What's happening in the CSN?

April 26, 2016 Edition

Celebrations

Good news!

Congrats to **Taey Curry** (**Rosenzweig** group) and family, who welcomed Aiden Dwayne Lyons (CSN honorary member) to the world on April 7th! Aiden weighed in at 3.2 kilograms (7 lbs., 1 oz.) and measured 4.953x10⁸ nanometers (19.5 inches) long!

Milestones and Awards



Congratulations to **Margy Robinson** (Hamers group) for being named the 2016 recipient of the Farrington Daniels Award for Ethical Leadership (UW-Madison Department of Chemistry), which is given annually to the student who best exemplifies ethical leadership. Margy is being recognized for her leadership in improving the culture of safety within the department, and for her work organizing bicycling as a community-building activity.

Margy was also awarded the Roger Carlson Award for instrumentation by the UW-Madison Department of Chemistry! Congratulations, Margy!

Congratulations to **Arielle Mensch** and **Lily Klapper** (Hamers group) for receiving a Stephen Morton Award for Mentoring, which is given to a graduate student mentor and undergraduate student mentee! The award includes a cash prize for both the mentor and the mentee. Arielle has been working with Lily to functionalize AFM tips with molecules to enable direct measurement of molecular interaction forces at interfaces.



Arielle Mensch is also receiving a <u>PPG Industries</u> Mentoring Award for 2015-16! Congratulations, Arielle!



CSN undergraduate researcher **Kyle Johnson** (**Haynes** group) received a University of Minnesota Heisig/Gleysteen Summer Research Fellowship! This competitive award will allow Kyle to continue his CSN project full-time during summer 2016. Congratulations, Kyle!

Nathan Klein (undergraduate researcher, **Haynes** group) has been awarded a 2016 National Science Foundation Graduate Research Fellowship! Nathan will be attending MIT starting in the Fall of 2016. Congratulations, Nathan!





Thu Nguyen (Feng group), a senior chemistry and biology double major from Augsburg College, was admitted to the PharmD programs at both UMN and the UW-Madison. She'll enroll in the UMN-Duluth program in the Fall. Congratulations, Thu!

Emily Caudill (**Pedersen** group) successfully defended her research plan as part of her successful Thesis Background Oral (UW-Madison Department of Chemistry) on April 13th. Congratulations, Emily!





Congratulations to **Zheng Zheng** (**Rosenzweig** group) for passing his candidacy exam (UMBC Department of Chemistry) on April 14th! **Joel Pedersen** served is serving as a committee member for Zheng and was present via WebEx.

Congratulations to **Bob Hamers** (our fearless leader!) for being named the 2016 <u>Langmuir Lecturer</u> (from the American Chemical Society)! The award recognizes researchers in colloid and surface chemistry, and is sponsored by the ACS journal *Langmuir* and the ACS Division of Colloid and Surface Chemistry. Be sure to check out Bob's award lecture at the Fall 2016 ACS National Meeting in Philly!



CSN Productivity

Juli Troiano's (Geiger group) paper investigating "the interplay between the resonant and nonresonant components of the second harmonic response as 4 and 14 nm spherical gold nanoparticles (AuNPs) wrapped in the cationic polyelectrolyte polyallylamine hydrochloride (PAH) adsorb to negatively charged supported lipid bilayers" has been accepted in the *Journal of Physical Chemistry C*. Congratulations to Juli and co-authors Tom Kuech, Ariane Vartanian, Marco Torelli, Akash Sen, Lisa Jacob, Bob Hamers, Cathy Murphy, Joel Pedersen, and Franz Geiger!

Julianne M. Troiano, Thomas R. Kuech, Ariane M. Vartanian, Marco D Torelli, Akash Sen, Lisa M. Jacob, Robert J Hamers, Catherine J. Murphy, Joel A. Pedersen, and Franz M. Geiger. **On Electronic and Charge Interference in Second Harmonic Generation Responses from Gold Metal Nanoparticles at Supported Lipid Bilayers**. *J. Phys. Chem. C.* **2016.** DOI: 10.1021/acs.jpcc.6b01786.



The Tuskegee Student Chapter of the American Chemical Society (SCACS) was featured in *InChemistry Magazine*, which is sponsored by ACS. The article included a <u>Q&A with Michael Curry</u>, who is a faculty co-advisor for SCACS.

