

# YALE UNIVERSITY

## DEPARTMENT OF CHEMISTRY

### THE CHEMISTRY CHRONICLE

August 24, 2015

#### **ANNOUNCEMENTS**

For further information on any of the items included here, or if you would like to contribute information to the next bulletin, please contact [chemistry.adminoffices@yale.edu](mailto:chemistry.adminoffices@yale.edu).

Clara (Clare) Garguilo recently joined the Chemistry Staff as a Financial Assistant in the main office. She came to us from The Yale Cancer Center where she supported Business Office Accountants and the sections of Hematology, Oncology including Palliative, Neuro-Oncology, MOH and OAB Care Centers. Clare has been with the University for almost 15 years and has as many years' experience in Yale's financial areas.

Faculty & Staff: **If an employee who is set up for direct deposit, receives a paper payroll check and did not make changes to their direct deposit information, please report it immediately to the Employee Service Center at 203-432-5552.** As a security precaution, the university issues a paper check whenever direct deposit account information is updated. The new direct deposit instructions take effect in the following payroll cycle. In addition, the new Workday system automatically produces a notification to the employee's Workday inbox any time a change is made to direct deposit account information. In the past year, more than 850 NetIDs and passwords have been compromised by phish and malware. In eleven cases in November and December, prior to the university's move to Workday, thieves were able to change direct deposit information by accessing "My Pay and Info" via the Yale Portal. No money was lost and we were able to correct all unauthorized changes to direct deposit information because staff immediately alerted us when they unexpectedly received a paper check. The university is transitioning to [Multi-Factor Authentication \(MFA\)](#) to protect your intellectual property, your personal information, and Yale's data. **Please support the roll out of MFA in your department.** MFA technology is being rolled out in phases over the next few months to all members of the Yale community. Yale ITS will be partnering with your department to keep you informed and ensure the smoothest possible transition. Information on the roll out of MFA is attached here for reference: <http://its.yale.edu/secure-computing/identity-and-access-management/multifactor-authentication-yale>.

#### **Call for Yale Volunteers! Yale Pathways to Science Orientation & Reception for New Students** **Saturday, September 26<sup>th</sup> @ Yale Commons 3:30pm to 5:30pm**

This year we are welcoming 330 local middle & high school students as the youngest members of Yale's STEM community. We need you to represent Yale & host a table of ten of these new students and their parents.

Your job at the table, should you accept:

1. Be your charming selves!
2. Introduce yourself and facilitate introductions.
3. Eat snacks.
4. The Challenge: As a table, come up with an answer to "Why is Science Important?" and ask a new Pathways student to report the answer during the presentation.

If you are interested in joining us, please email [maria.parente@yale.edu](mailto:maria.parente@yale.edu).

Graduate students: please recall that you are eligible for a Conference Travel Fellowship, where you receive up to \$1000 toward travel/registration to a conference! Details at <http://gsa.yale.edu/conference-travel-fellowship>.

#### **Visa Processing:**

The government has changed the signature requirement on the DS-2019. They now require an original PI signature on the document. Please note that staff cannot sign for you.

## Save the Date:

- **Pasteur Foundation Gala.** Tuesday, September 29, 2015 in New York City. The Pasteur Foundation supports American scientific exchange through postdoctoral fellowships, undergraduate summer internships and related programs that advance scientific discovery. The Foundation fosters international exchange through 3-year fully funded postdoctoral fellowships on the Institut Pasteur campus in Paris and on 33 international Network sites on 5 continents. For further information, contact [LHinden@rcspr.com](mailto:LHinden@rcspr.com) or 212-463-0684. [www.pasteurfoundation.org/](http://www.pasteurfoundation.org/)
- **Chemistry's annual Holiday Luncheon** will take place on December 23, 2015 in the SCL Historic Corridor first floor.
- **Yale West Campus Chemical Biology Fall Retreat.** Friday, October 9, 2015 at Yale West Campus Conference Center. Special guests: Dr. Alice Y. Ting (Ellen Swallow Richards Professor, Dept. of Chemistry, Massachusetts Institute of Technology) and Dr. Karen Carniol (Deputy Editor, Cell Press) Along with Yale faculty: Jonathan Ellman, Mark Lemmon, Chenxiang Lin, Michael Murell, Alanna Schepartz and Sarah Slavoff. Contact Paula Maher ([paula.maher@yale.edu](mailto:paula.maher@yale.edu)) for further information.
- **Chemistry's Visiting Days for Admitted Graduate Students:** Thursday, March 10<sup>th</sup> and Friday, 11<sup>th</sup>, 2016. Secondary visiting day is planned for Friday, April 1, 2016.

