What's happening in the CSN?

December 8, 2017

Volume 3, Issue 3

Supporting the CSN

Are you or your family members interested in supporting the CSN by making a donation? Donations are taxfree and all aspects are professionally managed by the University of Wisconsin Foundation, UW-Madison's official philanthropic foundation. Gifts made to the UW Foundation can be used to support many (but not all) of the CSN activities that we can't fund using federal grants. If you or someone you know might be interested in making a donation, please direct them to the <u>UW Foundation's donation site</u> and ask them to donate specifically to "**Fund #112220006, Center for Sustainable Nanotechnology**". Better yet, make it a recurring gift!

Celebrations

Welcome to New CSN Members

Demetrius Finley is a student from Detroit, Michigan. He obtained his undergraduate degree in chemical engineering from Tuskegee University in 2016 and began working with the **Curry** Research group while still an undergrad. He entered the Masters program in Chemistry at Tuskegee University in 2017, still working with the Curry research group. His favorite thing to do in his spare time is help coach the quiz bowl team on campus and enjoy time with family and friends.

Curtis Green joined the **Hamers** Group at the University of Wisconsin-Madison in November. Prior to graduate school, he attended Indiana University-Bloomington for his BS in Chemistry. Curtis grew up in a small northwest suburb of Chicago and enjoys watching the Chicago Cubs. Aside from sports, Curtis is very into musical theater and exploring nature.

Paige Kinsley has joined the **Hamers** group at the University of Wisconsin-Madison. She grew up in Colorado and completed undergraduate degrees in Chemistry and Chinese at the University of North Carolina-Chapel Hill. In her spare time, she enjoys reading anything that comes her way and traveling to countries where she doesn't speak the language.









Christian Lochbaum has joined the **Pedersen** lab at the University of Wisconsin-Madison. He grew up in North Carolina and completed his undergrad degree in Chemistry at the University of North Carolina-Chapel Hill. He enjoys biking and cooking in his free time.





Andrew Northwick has joined the **Carlson** lab at the University of Minnesota-Twin Cities. He completed his chemistry degree at St. Olaf College in 2014 and spent the last two years working for Pace Analytical in the 3M CRAL mass spectroscopy labs.

CSN Productivity

Dongyue Liang, Jiewei Hong, Fang Dong, Joseph Bennett, Sara E. Mason, Robert Hamers and Qiang Cui. <u>Analysis of conformational properties of amine</u> ligands at the gold/water interface with QM, MM, and QM/MM simulations. *Physical Chemistry Chemical Physics*, **2017**.





Bo Zhi, Miranda J. Gallagher, Benjamin P. Frank, Taeyjuana Y. Lyons, Tian A. Qiu, Joseph Da, Arielle C. Mensch, Robert J. Hamers, Zeev Rosenzweig, D. Howard Fairbrother, and

Christy L. Haynes. <u>Investigation of phosphorous doping effect on polymeric carbon dots: fluorescence, photo stability and environmental impact</u>. *Carbon*, **2017**.

Lab Exchanges

Don't forget that our Center goal is for every trainee to complete a lab exchange each year! If you don't know where to do a lab exchange, talk with your faculty advisor soon so you can start making arrangements for spring and summer travel.

Bo Zhi (Haynes Group) visited **Qiang Cui**'s group at UW-Madison to explore ways to use computational modeling for understanding carbon dot chemistry.



CSN Talks and Presentations

SETAC (November 12-16). Many trainees (present and past) attended SETAC in Minneapolis. Peter Clement, Sunipa Pramanik (Haynes Group), Nicholas Niemuth, Becky Curtis (Klaper Group), and Stephanie Mitchell (Carlson Group) all presented posters and Autumn Qiu (Haynes Group) gave a platform presentation on her Growth-based viability (GBV) work!



Autumn giving her GBV talk



Peter presenting Stephanie's poster

CSN Diversity

Part of our Center strategy for enhancing diversity is that each of our CSN faculty will present at least one talk per year at a minority-serving institution (MSI), including community colleges. We were well underway with this effort even before the formal policy went into effect: Vivian Feng recently gave a presentation at Century College in White Bear Lake, MN; Joel Pedersen and Christy Haynes both recently spoke at the University of Texas Rio Grande Valley; and Sara Mason has presented at Hawkeye Community College in Waterloo, Iowa. We are in the process of scheduling other talks for spring semester and look forward to the future REU students and research collaborations that can develop from these connections.

As part of our strategy for enhancing diversity, the CSN has allocated resources to support faculty and students from minority-serving institutions (MSI) and/or who are themselves from under-represented groups. We are particularly interested in faculty-student pairs, with the student staying for a summer through our REU program and the faculty member visiting as much as their time permits. If you know of faculty who might be interested in visiting one or more of the CSN labs during summer, please let Bob know and we can discuss options.

New CSN Capabilities

The <u>CSN Nanotech Database</u> ("Nanodatabase") is fully functional! You can now share data online without using Box, Dropbox, sandbox, box turtles, email, snail mail,

Nanotech Database

Study - Experiment - Protocol - Batch - Document Record - User - Admin -

You are now logged in.

Google anything, facsimile machines, or carrier pigeon. Mike is working with several students and postdocs to provide examples for Nanodatabase use, including depositing published manuscripts, organizing nanomaterials "Batch" pages, and uploading data from collaborative experiments. There are now plenty of examples showing how you might organize these pages, so start using the Nanodatabase today!

Mike is developing step-by-step instructions for the most common expected uses of the Nanodatabase, which you can find listed in the Help document linked in the upper, right corner of all pages. Individual Help documents and other useful info (like a CSN Endnote file) will be available on the Study page titled "<u>CSN Help Page</u>" (which is Study ID #11 for those who know the lingo), or you can go to Mike's User page to find help files and other fun links to helpful documents. Mike will also be happy to give you a personal tutorial if you're ready to send nanomaterials, share files with collaborators, or organize pending manuscripts!

