Consortium Connections

Connecting campuses to promote excellence in science and mathematics

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The grading frenzy is probably in full swing all over your campuses. Good luck getting your finals graded and grades submitted, not to mention getting your Holiday shopping and baking finished. We hope it's been a productive and enjoyable fall semester for you and your students. The Consortium had a great fall and we're looking forward to a busy spring with two faculty development workshops on the schedule and other campus visits and programs in the works. Please take a few minutes to read through this newlestter and discuss these opportunities with your colleagues.

Recap: Undergraduate Research Symposia

Biological Sciences and Psychology at Washington University, November 2-4



More than 85 students and faculty participated in the weekend Symposium that featured 46 student research poster presentations and 17 student research oral presentations. The group from Augustana College including Professors Mary Ellen Biggin and Pam Trotter with students Deidre Leist, Matthew Pautz, M. Zak Rajput, Bret VanDeWoestyne and James Walsh are pictured here during one of the poster sessions.

Dr. Pamela Trotter, Associate Professor & Robert W. Beart Chair in Chemistry from Augustana College in Rock Island, IL presented one of the plenary lectures on Saturday entitled "Beyond Bread and Beer: Using Yeast to Probe Metabolism and Compartmentation in Cells". On Sunday morning, Dr.

Ursula Goodenough, Professor of Biology at Washington University in St. Louis presented the second plenary lecture entitled "The Evolution of Sex." Both presentations stimulated many questions from students and faculty. Thanks Pam and Ursula!

Besides the presentations and conversations about research, participants had fun competing in teams of 5 or 6 to build the tallest tower out of noodles and marshmallows, attended lunchtime discussions about grad school and careers and explored the fantastic City Museum on Saturday evening.

On the evaluations, many students commented on how exciting it was to share their research with their peers and talk with graduate students at Wash U. One student wrote "I was excited to be able to attend and I think it's been an important experience for me as a future graduate student. Being able to share your work is exciting and fun."

Thanks to John Russell, Jennifer Lawler-Brown, Andrew Richards and Marlene Field for their superb planning and weekend organization.

For more pictures from the meeting, visit www.mathsciconsortium.org.

Physical Sciences and Mathematics at The University of Chicago, November 9-11

The weekend was attended by 96 students and faculty with 32 oral presentations by students about their research



and 39 poster presentations by students about their research. Like Jessica Hellyer from Colorado College pictured here with Professor Fermin Capitan-Vallvey from Grinnell, many students and faculty dug into the details of their research projects during the oral and poster sessions.

Dr. John Fredrick, Professor of Geophysical Sciences and Associate Dean for the Division of the Physical Sciences, gave a plenary lecture on Friday evening entitled "Urban Heat Islands and Microclimates." On Sunday morning, Dr. Ka Yee Lee, an Associate Professor of Chemistry, presented the second plenary lecture entitled, "The Science of Breathing." Both presentations featured research being done currently at the

University of Chicago and were followed by many questions from students and faculty in the audience. Thanks John and Ka Yee for very stimulating talks!

Besides the presentations and conversations about research, participants had fun touring some labs on campus or taking a general campus tour, attending lunchtime discussions about grad school and careers and exploring millennium park (pictured on the right) in downtown Chicago during their free time on Saturday evening.

Students and faculty were positive in their evaluations of the weekend. One student wrote "The quality of the presentations was a lot higher than that of any undergraduate conference I had previously attended."

Thanks to John Fredrick, Sheila Naughten, Kurt Hendrickson and Marlene Field for their participation, planning, and technology assistance throughout the weekend meeting. Thanks to Professor George Lisensky from Beloit for being the unofficial photographer for the weekend.



For more pictures from the meeting, visit www.mathsciconsortium.org.

Upcoming Workshops: Winter and Spring 2008



Re-energize, re-imagine and re-invest: A weekend of reflection and planning for mid-career faculty, Macalester College, February 22-24

Now tenured, promoted and with years of experience—what next?

Mid-career science and mathematics faculty have a wonderful opportunity to step back and consider what next, to figure out how to balance new demands for leadership at the departmental and campus level with emerging interests in your research lab. Or, perhaps you've put ideas about experimenting with new pedagogies on the back-burner while preparing your tenure dossier, and think now is the time to bring them forward. Maintaining (and enhancing) personal creativity can be a challenge at any career stage, but one of the 'rules' is to take time to reflect on what you really like to do and on how you can start doing more of that and less of what you do not like to do. If this is an opportunity you would like to explore we invite you to attend a workshop hosted by the

Midstates Consortium at Macalester College in St. Paul, MN from February 22-24, 2008. This weekend will be time to reflect, to re-energize, re-image and re-invest, working alone and with colleagues.