**Science on Saturdays** hosted by Kurt Zilm – Fun science lectures for 'kids' of all ages will take place in SCL 110 from 10:00 a.m. to noon on three Saturdays this fall (September 26, October 17 and November 14).

<http://onhsa.yale.edu/science-saturdays>

## SEMINARS

[Chemistry Department Seminar Schedule](#)

**Wednesday, September 2. Energy Sciences Institute Talks at West Campus:** Professor Nikhil S. Malvankar, Molecular Biophysics & Biochemistry Microbial Sciences Institute, Yale University <http://campuspress.yale.edu/malvankarlab/> "Engineering Electron Transfer Among Bacteria for Improved Bioenergy and Biofuels" 3:00 p.m. West Campus Conference Center, room 208.

**Tuesday, September 8.** Lecture in Physical Chemistry: Professor Todd J. Martinez, Department of Chemistry, Stanford University <http://mtzweb.stanford.edu/mtz/> "Discovering Chemistry with an *Ab Initio* Nanoreactor" 4:00 p.m. Sterling Chemistry Lab, room 160.

## SYMPOSIA

This year's **Yale Chemistry Symposium** will take place on **Friday, August 28th**. This symposium is held at the beginning of the academic year and is organized and managed entirely by the second-year class of graduate students in the Chemistry Department. The purpose of the symposium is three-fold: 1) to welcome the newest class of graduate students to Yale Chemistry; 2) to provide current graduate students with an opportunity to present their research in a more formal setting; 3) to build camaraderie between the members of the second-year graduate class before they enter a crucial year in their graduate studies. Please note that the symposium will begin at 8:45 am. The day's schedule is below. **All of the Chemistry Department's research community is encouraged to attend.**

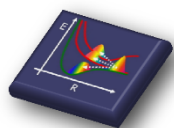
8:45am - 10:10am SCL 110 Presentations, Session 1  
10:30am - 11:30am SCL 110 Keynote Lecture w/Prof. Gary Brudvig  
11:30am - 12:00pm SCL 110 New Faces & TA Awards  
1:00pm - 2:30pm SCL 110 Presentations, Session 2  
2:30pm - 3:00pm SCL 18 Meeting with DGS  
3:00pm - 3:30pm SCL 18, 19, 21, 23, 111 Sub-discipline Meetings  
3:30pm - 5:00pm SCL 110 Presentations, Session 3  
5:00pm - 6:00pm SCL Foyer Poster Session

Please note that the Safety Training Presentation which was previously held at this event will take place in the main corridor of SCL on Tuesday, September 1, 2015. Details to follow.

**11<sup>th</sup> Annual Tri-Institutional Chemical Biology Symposium** – Wednesday, August 26 9:00 a.m. – 5:30 p.m., Memorial Sloan Kettering Cancer Center. Sponsored by the Tri-Institutional PhD Program in Chemical Biology (TPCB). Keynote Speakers: Catherine Drennan (MIT), Morgan Huse (Memorial Sloan Kettering Cancer Center), Sarah E. Reisman (Caltech) & Peter G. Schultz (Scripps Research Institute).

