

USF Chemistry NEWS

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

Volume 10, No 3 Sumer, 2012

Good news for Chemistry

Several significant research awards were announced during this time.

Dr. Cai's good news

From **Dr. Randy Larsen**: "Please join me in congratulating **Dr. Jianfeng Cai** who has been awarded a New Investigator Grant from the Florida Department of Health-Bankhead-Coley Program entitled "Design, synthesis, and evaluation of γ -AApeptide-based protein tyrosine phosphatase inhibitors as novel anticancer agents". The award is \$375,000 over three years."



Dr. Cai

"This project not only enhances the research profile within the Department of Chemistry (specifically the Center for Diversity in Drug Design, Discovery and Delivery, CMD5) but also involves USF-CDDI [Center for Drug Design and Innovation] and the SNSM Interdisciplinary Research Cluster in Biomedical Sciences!"

Dr. Space's good news

Subsequently, **Dr. Larsen** was happy to also congratulate **Dr. Brian Space**, professor of chemistry, who just received notification that his NSF project entitled "Molecularly Detailed Theories of Interfaces: Spectroscopy and Sorption" was recommended for funding. The award is for \$390K over three years.



Dr. Brian Space in his IRDB office

Dr. Larsen wrote, "The funded project is an integral component of the new Advanced Materials Cluster developed within the Interdisciplinary Research Building (IDRB) and strengthens the SNSM Interdisciplinary Research Cluster in the area of Materials Science."

He added, "This has certainly been a banner year for funding in SNSM at a time when extramural support is extremely difficult! We clearly have outstanding faculty who continue to produce high quality/high impact research!"

Dr. Manetsch's news

Dr. Larsen's announcement in July noted that, "**Dr. Roman Manetsch** (associate professor) is part of a team that has received an NIH R21 grant entitled "Antileishmanial Lead Optimization of Quinazolines". The total award is \$432,963 for two years.



Dr. Roman Manetsch

Visceral and cutaneous leishmaniasis are parasitic diseases that affect millions of people per year in developing countries. The former disease is usually fatal without drug treatment, and the latter, which also impacts deployed U.S. military forces, causes disfiguring skin sores.

The funding is to support the evaluation of Prof. Manetsch's quinazolin class of molecules as potential anti-leishmanial drugs. This effort is a major component of the Department's CMD5 drug discovery center, CDDI and the SNSM Biomedical Sciences Interdisciplinary Research Cluster.

REU news

In July, **Dr. Larsen** wrote, "It is my pleasure to report that the Department of Chemistry has been awarded an NSF

Research Experience for Undergraduates grant entitled 'REU Site: Chemistry Summer Enhanced Experience Discovering Science, Chem-SEEDS'."



Dr. Patricia Muisener

Dr. Santiago Sandi-Urena and Dr. Patricia Muisener developed the project. "The award will provide high profile summer research opportunities for undergraduate students in a wide array of interdisciplinary areas of research," Dr. Larsen added.



Dr. Santiago Sandi-Urena on a volcano in Central America and above the Clouds.

The three-year project is funded at \$270,000.

Dr. Merkler also had good news

Dr. David Merkler, professor of chemistry received (July 23rd) an NIH R03 grant

entitled "Glycine N-Acyltransferases". The project is ~\$150K over two years (total costs).

Dr. Larsen wrote, "This research effort directly ties to the Departments Center for Molecular Diversity in Drug Discovery, Design and Delivery, the USF Center for Drug Discovery and Innovation and the SNSM Biomedical Sciences Interdisciplinary Research Cluster!"

Quiet Quality Award to Ms. McCain

It is always a pleasure when a member of the Department receives special recognition.

Ms. Adrienne McCain is a 2012 Quiet Quality Awardee for "exceptional service to USF in recognition of outstanding service and contributions to USF, including student success. She has been a staff member of chemistry for nine years and is presently



Dr. Muisener, Ms. Adrienne McCain

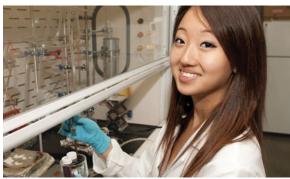
Graduate Secretary. She is responsible for coordinating applications from prospective graduate students, coordinating the progress of and the disposition of those applications. She is responsible for maintaining records of progress for 142 (mostly doctoral) students.

