2013 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
April 8, 2013

Monday, April 8: *Safety Meeting*
Tech K140; 3 pm

Wednesday, April 10: *Physical Seminar*
Mostafa El-Sayed
Ryan 4003; 4-5 pm

Thursday, April 11: *Organic Seminar*
Gojko Lalic
Ryan 4003; 4-5 pm

For full schedule, including Center events, please see the Department Calendar:
http://www.chemistry.northwestern.edu/events/calendar.html

Reminder
BIP meets every Friday in Tech K140 at 3 PM.

Arrivals and Departures
Floren Gonzalez joined the Scheidt group as a visiting scholar.

Upcoming Events
The Argonne-Northwestern Solar Energy Research (ANSER) Center and ISEN are proud to host the 5th ANSER Solar Energy Symposium on **May 9-10, 2013** on the Northwestern University Evanston campus.

The focus of this year's symposium is "Solar Electricity," and we are excited to announce an all-star lineup of speakers for this event:

Thursday, May 9th, 4:00 - 5:00 pm (Pancoe Auditorium)
Prof. Stephen Forrest (Univ. of Michigan)

Friday, May 10th, 9:00 a.m. - 4:00 p.m. (McCormick Tribune Forum)
Prof. Marc Baldo (MIT)
Prof. Christopher Bardeen (UC Riverside)
Prof. Mario Leclerc (Université Laval)
Prof. Michael McGehee (Stanford)
Dr. Michael Woodhouse (NREL)

Formal Symposium website, registration links, and agenda with abstracts will be distributed at a later date.

NSF Fellowship Announcement
Congratulations to the ten current Chemistry graduate students who have been awarded NSF Fellowships this year. Eight other students received Honorable Mentions for their applications.

Graduate Winners:

- Thomas Aldrich, Marks group

- Cornelius Audu, Hupp/Nguyen groups
- Edward Dale, Stoddart/Stupp groups
- Erica Hartz, Seideman
- Catherine Mauck, Wasielewski group
- Eric Pozzi, Hersam/Van Duyne groups
- Karl Rickert, Poeppelmeier group
- Ryan Thaner, Mirkin/Nguyen groups
- Mary Alice Upshur, Geiger/Thomson groups
- Danielle Wisniewski, incoming Fall 2013 student

Graduate Honorable Mention:

- Kang Du, Harris group
- Audrey Gallagher, Harris group
- David Krist, Statsyuk group
- Rebecca Lindquist, Wasielewski group
- Kallie Powers, Freedman group
- Joshua Szekely, Seideman group
- Victoria Weidner, Harris group
- Stephanie Zaleski, Van Duyne group

Opportunities

Lake Forest College – Department of Chemistry

The Department of Chemistry invites applications for a **one-year visiting faculty** position at the **Assistant Professor** level, starting **August 2013** with primary teaching responsibilities in instrumental analysis. Candidates should demonstrate enthusiasm for liberal arts education and readiness to contribute as needed to the general chemistry and non-major chemistry curricula. A commitment to excellence in liberal arts education is required. Postdoctoral experience and demonstrated excellence in teaching is strongly preferred. Teaching responsibilities will include the 400-level instrumental analysis lecture and lab as well as courses in introductory chemistry and general education science. Candidates may also have the option to participate in course offerings in the Environmental Studies program. The Lake Forest College Chemistry department has an established history of emphasizing use of research-grade instrumentation across the curriculum beginning with a first year sequence that includes NMR and UV-vis spectroscopy and gas chromatography. Upper level students expand the use of instrumentation in the laboratory to include the use of IR, HPLC, spectrofluorimetry, GC-MS, X-ray crystallography, and flash photolysis. Candidates should demonstrate an interest in maintaining and enhancing this departmental priority. A highly selective liberal arts college located on Chicago's North Shore, Lake Forest College enrolls approximately 1,500 students from over 47 states and 78 countries. At Lake Forest College, the quality of a faculty member's teaching is the most important criterion for evaluation. The College also expects peer-reviewed publications and active participation in the College community. Lake Forest College embraces diversity and encourages applications from women and other members of historically underrepresented groups.

