

# Agenda

## WEDNESDAY, JANUARY 26, 2011

6:00pm – 10:00pm     **Registration and Poster Setup**  
*Grand Registration/Grand Ballroom*

## THURSDAY, JANUARY 27, 2011

7:00am – 7:45am     **Registration and Continental Breakfast**  
*Grand Registration/Grand Ballroom*

**Poster Setup**  
*Grand Ballroom*

7:45am – 8:45am     **Welcome and Opening Plenary Session**  
*Renaissance Ballroom*

**Moderator:**  
**Donald L. Millard**, Lead Program  
Director, NSF TUES Program

**Speakers:**  
**Shirley M. Malcom**, Director, AAAS EHR  
Programs

**Linda L. Slakey**, Division Director, NSF  
DUE

8:45am – 9:00am     **Break**

9:00am – 10:30am     **Poster Session I**  
*Grand Ballroom*

10:30am – 10:45am     **Break**

10:45am – Noon     **PI Led Workshops - Session A**

### **ASSESSMENT/EVALUATION**

**A1** Assessing Student Achievement/  
Outcomes - I  
*Congressional A*

**A2** Evaluating Conceptual Understanding  
*Meeting Room 2*

**A3** Using Technology to Help Assess  
Student Writing  
*Meeting Room 6*

**A4** Using Wikis for Assessment and  
Collaboration  
*Meeting Room 7*

### **COLLABORATION**

**A5** Overcoming the Challenges of  
Multi-Institutional TUES Projects  
*Meeting Room 3*

### **DISSEMINATION**

**A6** Achieving Widespread Adoption of  
Technology-Based Materials: From  
Initial Designs to Dissemination  
*Congressional B*

### **FACULTY DEVELOPMENT**

**A7** Developing Faculty Learning  
Communities  
*Meeting Room 12*

**A8** Faculty Empowerment Through  
Professional Development  
*Meeting Room 8*

### **MATERIALS DEVELOPMENT**

**A9** Designing for Diversity: Being  
Attentive to the Needs and Resources  
of Underrepresented Groups in STEM  
*Meeting Room 9*

**A10** Inquiry-based Learning Materials  
*Meeting Room 13*

**A11** Using Computer Visualizations to  
Improve Learning  
*Meeting Room 5*

### **PEDAGOGY**

**A12** Affective Behavior and  
Motivation II  
*Meeting Room 15*

**A13** Identifying and Adapting  
Pedagogies for Learning Across  
Disciplines  
*Meeting Room 10*

**A14** Incorporating Writing into STEM  
Courses and Surviving It  
*Meeting Room 11*

**A15** Teaching Essential Scientific Skills  
for Citizens and Scientists  
*Meeting Room 4*

### **TECHNOLOGY-ENHANCED LEARNING**

**A16** Challenges of Interdisciplinary  
Education in the Continuous Col-  
laborative Computational Cloud (C4)  
*Meeting Room 16*

	<p><b>A17</b> Integrating Simulations into STEM Education <i>Meeting Room 17</i></p> <p><b>A18</b> Leveraging Technology to Support Disciplinary Reasoning <i>Meeting Room 18</i></p> <p><b>A19</b> Remote Instrumentation <i>Meeting Room 19</i></p> <p><b>A20</b> Successes and Pitfalls with Computer-based Learning Modules <i>Meeting Room 14</i></p>	<p><b>B4</b> Methods for Assessment and Evaluation <i>Meeting Room 4</i></p> <p><b>COLLABORATION</b></p> <p><b>B5</b> Building Bridges Between 2-Year and 4-Year Institutions <i>Meeting Room 3</i></p> <p><b>DISSEMINATION</b></p> <p><b>B6</b> Designing and Implementing Dissemination That Will Have an Impact on Faculty Practice <i>Congressional A</i></p> <p><b>B7</b> From Dissemination to Sustainability <i>Meeting Room 19</i></p> <p><b>FACULTY DEVELOPMENT</b></p> <p><b>B8</b> Overcoming Faculty Resistance to Educational Changes <i>Meeting Room 12</i></p> <p><b>KEY CHALLENGES</b></p> <p><b>B9</b> Qualitative Methods: Getting Serious About Understanding Student Learning <i>Meeting Room 5</i></p> <p><b>MATERIALS DEVELOPMENT</b></p> <p><b>B10</b> Curricula, Materials and Assessments for Inquiry-Based Pre-Service Teacher Courses that Help Connect Content and Pedagogy <i>Meeting Room 11</i></p> <p><b>B11</b> Developing Modular Curricula-I <i>Meeting Room 15</i></p> <p><b>B12</b> Teaching Outside the Box: New Tools for New Insights <i>Meeting Room 6</i></p> <p><b>PEDAGOGY</b></p> <p><b>B13</b> Effective Use of Information Technology <i>Meeting Room 14</i></p> <p><b>B14</b> Implementing Problem-Based and Collaborative Learning <i>Congressional B</i></p>
Noon – 1:30pm	<p><b>Lunch and Speaker</b> <i>Renaissance Ballroom</i></p> <p><b>Moderator:</b> <b>Don L. Millard</b>, Lead Program Director, NSF TUES Program</p> <p><b>Topic and Speaker:</b> <i>Measuring Impact in STEM ED - Are They Thinking Like Experts?</i> <b>Carl E. Wieman</b>, Associate Director for Science, White House Office of Science and Technology Policy (OSTP)</p>	
1:30pm – 1:45pm	<b>Break</b>	
1:45pm – 3:15pm	<b>Poster Session II</b> <i>Grand Ballroom</i>	
3:15pm – 3:30pm	<b>Break</b>	
3:30pm – 4:45pm	<p><b>PI Led Workshops - Session B</b></p> <p><b>ASSESSMENT/EVALUATION</b></p> <p><b>B1</b> Assessing Professional Skills Related to Critical Thinking and Problem Solving <i>Meeting Room 13</i></p> <p><b>B2</b> Assessing Student Achievement/Outcomes - II <i>Meeting Room 2</i></p> <p><b>B3</b> Integration and Evaluation Issues with Computer Security Related Projects <i>Meeting Room 7</i></p>	

