

Consortium Connections

Connecting campuses to promote excellence in science and mathematics

Founded by the Pew Charitable Trusts

September 11, 2008

Vol. 3 No.1



Even though fall officially begins on September 22nd this year, most of us associate the beginning of fall with the start of the school year and for most of us, classes are underway and students are already taking the first round of exams. Fall is a beautiful season with lots of delicious produce, sunny but cool afternoons of college football and all the colorful leaves! We hope you can make time to enjoy some of the pleasures of this season. Fall is a busy time for the Consortium too as we host our two annual Undergraduate Research Symposia. Please take a few minutes to read through this newsletter that details our recent and upcoming meetings and where appropriate, discuss these opportunities with your students and colleagues.

Welcome Gustavus Adolphus College

This fall we welcome Gustavus Adolphus College as our fourteenth Consortium member. Gustavus Adolphus is a private liberal arts college with 2,600 undergraduate students set high on a hill in St. Peter, Minnesota. Gustavus has a full compliment of undergraduate science and math programs including neuroscience, geography and nursing. Gustavus was one of two Minnesota colleges awarded a 2008 HHMI grant. Four new faculty from Gustavus attended this summer's New Faculty Workshop, and we look forward to faculty and students from Gustavus participating in more Consortium programs this year.

Undergraduate Research Symposia



Undergraduate students are invited to present their research projects and results to peers from the 14 MCMS member campuses at either of the 2008 Undergraduate Research Symposia. Students are invited to present about their research projects in a 15 minute oral or poster presentation. In 2007, more than 150 students and faculty participated in these meetings including Jessica Hellyer from Colorado College who is shown here discussing her research with Professor Fermin Capitan-Vallvey from Grinnell at the Symposium at the University of Chicago. These meetings are wonderful opportunities to meet peers from many colleges, learn a little bit about graduate school in science and math, visit campuses with vibrant, diverse and nationally recognized research programs and have fun in St.

Louis and Chicago!

The Consortium covers all the expenses for up to 8 students and 2 faculty members from each campus to attend each meeting. Students are encouraged to discuss registering for the meeting with their research advisor. As part of the online registration, students will need to submit an abstract as an MSWord file (200 word maximum).

Online registration and abstract submission will be open until Wednesday October 1st at www.mathsciconsortium.org.

Biological Sciences and Psychology The University of Chicago, October 31-November 2

On Halloween weekend The University of Chicago is hosting the Biological Sciences and Psychology Symposium. Students are welcome to make their research presentations on subjects ranging from ecology, zoology, biochemistry, medicine, and molecular biology, to behavioral and cognitive science, pharmacology and neuroscience. On Saturday afternoon students and faculty will have several hours to explore one of the many attractions on Chicago's waterfront including the Museum of Science and Industry, the Shedd Aquarium, the Field Museum of Natural History or the Adler Planetarium.

***Physical Sciences, Mathematics and Computer Science* at Washington University, October 31-November 2**

On the same weekend, Washington University in St. Louis is hosting the Physical Sciences, Mathematics and Computer Science Symposium. This meeting will feature student presentations on topics including computer science, environmental science, chemistry, physics, mathematics and geology. On Saturday afternoon students and faculty will have several hours to explore one of St. Louis's many attractions including the zoo, the Gateway Arch or the Art Museum.

Reports on Recent Events

2008 New Faculty Workshop: Strategic Planning for Early Career Success

Hope College and Marigold Lodge, Holland, MI July 11-13, 2008



What do you get when you mix 20 first and second year faculty, postdocs and senior graduate students with great food, good conversation, and good humor on a beautiful summer weekend? You get the Consortium's New Faculty Workshop – well at least all but the beautiful summer weather. Despite the pouring down rain on Saturday morning, there was plenty of sunny optimism and good humor about early career planning and sharing strategies for surviving and thriving in the first few years of an academic position. The meeting started Friday

evening with dinner and the first brainstorming session at the Haworth Center on Hope's campus. On Saturday the group met at Marigold Lodge, an old estate on the shores of Lake Macatawa not far from Hope's campus. The group photo and cluster photo shown here were taken on the Marigold Lodge grounds. Participants used a combination of time alone for reflection, conversation with partners and small clusters and large group discussions to develop individualized strategic plans for the next 2-4 years. Meeting facilitators Jeanne Narum and Karen Nordell Pearson challenged the participants to be ambitious about their goals, strategies and actions and help their colleagues refine their plans through constructive criticism.

Like last year, one of the most fun parts of the workshop was a group of skits on Sunday morning. The set of five creative and hilarious skits were based on teaching, research, service, alternative careers and balancing life and work. The skit on service featured the three little pigs and the big bad tenure wolf. In the skit about alternative

careers, Dr. Whiz, the host of a cable access TV show, interviewed a patent lawyer, a science journalist and a motivational speaker who all use science in their work. The final skit was a chaotic look at the life of a new mom who is also a tenure-track faculty member. She is bombarded with questions from her scatter-brained husband who can't find his keys, her young son who is constantly whining to go swimming and her research student who calls to report a major flood in the lab – yikes! The fun of the skits was a good reminder about the importance of humor and laughter especially in the often-stressful early pre-tenure years.