Applicants should send a CV, cover letter, and a statement of teaching interests/philosophy to chemsearch@lakeforest.edu (please use "Instrumental" in the subject field.) Three letters of recommendation and graduate school transcripts should be e-mailed under separate cover directly from the recommender to chemsearch@lakeforest.edu. **Review of applications will begin immediately** and continue until the position is filled.

Wolfe Laboratories, Inc.

1) Postdoctoral Scientist Job Summary: We require a highly motivated Postdoctoral Scientist to work on protein stability & aggregation as it relates to therapeutic protein development. The current postdoctoral project is designed to understand the fundamental mechanism/s of protein instability, sub-visible particulate formation and aggregation using variety of chromatographic, biophysical and biochemical tools.

DUTIES AND RESPONSIBILITIES:
SCIENTIFIC RESPONSIBILITIES:
• Evaluate physical and biophysical properties of peptides and proteins relevant to drug development and subsequently communicate the interpretation and implication of results to clients.
• Develop analytical methods and characterize product variants
• Execute and oversee specialized analytical testing and generation of technical documents
• Maintain a strong awareness of current scientific literature, particularly in the area of protein characterization, and actively apply new concepts as appropriate.
• Develop and evaluate new cutting-edge technologies for protein product understanding, especially product heterogeneity and impact on safety and efficacy.
• Design experiments to develop pre-clinical and clinical formulations of drug candidates to support drug discovery and development.
• Design experiments to determine the stability in prototype clinical formulations, to detect and identify the decomposition products, and to achieve formulations with acceptable shelf-life.
• Perform laboratory experiments related to the above.
• Create presentations for outside scientific meetings and conferences to showcase
Wolfe Laboratories' scientific leadership in the field of protein analysis and characterization.
CLIENT INTERACTION RESPONSIBILITIES:
• Interface with clients to develop an in-depth understanding of client objectives and define solutions to meet their program requirements
• Develop compelling approaches and solutions to address client needs
• Write persuasive proposals for the projects
• Regularly interact with clients to keep them abreast of project progress
• Write and review interim and final reports.

REQUIRED BACKGROUND AND EXPERIENCE:
• Ph.D. in Biochemistry, Biophysics, Chemistry or closely related disciplines
• In depth experience in the area of protein biophysical chemistry of proteins involving structure-folding-stability relationships. This includes purification, stability, kinetics and thermodynamics of folding of monomeric proteins, particularly as they relate to the pre-formulation and formulation development of new drugs
• Hands-on experience with chromatographic method development as well as techniques used for biophysical characterization of biopharmaceutical products such as calorimetry, spectroscopy, higher order structure analysis, protein mass spectroscopy, CE, HPLC, ELISA, and carbohydrate analysis.
• A demonstrated drive to apply technical knowledge to developing drug formulations
• Established track record of significant contributions as an individual technical expert
• Outstanding written and oral communication skills as well as polished and persuasive client presentation skills

ADDITIONAL DESIRABLE BACKGROUND:
• Post doctoral experience in analytical biochemistry or closely related discipline.
• Good understanding of excipient and ligand interaction with proteins
• Evaluation of thermodynamic and kinetic models
Interested candidates are requested to email a copy of their resume with a cover letter including salary history to: steve.pangione@wolfelabs.com

2) Quality Systems Supervisor
An opportunity exists for an exceptional individual in the area of Quality Systems, focusing on the management of Quality Control and Quality Assurance. The QS Supervisor will work under the guidance of the Associate Director of Quality to implement and maintain Quality Systems supporting the Wolfe Laboratories GLP/GMP/GCP analytical testing and characterization program. The individual must be highly motivated toward increasing level of responsibility and leadership. The individual must be willing to receive a combination of on the job and outside training on GLP/GMP/GCP operations.

