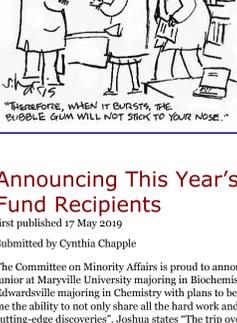


Welcome back, and a request

first published 29 August 2019



Whether you spent your summer hard at work on important problems or pondering life's sticky situations, the editors of the Chemical Bond bid you a warm welcome, and hope you enjoy catching up with the activities of the St. Louis Section of the American Chemical Society.

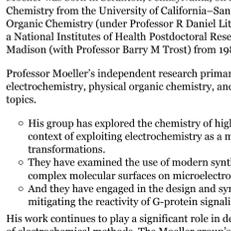
Remember that if you have news to share, our inbox at editor@stlacs.org is always open. Starting next month, (pending interest) we would like to reinstate a prior feature of the Chemical Bond: Bond Briefs. While we always appreciate write-ups of chapter activities, sometimes you want to share news that doesn't quite rise to the level of a blog post. So, if you have travelled somewhere interesting this summer, gone to a college reunion, received grant funding, got together with other ACS members, given a talk at a symposium, or anything else you feel like sharing (bragging about), [shoot us an email](#).

Announcing This Year's Undergraduate Minority Student Travel Fund Recipients

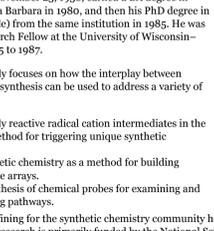
first published 17 May 2019

Submitted by Cynthia Chapple

The Committee on Minority Affairs is proud to announce our Undergraduate Minority Student Travel Fund recipients for spring 2019. Matilda is a junior at Maryville University majoring in Biochemistry with a Psychology minor. Joshua Jones is senior at Southern Illinois University – Edwardsville majoring in Chemistry with plans to begin a graduate chemistry program in the fall. Matilda states, "Attending the conference gave me the ability to not only share all the hard work and dedication which I put into my research but learn about other students' and businesses' cutting-edge discoveries". Joshua states "The trip overall gave me a firsthand experience of the extent of chemistry research. I believe that the conference improved my overall outlook on my own life. I bonded with friends and my professor, experienced several talks, and saw new cutting-edge technology."



Joshua Jones of SIUE



Matilda Derwisovic of Maryville University

Kevin Moeller is Midwest Awardee for 2019

first published 19 July 2019

Kevin D Moeller joined the chemistry faculty at Washington University in St. Louis in 1987, where he is now Professor of Chemistry. Henry Rohrs, Secretary of the Section, has announced that Kevin Moeller is the winner of the 2019 Midwest Award.

Moeller was born in Scranton, Pennsylvania, on November 25, 1958, earned a BA degree in Chemistry from the University of California – Santa Barbara in 1980, and then his PhD degree in Organic Chemistry (under Professor R. Daniel Little) from the same institution in 1985. He was a National Institutes of Health Postdoctoral Research Fellow at the University of Wisconsin – Madison (with Professor Barry M Trost) from 1985 to 1987.

Professor Moeller's independent research primarily focuses on how the interplay between electrochemistry, physical organic chemistry, and synthesis can be used to address a variety of topics.

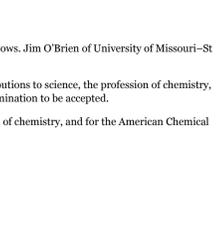
- His group has explored the chemistry of highly reactive radical cation intermediates in the context of exploring electrochemistry as a method for triggering unique synthetic transformations.
- They have examined the use of modern synthetic chemistry as a method for building complex molecular surfaces on microelectrode arrays.
- And they have engaged in the design and synthesis of chemical probes for examining and mitigating the reactivity of G-protein signaling pathways.

His work continues to play a significant role in defining for the synthetic chemistry community how they can think about and take full advantage of electrochemical methods. The Moeller group's research is primarily funded by the National Science Foundation and the National Institutes of Health and has led to the publication of over 150 papers and the presentation of over 300 talks and invited lectures.

Professor Moeller has guided 45 students to their PhD degrees and taught over 6,000 students in his courses. He has received Washington University's Student Union Professor of the Year Award, the Washington University Arts and Sciences Excellence in Research Award, Washington University's "Unsung Hero" award for his contributions to undergraduate education, the American Chemical Society's St. Louis Award for his contributions to chemistry, and in 2016 the Manuel M Baizer Award from the Electrochemical Society for his contributions to organic and biological electrochemistry.

From 2016 to 2018, Professor Moeller served at the National Science Foundation as a Program Director for the Chemical Synthesis and Chemical Structure, Dynamics, and Mechanism B Programs and as Program Lead for the Chemical Synthesis Program.

