

Consortium Connections

Connecting campuses to promote excellence in science and mathematics

March 2017

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Mark your calendar for upcoming events (see sections in newsletter for more information)

- March 31, nominations for Janet Andersen Award due
- April 21-22, Executive Committee Meeting, Aloft Chicago O'Hare
- July 14-16, Early Career Workshop, Gustavus Adolphus College
- November 3-4, Physical Sciences, Mathematics and Computer Science Symposium in Chicago
- November 10-11, Biological and Psychological Sciences Symposium in St. Louis

Comments from the Director

Since formally assuming the position as MCMS Director in July of 2016 I have been on a rapid learning curve. I wish to thank former Director Brandy Russell and Midstates Assistant Sara Sletten for the time they have spent over the phone and via emails providing information on how to keep all the many moving parts synchronized so that the Consortium can provide successful events and professional development to the students and faculty. A key person in making sure that the countless details have been taken care of in a timely and cheerful manner is our Assistant Ann Schutt. Ann's experience as a Fund Development Manager with Hospice and a Program Director with Habitat for Humanity have



Ann Schutt
MCMS Assistant

allowed her to quickly assume the varied responsibilities needed for both the financial and personnel aspects of the Consortium. As a Hope College alumnus Ann is enjoying the opportunity to be back on campus and to be working with students and faculty at all the member institutions. She looks forward to meeting you at future events.

As Director I wish to meet as many faculty and administrators as possible at each of the member schools and discuss how our program can continue to provide outstanding professional development and educational opportunities for faculty and students in science and mathematics. While I did visit several schools during this past year, the time for extra travel was limited due to my teaching commitments. However, this will change at the end of the spring semester as I will be retiring after 39 years of teaching chemistry at Hope College, but plan to continue as MCMS Director in my new role as an Emeritus Professor. I indeed look forward to serving the Consortium in this capacity, as it will provide a way for me to maintain professional contacts and have an impact on STEM programs. During my first six months as Director I met 16 enthusiastic and engaging young faculty at the Early Career Workshop and saw the excitement of 200 students presenting their research at the Undergraduate Symposia in Chicago and St. Louis. Interacting with so many people who can make a difference in the future of STEM is certainly a wonderful benefit of participating in the Consortium programs.



Mike Seymour
MCMS Director

The following pages of the newsletter have a brief description of activities that have already taken place during the 2016-17 program year and information on upcoming events. Best wishes to all for a great finish to the spring semester.

Early Career Workshop, July 8-10, 2016

The 2016 Early Career Workshop was held at Gustavus Adolphus College and attended by 16 participants from 10 schools. The program was facilitated by Scott Burr from Gustavus Adolphus College and Karen Nordell Pearson from Hope College. The multidisciplinary group discussed common challenges of teaching and scholarship from different perspectives and each person developed a personal strategic action plan complete with a vision, goals, strategies and actions for the next 2-3 years. Everyone left with new personal connections and the beginning of a network with colleagues in similar positions to provide support throughout their careers. The 2017 Workshop will be held July 14-16 at Gustavus Adolphus College. Information is posted on the MCMS homepage <http://mathsciconsortium.org>.



2016 Early Career Workshop participants with statue of Carolus Linnaeu

Undergraduate Research Symposium in the Physical Sciences, Mathematics, and Computer Science, Washington University in St. Louis, November 4-5, 2016

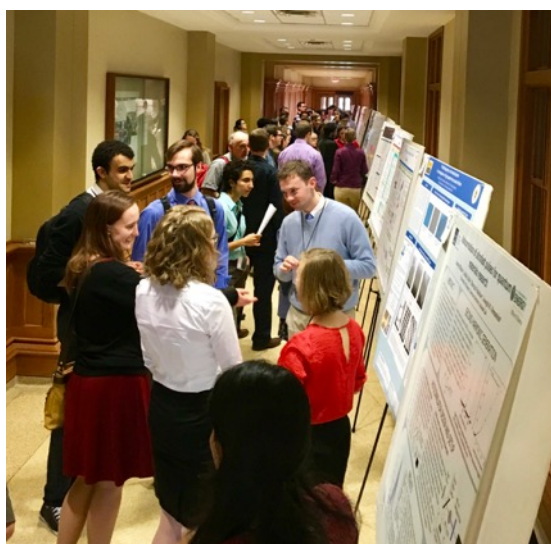


Symposium participants after the Friday evening dinner at the Sheraton Clayton Plaza Hotel