<http://chembio.triiprograms.org/publications-news/symposium-2015/>

**Saturday, November 7, 2015**



## *John Tully Retirement Symposium*

The Tully Retirement Symposium is scheduled to take place at Yale's Sterling Chemistry Laboratory on **Saturday, November 7, 2015**. A variety of individuals associated with John and his multifaceted scientific endeavors graciously have agreed to participate as keynote speakers for this day-long meeting:

- Professor Joel M. Bowman Emory University
- Professor Louis E. Brus Columbia University
- Professor Sharon Hammes-Schiffer University of Illinois Urbana Champagne
- Professor Martin P. Head-Gordon University of California, Berkeley
- Professor William H. Miller University of California, Berkeley
- Professor Krishnan Raghavachari Indiana University
- Professor John D. Weeks University of Maryland

### **Travel and Entertainment Policies:**

#### **Out of Pocket Reimbursements:**

- A reimbursement submitted between 120 and 366 days after the expense is incurred may only be reimbursed as taxable income. Gross-up for taxes incurred will not be allowed.
- No reimbursement submitted more than 366 days after the date the expense is incurred will be eligible for reimbursement.

#### **Business Meals:**

- Require itemized detailed receipt for all Pcard charges and reimbursements.

### **SCHOLARSHIPS/FELLOWSHIPS**

There are many generous sources of support both at Yale and beyond campus for graduate students to conduct their research and develop as professionals. From sponsoring the Dean's Fund to convene student-organized seminars and conferences to conducting the campus review process for the Fulbright program, the Graduate School promotes opportunities for students to fund their work at a variety of levels. In addition, the Graduate School has developed and identified a number of resources to communicate these opportunities to students. For further information, visit

<http://gsas.yale.edu/funding-aid/fellowships/gsas-other-fellowships>

Fall Data Science Fellowship: **The Data Incubator** is an intensive 7-week fellowship that prepares masters, PhDs, and postdocs in STEM + social science fields seeking industry careers as data scientists. Further information can be found at: <https://www.thedataincubator.com/?ref=v646221>

**Paul & Daisy Soros Fellowships for New Americans** – This program honors the contributions of immigrants to the United States. Every year they invest in the graduate education of 30 New Americans – immigrants and the children of immigrants – who are poised to make significant contributions to U.S. society, culture or their academic fields. Each new Fellow receives up to \$90,000 in financial support over two years, and they join a lifelong community of New American Fellows. Eligibility requirements can be found at: <http://pdsoros.org/> Applications are due on November 1, 2015.

## **POST-DOC OPPORTUNITIES**

The new YIBS Yale Analytical and Stable Isotope Center (YASIC) is awarding matching funds for student and post doctoral research. Up to \$750 dollars in matching funds for analysis using any instruments currently housed in the center is available (<http://earth.yale.edu/yasic-instruments>). To apply please email a one page proposal summarizing your project to Brad Erkkila ([brad.erkkila@yale.edu](mailto:brad.erkkila@yale.edu)) and Pete Raymond ([peter.raymond@yale.edu](mailto:peter.raymond@yale.edu)). Awarded funds are available for the summer and fall terms. A new announcement will go out in December for the spring and summer 2016. In your proposal please provide a PTAE0 for match.

Prof. Peter Raymond, Yale School of Forestry and Environmental Studies <http://environment.yale.edu/raymond-lab/>

Dr. Vince Carroll runs the med chem group of a small company called **Molecular NeuroImaging** (<http://www.mnimaging.com>), located in New Haven. They are currently expanding rapidly and have **two open positions for post-docs** in his group. Interested individuals should contact Dr. Carroll ([vcarroll@mnimaging.com](mailto:vcarroll@mnimaging.com)).

Dr. T. Keith Hollis, Associate Professor of Chemistry at **Mississippi State University** is seeking **two postdoctoral fellows** to work on his NSF funded research program. The work will involve organometallic synthesis and applications to catalysis related to energy topics. A skilled synthetic organometallic chemist with experience in glovebox and other inert atmosphere techniques will be highly competitive for these positions, which are available immediately. Interested candidates should send a cover letter, CV with complete publication list, and arrange to have three letters of recommendation forwarded by email. All materials may be sent to [khollis@chemistry.msstate.edu](mailto:khollis@chemistry.msstate.edu).

