

USF Chemistry NEWS

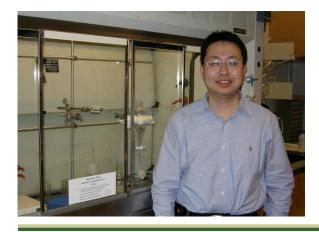
News of Interest to
Friends of the Department of Chemistry
University of South Florida

Volume 8, No 2 Spring, 2010

Introducing a new faculty member...

Dr. Jianfeng Cai, Assistant Professor of Chemistry wrote:

"I was born in an out-of-the-way village at the foot of beautiful Jinyun Mountain located in Beibei, a suburb of Chongqing, which is now one of five municipalities directly under the Central Government in China. My father was an electrician in a metallurgical construction company, and my mother was working as a countryside pharmacist. My childhood was full of happy memories, and even now I still often let my thoughts run back to those 'good old days.' I always reminisce about the refreshing fragrance pervading the mountain in spring when all the flowers were blooming, and golden fruits hanging on the trees in autumn when people were harvesting rice in farmlands. There were a lot of kids of my age back those days in the village, and we grew up together and played almost all the time."



"I had high career goals even before I got into elementary school. In those times, there was a huge difference between urban- and rural-registered residences in terms of quality of life. Therefore my original goal in being a good student was to go to college because a college graduate would be assigned urban residency and a job with cadre appointment. Such a firm and strong will sustained me to study hard all the time and be a student with good performance, even though I had no clue what type of person I would like to be after I grew up."

"The competition became much more intense in high school, which was also when I started to like chemistry more than other subjects, because it came more naturally than other subjects. I don't remember when but I was considering going to a chemical engineering institute after high school so that I would be able to work as a chemical engineer in a chemical company. I believe that's why I chose the Chemistry Department at Nanjing University."

"After 4 years of undergraduate studies, I decided to get an M.S. because at that time China had been developing very quickly and college graduates were no longer being offered with jobs automatically. I was told M.S. was almost 100% required to be more competitive in job market. In my graduate years, I found many of my classmate were taking the GRE and TOEFL, and applying for Ph.D. degree programs all over the world. I then also studied hard for those tests to get the chance to study in the U.S.

where the top chemical research is conducted."

"It was at Washington University where I realized that I would devote myself to chemical research for my whole life. I found bioorganic research so exciting with many areas still remaining unexplored. I made up my mind to stay in academia where I believe I will have much more freedom to do my wanted research. After my postdoctoral training, I was very fortunate to join the Chemistry Department at USF, where right now I am running my lab with my graduate students and postdocs."

"Tampa is a very beautiful city where I have had a lot of fun already. The research environment of our department is excellent, and colleagues are extremely friendly and helpful. I could not be happier with my life here. I will focus on my research and work hard to move my career forward!"

Funding news...

From **Dr. Randy Larsen** (March 11, 2010): "It is my pleasure to report that a team NIH project involving St. Jude's Children's Research Hospital in Memphis, TN (**Kip Guy**, PI), Rutgers University, Department of Pharmaceutical Chemistry (**David Floyd**, CI) and USF (**Roman Manetsch-**CI, Department of Chemistry and **Denis Kyle-**CI, Departmental of Global Health) has been recommended for funding. The total direct cost for the project is \$3,667,481 over five years. The USF direct costs are ~\$1,500,000!"

"This malaria-based project focuses on hitto-lead studies that will evaluate a series of hits identified from a cellular high throughput screen that detected inhibitors of Plasmodium falciparum growth. The hit series will be prioritized based upon studies related to novel mechanism of action, high inherent selectivity for Plasmodium versus



Dr. Roman Manetsch

the human host, and physiochemical properties that are compatible with the development of orally available drug candidates. Compounds displaying great promise as anti-malarial leads may be further developed by Medicines for Malaria Venture (MMV, www.mmv.org)."

"Medicines for Malaria Venture (MMV) is a nonprofit organization created to discover, develop and deliver new anti-malarial drugs through effective public-private partnerships."

"This exciting development is an excellent example of the collaborative research efforts involving our CMD5 center, Global Health and St. Jude's Research Hospital!"