Lab Exchanges

Arielle Mensch (Hamers group) visited Pacific Northwest National Laboratory, where she and Eric Melby (Pedersen and Orr groups) examined the formation of supported lipid bilayers using both fluorescence

microscopy and atomic force microscopy (AFM). They aimed to determine the location of nanoparticles relative to domain structures by correlating fluorescence microscopy and AFM on the same bilayer samples. Arielle and Eric figured a month on a combined AFM/fluorescence microscope (available at PNNL) should be plenty of time to do something nobody has ever done before, so they did; by successfully correlating images and collecting AFM data for the same phase-segregated domains within a lipid bilayer!



Mike Schwartz visited the **Rosenzweig** and **Fairbrother** labs in March, where he learned about weathering, zebrafish, and more! Unfortunately, Mike is good at reminding people to take pictures of their lab visits, but not so good at remembering to take them himself. <u>Mr. Yuck</u> disapproves.



CSN Talks and Presentations

Stephanie Mitchell (Carlson group), **Joe Buchman (Haynes** group), and **Erin Carlson** presented an overview of the Center's work at <u>Ecolab</u> on April 7th. The event was attended by ~75 company employees and the poster was highly popular!





Natalie Hudson-Smith (Haynes group) and **Stephanie Mitchell (Carlson** group) were volunteers at NanoDays at at Flex Academy in Minnesota. NanoDays is organized through the Nanoscale Informal Science Education (NISE) Network and funded by the National Science Foundation. Natalie lead an activity on super absorbing materials, while Stephanie lead an activity on capillary action.

Erin Carlson was on the radio on April 8th! She recorded an interview with Minnesota Public Radio's Kerri Miller headlined "<u>6 Things I wish I would have known before college</u>" (click on the link to find the archived show).



Miriam Krause co-presented a talk titled "Outreach for Unique Populations" at the <u>National Alliance for Broader Impacts</u> Summit in Philadelphia on April 22. The

presentation highlighted the CSN's Research Experience for Veterans program, in keeping with this year's Summit theme of broadening participation.

Innovation

The CSN held our first full-blown Innovation Council meeting in Baltimore on April 19th, with representatives from Adámas Nanotechnologies (Olga Shenderova), <u>3M</u> (Fred LaPlant and Brian Mader), <u>Lonza</u> (Phil Sweeney), <u>Dow Chemical</u> (Cathy Tway), <u>Research Products Corporation</u> (Michelle Harasimowicz), <u>Procter & Gamble</u> (Ravi Ranatunga), <u>Chemours</u> (Scott Brown), <u>CytoViva</u> (Sam Lawrence), and the UW-Madison <u>Weinert Center for Entrepreneurship</u> (John Surdyk). The IC presentations and subsequent discussions will play an important role in helping us to identify best nanoparticles for investigation and define how we can best interact with companies large and small.

Looking Ahead

Don't forget to update your reporting information, like awards and presentations! (Too soon?) The new CSN website will soon have forms where you will be able to submit information on your presentations and other activities as they occur (Stay tuned!).



Lost in Cyber-Space? Links to frequently requested CSN documents and information sources

HOME ABOUT US OUR TEAM NEWS EDUCATION & OUTREACH WORKING WITH THE CSN PUBLICATIONS RESEARCH MEMBERS

For these documents and more, visit the <u>center resources page</u> on the <u>CSN website</u> (requires Member login, contact <u>Miriam</u> if you need help).

CSN Documents and Downloads

- Center-wide detailed schedule: <u>http://tinyurl.com/zeukpus</u>
- CSN Operations Guide: <u>http://tinyurl.com/zyw9k4h</u>
- CSN participants list (Names, group, and email addresses): <u>http://tinyurl.com/jrrkp4b</u>
- List of all CSN researchers and project names (google-sheet): http://tinyurl.com/hxfazkl
- Approved projects for all students/postdocs: <u>http://tinyurl.com/hnp3whg</u>
- Download the Webex player: <u>https://www.webex.com/play-webex-recording.html</u>.

Forms

- Agenda requests for the Executive Committee: <u>http://tinyurl.com/z9eftvh</u>
- Report lab exchange activities: <u>http://tinyurl.com/jxw5jh9</u>
- Nanoparticle availability (Listing of NPs available center-wide): http://tinyurl.com/goathu7
- Suggestion Ox (All comments are completely anonymous):

https://www.suggestionox.com/response/BeNBi6

• **Newsletter topics** (To suggest a topic or to add information to be included in the next newsletter; e.g., an award, highlight, etc.): <u>http://goo.gl/forms/Rz8FIIXnGy</u>