

## From the Chair...

“Congratulations to **Bill Baker** [Professor of Chemistry] and **Dennis Kyle** [Professor of Global Health, College of Public Health] for making the USF FrontPage!!! [December, 2009] The article provides an overview of USF efforts to identify marine natural products from Antarctica that may be effective in the treatment of various cancers and tropical diseases. Great reading!”



USF tropical disease expert Dennis Kyle (right) tested compounds in a sea sponge Bill Baker, chemist, (left) discovered during an expedition to Antarctica. The compounds have been found to be active against both malaria and leishmaniasis.

The substances of interest are “norselic acids A-E, highly oxidized anti-infective steroids that deter mesograzed predation.” **Drs. Baker and Kyle** and their collaborators noted that the compounds are active against the Leishmania parasite at low micromolar levels. [Please see: *Journal of Natural Products*, (2009) **72**(10), 1842-1846.]

**Dr. Baker** was also interviewed on “University Beat” produced by WUSF.

## It's arrived!

A 600 MHz Unity<sup>Inova</sup> NMR spectrometer arrived on December 18<sup>th</sup> from Idaho... a marvelous Christmas present.



Special Delivery

The 600 MHz spectrometer purchase from the University of Idaho ([USF INMRF INOVA-600 Project](#)) was an interdisciplinary effort involving the USF Office of Research and Innovation, Department of Molecular Medicine (College of Medicine), and the Department of Chemistry (College of Arts & Sciences).

The spectrometer is a welcome addition to the existing four spectrometers at the USF Interdisciplinary NMR Facility. Installation began on January 4<sup>th</sup>, 2010 under the supervision of **Dr. Edwin Rivera**, Research Assistant Professor and Director of the NMR Facility.



Unloading of the Oxford 600MHz-Actively Shielded Superconductive magnet which was delivered to the Chemistry Building that will house the spectrometer until 2012.

We are grateful for support and encouragement provided by **Dr. Karen A. Holbrook**, Vice President, USF Office of Research and Innovation. **Prof. Robert Deschenes**, Chair of Molecular Medicine also contributed 1/3 to the cost.

“This was an excellent example of inter-departmental cooperation that led to significant infra-structure enhancement!” said **Dr. Randy Larsen**, Chemistry Chair.

## ***Congratulations to new graduate alumni***

It is a pleasure to extend our best wishes and congratulations to those students who completed the requirements for their **graduate** degree and were formally graduated in ceremonies held December 12.

As usual, doctoral students were “hooded” by their advisor. All graduates walked across the platform and had their names announced. They were also had their pictures taken with President Judy Genshaft and were congratulated by the Dean of the Graduate School, **Dr. Karen Liller**.

*Doctoral Graduates:* **Drs. Jonathan L. Belof, Miranda L Cheney, Mariangela Dametto, Teresa M. Eckart, John J. Perry IV.**

*Masters Graduates:* **Christi Whittington Young.**

For more information (advisors, plans), please look at the Department Webpage (<http://chemistry.usf.edu/grad/>). Look for the link to Graduate alumni (right-hand side menu).

## ***Facebook news***

From **Ms. Kimberly Read**, MBA, Manager, Fiscal & Business Administration, “If you haven’t already heard the rumor, I can confirm that yes, we do have a Facebook page for the department:” [USF Department of Chemistry on Facebook](#).

Or go to our new Web page for a good link.

## ***Martin Lecturer***

**Dr. Jay J. Siegel**, Professor and Director, Institute of Organic Chemistry, University of Zurich, served as the 2010 Martin Lecturer (Feb. 17-18). His fascinating lecture was titled “Aromatic Architectures: Bowls, Gears, and Knots.” He was accompanied by his wife, Professor Kim Baldrige, a noted computational chemist at Zurich.

## ***Brian Stevens, 1924-2010***

**Dr. Brian Stevens** of Mount Dora, Fla., passed away Friday, February 12, 2010. Born in Sheffield, England, he moved to

Mount Dora in 1999 upon retirement as Graduate Research Professor of physical chemistry at USF having joined the faculty in 1967. He received his education at Oxford University (BA, 1950; M.A., 1950; Ph.D., 1953; D.Sc., 1977).

Before coming to USF, he was a faculty member at Sheffield University where he taught kinetics to **Dr. Rebecca O'Malley** (then an undergraduate) on Saturday mornings.

In World War II, **Dr. Stevens** served with the British Royal Engineers. He enjoyed golf, and after retirement, he played with the Raiders with the Mount Dora Golf Association.

He is survived by his wife, **Shanaya Nalina** of Mount Dora; sons, Michael Stevens of Ashville, N.C., and **Dr. Anthony "Chris" Stevens** of Boston, Mass.; sister, Marie of England; and numerous nieces, nephews and grandchildren. An online guestbook was available at [www.hardenpauli.com](http://www.hardenpauli.com).