Fun!



Surly with the gang. Trainees managed to have some fun after SETAC and caught up with some CSN friends at Surly Brewery in Minneapolis, including from left to right: Dr. Ian Gunsolus, Natalie Hudson-Smith, Nicholas Niemuth, Becky Curtis, Autumn Qiu, Stephanie Mitchell, Peter Clement, Dr. Devrah Arndt, Bo Zhi, and Dr. Jared Bozich!

Kudos to Erin Carlson and Christy Haynes, who spent their Thanksgiving morning running a 10K race!



Latest from Sustainable Nano

See sustainable-nano.com for all the CSN blog posts and podcast episodes

Blog posts and podcast episodes since the last newsletter

- Nov 22: Oxygen: the Gas of Life (infographic) by Peter Clement
- Nov 30: Podcast Ep 21. <u>Quantifying effects of gender bias: There's an app for that</u> interview with Penelope Hill
- Dec 6: The Science Behind Pixar Exhibit: A Review by Joshua Kuether

Opportunities and Resources

ACS Public Policy Fellowship

From ACS email Nov 21: Interested in putting your scientific training to work in a policy environment? The <u>ACS Public Policy Fellowships</u> are a unique opportunity for ACS members to gain hands-on policy experience and insights while working on Capitol Hill or with ACS External Affairs staff in Washington, DC. Applications for the 2018-2019 fellowships are due January 15, 2018. Visit <u>www.acs.org/policyfellow</u> for more information.

Young Environmental Scientists Meeting

March 25-29, 2018

From Emily Caudill: A few of us in the Pedersen Lab are helping plan the 2018 Young Environmental Scientists Meeting, which is part of SETAC (Society of Environmental Toxicology and Chemistry). It will be in Madison in March. It is organized and attended entirely by students and recent graduates in the fields of environmental toxicology and chemistry, and there is a specific Nanomaterials in the Environment section. Please consider checking out the <u>website</u> and submitting an abstract to attend (**deadline is TODAY**). Travel grants are available. Let me know if you have any questions.

Videos available from The Science of Science Communication III: Inspiring Novel Collaborations and Building Capacity

Videos from this recent National Academies of Science Colloquium are now available for viewing on the <u>Arthur M. Sackler Colloquia YouTube Channel</u>

Science Talk Conference

March 1-2, 2018

From <u>sciencetalk.org</u>: SCIENCE TALK '18 will unite active scientists, science communicators, journalists, policymakers, content providers, students, and trainees for two exciting days of learning how to talk science to non-scientists or those outside your discipline. It will feature presentations, workshops, and expert panels.

(Miriam is planning to attend - contact her for more information)

Looking Ahead

ACS Professional Development Webinar: Science Communication: How to Talk to Journalists About Your Research

Wednesday, Dec 13, 9:00-10:00 Central

From ACS: Science communication is an important aspect of broadcasting your research. Communicating your scientific research to the media accurately is not always an easy task, but it raises the profile of your research, helps the public stay informed, and it can improve support for public research funding. Make sure your hard work gets noticed with the ACS on Campus Science Communication Webinar on Wednesday, December 13 at 10:00 AM EST! Registration <u>here</u>

CSN Professional Development activity: "I was trained to do everything but run a lab!" Thursday, Dec 14, 3:30-4:30 Central

Dr. Kathy Barker, author of <u>At the Helm</u>, will discuss how the skills learned in a chemistry PhD program help prepare you for running your own lab. Miriam has a hardcover copy of the book -- contact her any time if you want to borrow it.

Student Board/Executive Committee Liaison Election

The SB/EC Liaison is a trainee who sits on both the Student Board and the Executive Committee and facilitates communication between them and across the Center. **Becky Curtis's** nine-month term as the Liaison will be finishing up at the end of January. At the next SB meeting on December 18, we will finalize the timeline for electing her successor, but in the meantime please start submitting nominations to Miriam (including yourself!). If you are nominated by anyone other than yourself, Miriam will ask if you want to run before announcing you as a candidate. Any center member (including faculty and staff) can submit nominations, and any center trainee can run for the liaison position.

Lost in Cyber-Space?

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

Links to frequently requested CSN documents and information sources

For these documents and more, visit the <u>Center Resources page</u> on the <u>CSN website</u> (requires login though Members page, contact <u>Miriam</u> if you need help).

Newsletter submissions (awards, highlights, lab exchanges, publications, FUN, etc.): <u>link</u>

CSN Documents and Downloads

- Nanodatabase login page: <u>link</u>
- CSN calendar (RFA, All-hands, professional development): link
- CSN Operations Guide 2.3: link
- CSN participants list (Names, group, and email addresses): link
- CSN Projects Documents (Spring 2017 version): <u>CSN Projects</u> <u>% Effort sheet</u>

CSN Reporting Forms

- Report lab exchange activities: link
- New CSN Publications: <u>link</u>
- New CSN Presentations: <u>link</u>
- Report Outreach Activity: <u>link</u>
- CSN Safety Verification form: link
- Nanoparticle availability (Listing of NPs available center-wide): link

CSN Feedback Forms

- Requests for the Executive Committee (meeting agenda): link
- SuggestionOx (completely anonymous comments/suggestions to CSN staff): Director (Bob): <u>link</u> Associate Director (Christy): <u>link</u> Managing Director (Mike): <u>link</u> E/O Director (Miriam): <u>link</u>

Find the most recent list of all our publications on the <u>CSN Google Scholar</u> page.



PUBLICATIONS RESEARCH MEMBERS