

Summer  
2012

## NEW WAVE NEWS

[Goldwater Scholar Making the Most of Summer Break »](#)[New Approach Needed for Oil Spill Research »](#)[Sun's Rays Fuel Bright Idea for Cleaner Drinking Water »](#)[Gulf Coast Sea Level Rise in Overdrive, Study Says »](#)[Read Other News »](#)

## ACCOLADES

Biomedical Engineering Assistant Professor Sergey Shevkopyas was awarded \$100,000 from the Grand Challenges Explorations initiative of the Bill & Melinda Gates Foundation to develop a microfabricated bidirectional membrane device for facilitating the baby's passage through the birth canal during operative vaginal deliveries in resource-limited settings.

Chemistry Assistant Professor Janarthanan Jayawickramarajah was recently awarded a first year installment of a five year \$1,429,750 award from the NIH to develop caged protein inhibitors that are activated by RNA biomarkers up-regulated in cancer cells.

## Message from the Dean

*Nicholas J. Altiero, Dean*

On May 19, Tulane University celebrated its 178th Commencement. Among the nearly 2700 undergraduate, graduate, and professional degrees conferred on that day were 395 undergraduate and 141 graduate degrees to students enrolled in programs offered by the School of Science and Engineering. The School has experienced astonishing growth since its creation six years ago and all indications are that there will again be a record number of incoming science and engineering students at both the undergraduate and graduate levels this coming fall. In addition, June 30 marks the end of Tulane's 2011-2012 fiscal year and, while the numbers are not yet finalized, it is clear that School of Science and Engineering research funding, scholarly publications, and patent disclosures will all surpass record levels.



[Read Dean's Message »](#)



## Ceremony Celebrates Alumni Achievements

*Article by Michael Ramos*

The Tulane University School of Science and Engineering celebrated the diverse achievement of alumni at an awards ceremony in the Lavin-Bernick Center on April 12. Ken Ford (left) – Ph.D., Computer Science, '87 – received the Outstanding Alumnus award, the highest form of alumni recognition given by

the school. Tommy Meehan (right) – BSE, Chemical Engineering, '83 – a member of the school's advisory board, won the Outstanding Service Award. Dr. Angela Rose Black (center) – BS, Psychology, '98 – received the Outstanding Young Alumna award.

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## Physicist has Key to Greener Polymer Manufacturing

*Article by Michael Ramos*

Tulane University physicist Wayne Reed says he wants to revolutionize the polymer manufacturing sector, an important component of the global economy. Through his patented technology, Reed and colleagues see a \$100 billion opportunity in the \$1.2 trillion polymer industry, and the key to helping this industry become greener and more

Mathematics Professor Michael Mislove was awarded \$469,455 from the Office of Naval Research for work to develop mathematical models that can be used to analyze crypto-protocols and help prove they are secure. The work focuses primarily on models that support probabilistic reasoning, and that allow the use of information-theoretic techniques in protocol analysis.

Mathematics Assistant Professor Rafal Komendarczyk was awarded \$197,366 for the Young Faculty Award (DARPA) class of 2011 for research in topological fluid dynamics.

Annette Oertling, Assistant Dean for K-12 Stem Outreach, was presented with the Louisiana Legislative Women's Caucus 2012 Women of Excellence Award in Science, Technology, Engineering, & Mathematics (STEM).

Ecology and Evolutionary Biology Alumna Karoun Heidi Bagamian, Psychology Professor Gary Dohanich, and Chemistry Assistant Professor Scott Grayson received awards at the Newcomb College Institute's Under the Oaks 2012 celebration. [About the Awards >>](#)

## CONTACT US

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## FEEDBACK

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efficient. Reed's method allows real-time monitoring of polymer reactions, which are necessary to produce materials used in planes, cars, paint, adhesives, coatings, fertilizers, electronics, medicine and more.

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Photo by Paula Burch-Celentano



## Tulane Student-Scientists Lead Breakthrough Discoveries

*Article by Michael Ramos*

From environmental protection to health and well-being, projects presented at the recent Tulane University School of Science and Engineering poster session tackled a wide range of issues. The annual event, held at the Lavin-Bernick Center on April 12, allows students to illustrate their latest research outcomes on paper posters affixed to

portable walls. First-place winner Christine Faust Witty (Ph.D., Neuroscience) studied the effects of estrogen on learning and memory.

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## Geralyn Caradona: Mathematical Constant

*Article by Robert Morris*

When Geralyn Caradona first joined the Tulane University Department of Mathematics in 1984, mathematical equations were still being hammered out on mechanical typewriters, with secretaries tediously changing out the keys by hand for each symbol that needed to be typed. Nearly three decades later, technology has transformed the way the department functions, but Caradona's devoted oversight has remained an unchanging part of the equation.



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## Upcoming Events

*School of Science and Engineering Highlights*

### Welcome Week at Tulane – Move-In

Saturday, August 25 –  
Sunday, August 26, 2012  
[For More Information >>](#)

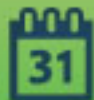
**School of Science and Engineering Homecoming 2012 Celebration**  
**Open House | Research Lab Tours | Flower Hall Showcase**

Friday, November 2, 2012

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## School of Science and Engineering Distinguished Leadership Circle Reception

Thursday, November 1, 2012

6 PM – 8 PM

123 Walnut – Rooftop

*Invitation Only*

[View All Events »](#)

See a weekly schedule of Science  
and Engineering Seminars open to  
the public »

2 PM – 4 PM

Boggs Center for Energy &  
Biotechnology – First Floor Lobby

*Everyone is Invited*

## School of Science and Engineering 2012 Homecoming Tailgating Tent

Saturday, November 3, 2012

11 AM – Game Kickoff

Mercedes-Benz Superdome

Champions Square

*Everyone is Invited*

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