**Boston University** Department of Chemistry is seeking candidates with a strong background in synthetic organic chemistry for a postdoctoral position that is currently available. Projects include the synthesis of macrocyclic libraries and bioactive natural product analogues. For postdoctoral positions, experience in multi-step synthesis and characterization of complex molecules is required. Candidates with experience integrating computational techniques with synthetic organic chemistry are also strongly encouraged to apply. If interested, send cover letter, resume, and three letters of recommendation to Lisa Holik by email at [bucmd@bu.edu](mailto:bucmd@bu.edu) or by mail at:

Lisa Holik  
Boston University College of Arts and Sciences  
Department of Chemistry  
Center for Molecular Discovery (BU-CMD)  
590 Commonwealth Avenue  
Boston, Massachusetts 02215

## **JOB OPPORTUNITIES**

**ExxonMobil Chemical** is pleased to announce an opening in the Organometallic Catalysis Department within the Baytown Technology and Engineering Complex located in Baytown, Texas. They are looking for a highly motivated individual at the post-doc or Ph.D. candidate level to work within interdisciplinary teams for the development of single-site catalyst technology. The ideal candidate should have a strong background in synthetic inorganic/organometallic chemistry with a demonstrated record of creative research. This position is expected to be filled in the first half of 2016. Applicants should submit their CV and direct any questions to the Recruiting Committee chair, Steven Brown, at [steven.d.brown@exxonmobil.com](mailto:steven.d.brown@exxonmobil.com)

The **Department of Chemistry, University of Toronto**, invites applications for a tenure stream position at the rank of **Assistant Professor or Associate Professor in the area of Experimental Physical Chemistry**, including fundamental studies of materials and/or biophysical chemistry. The position start date is July 1, 2016. Applicants must have earned a PhD by date of the appointment or soon thereafter in the broadly defined area of Physical Chemistry, a strong academic background, an excellent research record and demonstrated excellence in teaching. Successful candidates will be expected to conduct innovative research at the highest international level and to establish an outstanding, externally funded research program. Evidence of excellence in teaching will be demonstrated through teaching accomplishments, letters of reference and the teaching dossier submitted as part of the application. Candidates also must have a record of excellence in research as demonstrated by publications in top ranked and field relevant academic journals, presentations at significant conferences, and strong endorsements by referees. Applications should include curriculum vitae, a

statement of teaching philosophy and interests, and an outline of proposed research. If you have questions about this position, please contact [receptn@chem.utoronto.ca](mailto:receptn@chem.utoronto.ca). All application materials should be submitted online. Please combine attachments into one or two clearly labeled files in PDF format. Submission guidelines can be found at <http://uoft.me/how-to-apply>. Applicants should also arrange to have three confidential letters of recommendation sent on their behalf to [receptn@chem.utoronto.ca](mailto:receptn@chem.utoronto.ca). To ensure full consideration, applications should be received by October 1, 2015. This search will remain open until filled. For more information about the Department of Chemistry, please visit [www.chem.utoronto.ca](http://www.chem.utoronto.ca).

The **Department of Chemistry at Gustavus Adolphus College** is currently undertaking a search for a **one-year Visiting Assistant Professor of Biochemistry and Organic Chemistry**. Responsibilities will include: 100-level organic chemistry lecture and associated laboratories, 200-level biochemistry laboratories, 100-level Principles of Chemistry laboratories, and a possible January Term course. Job announcement is below.

Review of applications began on July 2 and will continue until the position is filled. The position will begin September 1, 2015. Applications may be sent to [chem-search@gustavus.edu](mailto:chem-search@gustavus.edu).

**Sacred Heart University** in Fairfield, CT has an opening for a late-career graduate student or end-of-contract postdoc to teach an **entry-level graduate course on Chromatography** this fall. The course is offered once a week after 5:00 p.m. and the day of the week is flexible. If interested, contact Dr. Eid Alkhatib, Chair of the Department of Chemistry at SHU. His email is [alkhatibe@sacredheart.edu](mailto:alkhatibe@sacredheart.edu).

The **Department of Chemistry and Chemical Engineering at the University of New Haven** is hiring new **adjunct faculty for the Fall 2015 semester**. Positions are available during both the day and evening. The Chemistry program is particularly seeking individuals interested in teaching **General, Organic or Physical Chemistry** Laboratory courses. CVs should be sent to Nancy Savage, Chemistry Program Coordinator at [nsavage@newhaven.edu](mailto:nsavage@newhaven.edu).