Eighth Raymond N. Castle Student Research Conference...

The Conference continues to be organized by students for students and continues to promote Dr. Castle's goals of scientific collaboration and scientific education.

Castle Conference Committee members were: Todd Gatlin (Co-chair), Christi Whittington Young (Co-chair), Biplob Bhattacharya, Christian Cioce, Kimberly Fields, Joseph Gill, Priyesh Jain, Chungsik Kim, William Maza, Sreya Mukherjee, Meagan Small, Melissa (Missy) Topper, Carissa Vetromile, Justin White, Tarah Word, Xue (Snow) Xu, and Mingzhou Zhou.

Faculty Advisors were: Dr. Patricia Muisener and Dr. Brian Space.

Mr. Tony Green provided Web support, including recording a list of the winners: (http://chemistry.usf.edu/castle/awards_2010_php).

Judges came from the Chemistry Department (17 faculty members), H. Lee Moffitt Cancer Center and Research Institute (3) and two officers of the ACS Tampa Bay Local Section, which also provided financial support.

In addition, the Tampa Bay Local Section provided copies of the Merck Index for each winner, as well as for each research group.

Dr. Patricia Muisener wrote, "I would also like to thank the Tampa Bay Section of the American Chemical Society and The USF College of Arts and Sciences and Pearson Education for the financial support, Alpha Graphics for providing the professional conference booklets and McAlister's Deli for the tea, cookies, pickles and all the

necessary supplies... VWR, Fisher Scientific and EMD Chemicals also provided excellent giveaways."

We are grateful to **Eric Steimle** (Ph.D. '99) who kindly arranged for valued takeaways (tote bags, data sticks, card cases, etc).

This year there were 20 graduate (oral) presentations, 22 graduate posters, and 53 under-graduate posters to be judged.

The Plenary lecturer was alumnus **Lyle Castle** (Ph.D. '92), son of **Dr. Raymond** and **Mrs. Ada Castle**, and currently Professor of Chemistry and Dean of Academic Programs at Idaho State. He is also CEO and President of Hetero Corporation and Editor-in-Chief of the *Journal of Heterocylic Chemistry*, now in its 46th year of publication.

23rd Annual Scholarship & Alumni Celebration....

This was held April 13. The Outstanding Alumna was **Dr. Joanna Fowler** (B.A. '64), Senior Scientist Brookhaven National Laboratory (please see Web page for additional biographical information), who described her award-winning research on identification of chemical processes in the brains of addicted subjects.

The Chemistry team involved with making this annual awards celebration a success were Ms. Kimberly Read (Manager, Business and Fiscal Affairs), Ms. Lorene Hall-Jennings (Academic Services Administrator), Dr. Patricia Muisener (Assistant Chair), and Ms. Victoria Mothershed (Grants Manager).

The names of award recipients and pictures may be found on our Web page (please see "Awards" on the Department page). Additional thanks go out to our Webmaster, **Mr. Tony Green.**

Staff who's who ...

Keeping up with the staff organization in the Department is easier thanks to an organization chart prepared by Ms. Kimberly Read, M.B.A. Please see the Web page (Department, Staff).

Goldwater Scholar

Dr. Randy Larsen wrote (April): "One of our undergraduate students, Juan Baso, has been awarded a prestigious Barry Goldwater Scholarship... Juan has prestigious also received a American Chemical Society-Summer Undergraduate Research Fellowship. Juan is undergraduate researcher in the laboratory of Prof. Jon Antilla." Mr. Baso is one of two USF recipients.

"The Barry M. Goldwater Scholarship Program was created to encourage outstanding students to pursue careers in mathematics, the natural sciences, or engineering and to foster excellence in those In awarding scholarships, the fields. Foundation Board of Trustees will consider the nominee's field of study and career objectives and the extent to which that individual has the commitment and potential to make a significant contribution to his or her field."

"The Goldwater Scholarship is given to 300 students nationwide each year, and covers expenses including tuition, fees, books, and

room and board, up to a maximum of \$7,500 per year."