The award will be officially conferred at the Midwest Regional Meeting in October in Wichita, Kansas. The Award Symposium is scheduled for 1 to 3:30 pm on October 18th, with Dr Moeller's plenary lecture at 4 pm. The Award Banquet will follow.



Kevin D Moeller, 2019 Midwest Award winner

O'Brien, Jun are newest ACS Fellows

first published 23 July 2019

Two members of the Saint Louis Section are among the 70-chemist-strong 2019 class of ACS Fellows. Jim O'Brien of University of Missouri – St. Louis and Young-Shin Jun of Washington University in St. Louis have been named ACS Fellows.

ACS Fellowship (or is it Fellowship?) is a recognition of outstanding achievements in and contributions to science, the profession of chemistry, and the American Chemical Society. All three areas must be strongly represented for a fellow nomination to be accepted.

Congratulations, Young-Shin and Jim. And thanks for all you do ... for science, for the profession of chemistry, and for the American Chemical Society.



Jim O'Brien



Young-Shin Jun

David Keire is Saint Louis Award winner for 2019

first published 27 August 2019

Dr Benjamin Barth, past chair of the St. Louis Section – ACS and chair of the St. Louis Award Jury, has announced the winner of the 2019 St. Louis Award: **Dr. David Keire**, Director of the Food and Drug Administration Center for Drug Evaluation and Research (CDER), Office of Testing and Research, Division of Pharmaceutical Analysis in St. Louis. The Award Symposium and Banquet will take place Friday October 25, 2019.

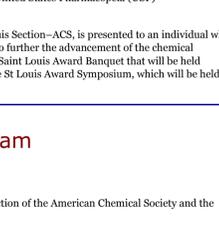
Dr Keire obtained his BS in Chemistry from the University of Washington in 1985. He completed his PhD in Analytical Chemistry, specializing in NMR spectrometry, at the University of California – Riverside in 1990 under Dallas Rabenstein. Upon graduation, he held a postdoctoral appointment at Purdue University with David Gorstein before joining the Division of Immunology of The Beckman Research Institute of the City of Hope National Medical Center in 1992 as an Assistant Research Scientist and Director of the NMR facility.

In 1999 he was hired into the Digestive Diseases Division of the David Geffen School of Medicine at UCLA as an Associate Researcher with a joint appointment as a Research Chemist at the Greater Los Angeles Veterans Administration Hospital; in 2005, he was promoted to Researcher. Finally, in October, 2008, he joined the FDA as Chemist in the Pharmaceutical Analysis Division (DPA) of CDER. In 2010, he was promoted to Research Chemist and in 2013, to Senior Research Chemist. In 2016, he became Director of Division of Pharmaceutical Analysis, the position he now holds. He was appointed to a Senior Biomedical Research Service (SRS) position in 2018, one of fewer than 80 in the agency.

Dr Keire has contributed greatly to FDA research and regulatory priorities by acquiring and applying state-of-the-art NMR spectroscopy and mass spectrometry (MS) instrumentation to develop analytical methods for complex drug substances and biologics. His first major accomplishment after joining the FDA was to lead the development of improved analytical methods for the analysis of heparin products leading to regulatory specifications to ensure the quality, purity, and potency of these products. He then went on to lead the development of orthogonal state-of-the-art NMR and MS methods for the analysis and quality assessment of biologics such as insulin, human growth hormone, and antibodies. He also led the development of a novel in vitro approach involving high resolution analytical techniques with multi-variate analysis to assess similarity or equivalence for complex drugs, which was used to support approval of the first generic glitazamer acetate for multiple sclerosis. Most recently, he has led method development for detecting carcinogenic impurities in cardiovascular drugs such as valsartan.

To date, Dr Keire has 97 peer-reviewed publications, 7 book chapters, and 7 popular publications, as well as 62 internal technical reports. He has presented 65 invited seminars at internal, national, and international meetings, and was appointed to the editorial advisory board of *Analytical Chemistry* in 2017. In 2018, Dr Keire was selected as the Regulatory Chair of the ICH Expert Working Group to revise analytical method development and validation guidance documents. For the past three years, Dr Keire has served as a member of the CDER Committee for Advanced Scientific Education (CASE), which promotes continuing education of CDER employees. Dr Keire's expertise has led to him being a member of the team developing CDER guidance on heparin drugs and serving as an FDA representative at the United States Pharmacopeia (USP) Heparin/Protamine Expert Panel.

