

SENCER E-News, October 3, 2008

Visiting Mathematician Appointed for 2008-2009 Academic Year

Cindy Kaus, associate professor of mathematics at Metropolitan State University, will serve as the SENCER Visiting Mathematician for the next academic year. Cindy will focus on extending the applications of civic engagement in mathematics courses and creating a community of practice of mathematicians using these methods. She will also make several presentations at disciplinary meetings, consult on campus, and participate in SENCER events on the integration of the SENCER approach into math. To learn more about her plans and presentations over the next year, please click [here](#).

NCSCE Appoints Duschl Senior Fellow for Education

Richard Duschl, the Waterbury Chair in Secondary Education for the Pennsylvania State University, will lead NCSCE and SENCER's teacher preparation initiatives.

Prior to joining Penn State, Richard held the chair of science education at King's College London and served on the faculties of Rutgers, Vanderbilt and the University of Pittsburgh. He recently served as chair of the National Research Council research synthesis report *Taking Science to School: Learning and Teaching Science in Grades K-8* (National Academies Press, 2007). With Richard Grandy, he co-edited *Teaching Scientific Inquiry: Implications for Research and Implementation* (SensePublishers, 2008). His research focuses on establishing epistemic learning environments and on the role of students' inquiry and argumentation processes. Richard has twice received the JRST Award (1989; 2003) for the outstanding research article published in the *Journal of Research in Science Teaching*. He also served for more than a decade as editor of the research journal *Science Education* and editor for TC Press "Ways of Knowing in Science and Math" book series.

For SENCER, Richard has participated in several symposia on teacher preparation. At the most recent SENCER Summer Institute, he co-facilitated a colloquium on "SENCERizing K-8 Teacher Education: Effectively Coordinating Concepts and Practices across STEM and Education Courses" and a plenary session, "4+1 Pillars of Undergraduate STEM Education."

Labov Named Woodrow Wilson Visiting Fellow

Jay Labov, senior advisor for education and communications for the National Academy of Sciences and the National Research Council, was recently named a Woodrow Wilson Visiting Fellow by The Council of Independent Colleges. The program allows liberal arts colleges to bring people with diverse areas of expertise to campus for up to four days to interact with faculty, students, and the general public. Colleges are encouraged to visit the Council's website and explore the many profiles of Fellows and request residencies.

Jay has been a member of the SENCER Summer Institute faculty for many years, offering concurrent sessions and workshops on topics such as introductory STEM courses and teaching and communicating controversial topics in undergraduate courses. At SSI 2008, Jay also gave a plenary session, "4+1 Pillars of Undergraduate STEM Education."

SCI-West Announces Fall Symposium

SCI-West will host a symposium on "Teaching Science and Engineering through Civic Engagement" on October 25th at the Benson Memorial Center at Santa Clara University. The symposium will feature a special emphasis on water and the West but will also feature presentations by SENCER Leadership Fellows, a keynote on robotic systems and water resources by Christopher Kitts (SCU), roundtable discussions, and workshops on assessment and course design.

Participation is free but registration is required. If interested, please send your contact information to Amy Shachter (ashachter@scu.edu) by October 17th. Participants are also invited to submit a poster proposal. Proposals are due by October 10th, and applicants will be notified by

October 13th. Please visit the SCI-West website for more information on the symposium, to learn how to submit a poster proposal, and to view a complete symposium schedule.

WVU Awarded Noyce Grant

SENCER alumni from West Virginia University have been awarded a grant from the Robert Noyce Teacher Scholarship Program. The Noyce Program, part of the National Science Foundation, supports programs that encourage students and professionals to become K-12 math and science teachers in high-need school districts. The Teaching Excellence at College for High Achievement in West Virginia (TEACH-WV) will recruit freshman and sophomore science, technology, engineering, and mathematics majors to become secondary STEM teachers. To learn more about WVU's plan, please click [here](#).

NCSCE Invites Nominations and Applications for SENCER Leadership Fellows

Following the appointment of a strong inaugural class of Fellows this summer, we welcome all interested educators to apply for the next round of Fellowships. During the 18-month terms, Fellows work on projects of their choice to improve STEM education on campus and serve as mentors for colleagues new to the SENCER approach. Applications and nominations can be submitted easily through the [SENCER website](#), and are due by October 20, 2008.

Foundation Announces Student Design Contest

The Hydrogen Education Foundation Design Contest asks teams of university-level students to design hydrogen applications for real-world usage. The 2008-2009 Contest focuses on the challenge of creating a green student center powered by hydrogen for the State University of New York – Farmington, using a budget of \$28 million. Abstracts from interested teams must be submitted to info@hydrogencontest.org by October 24, 2008. Please visit <http://www.hydrogencontest.org/rules.asp> or contact the email address above for more information on the contest.

Upcoming Workshop

"The Role of Metacognition in Teaching Geoscience" will take place on November 19-21 at Carleton College and will explore the following questions:

- (1) What do we mean by metacognition?
- (2) How do we teach metacognition?
- (3) Can geoscience learning be enhanced by utilization of specific metacognitive skills?
- (4) How do we evaluate student learning of metacognitive skills?

Applications to participate in the workshop are due October 10th. For more information, please visit <http://serc.carleton.edu/NAGTWorkshops/metacognition/workshop08/index.html>.

Call for Nominations

Magna Publications and McGraw-Hill have created an award to recognize an exemplary scholarly article on teaching and learning. The award along with a \$1,000 stipend will be presented to the article's author or authors at the 2009 Teaching Professor Conference, June 5-7 in Washington, D.C. Please consult <http://www.teachingprofessor.com/conference/teachingandlearningaward.html> for specific information on eligibility and how to submit a published work for consideration.