Graduate Student Awards

Following a tradition of long standing, awards to graduate students in chemistry were presented at the last seminar of the academic year.

The *Ashford Graduate Fellowship* was awarded to **Mr. Jason Perman**, who works with **Prof. Mike Zaworotko**.



Mr. Jason Perman

The George Bursa Award went to Ms. Michelle Cortés-Salvá, who works with Dr. John Antilla.

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 May, "The Research

Experience for Undergraduates (REU) Program in the Department is going strong. This Spring we had 80 students participating in undergraduate research in the Department and 20 faculty mentors. Mr. Todd Gatlin was the Teaching Assistant for the Program this Spring and will continue on this summer and the 2010/2011 academic year. Spring semester we offered workshops on abstract writing, scientific writing, poster making and poster presentation skills. Most of our students presented at the Department of Chemistry Raymond N. Castle Student Research Conference. This summer we have 35 students participating either for credit or as a volunteer. 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."

Campus changes --- past and future...

The Tampa *Tribune* recently described a "building boom" at USF Tampa Campus. This includes:

The Kiran C. Patel Center for Global Solutions: 71,700 ft² plus a large auditorium, \$24.9 million (gift from Dr. Patel plus State matching funds), scheduled completion: December 2010.

Music Building: 13,500 ft², \$46.6 million, includes 500-seat concert hall, 100-seat recital hall, practice rooms, and classrooms. Estimated completion: January 2011.

Interdisciplinary Science Teaching and Research Building: 238,500 ft², \$92.8 million, two 300-seat classrooms, additional

smaller classrooms, and laboratories. Estimated completion: August 2011. This will be USF's largest building, taller than the University Library.

Recreation Center expansion: 51,000 ft², \$14.9 million (from student fees), and will include recreation and dining facilities.

Though there is a recession, most of the \$179 million in construction costs comes from "State publication capital outlay funds using tax revenue budgeted years ago specifically for construction."

"Given ~475,000 ft² additional space, it is useful to remember a State analysis that projected USF would in 2012 rank last among Florida public universities for having enough space for the teaching and research responsibilities (especially research laboratories)."

[Our thanks for an informative article by Tribune Staff writer Mr. Richard Danielson: http://www.tampabay.com/news/education/college/article1076403.ece]

And more...

A groundbreaking ceremony was held for the Pam and Les Muma Basketball Center (50,000 ft²). The "footprint" is located on the south side of the Sun Dome.

At the ceremony, President Judy Genshaft said, "We will soon have a similar ceremony for baseball and for the Frank and Carol Morsani Football Practice Center. In roughly one year's time, the athletics landscape will be completely transformed."

[Three days later, in the Sun Dome, the USF basketball team beat the UConn team for the first time in eight meetings.]

Graduate degrees, May 2010...

Spring Commencement included the following graduate alumni:

Ph.D. Graduates:

Mohamed Helmi Alkordi (Advisor: Dr. Mohamed Eddaoudi),



Dr. Alkordi

Emma K. Ferrell (Advisors: Dr. David J. Merkler and Dr. James R. Garey),

Jaime Heimbegner-Noguez (Advisor: Dr. Bill Baker),



Dr. Jaime Noguez

Farid Nouar (Advisor: Dr. Mohamed Eddaoudi),



Dr. Farid Nouar

Scott S. Segro (Advisor: Dr. Abdul Malik).

Masters Graduates:

Wen-shan Chang (Advisors: Dr. Kirpal Bisht and Dr. Dean Martin),



Ms. Chang

Xiaoying Xu (Advisor: **Dr. Jennifer Lewis**).

Degrees for the entire USF system amounted to 5,608, and of that number, 4,908 were from USF Tampa. This included 1,073 master's degrees, and 173 doctoral and specialist degrees.

Did you know?

"USF is only one of 38 programs across the county that has all three (Army, Navy/Marine, Force) **ROTC** and Air In 2004, USF established the programs. 'only' Joint Military Leadership Center (JMLC) in the nation... The JMLC and ROTC programs are consolidated in the state-of-the-art, 53,000 square foot C.W. Bill Young Hall." The first floor of this building has class rooms and an auditorium that are available to all students, and have helped relieve a shortage of class room space on the Tampa Campus. The Army ROTC program (Suncoast Battalion) began in July 1975. The Air Force ROTC and Navy/Marine **ROTC** programs were established subsequently. [Source: Suncoast Battalion, Issue 1, Fall 2009; used with permission].