She initiated the list of scheduled defenses for those who wish to attend (please see Department Web page), as well as a list of past advanced degree recipients.

Ms. McCain was nominated by **Dr. Patricia Muisener**, Assistant Chair and was formally recognized at a reception sponsored by the Administration and the USF Staff Senate.

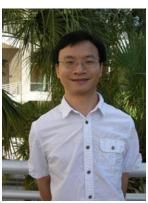
Ma Laboratory recognition

A story about **Ms. Sinhye Lee,** working in **Dr. Shengqian Ma's** Lab, was featured in *USF Magazine* (summer issue).



Ms. Lee as pictured in *USF Magazine*, Summer 2012

The feature article, "Young Researchers" by **Ann Carney** of USF News, focuses on undergraduate research at USF. It describes the activities of the Office of Undergraduate Research, headed up by **Dr. Richard Pollenz,** associate dean, Honors College.



Dr. Shengqian Ma

Ms. Lee spoke favorably of her experience, what she had learned, how it met her expectations, and the excellent environment of the Ma Laboratory.

Dr. Ma, assistant professor of chemistry, specializes in materials chemistry.

Introducing new faculty members...

Dr. James Leahy

The new hire for the Medical Chemist position is an alumnus, **Jim Leahy** (B.S.'84; Ph.D. '90), who will be a professor with a split appointment in Chemistry and in The Center for Drug Design and Innovation (CDDI).



Dr. Leahy

Dr. Leahy's extensive experience in drug development includes previous positions as president of Leahy Consultants (February, 2011--) and as senior director of chemistry for Exelix, Inc.(July 2004-February 2011) and director of chemistry (Aug 1999 –June 2004).

Among the honors he has received was being named *Distinguished Alumnus* by the USF Alumni Association in 2002.

Dr. Yiannis Gelis

Dr. Gelis is a biophysical chemist who is joining USF in the fall term as an assistant professor of chemistry. He received the B.Sc(Hons) from University of Leeds (UK), a M.Sc. from University of Hull (UK), and his Ph.D. jointly from the University of Athens and the University of Florence working with Professor I. Bertini.



Dr.Gelis

His most recent postdoctoral experience was as a research scientist at J.W.-Goethe University of Frankfurt, where he was associated with Prof. P. Fucini at the Institute for Organic Chemistry and Chemical Biology. There is topic of research was Co-translational protein folding and ribosome targeting.

We are delighted that both chemists have joined us.

Out and about...

A state official once said that at a major university, ten percent of the faculty are airborne at any given time. Our faculty are invited to international meetings, as indicated by two examples.

Merkler an "Opponent" in Stockholm

Professor David Merkler was at the University of Stockholm (Sweden) June 1 to take part in a Ph.D. defense of Mr. Dominik Waluk, a graduate student enrolled in the Department of Genetics,

Microbiology, and Toxicology. Dr. **Merkler** serving as "Opponent", gave a 20 minute background talk before the candidate's presentation, after which the "Opponent" asked all the questions for an hour prior to withdrawing with members of the committee to consider the pass/fail decision.

22nd ICCE meeting

Dr. Santiago Sandi-Urena was invited to organize a symposium ion problem solving at the International Conference on Chemical Eductation (ICCE) held in Rome (July 15-22).

Two of his doctoral advisees (Todd A. Gatlin and Adrian Villalta-Cerdas) presented papers on their research work, and they visited with Dr. Bassam Z. Shakhashiri, internationally noted educator at Wisconsin and 2012 ACS president.



Mr. Gatlin, Dr. Shakhashiri, Mr. Villalta-Cerdas

Dr. Vicki Lykourinou (instructor) also attended the ICCE meeting held at Rome's La Sapienza University, and is shown



Dr. Lykourinou and other delegates

discussing her poster on implementation of reforms in the USF General Chemistry Laboratory Program.

More meetings

Dr. Lykourinou (General Chemistry Laboratory Coordinator) also went to two workshops.