Responsibilities include:
• Help to maintain and grow all Quality Systems including, but not limited to the management of:
• Internal audits
• Vendor audits
• Training
• Documentation
• Laboratory controls
• Non-conformances and CAPA
• Ensure compliance with GLP, GMP, and GCP regulations and industry standards as they relate to Wolfe Laboratories activities
• Provide Quality Assurance oversight for GLP, GMP, and GCP-related activities
• Manage Quality Assurance review of analytical test results, investigations, reports and protocols for GLP, GMP, and GCP projects
• Manage internal and external audits
• Lead Quality Assurance investigations of non-conformances by analyzing data, interpreting results and recommending appropriate corrective actions to area managers
• Contribute to the efficiency of Quality Processes by identifying and suggesting improvements and eliminating non-value added work
• Contribute to writing of proposals or technical agreements for GLP/GMP/GCP projects

Desired Background and Experience:
The successful candidate will hold a Master's or Ph.D. degree in a science-related field, with 1–3 years of experience in an equivalent role. Previous laboratory experience required: experience in manufacturing operations for pharmaceutical/biopharmaceutical or drug development organizations in activities supporting GMP or GLP functions preferred. Ability to apply established principles, theories and concepts in areas of laboratory operations. Can propose, design and implement solutions to solve or prevent problems that have a negative impact on quality of executed work or on compliance with Wolfe Laboratories Quality Systems and GLP/GMP/GCP regulations. Familiarity with regulatory guidance documents is highly desirable.
Good communication and interpersonal skills are essential for this position, as it requires working with both internal and external clients, vendors and suppliers. Prior experience delivering trainings is also helpful. Interested candidates are requested to email a copy of their resume with a cover letter including salary history to: employment.wolfelabs@wolfelabs.com.

Wolfe Laboratories, Inc. (WLI), located in Watertown, MA, is a premier contract research organization that provides integrated early drug development solutions to the biopharmaceutical industry. Wolfe Laboratories is an essential element of the drug development ecosystem, recognized by global and virtual biopharmaceutical companies as a science-driven organization whose mission is to provide outstanding discovery and development services tailored to its clients' needs for rational formulation development. Wolfe Laboratories integrates the critical path components of early development to ensure that programs advance while meeting rigorous scientific demands with flexibility to address dynamic challenges and aggressive timelines.

Wolfe Laboratories' vision is to improve human health, and we continue to strive towards that goal by embracing our core values of integrity, excellence and teamwork. The company has a high percentage of repeat clients, which is a testament to its long-term commitment of continual investment in its capabilities to meet biopharma's growing demand for high quality, integrated early development services.
We have a steady 12-year track record of growth, success and profitability.
For more information visit us at: www.wolfelabs.com.
Wolfe Laboratories, Inc is an Equal Employment Opportunity employer

Smith College – Chemistry Department Our department is in the process of searching for a full-time laboratory instructor position beginning in July/August 2013. This is initially a one-year position with the possibility of renewal. Primary teaching responsibilities include laboratories in both general and organic chemistry, with participation in ongoing lab curriculum development. Applicants must have either an M.S. or

Ph.D. in Chemistry and a commitment to excellence in teaching.

Applications need to be submitted at https://secure.interfolio.com/apply/21278 with letter of application, curriculum vitae, statement of teaching philosophy, unofficial graduate and undergraduate transcripts, and three confidential letters of recommendation. Review of applications will begin March 15th, 2013.

Questions regarding the search should be directed to Cristina Suarez, Chair of the Search Committee, csuarez@smith.edu. Smith College is an equal opportunity employer encouraging excellence through diversity.

The National Research Council of the National Academies sponsors a number of awards for graduate, postdoctoral and senior researchers at participating federal laboratories and affiliated institutions. These awards include generous stipends ranging from $42,000 - $80,000 per year for recent Ph.D. recipients, and higher for additional experience. Graduate entry level stipends begin at $30,000. These awards provide the opportunity for recipients to do independent research in some of the best-equipped and staffed laboratories in the U.S. Research opportunities are open to U.S. citizens, permanent residents, and for some of the laboratories, foreign nationals.

Detailed program information, including online applications, instructions on how to apply and a list of participating laboratories, is available on the NRC Research Associateship Programs Website (see link above).

Questions should be directed to the NRC at 202-334-2760 (phone) or rap@nas.edu.

There are four annual review cycles.

Review Cycle: **May**; Opens March 1; Closes May 1
Review Cycle: **August**; Opens June 1; Closes August 1
Review Cycle: **November**; Opens September 1; Closes November 1
Review Cycle: **February**; Opens December 1; Closes February 1

Applicants should contact prospective Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities.