### **SMS Connects- August 2020**



Dear SMS Community,

The School is about to embark on one of the most challenging semesters in recent memory, but I am so proud of the way our staff and faculty have worked so hard to ensure that learning and research will be as productive and as safe as possible. This summer was one of hard work and invention, of developing creative ways to teach and to organize our operations to maximize safety. This summer certainly put to rest the myth that online and remote teaching is inexpensive and easy, it is neither. We have invested considerable funds in hardware, software and in person hours to pull everything together. We are prepared. I can't thank everyone enough for their effort, for their patience and for their understanding. It is hard to be confident in the future in this environment, but I am optimistic that we will have a good semester, and if necessary, that we can pivot and adapt to any changing situation that might arise.

I wish you all a productive, and most importantly, a safe semester!

Best regards, lan Gould SMS Interim Director

# Fall 2020 Welcome- COVID Style!

#### 250 chemistry and biochemistry majors!

The class of 2024 chemistry and biochemistry majors were welcomed on 8/18/20 at 11 a.m., virtually, but in spectacular style with lots of bangs! Five faculty members from the School of Molecular Sciences gave an exciting and colorful introduction to chemistry for 250 future molecular scientists. This is a nine percent increase over Fall of 2019.

lan Gould, Anne Jones, Jim Klemaszewski (Klem), Gary Cabirac and Will Comar set fire to hydrogen balloons, explored temperature, pressure and volume relations, made "Elephant's Toothpaste", dazzled with colorful chemistry in solution and in flames, and created a spectacular indoor cloud of water using liquid nitrogen, to show our incoming chemistry and biochemistry freshmen the magic and beauty of chemistry.

#### Click Here to watch the Fall Welcome Spectacular Video on YouTube!



#### **Virtual Event to Welcome New Graduate Students**

On Friday, 8/22/2020 at 6:00pm, the SMS Graduate Student Council held a virtual event to welcome our incoming graduate students. It was a fun night of online games, live performances, and socializing.



This year the School of Molecular Sciences welcomed 23 new PhD students for the Fall 2020 semester. Due to the COVID-19 global pandemic, 15 of our incoming international students were unable to join us this semester and we hope to have them join us for the Spring 2021 semester. We welcomed eight students who transferred to our PhD program with professor Tim Long from Virginia Tech to complete their studies. We also welcomed eight Masters students who joined our recently reopened MS degree programs. Altogether, our fall 2020 graduate students join us from five countries and nine US states, and also include 15 students with a previous affiliation with ASU and a further five who hail from Arizona or attended other universities in Arizona.

### **SMS Welcomes New Faculty Member Tim Long**

We are delighted to welcome Tim Long who has now joined ASU as full professor in the School of Molecular Sciences and the School for Engineering Matter, Transport, and Energy (SEMTE). Tim comes to ASU from Virginia Tech, where he was Director of the Macromolecules Innovation Institute. He will direct a new Biodesign Center for Sustainable Macromolecular Materials and Manufacturing (BCSM3). Tim has an outstanding track record in research into the structure-property-morphology-processing relationships of a wide range of polymer systems. He has particular interests in the influence of non-covalent interactions on polymer properties, and more recent interest in sustainable polymer chemistry.



In addition to over 400 peer-reviewed publications, his research awards include the 2020 Virginia Outstanding Faculty Award, 2015 Virginia Scientist of the Year, 2010 Virginia Tech Alumni Research Award, ACS PMSE Collaborative Research Award, PSTC Carl Dahlquist Award, 2019 ACS Rubber Division Thermoplastic Elastomer Award, and the ACS POLY Mark Scholar Award. He has served as the Chair of the ACS Division of Polymer Chemistry, Chair of the Gordon Research Conference in Polymers, 2012 Chair of the IUPAC World Polymer Congress, and he currently serves as the Past-President of the Adhesion Society. He is a member of advisory boards for leading journals, and he was recently appointed as Editor-in-Chief of Wiley Polymer International.



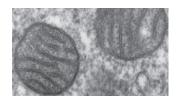
# <u>Protein structural insights chart the way to improved treatments for</u> heart disease

Professor Wei Liu and his group published a paper on Aug. 19 in Molecular Cell that offers promising details of improved therapeutic treatments for cardiac disease.



#### <u>Unraveling Mysteries Through Research</u>

Professor Jeff Yarger (Spiderman of ASU)'s research on Spider Silk was featured in PBS Catalyst series.



#### Study sheds new light on mitochondrial disorders

In a new study, Professor Abhishek Singharoy joins lead author Chitrak Gupta to explore the first and largest of the five respiratory complexes, known as Complex I.



#### New understanding of CRISPR-Cas9 tool could improve gene editing

Professor Audrone Lapinaite and her collaborators in UC Berkeley recently published a paper in Science.



#### SMS Launched two new online degrees this Fall

After the enormous success of current SMS online degree programs where students take formal lecture-style courses online but also get critical hands-on skills through in-person laboratory courses- two new degrees have launched this Fall. New to ASU Online are the <u>Bachelor of Arts in biochemistry</u> program and the <u>Bachelor of Science in biochemistry</u> with a focus on medicinal chemistry, which covers the fundamentals of organic chemistry in the context of drug discovery and development.

### **SMS Leadership Team**

We are very pleased to announce that Marcia Levitus has joined the SMS leadership team as Associate Director for Graduate Programs. The <u>New SMS leadership team</u> includes: lan Gould (Interim Director), Marcia Levitus (Associate Director of Graduate Programs), and Pierre Herckes (Associate Director of Academic Affairs).

### Fall 2020 COVID-Specific Guidance and Resources

ASU: Fall 2020 update

SMS: <u>Package Pickup and Gas Cylinder Exchange instructions</u>

SMS: Office Disinfection and Facial Covering Guidance - Video

SMS: Lab Disinfection Instructions - Video

# **Employment Opportunities**

US Department of Veterans Affairs: <u>Lead Medical Technologist</u>

FMC: R&D Synthetic Organic Chemist (PHD level)

City of Scottsdale (AZ): Police Forensic Scientist - Latent Prints (I, II, or III)

Please follow us on the <u>SMS LinkedIn</u> page for more job opportunities. Please also check <u>Chemistry Job Resource: Chemjobber</u> for more chemistry jobs.

Please feel free to send email to <u>ASUSMS@asu.edu</u> at any time with questions, concerns, or suggestions. You can visit our website at <u>sms.asu.edu</u> or connect with us by liking our <u>Facebook</u> page!









