National Conference on Undergraduate Science Teaching

A national conference on college level teaching of science is convening at the University of Alabama's Bryant Conference Center in Tuscaloosa on June 21 and 22, 2012. The conference, "Research Based Undergraduate Science Teaching: Investigating Reform in Classrooms: National conference II" is being sponsored by the National Study of Education in Undergraduate Science (NSEUS) a project funded by the National Science Foundation and The University of Alabama Office of Research on Teaching in the Disciplines. The conference focuses on best practices and reforms in teaching undergraduate science and their impact on student learning outcomes. This highly interactive meeting combines presentations with time to interact and network with researchers. Nationally recognized researchers in the field of science education will serve as Keynote Speakers:

Lawrence B. Flick, Dean, College of Education, and Professor, Science and Mathematics Education in Partnership with College of Science, Oregon State University

"Reform or Revolution? Undergraduate Science Education in Diverse Contexts for Learning"

David Hammer, Professor, Departments of Education and Physics and Astronomy, Tufts University
"The Challenges and Possibilities of Meaningful Assessment in Large lecture Introductory
Physics"

John Dantzler, Educational Research, The University of Alabama

"Researching Reform: Designing studies to understand the impact of reform methods in undergraduate science classrooms"

Presentations and panels include researchers from universities and colleges in over 25 states and participation in discussion and work groups by all conference attendees from over 40 universities. Presentation topic examples are An Ambitious Plan in Undergraduate Science STEM Education, Combating 'One and Done': Maximizing the Impact of an Undergraduate Science Course, Learning Science Through Undergraduate Research: Inquiry and the Scientific Endeavor, Cooking From Scratch: Development of Inquiry Based Activities for the General Microbiology Laboratory, Alignment of High School and College STEM Curricula, A Curriculum Experiment in Climate Change Education Using an Integrated Approach of Content Knowledge Instruction and Student-Driven Research, Year 2, Teaching Undergraduate Physics Through a Research-based Clicker Methodology, How do Summer Undergraduate Research Experiences Compare to Other Models?, and A Research-Based Transformation of Purdue's Modern Mechanics Course.

Highlighted in the conference will be the results of the six-year NSEUS national study investigating undergraduate science classrooms. The goal of the National Study of Education in Undergraduate Science (NSEUS) project was to examine the impact of reformed undergraduate entry-level science courses that differ from traditional courses. Site visits at 20 colleges and universities as well as over 90 K-12 schools were conducted by a team of investigators from the University of Alabama, Kansas State University, and San Diego State University.

Information regarding the conference or submission of a proposal for presentation is available on the NSEUS web site http://nseus.org. Conference committee co-chairs are Dennis Sunal, University of Alabama; Dean Zollman, Kansas State University; Cheryl Mason, San Diego State University; and Cynthia Sunal, University of Alabama. For more information contact Dennis Sunal at dwsunal@bama.ua.edu.