## ***Out and about...***

From the Chair (January 13<sup>th</sup>): “One of **Dr. Jon Antilla's** manuscripts entitled "Catalytic Asymmetric Addition of Alcohols to Imines: Enantioselective Preparation of Chiral *N,O*-Aminals", *J. Am. Chem. Soc.*, **2008**, *130* (37), pp 12216–12217 has been highlighted in the most recent JACS Select virtual issues of highly cited papers! This is a significant honor and reflects the high quality and impact of **Dr. Antilla's** research.”

**Dr. Bill Baker**, Professor of Chemistry, was featured in a news story in the *Tampa*

*Tribune* (“Professor seeks polar cures”) on January 3<sup>rd</sup>:

<http://www2.tbo.com/content/2010/jan/01/usf-researchers-mining-antarctic/>

He was also featured in an article (“USF Researchers work on new malaria-fighting drug”) in the *Oracle* (Jan 25, pp. 1, 3)

**Mark Barnard** (M.S. '99) is a Chemist at Pel Labs in Tampa.

**Joanna V. Bis** (Ph.D. '06), Glaxo-Smith-Kline, Research Triangle, NC, was a member of the dissertation examination committee for Miranda Cheney on November 9<sup>th</sup>.

**Russell H. Devane** (Ph.D. '05), a postdoctoral fellow at Temple University, is researching detergents and surfactants. Please follow the link to see a press release clip entitled: *Temple University Researchers Help Procter & Gamble Design Better Models For Cleaning Products; Two NVIDIA Tesla GPUs Beat 1024 CPU BlueGene/L Cluster*. The link is: [http://www.nvidia.com/object/io\\_12634430\\_92139.html](http://www.nvidia.com/object/io_12634430_92139.html).

His doctoral mentor was **Dr. Brian Space**, Professor of Chemistry.

**D. L. Eng-Wilmot** (Ph.D. '78), Professor of Chemistry at Rollins College, recently returned from a trip to Antarctica, and has agreed to go to Nepal this summer, serving as a sponsor for students for a service project trip). His wife, **Sharlan**, continues to teach Kindergarten. Their son, **Graham**, is at the *Washington Post* (.com on their national home page), and their daughter, **Kira**, earned a masters (Fashion Institute of Technology, NYC) is in the Textile

Conservation lab at the Cathedral Church of St. John the Divine.

**Li Fang** (Ph.D. '09) continues as a postdoctoral research associate at SUNY-Buffalo in analytical chemistry. **Dr. Abdul Malik** was her doctoral advisor.

We saw **Dr. Jack Fernandez** (Charter Faculty, 1960-1995) and **Mrs. Sylvia Fernandez** at the November meeting of "Dinner with a Scholar." They are strong supporters of the program that brings USF Faculty together with persons interested in USF research in the College of Arts and Sciences.

**Kenneth Hewes** (M.S. '83), lives in Richardson with his wife, Doreen, who is a controller at a private school, and their son, **Winston**, a fourth grader and outstanding swimmer. Ken is working for Brooks Instruments.

**Bart A. Heldreth** (Ph.D. '00) is a chemist at the Cosmetic Ingredient Review (CIR), Washington, DC. He wrote, "The CIR ([www.cir-safety.org](http://www.cir-safety.org)) is an independent, non-profit scientific body that was launched in 1976 to assess the safety of ingredients used in cosmetics in the U.S. with the support of the U.S. Food & Drug Administration (FDA) and the Consumer Federation of America."

He added, "The CIR thoroughly reviews and assesses the safety of ingredients used in cosmetics in an open, unbiased, and expert manner and publishes the results of its work in peer-reviewed scientific literature."

His wife, **Mrs. Amy Heldreth**, formerly a staff member in Chemistry, is now the Jr. Human Resources Client Partner at George Washington University.

**Young Jung** (Ph.D. '06) was promoted to Scientist II at Vertex in October, 2009). The report included a comment by Dr. Patricia Hurter (V-P Pharmaceutical Development) "Throughout his time at Vertex, Young has consistently demonstrated the ability to take



Dr. Young Jung

a synthetic route, convert it into a scalable process and execute the technically challenging experiments. He is fast at getting to a decision point." **Dr. Edward Turos** was his doctoral advisor.

**Dr. Leon Mandell** (Professor Emeritus) presented "Religion, Education, and Science" on January 21<sup>st</sup> at the Franciscan Center Scholars Forum in Tampa.

**Greg McManus** (Ph.D., '07) stopped by for a visit in December. He is now an assistant professor of chemistry at Florida Gulf Coast University. **Dr. Mike Zaworotko** was his doctoral mentor.

**Mr. Yixue Pan** (M.S. '92) is a program analyst II at Robert Half International in Pleasanton, CA. He and his wife are parents of two sons.

**Mrs. Barbara B. Martin** and **Dr. Dean F. Martin** were named *Editors Emeriti* of *Florida Scientist* (the quarterly journal of the Florida Academy of Sciences). The Martins served as editors for 26 years.



Col. Robert Wright and a Chemistry faculty member review the 158 Cadet Wing during fall end-of-semester parade.

## **REU News**

REU is a research experience for undergraduates and was initiated as an NSF-supported summer program with a three-year grant, as noted in previous issues of *News*. The program was adapted to the fall and spring semesters starting with the fall of 2005.

