Environmental Sciences Professor Karen Johannesson**

Thursday, February 5, 2015  
3 PM – 5 PM  
Woldenberg Art Center – Freeman Auditorium  
Reception will follow in Woodward Way Breezeway  
*Everyone is Invited*

### **8th Annual School of Science and Engineering Outstanding Researcher Ceremony**

Thursday, April 9, 2015  
3 PM – 4 PM  
Lavin-Bernick Center for University Life  
Kendall Cram Lecture Hall, Room 213

### **8th Annual School of Science and Engineering Research Day – Poster Session**

Thursday, April 9, 2015  
4 PM – 6 PM  
Lavin-Bernick Center for University Life  
Qatar Ballroom, Room 212  
*Everyone is Invited*

### **School of Science and Engineering Distinguished Leadership Circle Reception & 7th Annual Science and Engineering Alumni Awards Celebration**

Thursday, April 9, 2015  
6 PM – 8 PM  
Lavin-Bernick Center for University Life  
1834 Club, Room 215

*Everyone is Invited*

[View All Events »](#)

*Invitation Only*

[For Information about Alumni Awards »](#)

[See a weekly schedule of Science and Engineering Seminars open to the public »](#)

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