**The University of Pennsylvania** has an opening for the faculty position detailed below. This is the second in a cluster of hires at the University of Pennsylvania focused on energy science. The hire can be made into one of three departments: Biology, Earth & Environmental Science, and Physics & Astronomy. Candidates should relate their research objectives to energy science, but energy is considered broadly and do not have any specific programmatic objectives. The position is a junior-level appointment but more senior hires can be considered. If interested, email Prof. Jay Kikkawa (Department of Physics and Astronomy, The University of Pennsylvania – [kikkawa@sas.upenn.edu](mailto:kikkawa@sas.upenn.edu)

#### **Assistant Professor**

As part of a larger investment to create a new Center for Energy Research, the School of Arts and Sciences at the University of Pennsylvania seeks to add faculty to their newly formed Energy Cluster spanning the natural sciences. Following a first hire in Chemistry, we now invite applications for tenure-track assistant professor whose primary research and teaching affiliation will be in one of the following departments: Biology, Earth and Environmental Science, or Physics & Astronomy. Exceptional senior candidates will be given consideration. The successful candidate will mount an innovative program of fundamental scientific research with impact on our societal energy challenges, and in doing so will forge collaborative links with Penn scientists and engineers involved in energy research. Applicants must apply online at <http://facultysearches.provost.upenn.edu/postings/590>. Required application materials include: curriculum vitae with a list of publications, and a research and teaching statement that includes the candidate's perspective on how she or he fits into one of the three departments and identifies potential collaborative links with other natural science departments. Applicants should also submit the names and contact information for three individuals who will provide letters of recommendation. Review of applications will begin no later than September 1st, 2015 and will continue as long as the position remains open.

**Industrial Interviews** in the Chemistry Department:

Monday, 8/10/15 – **Merck**

Thursday, 8/13/15 – **Bristol-Myers Squibb**

Friday, 8/21/15 – **Novartis**

Tuesday, 9/1/15 - **Gilead Sciences, Inc. CVs due by Mon., 8/24/15**

Thursday, 9/3/15 – **Biogen**

Monday, 9/21 – Wednesday 9/23/15 - **DuPont**

**Incyte Corporation and Macrolide Pharmaceuticals** will also be recruiting at Yale. Date hasn't been determined.



**Merck** representatives, Drs. David Thaisrivongs and Jason Imbriglio interviewed at Yale on **Monday, August 10<sup>th</sup>**. Those interested in positions at Merck may email [david.thaisrivongs@merck.com](mailto:david.thaisrivongs@merck.com) and/or [jason\\_imbriglio@merck.com](mailto:jason_imbriglio@merck.com).

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Representatives from **Bristol-Myers Squibb** were here on **Thursday, August 13<sup>th</sup>** interviewing for Ph.D. openings in both Discovery Medicinal Chemistry and Chemical Development. Those still interested may contact Dr. Makonen Belema ([Makonen.belema@bms.com](mailto:Makonen.belema@bms.com)).

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Dr. Alec Flyer from **Novartis** visited the Department on **Friday, August 21<sup>st</sup>**. If you are interested in a position at Novartis, email [alec.flyer@novartis.com](mailto:alec.flyer@novartis.com).

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**Gilead Sciences, Inc.** (<http://www.gilead.com/>) is a research-based biopharmaceutical company with headquarters in Foster City, California. They will interview here at Yale on Tuesday, September 1<sup>st</sup>. Below are job descriptions for Process Chemistry and Medicinal Chemistry. CVs and research summaries should have been emailed to Drs. Michael Ischay ([michael.ischay@gilead.com](mailto:michael.ischay@gilead.com)) and Kevin Currie ([kevin.currie@gilead.com](mailto:kevin.currie@gilead.com)) by Monday, August 24<sup>th</sup>.

Research Scientist I Process Development, Req. #22725, Multiple Openings

Specific Skills - The successful candidate will design and execute reaction sequences and define processes to chemical intermediates and drug substances; perform chemical reactions, isolations, separations, purifications and crystallizations; conduct route scouting, reaction optimization, and scale-up demonstration; write concise procedures and reports to enable successful Technology Transfers. Participate in project teams and communicate results in a team-based environment.