The 2016 Physical Sciences, Math and Computer Sciences meeting at Washington University had an attendance of 103 students and 18 faculty with 57 poster and 35 podium presentations. The Friday evening banquet featured a presentation by Janet Andersen Lecture Award recipient Andrew Beveridge entitled *To Catch a Thief: Pursuit-Evasion in Two Dimensions*. Saturday morning started with a continental breakfast at the Laboratory Sciences Building, followed by two parallel oral sessions and the morning concluded with a poster session in the Rettner Gallery.



Student presentation at Washington University meeting



Students discussing their work during a poster session in Rettner Gallery



Lunch and Graduate School panel in Holmes Lounge

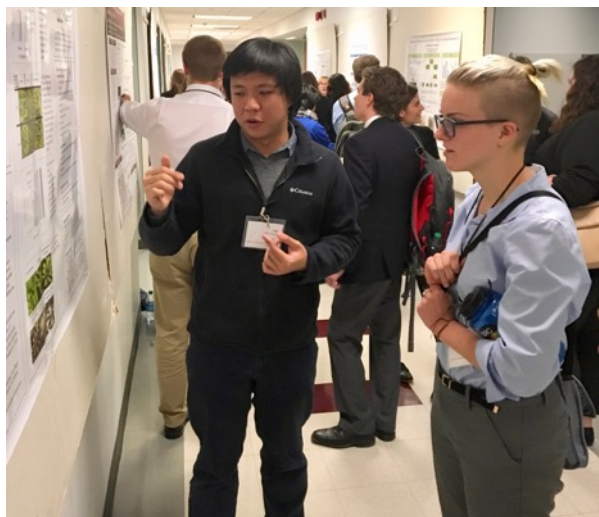
A Mexican-themed buffet lunch was served in the elegant Holmes Lounge, followed by a discussion entitled “Life in Graduate School” presented by five Washington University graduate students, all of whom attended MCMS colleges. The meeting concluded at 5:00 PM following the afternoon sessions of poster and oral presentations. Our thanks to John Bleeke from Washington University for all his work and outstanding guidance in planning and hosting the meeting.

Undergraduate Research Symposium in the Biological and Psychological Sciences Symposium, University of Chicago, November 11-12, 2016



Symposium participants after the Friday evening dinner at the LaQuinta Inn

The 2016 Biological and Psychological Sciences meeting at the University of Chicago had an attendance of 84 students and 16 faculty with 59 poster and 17 podium presentations. The arrangements for this meeting were different than previous years in that the attendees stayed at the recently renovated LaQuinta Inn in Hyde Park instead of the downtown Holiday Inn. The short drive to the University and the comfortable banquet facilities were appreciated. The Friday evening banquet featured an entertaining and informative presentation by University of Chicago Professor Jack Gilbert regarding the research being carried out by The Microbiome Center partnership. In addition to presenting exciting science, he encouraged students to think big in terms of their career goals.



Students sharing their research during a poster session in the BSLC mezzanine

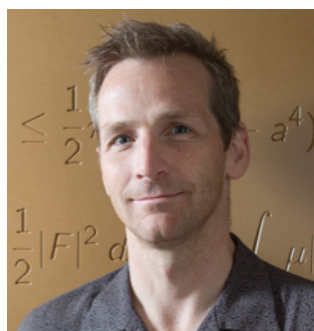
The Saturday morning program at the Biological Sciences Learning Center (BSCL) included two parallel sessions for oral presentations followed by a poster session. After a buffet lunch in the BSCL lobby participants could attend a discussion with a panel of University of Chicago graduate students about Applying to Graduate School or a discussion on Careers in a Liberal Arts Institution presented by a panel

of faculty from Consortium Institutions. The afternoon program consisted of two poster sessions with an intervening oral session and concluded at 5:00 PM as most participants picked up their boxed dinners for the trip back to their home institution. Our thanks to Victoria Bolf and Victoria Prince from the University of Chicago for their help in planning the meeting and taking care of the local arrangements.