Out and About...

Dr. Mildred Acevedo-Duncan, Associate Professor, presented an invited paper entitled "Role of PKC-iota in Cancer cell Proliferation and Survival" at the BIT Life Sciences Third Annual Protein and Peptide Conference held in Beijing, China on March 21-23.



Dr. Acevedo-Duncan

Dr. Bill Baker recently led a team of seven scientific divers to the Keys Marine Lab (KML) in Long Key, Florida. During this expedition the team was tasked with collecting data, completing training dives for new divers, and conducting final preparations for an upcoming trip to Antarctica. Data collection in the Keys included water sampling and invertebrate collection for natural product study.



Dr. Cherie Geiger

Cherie Geiger (Ph.D. '94) Associate Professor of Chemistry and Associate Chair, UCF and Kathleen Carvalho-Knighton (Ph.D. '00), Assistant Professor ES&P, USF-St. Petersburg were co-editors of



Dr. Carvalho-Knighton

Environmental Applications of Nanoscale and Microscale Reactive Metal Particles, ACS Symposium Series, Vol. 1027, published in December 2009.

Dr. Jennifer Lewis, Associate Professor of Chemistry, "will be taking the helm of the Women's and Gender Studies Department as Interim Chair beginning in the fall," **Dr. Eric Eisenberg**, Dean, College of Arts and Sciences, announced on May 5. He added, "Her interest in gender issues in science and progressive forms of pedagogy make her a perfect fit for the job."



Dr. Lewis

Dr. Lewis was also invited to Australia this spring by Project ALIUS to do a series of workshops on active learning over a two-week period. ALIUS is an acronym for Active Learning in University Science.

Jennifer A. McMahon (M.S. '06) is a Senior Chemist at Eli Lilly & Company, Indianapolis. Her research advisor was **Prof. Mike Zaworotko.**

William (Bill) Sawyers (Ph.D. '99) is a Sr. Chromatographer/Mass Spectromistrist with Scientific Applications International

Corporation (SAIC) contracting for the US Army. He works for the Edgewood Chemical and Biological Center (ECBC, est. 1917) on the Edgewood Area post of Aberdeen Proving Grounds in Maryland.

Among the range of instruments available to him is a "plug flow reactor" of which there are only 30 in the world. More information: [http://en.wikipedia.org/wiki/plug_reactor_model].

Dr. Stewart Schneller (Faculty: 1971-1994 Chair: 1986-1994), Professor of Chemistry and Dean of Science and Mathematics at Auburn University, visited The Department and presented a seminar ("mRNA Capping in anti-Viral Drug Discovery") on April 8.

"Make a Gift"

This is the title of a secure link on the departmental Web page. (Link is on the left-hand side of the Home page). 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. 2009 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.

Other opportunities for helpful giving (Do as we do?)

The 2009-2010 Faculty/Staff Fund Drive may be considered a success, thanks to the participation of Chemistry faculty and staff members.

This is a drive to encourage faculty and staff members all over the University to make a donation to USF, e.g., one of funds listed under "Make a Gift". Cash donations or pay-roll deduction were two of the other opportunities that were available.

How did we do? Quite well. Over 94 percent of the faculty and staff members of Chemistry either donated or pledged so far.

The percentage likely places Chemistry ahead of all other departments of any size in the College of Arts and Sciences (CAS).

Ms. Lorene Hall-Jennings and a retired chemistry faculty member were among the four CAS Co-Chairs for the Drive. They have been invited to serve as co-chairs for the 2010-2011 Faculty/Staff Fund Drive.

Our sincerest gratitude to all the members of the Department who supported the Drive. The fact that they have "bought in" to the enterprise is commendable and exemplary.

News and feedback

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News:

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

News for us or comments?

Please write to: dfmartin@usf.edu
or share with the Webpage or with the Facebook page.