# **Consortium Connections**

Connecting campuses to promote excellence in science and mathematics

Founded by the Pew Charitable Trusts

Vol. 3 No.2

November 11, 2008



The days are shorter and colder, but this time of year boasts great colors and fall produce including squash, apples, pumpkins, beets and much more! I suspect it's been a busy fall for you with the usual commitments plus the election and the economy. In the midst of your pre-Thanksgiving preparations, please take a few minutes a read about some of the recent and upcoming Consortium activities.

# **Undergraduate Research Symposia**

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



On Halloween weekend 88 students and faculty attended the Biological Sciences and Psychology Symposium hosted at The University of Chicago. The weekend began with a dinner at the DoubleTree Hotel and Lawrence's Associate Professor David Hall's presentation of the first Janet Andersen Award Lecture. Dr. Dave, as his students call him, presented a lecture entitled "Understanding the mechanisms of rhinovirus-induced inflammation."

Starting on Saturday morning and running the rest of the weekend, 25 students made

oral presentations and 42 students presented posters detailing their research results. James Antony from Lawrence is shown on the left describing his research on the diagnosis of glaucoma. On the right is Shanna Dell from Beloit describing her poster entitled "A Gender Study on ADCC activity against HIV" to Hart Ford-Hodges from Grinnell.

On Saturday afternoon students and faculty spent several hours exploring the Museum of Science and Industry, the Shedd Aquarium, or the Field Museum.

"I was impressed by the organization, the student engagement, and the opportunities for interaction" said one faculty member who attended the meeting for the first time. The student comments about the weekend were very positive too and taking the afternoon on Saturday to visit the museums was a hit! Thanks to Marlene Field, Nancy Schwartz, Melissa Lindberg and Parag Shah for all their work planning and hosting the meeting.

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

On the same weekend, about 300 miles south in St. Louis, 78 students and faculty were gathered for the Physical Sciences, Mathematics and Computer Science Symposium hosted at Washington University. Participants gathered on Friday evening at the Sheraton Hotel in Clayton for dinner and a panel presentation by two Wash U faculty members, Mark Conradi and Jen Smith, and graduate students Melissae Stuart and Andy Womack. The four panelists shared their personal stories and advice about graduate school.

Starting early on Saturday morning and finishing on Sunday morning, 28 students made oral presentations in four sessions, grouped roughly by discipline. Shown here



telling Belaynesh Feleke from Lawrence about her chemistry research.

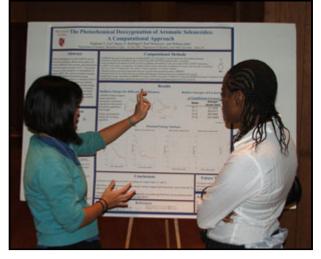
On Saturday morning, Wash U Professor Ray Arvidson from the Department of Earth and Planetary Sciences gave a lecture entitled "Exploring the Surface of Mars." On Sunday morning, Physics Professor Jeff Wilkerson from Luther College gave his Janet Andersen Award Lecture entitled "At Home in the Milky Way." Both lectures were out of this world!

Thanks to our hosts John Bleeke and Angela Potter from Washington University. The meeting was well organized, the food was delicious and the weather



on the left are Dan Mellema and Brad Abell from Gustavus Adolphus College presenting on their work with microcantilevers. After lunch on Saturday, students and faculty took several hours on the unseasonably warm afternoon to explore some of St. Louis's many attractions including the zoo, the Gateway Arch or the Art Museum.

On Saturday evening, after a wonderful banquet in Holmes Lounge, 28 other students presented posters in a very lively session that went until after 9pm. At the right is Stephanie Lee from Macalester



was beautiful. Thanks for taking care of at least two out of those three! :-) Thanks also to Marlene Field for help organizing and planning the Symposium.

As noted above, Dave Hall (Lawrence) and Jeff Wilkerson (Luther) were selected last spring as the 2008 Janet Andersen Lecture Award winners and both of them presented lectures at the two 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.