The Saint Louis Award, sponsored by the Monsanto Company and administered by the Saint Louis Section – ACS, is presented to an individual who has made outstanding contributions to the profession of chemistry and demonstrated potential to further the advancement of the chemical profession. The award, consisting of a \$1,500 honorarium and a plaque, will be presented at the Saint Louis Award Banquet that will be held Friday evening, October 25, 2019, at the Glen Echo Country Club. Details on the Banquet and the St. Louis Award Symposium, which will be held that Friday afternoon at the Saint Louis College of Pharmacy, will follow.



David Keire, 2019 Saint Louis Award winner

Saint Louis Award Symposium 2019 program

first published 27 August 2019

[Updated 13 Sep 2019 with final schedule of speakers.]

The 2019 Saint Louis Award Symposium, Friday, October 25, is sponsored by the Saint Louis Section of the American Chemical Society and the Food & Drug Administration, St. Louis.

Honoring
Dr. David Keire, 2019 Saint Louis Award Winner
 Deputy Director, FDA/Office of Pharmaceutical Quality, Office of Testing and Research
 US Food & Drug Administration
 Academic and Research Building, Room 111
 St. Louis College of Pharmacy
 St. Louis, Missouri 63110
 Friday, October 25, 2019

Keeping it safe! Current Challenges in the Analysis of Food and Drugs

1:00 pm	Dr. Benjamin Barth , Associate Professor of Chemistry, Saint Louis College of Pharmacy, Immediate Past Chair of the St. Louis Section, American Chemical Society. <i>Welcome and General Introduction</i>
1:05 pm	Dr. Larry Lee , Director FDA/CDER Office of Testing and Research, Symposium Chair <i>Introduction and Salute to Dr. Keire</i>
1:10 pm	Dr. David Keire , Deputy Director, FDA/CDER Office of Pharmaceutical Quality Office of Testing and Research, Awardee <i>Assuring the Quality of the US Drug Supply: Analytics for Complex Drug Assessment</i>
1:50 pm	Dr. Cindy Buhse , FDA Office of Pharmaceutical Quality Surveillance <i>Drug Quality Surveillance Tools for a Global Market</i>
2:30 pm	Coffee break
2:50 pm	Dr. Nicole Konsdorf , Team Lead, NP Analytical Laboratories <i>Vitamin D analysis in pet foods</i>
3:30 pm	Dr. Justin Sperry , Senior Director in Analytical R&D, Pfizer <i>Biotherapeutic Product and Process Understanding Through Advanced Analytical Technologies</i>
4:10 pm	Dr. Matt Vincent , Subject matter expert, Budweiser Technical Center, Anheuser-Busch/InBev <i>Systematic Solution of Sensory Problems</i>
4:50	Reception immediately following
6:30 pm	Saint Louis Award Banquet , Glen Echo Country Club 3401 Lucas and Hunt Rd, Normandy, MO Reservations required (See link for more information and reservations.)

Venue information: See [campus map](#). Use the Childrens Place parking garage, 4533 Children's Place, St. Louis, MO 63110. Buzz the intercom and inform the attendant that you are attending the St. Louis Award Symposium.

The map also shows the Central West End Metrolink station, which is very convenient to the campus.

Grab your seat at the table: the 2019 Saint Louis Award Banquet

first published 27 August 2019

Updated 27 Sep 2019 with reservation information and final program details. Y'all come!

October 25, 2019, directly after the Saint Louis Award Symposium
Glen Echo Country Club • 3401 Lucas & Hunt Road, Saint Louis, MO 63121

7:00 pm cocktails (open bar), hors d'oeuvres
6:00 pm banquet
8:00 pm program

- Dr. Ben Barth**, Immediate Past Chair, St. Louis Section – American Chemical Society
Opening Remarks and Award Presentation
- Dr. Larry Lee**, Director FDA/CDER Office of Testing and Research
Introduction of the Awardee
- Dr. David Keire**, Deputy Director, FDA/CDER/OQ Office of Testing and Research,
2019 ACS St. Louis Section St. Louis Awardee
Awardee Address: Keeping it safe! Advanced analytics for complex drugs

Please send reservations, including check, by October 21st to:
Jeffrey Cornelius
Department of Chemistry
1 Maybeck Place
Principia College
Elsah, IL 62028
phone: 618.374.5296; fax: 618.374.5122; email

Make checks payable to Saint Louis Section – ACS and include the information requested below. Alternatively, pay directly via [Paypal](#) and include the information requested below in the note window. For both methods of payment, please also send an email confirmation of the information to Dr. Cornelius.

Name(s) _____
Special dietary limitations, if any _____
Number attending: (_____
_____ regular ACS members and spouses, \$30 each
_____ graduate and undergraduate ACS members, \$15 each
_____ non-members, \$60 each)
= amount remitted: \$ _____

For information on obtaining first-time ACS Membership and a discount offer connected to this event, contact Brent Znosko at 314-977-8567 or brent.znosko@slu.edu.