This workshop is designed for associate-level faculty, who want to re-energize, re-imagine and re-invest in their academic life. Jeanne Narum, Director of the Independent Colleges Office (ICO) and Project Kaleidoscope (PKAL) will facilitate this meeting with Karen Nordell Pearson the Consortium's Director. Jeanne and Karen teamed up for a similar career-planning and visioning workshop for early-career faculty this past summer. Macalester Chemistry Professor Paul Fischer is our host at Macalester and has arranged for us to use Mac's Alumni House for our meetings.

Participants will have a pre-workshop assignment that sets the stage for discussions about shaping a future, discussions that will lead to the development of individual 'strategic professional plans' for the next two-three years.

Online registration will open in early January on our website, <u>www.mathsciconsortium.org</u>. A tentative schedule and other details will be on the website too. Participants will be hosted in their own rooms at the Best Western near Mac's campus and as always, the costs for attending this meeting including meals, lodging and travel will be covered by the Consortium. Contact your <u>campus representative</u> or <u>Karen Nordell Pearson</u> with questions.



Sharing best practices for serving students and faculty at Science and Math Teaching and Learning Centers, Colorado College, April 18-20

Wanna see Pikes Peak in the spring? Well...here's your chance! Staff members, administrators and faculty involved with Teaching and Learning Centers are all invited to attend a meeting at Colorado College on April 18-20, 2008. Minna Mahlab, the Director of the Grinnell's Science Learning Center, Julie Haurykiewicz, the Director for the Center for Teaching and Learning at Lawrence University and Dr. Mark Morgenstern, the Director of the Quantitative Reasoning Center at Colorado College are conceiving the meeting as an opportunity to discuss common issues on all (or most) of the Consortium's campuses and share best practices, including both 'big-picture' and 'nuts-and-bolts' issues.

The topics for the weekend meeting will likely include:

- practical 'what works' ideas for hiring, training and evaluating student tutors
- communicating with faculty about the services you provide to them and to their students
- publicity for the services you offer to students
- responsiveness to requests from students and faculty about offering new programs or services
- the use of technology in your centers
- faculty and institutional support for the programs you offer i.e. staff, space, \$, visibility
- assessing the impact of T&L centers on student performance in math and science
- helping students with learning disorders such as text anxiety, math phobia, or others

Minna, Julie and Mark are hoping to invite at least one outside speaker, perhaps on the topic of learning disorders as they affect science and math students since these are becoming fairly common and hearing from an expert would be valuable.

Online registration will open in early March on our website, www.mathsciconsortium.org. A tentative schedule and other details will be on the website too. Participants will be hosted in their own rooms at the Antlers Hilton in Colorado Springs within walking distance of CC's campus. The costs for attending this meeting including meals, lodging and travel will be covered by the Consortium. Contact your campus representative or Karen Nordell Pearson with questions.

Update on the Speaker-Consultant Exchange



In case you're wondering what's the status of the Speaker-Consultant Exchange program, don't worry it's still happening. It's just taken us a bit longer to get organized. Three biology, seven chemistry, one computer science, one geology, one math, four physics, three psychology and two geography departments expressed interest. We're working to match schools and speakers for this spring. Karen will be sending Consortium representatives and department chairs from interested departments a note about the program in the next few weeks. Thanks for your patience. For more information about this program, visit the SCE webpage.

Comments from the Director

Friends and Colleagues,

This fall's Undergraduate Research Symposia were exciting weekends full of new experiences for many students. Thanks to each of the faculty members who spent one of their fall weekend's attending the meetings with students. Thanks also to the research mentors who worked hard to help the students prepare for their presentations. Thanks again to all those who helped plan and facilitate the weekend meetings!

We've got several exciting workshops happening this spring and we'd love to see many faculty, staff and administrators participate in these meetings. Even if neither of these meetings is of interest to you, please encourage your colleagues to attend.

I've been in discussions with several groups of faculty on our campuses as well as those in other Consortia, including the ACM and the GLCA, about new programs we might offer to students and faculty. This spring I'll be forming an advisory committee to design a series of programs including workshops, collaborative research and teaching projects and student-led projects related to Greening our Campuses. If you're interested in being part of this Green Advisory Group, please let me know.

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 winter break.

Karen Nordell Pearson

Augustana College • Beloit College • Carthage College • Colorado College • Grinnell College • Hope College • Knox College

Lawrence University • Luther College • Macalester College • St. Olaf College • University of Chicago • Washington University