She was funded by NSF to attend with an undergraduate student (Mr. **Patrick McKeny**) a highly selective one-week workshop on enhanced learning in the laboratory held at Purdue University,

The BCCE (Biannual Conference on Chemical Education) was held at Penn State this summer. It may be the largest conference for practitioners and researchers involved in undergraduate curricula. It was attended by **Dr. Lykourinou** and **Dr. Solomon Weldegirma** (Instructor and Coordinator, Organic Chemistry Laboratories.

Special Visitor

Dr. Jerry L. Atwood, Curators' Professor and Chair of Chemistry (University of Missouri) served as a keynote lecturer "How Solid is the Organic Solid State" May 18th at the 2012 FAME meeting at Innisbrook Resort. He spoke in the Materials Chemistry Section, organized by **Dr. Shengqian Ma.**

Dr. Atwood is an internationally recognized leader in the field of supramolecular chemistry. As Dr. Ma noted, "Prof. Atwood was one of the first scientists to understand the significance of this emerging field."



Professor Atwood

In July, The Royal Society of Chemistry 2012 Award winners were announced, and the Supramolecular Award (Dalton and Organic Divisions) was given to **Dr. Atwood** "For pioneering work on the design and manipulation of supramolecular complexes containing non-covalent interactions."

Dr. Mike Zaworotko and **Dr. Mohamed Eddaoudi** of our department are also internationally recognized experts in this field.

Persons you may know

Mr. Frank Adamo (M.S. '68) wrote

"On August 25, I am having my first Book Signing and Presentation Skills Discussion in the Tampa Bay area from 12:00 to 3:00 pm at *The Coffee Beanery*... I will have available my published book, *31 Tips to Becoming an Effective Presenter*, one of the few books available through Toastmasters."

He has contributed to two other books. **Discover Your Inner Strength**, and **Yes You Can!** His Web page is www.FrankSAdamo.com. **Rachael Alessio** (M.S. '12) is employed as a chemist by Key Safety (manufacturer of car safety bags).



Ms. Rachael Alessio

Charles A. Asowata, PhD. (B.A '80), Lt Col U.S. Army, became project manager Distributed Common Ground System – Army Software Integration at a Change of Charter Ceremony July 12th at Aberdeen Proving Ground, MD. He was named the 2011 outstanding chemistry alumnus.

Roger W. Bass (M.S. '03, Ph.D. '12) 45th Space Wing, US Air Force was recently promoted to lieutenant colonel. **Dr. Jennifer Lewis** was his masters advisor and **Dr. Julie Harmon** was his doctoral advisor.

Beverly Barker (Ph.D. '06) is now with EduEquity Consulting Group, LLC. She was an advisee of **Dr. Jennifer Lewis.**

Miranda L. Cheney (Ph.D. '09) served as a Chairperson of the examining committee for **Padmini Kavuru**, a doctoral advisee of **Dr.** Mike **Zaworotko**, on June 19th.

Heather Clarke (Ph.D. '12) is employed by Xcellence, a local company that works on pharmaceutical products, **Dr. Zaworotko** was her doctoral advisor.

Melissa Derby (B.A. '96; Ph.D '02) is a professor with Kaplan University teaching general chemistry.

Kerriann Greenhalgh (B.A. '04;Ph.D. '08) is the founder of KeriCure, Inc. This firm was created to commercialize/develop "topical products designed to improve healing, prevent and treat infection and reduce scar formation." She and her firm were featured in a 2012-2013 calendar published by the Technology Transfer Office of USF Research and Innovation.

Among other examples of recognition noted in the text: her firm was "recently featured in *Tampa Business Journal* and was selected to present at the highly competitive Florida Venture Forum and VenturePitch Orlando conferences" last May.



Dr. Kerrian Greenhalgh

The feature article for the month of August describes the background of the discovery and the success of KeriCure. **Dr. Greenhalgh's** doctoral advisor was **Dr. Ed Turos.**

Bo Jiang (PhD.'08), an advisee of **Dr. Jennifer Lewis**, is now Senior IT Solutions Developer at TD Bank.

Suzette Martiney, J.D. (B.A. '00) is Managing Member of Bayshore Lawgroup PLCC, Tampa.

We learned with sorrow from the office of Patents that **Dr. Jay Palmer** (faculty member 1978-80, 1982-02) passed away in

June in Chicago. No further details were available. He and **Dr. Joseph Stanko** (faculty 1973-03) were collaborators on several patents.