*Venue directions:

Glen Echo Country Club is in Normandy, in the southwest sector of the intersection of Natural Bridge Road and Lucas & Hunt Road. See [map](#). Use either entrance:

- Main entrance drive: turn west off Lucas & Hunt Road; Edison Avenue will be on the opposite side of the road almost adjacent to the entrance drive. Continue on the winding, curvy, and pot-holed road until you reach the clubhouse.
- back entrance: turn south off Natural Bridge Road onto St. Marys Lane, just east of the post office. Continue through the gate, veer right, and park in front of the clubhouse.

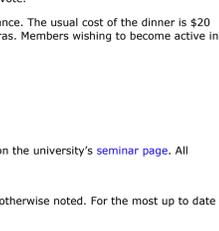
ACS member benefits: use 'em or ... use 'em

first published 27 August 2019

The national ACS website has [big page of small print](#) listing all the benefits of membership. We're guessing most of you (us) take advantage of only a fraction of what's out there. Some of that might be "meh, not my thing", but it could also be "I didn't know."

Here are a few of those member benefits with the broadest possible appeal – at least it seems so to us.

- Have you accessed the ACS webinars archive?**
ACS Webinars brings you the best and brightest minds in chemistry every Thursday at 1 pm Central Time with a variety of presenters and topics, from the purely professional like *Business and Entrepreneurship* to the fun side, like *Culinary Chemistry*. But if you work/life gets in the way, ACS members receive on-demand access to all the archived recordings. [Here's a sample](#), open-access webinar – no membership required!



- Did you know you can access 50 free journal articles per year?** After logging in, find your article by either:
ACS publishes more than 50 peer-reviewed journals with the highest quality research in and around our scientific bailiwick. Members receive access to 50 free articles per year for personal use. If your employer doesn't have a deal with ACS, or you just want to read something unrelated to your job description, you can ([here's how](#)). Members only, of course, and no free samples (sorry).

So, if you're already a member, take advantage of these benefits and get the most value from your annual dues. If you're not, [join now](#), and then get the most value from your annual dues. At the membership link, you'll see pictures of a bunch of people who look really happy to be members. We promise, those are not actors. At least, we think they're not.

Holden Thorp is new Science editor-in-chief

first published 31 August 2019

Well, this is pretty big news for little of Saint Louis.

Holden Thorp, the Rita Levi-Montalcini Distinguished University Professor of Chemistry and Medicine at Washington University, and recently its provost and executive vice-chancellor for academic affairs, has been named the new editor-in-chief of *Science* magazine and its associated publications. He is moving from Washington University to Washington, DC, and will assume his post at the end of October.

In his research career, Thorp developed technology for electronic DNA chips and co-founded two start-ups that are commercializing new drugs for fungal disease and prostate cancer. Unsurprisingly, during his time at WashU, his priorities included supporting interdisciplinary research and entrepreneurship.



Holden Thorp, editor-in-chief-elect of Science magazine

Thorp wants to continue to focus on ensuring the reproducibility of published science and encouraging manuscripts from a wide range of authors, including those outside top-rated universities. In addition to these ongoing concerns, he sees the importance of publishing research relevant to entrepreneurship. Thorp says, "It's really important that we have the right balance of basic science and things that have immediate application" in *Science*. But, he adds, he'll need to settle into the new job before he can propose any changes in news or research coverage.

Thorp replaces Jeremy Berg [also a (bio)chemist, although AAAS identifies him as a biologist] as *Science* EIC.

Upcoming CMA event: Inclusion and Culture in the Workplace

first published 31 August 2019

Submitted by the CMA Co-chairs Chanté Summers and Cynthia Chapple

On October 3rd at 6:00 p.m., The Committee for Minority Affairs (CMA) of the St. Louis ACS will be hosting our annual professional event – Inclusion and Culture in the Workplace. We are proud to have Dominic Dorsey from SIUE as the facilitator for this event.

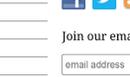
CMA is difficult to create a safe space for having open and honest discussions around people styles at work including how to tackle those sometimes difficult conversations with people from a different up-bringing, culture, or race. This free 2 hour event is open to the public. Doors open at 5:45, further information is in the flyer posted below.

St. Louis ACS – Committee for Minority Affairs presents:


INCLUSION & Culture in the workplace
Discussion led by Dominic Dorsey – SIUE Director of ACCESS

THURSDAY OCT 3rd 2019
AT 6 PM
doors open at 5:45
Join us for group discussions centered on diversity and conflict resolution in the workplace.

Buder Commons • Maryville University
650 Maryville University Dr. • St. Louis, MO 63141



 Direct inquiries to csomers15@stlacs.com or crchapple@gmail.com



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