At the end of the morning on Sunday, participants prepared posters of their Action Agendas and shared them with members of their clusters. Participants were reminded to post their action plans someplace in their offices to remind them of their goals, strategies and actions! Thanks to all the participants for a productive and enjoyable weekend. Thanks to Allison Harvey and Marlene Field for their help planning and executing the successful workshop.

For more pictures from the meeting, visit the [2008 NFW archive](#).



The Impact of Changes in the American Chemical Society (ACS) Guidelines, Colorado College, June 27-29

The department of Chemistry and Biochemistry at Colorado College hosted a two-day conference on the impact of recent changes in the American Chemical Society guidelines on the chemistry curricula on our campuses. The meeting was organized and hosted at Colorado College by Drs. Neena Grover, Harold Jones and Murphy Brasuel. Twenty three faculty from seven Consortium campuses attended the meeting.

Dr. Ron Estler from Fort Lewis College in Durango, Colorado who is a member of the ACS Committee on Professional Training presented two talks and facilitated discussions on the interpretations of the new guidelines throughout the weekend. Participants brainstormed ways that the changes in the guidelines might present new opportunities for changes in course offerings and the structure of the chemistry major. Since several campuses sent teams of two or more faculty members, these teams took time during the weekend to develop ideas tailored to the chemistry programs on their campuses.

2008 Janet Andersen Lecture Award Winners

Congratulations to Professors Jeff Wilkerson and David Hall who were selected as the 2008 Janet Andersen Lecture Award winners. Jeff Wilkerson is a physicist at Luther College and David Hall is a biochemist at Lawrence University. As part of the award, each of them will present a keynote address at this fall's Undergraduate Research Symposia. To read more about Jeff and David and why they were selected as the inaugural Janet Andersen Award winners, visit this link [Janet Andersen Award Winners](#).



Visits supported by the MCMS Speaker Series, Speaker Consultant Exchange or Short Term Consultation Programs

Spring, Summer and Fall 2008

Reminder: you can apply for these funds to support visits during the 2008-09 academic year!

visit: www.mathsciconsortium.org



Speaker Series

On April 17, 2008, Jodi Enos-Berlage in the Biology Department at Luther College hosted Maria-Luisa Alegre from the Department of Medicine at The University of Chicago. Dr. Alegre presented a seminar entitled "The immune system and graft transplantation."

Dr. Erin Flater from Luther College hosted fellow physicist Dr. Brian Borovsky from St. Olaf College on April 23, 2008. Brian presented the seminar "The Origins of Friction: Studying molecular monolayers as lubricants for high-speed microscopic machines" to students and faculty in Decorah.

Dr. David Thompson from Lawrence University hosted fellow chemist Dr. Wallace Fu from Hope College on April 25th, 2008. Wally presented a seminar to Lawrence students and faculty entitled "Industrial Green Chemistry -- the history of Quinapril (Accupril) Process Development."

Short Term Consultations

In March of 2008, Dr. John Fredrick visited St. Olaf College for two days of discussion with students and faculty on campus sustainability issues and green building design. Dr. Fredrick presented a seminar and met with students in an environmental science course on sustainability. Dr. Wes Pearson hosted John's visit.

On May 3, Augustana faculty members Ian Harrington and Erin Stoffel and three Augustana students attended the MidBrains Undergraduate Neuroscience Conference hosted by Dr. Eric Wiertelak at Macalester College. Two Augustana students presented their research results at the meeting and the faculty spent time in conversation with faculty from other schools related to Augustana's desire to create a neuroscience program.

Dr. Jennifer Hampton and two of her summer research students in the Physics Department at Hope College visited Dr. Erin Flater's Atomic Force Microscopy Lab at Luther College from June 29th - July 2, 2008. Jenny and her students were using Erin's AFM instrumentation to characterize the morphology of electrodeposited films of metal oxides.

Drs. Keith Kuwata and Brent Krueger from the Chemistry Departments of Macalester and Hope Colleges will meet twice during the fall and winter of 2008 to work on a proposal to the NSF-MRI program to support the purchase of a new computer system for the Midwest Undergraduate Computational Chemistry Consortium (MU3C).

Comments from the Director



Friends and Colleagues,

Thanks again for your support and participation in the variety of Consortium sponsored programs these past few months. Even though it was summer and most of you were busy doing summer research with undergraduate and graduate students, nearly 50 faculty participated in workshops and short term consultations over the summer. We appreciate you taking the time to participate in these meetings and we hope you found them valuable. Please encourage your students to attend and present about their research at this fall's Undergraduate Research Symposia. They are well-organized meetings that most of the undergraduates find very worthwhile and fun.

On a personal note, my husband Mark and I welcomed a baby girl, Anna Elizabeth, into our family on May 28th. She is a delight and we're enjoying her smiles and 'talking' despite being a bit sleep-deprived. So...if you find any typos in this newsletter, please chalk them up to my being a somewhat sleepy new mom!

If you've got ideas for how we can strengthen the MCMS, please give me a call at 616-395-7217 or send an email to nordellpearson@hope.edu.

Enjoy the fall !

Karen Nordell Pearson

Augustana College • Beloit College • Carthage College • Colorado College • Grinnell College •
Gustavus Adolphus • Hope College • Knox College
Lawrence University • Luther College • Macalester College • St. Olaf College • University of Chicago •
Washington University