Dr. Douglas J. Raber (faculty, 1971-1991) wrote, "After 20 years as a professor, a dozen years at the Board on Chemical Sciences & Technology, and another six years as a science-policy consultant, I've entered yet another career phase. Linda and I have written our first novel, and it's starting to sell pretty well." Details may be found at www.raberbooks.com

Dr. Joseph Stanko and **Mrs. Joan Stanko** celebrated their Fiftieth Wedding anniversary with family and friends on June 23rd. **Dr. Stanko** is a retired chemistry faculty member (1973-2003) and **Mrs. Stanko** was member of the University Counsel's office for several years.

Lanetra Clayton Tate (Ph.D. '05; Dr. Harmon, advisor) is now working at NASA headquarters in Washington, DC. She is detailed to NIST as the NASA representative for the Advanced Manufacturing National Program Office. Jerome Williams (Ph.D.'97) is an associate professor of chemistry at St. Leo University, St. Leo, Florida.

Cherie L. (Geiger) Yestrebsky (Ph.D. '94) is professor of chemistry at the University of Central Florida, where she is engaged in environmental research pertaining to air, water, and soil pollution, remediation and characterization.

August Graduates

Eight students were graduated in August:

Masters

Ms. Christi Whittington (Advisor: Dr. Wayne Guida



Ms. Whittington

Doctorates

Drs. David Badger, Ryan Cormier, Keily Heredia, Padmini Kavuru, Mu Seong Kim, Arun Babu Kumar, and Xue Xu.



Dr. Badger



Dr Heredia



Dr. Cormier



Dr. Kavuru



Dr. Kim



Dr. Kumar



Dr. Xu
Their advisers were, respectively, Drs.
McLaughlin, Turos, Lewis, Zaworotko,
Harmon, Manetsch, and Zhang.

Inside the Department

Our Department has immense responsibilities of teaching, research, and service, of course, but some time is set aside for personal relationships.

Staff Appreciation Luncheon

A semi-annual appreciation luncheon], sponsored by a faculty couple, was held May 8th. Guests were given menus to Chopstix, an nearby Chinese restaurant, and the meals of their choice were delivered to the Chemistry meeting room.



Chemistry Staff Members

Dr. Randy Larsen came to personally thank the Staff members for their dedication, for the impact that they make, and for their contributions to the success of the Department.

Baby Shower

A shower held for **Ms. Christina Nelson** July 19th, was well attended by Staff members with representation from Chemistry Faculty and Administration. We are grateful to **Ms. Kelly Pearson** (Lead Chemistry Advisor), **Ms. Nina Oliver**



Ms. Nelson opening one of the many presents (Academic Advisor, University Experience Instructor) **Ms. Victoria Mothershed** (Unit Research Administrator), and others for for organizing and participating in the gathering.



Ms. Pearson

Ms. Oliver



Ms. Mothershed **Madison Lexi Nelson** was born August 7th (7 lb 2oz, 21 in).

Week of Wonder (WOW)

Many students still feel lost during the first week of classes, but stations and informed persons are available to direct them to CHE



Announcement created by Ms. Kristin Kocher

and other important locations during WOW.

But the creative Chemistry Advising Cadre goes a step further and provides advice and course guidance (see announcement).

A special feature noted above was free popcorn, and **Ms. Nina D. Oliver** found a popcorn machine for really fresh popcorn.



Machine courtesy of the Marshall Center

All five members of the Advising Cadre also assisted with questions at the advising help table.

NMR update

USFINMRF (USF Interdisciplinary NMR Facility) announced the facility's move into High Throughput Screening with automation on both the Unity^{Inova} 400 and Agilent Technologies Direct Drive 500 spectrometers. The Unity^{Inova} 400 spectrometer is now equipped with a 5mm auto switchable (ASW) probe. Samples are changed automatically by an independent robotic sample changer, allowing 24 hour per day analysis. The Agilent Technologies Direct Drive 500, touts a cryogenic triple resonance (TR) 5mm indirect detection probe and the Technologies latest Agilent 7600-AS automatic sample changer with consecutive throughput of up to 96 samples.