# Agenda

**B15** Team Learning, Evaluation, and  
Community Building  
*Meeting Room 8*

**TECHNOLOGY-ENHANCED LEARNING**

**B16** Developing Reliable Software  
*Meeting Room 16*

**B17** Education through Games  
*Meeting Room 9*

**B18** Remote Laboratory  
*Meeting Room 10*

**B19** The Odd Couple: Physicists and  
Sociologists? Dissemination Strategies  
for Cutting-Edge Teaching and Learning  
Materials  
*Meeting Room 17*

**B20** Using Video to Support Learning  
*Meeting Room 18*

4:45pm – 5:00pm

**Break**

5:00pm – 6:15pm

**PD Led Workshops - Session A  
Topical Sessions**

Evaluation Strategies  
*Congressional A*

Other NSF Funding Opportunities  
*Congressional B*

Transitioning from Type 1 to Type 2  
Projects  
*Congressional C*

Project Sustainability  
*Meeting Rooms 8 and 9*

Dissemination Strategies  
*Meeting Rooms 12, 13, and 14*

Preparing Annual and Final Reports  
*Meeting Room 16*

6:15pm – 7:45pm

**Poster Session III**  
*Grand Ballroom*

7:15pm – 9:00pm

**Poster Session III Continues**  
*Grand Ballroom*

**Reception**  
*Grand Ballroom Foyer*

9:00pm – 10:00pm

**Remove Posters**  
**Reception Continues**

## FRIDAY, JANUARY 28, 2011

7:30am – 8:00am

**Continental Breakfast**

8:00am – 9:15am

**PI Led Workshops - Session C**

**ASSESSMENT/EVALUATION**

**C1** Assessing Service Learning and  
Community-based Research  
*Meeting Room 17*

**C2** Learning Assessment for Small and  
Large Curriculum Development  
Projects  
*Meeting Room 15*

**C3** Practical Evaluation for CCLI  
Programs  
*Congressional A*

**C4** Using Assessment Evidence to  
Guide our Actions: Practicing with Real  
Results  
*Meeting Room 10*

**COLLABORATION**

**C5** Building a Community of  
Researchers  
*Meeting Room 9*

**DISSEMINATION**

**C6** Leveraging Partners and Resources  
for Dissemination  
*Meeting Room 8*

**FACULTY DEVELOPMENT**

**C7** Disciplinary Communities for Peer-  
Based Faculty Development  
*Meeting Room 19*

**C8** Professional Development Pro-  
grams for Future STEM Faculty  
*Meeting Room 5*

**KEY CHALLENGES**

**C9** Growing Your Project for National  
Impact  
*Congressional B*

## MATERIALS DEVELOPMENT

**C10** Impacting K-12: Dissemination That Makes a Difference  
*Meeting Room 11*

**C11** Modeling and Simulation in the Biological Sciences  
*Meeting Room 16*

**C12** Undergraduate Project Laboratory Classes  
*Meeting Room 6*

## PEDAGOGY

**C13** Engaging Science Students with Video, Research, and Real World Applications  
*Meeting Room 18*

**C14** How Instructors Influence What Students Think, Believe, and Feel About the Learning of Science  
*Meeting Room 13*

**C15** Using Inquiry-Based/Hands-on Methods  
*Meeting Room 2*

## TECHNOLOGY-ENHANCED LEARNING

**C16** Adapting Computation into Undergraduate STEM Curricula  
*Meeting Room 4*

**C17** Automated Grading  
*Meeting Room 14*

**C18** Developing and Using Applets and Other Computer Resources for STEM Education  
*Meeting Room 7*

**C19** Online Activities in the Large Lecture Environment: Thoughts, Tactics and Strategies  
*Meeting Room 12*

**C20** Technology Enhanced Collaborative Learning  
*Meeting Room 3*

9:15am – 9:30am

**Break**

9:30am – 10:45am

**PD Led Workshops - Session B  
STEM Disciplines**

Biological Sciences  
*Meeting Rooms 12, 13, and 14*

Chemistry  
*Meeting Rooms 8 and 9*

Computer Science  
*Congressional C*

Engineering  
*Congressional A and B*

Geological Sciences  
*Meeting Room 11*

Interdisciplinary  
*Meeting Room 16*

Mathematics  
*Meeting Room 10*

Physics or Astronomy  
*Meeting Room 15*

Research or Assessment of Research  
*Meeting Room 18*

Social Sciences  
*Meeting Room 17*

10:45am – 11:00am

**Break**

11:00am – Noon

**Summary Plenary Session**  
*Renaissance Ballroom*

**Speaker:**  
**Myles G. Boylan**, NSF Program Director

Noon

**Adjourn**