#### Accepting Nominations for the 2009 Janet Andersen Lecture Award

Nominations are now being gathered for the 2009 Janet Andersen Lecture Award. Review the <u>award guidelines</u> and submit a letter of nomination to <u>your campus representative</u>. In addition, please ask the nominee to provide a recent CV to accompany your letter. Nomination letters are welcome from students, faculty and staff members. The 2009 award winners will be selected at the Executive Committee Meeting in April or May of 2009.



## Calling all Neuroscientists: We'd like your input!

**Proposal Description:** Washington University faculty member Jeff Zachs approached the Consortium with an idea for an undergraduate Cognitive, Computational & Systems Neuroscience (CCSN) research partnership. Jeff has been a leader of Washington University's interdisciplinary graduate training pathway in CCSN that serves students in Biomedical Engineering, Neuroscience, and Psychology (http://dbbs.wustl.edu/ccsn). As an extension of the

existing CCSN program, Jeff and Consortium Director Pearson are proposing to add intensive team-oriented research in CCSN for undergraduates from Midstates Consortium member campuses. We propose to admit as fellows an equal number of Washington University undergraduate students and undergraduates from other Midstates campuses, based on a competitive application process. Each Washington University undergraduate fellow will be matched with a "visiting" fellow and the pair will be placed in a laboratory affiliated with the CCSN graduate training program. Students will be paid a stipend and will reside in Saint Louis for 8-10 weeks, during which they will participate in an intensive team research project. Research projects will be supervised by the lab director and will involve collaborations with graduate students and postdoctoral fellows.

This program would be funded partly with Consortium money for the first summer or two. After this period, the program directors would seek external support to continue funding the partnerships.

Please read the full (but only 2 page) <u>proposal</u> and send your feedback to your campus's Consortium representative, or to <u>Karen Nordell Pearson</u>. Specifically, we'd like to know if you think students on your campus would be interested in this partnership program?

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

#### Fall and Winter 2008

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

visit:http://www.mathsciconsortium.org/



#### **Speaker Visits**

On September 29th, Dan McGehee from the University of Chicago visited Carthage College at the invitation of Dan Choffnes. Dr. McGehee presented the seminar "Cellular Mechanisms of Nicotine Addiction" at the Natural Sciences Colloquium to an audience of approximately 50 students and 10 faculty from many disciplines.

On October 20-21, David Bunde from Knox College hosted Marge Coahran from Grinnell. Marge, a computer scientist presented the seminar "Sketch-based Bargello Quilt Design" to students and faculty in the Computer Science Department at Knox.

### **Short Term Consultations**

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).

Hope physicist Steve Remillard will be taking samples of superconducting microstrips to Washington University for characterization using instrumentation including a Scanning Electron Microscope (SEM) with Drs. Ty Daulton and Bill Buhro. Steve and several undergraduates will be taking two trips to Wash U in 2009.

### **Comments from the Director**



Friends and Colleagues,

My husband Mark and I traveled with 5 students and our 5-month old daughter in a big Hope van to St. Louis for the Physical Sciences, Mathematics and Computer Science URS. It was a very long drive - but the students were fun and we enjoyed lively conversations much of the way. As always, I was impressed with the array of high-quality research presented by the undergraduates. I also enjoyed meeting several new faculty members and seeing many returning faculty members who spend one of their fall weekends supporting the students! Nearly 125 students have now participated in one of the most important traditions of science and research, namely, publically presenting their research for peer-review. Congratulations to all the students and faculty who came to these meetings to share their work.

We are open to ideas from you about workshops we might plan to enhance your teaching and research. So, please contact me if you've got an idea for a workshop. Remember, Marlene and I can provide a great deal of the planning and hosting support if you've got the idea for a Consortium-sponsored workshop.

I look forward to hearing your ideas...please give me a call at 616-395-7217 or send an email to <u>nordellpearson@hope.edu</u>.

#### Happy Thanksgiving, Karen Nordell Pearson

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

Washington University