Student presentation at the University of Chicago Symposium

The 2016 Janet Andersen Lecture Award recipients



*Professor Andrew Beveridge
Department of Mathematics, Statistics and Computer Science
Macalester College*

“Andrew has established himself as an internationally known mathematician in the field of probabilistic combinatorics. He works on problems in finite Markov chains, random graph models, and competitive/cooperative games. He is uniquely positioned in our department to teach in all four areas of our curriculum: math, applied math, statistics, and computer science. His leading role in the field is evidenced by the quantity and quality of publications he has written, the standard of the journals in which he has published, the fame of some of his coauthors, his invitations to talk at research conferences, and by his refereeing work.”



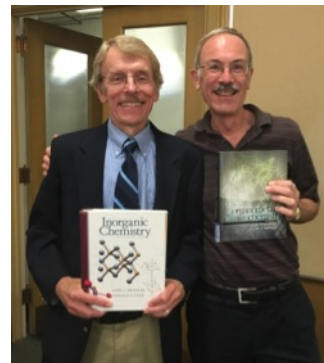
*Professor Maria Burnatowska-Hledin
Departments of Chemistry and Biology
Hope College*

Maria is recognized for her longstanding success in teaching, research, involving students in research, and innovative curriculum design. Dr. Hledin has directed Hope College’s interdisciplinary Biochemistry Molecular Biology (BMB) major since its inception in 2009 and led its accreditation by the American Society of Biochemistry and Molecular Biology (ASBMB) in 2014. Her research program has supported an average of 6-8 students per year and has garnered over \$1.3 million in external grant funding. It is particularly noteworthy that all of Dr. Hledin’s Hope College publications have included students as co-authors.

Nominations for the 2017 Janet Andersen Lecture Award are due March 31, 2017. Contact your campus representative or Consortium Director for information (midstatesdirector@gmail.com).

Short Term Consultations and Seminar Speakers

- Approved visit by Helen Hoyt (Knox College) to meet with Jared Lewis (University of Chicago). The purpose of the consultation is to both develop a research plan for a future proposal to the National Science Foundation Research Opportunity Award (NSF-ROA) Program and for Hoyt to interact as a visiting scientist with graduate students and faculty at The University of Chicago on research and teaching at a primarily undergraduate institution (PUI).
- Approved visit by Prabal Adhikari (St. Olaf College) to meet with Professors Case and Willig-Onwuachi (Grinnell College). The purpose of the consultation is to get further background regarding a student co-authored paper that investigates the possibility of more exotic vortices involving the condensation of neutral pions as it relates to the low-energy theory of quantum chromodynamics (QCD).
- “Adventures and Opportunities in College Chemistry Teaching” presented by Professor Gary Miessler (St. Olaf College) at Washington University – St. Louis.
- “Form and Function of Teaching Undergraduate Light and Electron Microscopy” presented by Professor Robert Finton (Luther College) at Carthage College.
- “On the Road (with ARTEMIS): An Exploratory Air Quality Study in the Bakken” presented by Professor Deanna Donohue (Lawrence University) at Carthage College.
- “Insulin signaling in *C. elegans*” presented by Dr. Stephanie Fretham (Luther College) at Carthage College.



Gary Miessler and John Bleeke
at WUSL seminar

Upcoming Events 2017

- *March 31*, nominations for Janet Andersen Award due. See the Consortium website for additional information (<http://mathsciconsortium.org>).
- *April 21-22*, Executive Committee Meeting, Aloft Chicago O’Hare. This one day program is when all the Consortium campus representatives meet in person to review the current activities and programs, propose new ideas, and discuss the financial status. If you would like to provide input on how the Consortium operates or suggest future directions, we look forward to hearing from you. Contact your campus representative or the Director (midstatesdirector@gmail.com).
- *July 14 – 16*, Workshop for Early Career Success, Gustavus Adolphus College. A description of the program, which is open to early career faculty, post-docs and graduate students, is on the MCMS homepage (<http://mathsciconsortium.org>). Registration for the meeting will be open in mid-April.
- *November 3-4*, The Physical Sciences, Mathematics, and Computer Science Undergraduate Research Symposium will be held at the University of Chicago. Registration will open in late August.
- *November 10-11*, The Biological and Psychological Sciences Undergraduate Research Symposium will be held at Washington University in St. Louis. Registration will open in late August.