**Dr. Patricia Muisener** (Assistant Chair) described progress in February, “The Research Experience for Undergraduates (REU) Program in the Department is going strong. **Mr. Todd Gatlin** is the Teaching Assistant for the Program this Spring. It is his first semester as TA. **Todd Gatlin** is a graduate student working with Dr. Santiago Sandi-Urena specializing in Chemical Education, he entered the graduate program

in Fall 2009. We had to say farewell to **Jason Cuce** who was the Teaching Assistant for the Program for the last year and a half. Jason is in Antarctica for the Spring and Summer semesters to work with his research advisor **Dr. Bill Baker**. We thank Jason for the excellent job he has done this past year and a half! Jason has done a great job of recruiting students to do undergraduate research as well as mentoring the students. We welcome Todd to the program.”

“This Spring semester we will be offering workshops on abstract writing, scientific writing, poster making and poster presentation skills. We will be encouraging students to present at the Office of Undergraduate Research Symposium as well as the Department of Chemistry Raymond N. Castle Student Research Conference. The Office of Undergraduate Research has generously funded the Teaching Assistantship since 2005 for the Academic Year as well as the summer for the past year. The Office of Undergraduate Research is a strong supporter of our program. This Spring we have 80 students participating in undergraduate research in the Department and 20 faculty mentors. We anticipate having a number of the students continue their research in the summer.”

“All the REU students will be participating in the Castle Conference Research Student Symposium. Plans are being made for the Symposium for Saturday April 17, 2010 from approximately 9AM to 5PM. Todd Gatlin is the Chair of the Castle Conference Organizing Committee. The Raymond N. Castle Conference is organized by students and provides the opportunity for young scientists to develop the necessary communication skills to excel in the future. A plenary speaker from outside the University will be invited. There will be research talks by graduate students and the

Barbara and Dean F. Martin Poster Session with poster presentations by both graduate and undergraduate students. More information about the Castle Conference will be in the next newsletter. Supporters of the Castle Conference include the Tampa Bay ACS Local Section, the University, the Clear Springs Land Company and more supporters to be mentioned in the next newsletter.”

## ***Campus changes --- past and future....***

### ***Walkway***

Also new on our side of the campus is the extension of the *Sessums Walkway* that extends from the new dorms for first-year students to just past the Science Center. The plan was to make the students feel tied into the Central Campus.

The new walkway (constructed through the Science Center parking lot) connects the new dorms with central campus. The new dorms have dining facilities (with room for faculty members to drop by for one or many meals) a deli, a bar-be-que restaurant, and a stand-alone Starbucks.



View from behind the Science Center looking west (Photo was taken in between semesters.)



Future Seven-story Interdisciplinary Science Teaching & Research Facility (ISA). Picture taken in January from third floor of Chemistry; Administration Building is in background.

### ***New Schedule***

Remember those **Eight O'clock Classes** when you were at USF? They are no more. But they have been replaced with classes that start at 7:30AM (when it's easier to get a parking place).

### ***New Web page***

Also check out our newer and better Chemistry Web page, thanks to **Mr. Tony Green**, Webmaster and doctoral candidate, who works with **Dr. Brian Space**.

In particular, look at the top of the Home Page for a set of favorite structures. Don't see yours? Just wait a bit.

## ***“Make a gift”***

This is the title of a secure link on the departmental Web page. (Box is on the left). Clicking on the link allows a donor to make a gift to one of the accounts that the Department is emphasizing. Both are related to the annual Scholarship & Alumni Award celebration each spring.

The **Chemistry Operating Fund** provides support for special guests to attend, a worthy cause that can not be supported by State funds. It also provides for food for seminars and related needs.

The **Chemistry Named Awards** endowment provides cash awards to outstanding students in six areas of chemistry (This was the first year that \$200 awards were given in addition to a book in the subject area). In addition, the awards are named in honor of six pioneering faculty members, all retired: **Drs. Binford, Braman, Davis, Fernandez, Owen, and Stanko.**

Two additional awards (in cash) are named after two past department chairs: **Drs. Maybury and Zaworotko.** We hope to build up the funds so the amount of the awards can be increased.

It is possible to contribute to other departmental funds that support students and honor former faculty members. These may be found under "Chemistry Related Funds."

## ***Donors***

July 1, 2009 - December 31, 2009

Donors who generously supported the Department of Chemistry included the following individuals and organizations. We gratefully acknowledge their support and encouragement.

In these economically challenging times, private philanthropy is essential for support of academic programs, so we are especially grateful for the support these donors provided to our programs.

Mr. Mark H. Alldredge  
Ms. Ashlee E. Bangari  
Dr. William Clifford Brown Jr.  
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Dr. Xiao-Xiang Peter Zhang

## ***News and feedback***

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### ***Web page:***

<http://chemistry.usf.edu>

***Webmaster:*** Mr. Tony Green

### ***News:***

For past issues you may have missed, please see the departmental Web page.

### ***News for us or comments?***

Please write to: [dmartin@cas.usf.edu](mailto:dmartin@cas.usf.edu)  
or share with the Webpage or with the Facebook.