Both instruments have been updated to the latest version of VNMRJ software. Data are automatically saved to an internal and external hard drive, data and spectra plot are also emailed directly to the individual users in PDF format. Training for both units is underway.

Faculty-Staff Fund Drive

An annual drive to encourage Faculty and Staff to donate to funds that support students and staff members was successful. Some 2800 persons participated and \$1.3 million was raised.

For the third year in a row over 90% of the faculty and staff members participated.

Supporters

The following is a list of those who made gifts to the Department of Chemistry, January 1 --- June 30 2012, as obtained from the College of Arts and Sciences office of Development. We are grateful for the special support of the alumni, faculty, staff, friends, and corporate/foundation donors listed here.

Dr. Mildred E. Acevedo-Duncan

Art Guild Inc.

Dr. Kirpal S. Bisht

Dr. Jianfeng Cai

Essilor of America

Dr. Maria Gallardo-Williams

Kelly Garcon

Dr. Jess E. Jones

Dr. Robin Lynn Jones

Kimberly Jane Jordan

Suzette Michele Marteny

John L. Martin, P.E.

Dr. Mark A. McLaughlin

Dr. Ralph E. Moon

National Fish and Wildlife Foundation

Emilio Oramas

Frances M. Salo

Tampa Bay Section of the American Chemical Society

50010ty

Dr. Henry Lee Woodcock

Louise B. Worrell

Out and about campus...

Sun Dome News

Sir Elton John will be the Sun Dome's grand opening act on September 14th .The "Rocket Man" had played the Sun Dome previously in 1984, 1986, 1988. Ticket prices range from \$39.50 to \$139.50 Ticket sales started June 15th.

USF and patents

Intellectual Property Owners Association ranked USF 10th worldwide among all universities granted U.S. patents for the second consecutive year.

"Making the IPO list again is a direct reflection of the innovation focus of USF researchers..." said **Dr. Paul R. Sanberg**, USF vice president for research and innovation (and an inventor with 30 patents).

Dr. Sanberg added, "The time and effort involved in achieving a patented invention is significant and has not always been appreciated in the academic world. But times have changed, and USF is proud of our faculty, students, and staff who have helped us become a leader in university patenting and licensing."

No other Florida university was in the top ten listing.

Campus changes --- past and future...

"Collins Park"

In June Office of Facilities unveiled the concept for "Collins Park," a beautiful outdoor space for the campus community to enjoy. An inviting urban park is currently

under development and will be located along the Library's south façade.

"Highlights you will find in the new park include a large sun shade structure, a tranquil fountain area, beautifully landscaped grounds, and plenty of gathering or 'chilling' spots for kicking back and relaxing alone or with friends and colleague," according to the announcement.

Collins Park is expected to be completed by the end of August. We look forward to seeing and visiting Collins Park this fall.

Chowdhari Golf Center...

USF golf teams will now have their own facilities in a 5,000 square-foot training center, which include a fitness center, indoor hitting bays locker facilities, coach office, and a conference room.

The Center was made possible by a donation from the parents of a member of the men's golf team. Main donor of the project **Dr. Shaukat Chowdhari.** and his wife **Dr. Antonia Chowdhari.** This is the third time the couple have made a major gift to USF. (Information was provided by **Tom Zebold**, USF Senior writer.)

Library renovation

The USF –Tampa Library continues to adapt to new technology. *A/V Media* has returned to the sixth floor. *Newspapers* are now on the first floor. *Microfilm* is in the basement.

The first floor has a number of computer work stations that seem very popular. And a *Jobs Hub* and a *Career Corner* are due to be added. Older alumni might be stunned to see a popular Starbucks/lounge area in the northwest corner.

The Second Floor will be converted into a

Learning Commons with over 300 computer workstations. The project is made possible by the Student Tech Fee.

Periodicals that were housed on the second floor have been placed in storage, and will be available in special take-up-less space shelving once renovation is complete.

News and feedback

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Webmaster: Mr .Brant Tudor

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.

Acknowledgments: Appreciation is expressed to **Dr. Rebecca M. O'Malley** (Professor of Chemistry Emeritus), for a news item.

We are grateful to **Ms. Victoria Mothershed** for a number of photographs.