The candidate must be skilled in the art and practice of modern synthetic and mechanistic organic chemistry. Familiarity and competence with modern spectroscopic methods applied to structure determination including <sup>1</sup>H and <sup>13</sup>C NMR, infra-red spectroscopy, and mass spectroscopy are required. Experience in the use of preparative silica gel chromatographic separations as well as analytical separations involving HPLC and GC is required. Practical experience in multi-step syntheses is preferred. Experience with spreadsheet programs such as Microsoft Excel and database software such as SciFinder is a plus. Knowledge and Requirements: Ph.D. in Organic Chemistry, Chemical Engineering, or related field.

Research Scientist I Medicinal Chemistry - As Research Scientist you will have the responsibility to design and execute the synthesis of novel molecules within a multi-disciplinary drug discovery team. The proposal of new molecular targets, application of scientific rigor, and application of creative solutions to challenging problems are essential skills. The successful candidate will have an excellent track record and a commitment to tackling drug discovery challenges through organic synthesis. Preference will be given to individuals with excellent leadership skills and a strong desire to succeed. Knowledge and Requirements: Ph.D. in Organic Chemistry with an emphasis on synthetic methodology or total synthesis; strong synthetic skills and a solid knowledge of modern organic synthesis techniques; strong written and oral communication skills; strong publication record.

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Dr. Robert Gilfillan from **Biogen** (<https://www.biogen.com/>) will be interviewing at Yale on Thursday, September 3<sup>rd</sup>. Biogen's Department of Chemistry and Molecular Therapeutics is seeking entry-level PhD chemists to join their Medicinal Chemistry group at their headquarters in Cambridge, Massachusetts. A world leader in biologics research, Biogen is expanding its capabilities in small molecule drug discovery and will be interviewing to fill positions starting in 2016. Please send your CV or resume and research summary to Dr. Robert Gilfillan ([rab.gilfillan@biogen.com](mailto:rab.gilfillan@biogen.com)).

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**Eli Lilly** has several openings for entry-level organic chemists in medicinal chemistry. Details are below. Although they won't be recruiting at Yale, they are collecting resumes, will then preselect candidates and conduct telephone or Skype interviews. Interested graduate students and postdocs should contact Craig Ruble directly by email at [ruble\\_craig@lilly.com](mailto:ruble_craig@lilly.com) and should provide a resume and research summary.

Lilly is a global healthcare leader that unites caring with discovery to make life better for people around the world. learn more about Lilly at [www.lilly.com](http://www.lilly.com).

## Research Scientist - Organic Chemistry - Discovery Research - Full Time

### Roles and Responsibilities:

#### 1. Medicinal Chemistry

o Analyze data in multiple dimensions

o Formulate and test medicinal chemistry hypotheses o Design and execute synthetic routes to target compounds o

Prepare material for biological, toxicological and pre-clinical evaluations o Work with external partners for purification,

synthesis, and analysis o Lead a research lab o Work across functional groups 2. Contribute to Lilly's Research and

Development Effectiveness o Organize seminar series o Encourage sharing different perspectives during technical

discussions o Generate new ideas or methods to resolve problems o Reorganize or reinterpret existing data or

information to develop new initiatives or different approach to problems 3. Employee Management and Development o

Mentor and coach direct reports 4. Growth in Scientific Community o Participate in internal and external professional

scientific activities.

o Build and maintain relationships with academic departments and research groups.

o Become a knowledge expert in selected areas o Author scientific publications

### Requirements:

. Ph. D. in Organic Chemistry or a related area completed by August, 2016 Additional Skills/Preferences: . Demonstrated

experience leading, managing, and/or mentoring in a lab environment . Demonstrated proficiency with oral and written

communication . Experience working as part of a team . Examples of insightful, analytical, conceptual, and creative

scientific problem solving . Demonstrated ability to organize, prioritize, and make decisions that drive projects . History

of networking and building relationships

### Location:

. Location - Indianapolis, IN with possible future opportunities in San Diego, CA