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16 December 2013

Dear Alumnae, Alumni, and Friends:

Greetings from the Chemistry Department at Stony Brook University! The Chemistry Department has been a very busy place in the last year. Below are some highlights of recent happenings and developments.

Two of our extraordinary undergraduates were honored with national awards. **Dara Bobb-Semple** is a 2013 American Chemical Society Scholar, and in 2012 she was a UNCF-Merck Undergraduate Science Fellow. She works in Professor Stanislaus Wong's laboratory to prepare crystalline metallic ruthenium (Ru) nanowires. She plans to pursue graduate work in chemistry and we look forward to following her career trajectory.

**Peter Giattini**, received a 2013-2014 Barry M. Goldwater Scholarship in Education. He has been the leading peer educator in our organic chemistry class this year. The workshops for organic chemistry moved into the newly opened **Frey Hall** and now follow a fully team-based learning approach. In addition, Peter has created a fantastic environment for our students to learn from each other outside the traditional classroom. Any time of day or night, you can find groups of students studying chemistry in the various spaces about the campus.

Our faculty has received national accolades as well. Professor **Jon Rudick** received an NSF CAREER award for his work to develop functional materials with precise structures; Professor **Thomas Allison** received an Air Force Young Investigator Award for his work in chemical dynamics using frequency combs. Professors **Ben Hsiao** and **Benjamin Chu** were elected to the National Academy of Inventors and will be inducted in March 2014.

We welcome **FIVE** new faculty as part of our hiring initiative!

**Scott Laughlin** (Assistant Professor). His laboratory uses chemistry to examine how the brain works. How does the brain sense the environment? How does it decode that sensory information and control behavior? He is creating chemical tools to help reveal the structure of neural circuits in living animals.

**Ming-Yu Ngai** (Assistant Professor). His laboratory is concerned with the reactivity of metal-carbon multiple bonds, specifically, compounds containing metal-carbon triple bonds. His long-range goal is the development of selective bond-forming processes.

**Jarrod French** (Assistant Professor, joint with Biochemistry & Cell Biology). His laboratory studies multi-component protein complexes involved in cellular

metabolism using X-ray crystallography, super resolution microscopy, chemical biology and mechanistic enzymology. His long-term goal is to develop new anti-cancer and anti-inflammatory drugs.

**Liang Gao** (Assistant Professor, joint with Biochemistry & Cell Biology). His laboratory designs and builds super high-resolution microscopes for imaging dynamic changes in live cells. He will integrate several super-resolution imaging techniques into one system and improve their performances for thick multi-cellular organelles.

**Eric Patterson** (Lecturer). Research in his group focuses on determining reaction mechanisms involving organic molecules. Most recently, he has focused on understanding the decomposition and reformation of the bovine growth hormone trenbolone in ground water.

Lastly, our newly formed External Advisory Board met for the first time in December. The purpose of the External Advisory Board is to increase the visibility and awareness of the Chemistry Department, to promote opportunities for its faculty and students, and to provide valuable intellectual support and advice to the Chair. Four distinguished alumni have agreed to serve for three-year terms, and we will be expanding over the next few years: **James DiLorenzo**, PhD '67, **Kevin Koch**, BS '83, **John Piwinski**, BS '76, **Jeonghoon Sun**, PhD '00. We encourage you to engage with them as a way to enrich the educational and research experience of current Chemistry students.

As always, we would love to hear from you. If you would like to receive real time updates about the Chemistry Department, please check in on [Facebook/StonyBrookChemistry](#) or follow us on Twitter [@StonyBrookChem](#).

As we approach the New Year, we ask you to consider supporting the Chemistry Excellence Fund with a [gift today](#).

All the best for happiness and success in 2014!

Nicole