





## AAU Undergraduate STEM Education Initiative Network Conference

October 13-14, 2015

Hosted by the Center for Integrative Research on Cognition, Learning, and Education and the Association of American Universities

Location: The Charles F. Knight Executive Education & Conference Center, Corner of Throop Drive & Snowy Way Drive

## **TUESDAY, October 13**

8:00, 8:15, 8:30 a.m. Shuttles from Clayton Plaza Hotel

8:30 – 9:00 a.m.

Registration

Outside Room 200

Continental breakfast at the Knight Center and Clayton Plaza Hotel for all conference participants

9:00 – 9:30 a.m.

Welcome

Room 200

Provost Holden Thorp, PhD, Washington University in St. Louis

The following presentations and roundtables are structured around the key elements in AAU's Framework for Systemic Change in Undergraduate STEM Teaching and Learning.

9:30 - 10:15 a.m.

**Pedagogy** 

Room 200

<u>Chemical Thinking: A Story of Curricular and Instructional Transformation</u>
John Pollard, Associate Professor of Practice in the Department of Chemistry and Biochemistry, University of Arizona

<u>Understanding and Measuring Project Ownership in Undergraduate Inquiry Based</u> Laboratory Courses

David I. Hanauer, Lead Assessment Coordinator of the SEA-PHAGES Program, Hatfull Laboratory, University of Pittsburgh & Professor of Applied Linguistics, Indiana University of Pennsylvania

10:15 - 10:30 a.m.

**Break & Transition to Roundtables** 

10:30 – 11:30 a.m.

Roundtables

Room 200, 211, 220, 222, 240, 245, 255, & Boardroom

- Articulated Learning Goals / Curriculum Redesign
- Educational Practice
- Assessments
- Access

**11:30 a.m.** – **1:00 p.m.** *Main Dining Room 3<sup>rd</sup> floor* 

Lunch

## **TUESDAY, October 13**

1:00 – 1:45 p.m.

**Scaffolding** 

Room 200

**Learning Spaces** 

Jeanne Narum, Principal, Learning Spaces Collaboratory

The Role of Teaching and Learning Centers

Jennifer Frederick, Executive Director, Center for Teaching and Learning, Yale University

1:45 – 2:00 p.m.

**Break & Transition to Roundtables** 

2:00 – 3:00 p.m.

**Roundtables** 

Room 200, 211, 220, 222, 240, 245, 255, & Boardroom

- Provide faculty professional development
- Easily accessible resources
- Collect and share data on program performance
- Align future facilities planning

3:00 – 3:15 p.m.

**Break & Transition** 

3:15 – 4:00 p.m.

**Cultural Change** 

Room 200

Excellence in Research and Teaching: Career Pathway Models

Diane O'Dowd, HHMI Professor; Vice Provost, Academic Personnel, University of California, Irvine

**Endowed Chairs in STEM Education** 

Gina Frey, Florence E. Moog Professor of STEM Education, Co-Director, CIRCLE and Executive Director, The Teaching Center, Washington University

4:00 – 4:15 p.m.

**Break & Transition to Roundtables** 

4:15 – 5:15 p.m.

Roundtables

Room 200, 211, 220, 222, 240, 245, 255, & Boardroom

- Leadership commitment
- Establish strong measures of teaching excellence
- Align incentives with the expectation of teaching excellence

5:15 – 5:30 p.m.

Main Dining Room, 3<sup>rd</sup> floor

Break and Set-up for Poster Session

5:30 – 7:30 p.m.

Main Dining Room, 3<sup>rd</sup> floor

**Networking Reception & Poster Session** 

To allow everyone to have the opportunity to speak with poster authors, we ask that individuals with odd numbered posters staff them from 5:30-6:15 p.m. People presenting even numbered posters, please staff them from 6:15-7:00 p.m. From 7:00-7:30 p.m., all posters are available for display.

7:15, 7:30, 7:45 p.m.

Shuttles returning to Clayton Plaza Hotel

## WEDNESDAY, October 13

7:30, 7:45, 8:00 a.m. Shuttles from Clayton Plaza Hotel

**8:00 – 8:30 a.m.** *Outside Room 200* 

**Breakfast** 

8:30 - 8:45 a.m.

**Opening Remarks** 

Room 200

Emily Miller, Director, AAU Undergraduate STEM Education Initiative Josh Trapani, Associate Vice President for Research and Policy Analysis, Association of American Universities

8:45 - 10:00 a.m.

**Workshop Time: Measuring Progress** 

Room 200, 220,340

Participants are asked to come prepared to discuss information, data sources, and analytical tools that are currently being used on their campus to inform decision making and measure progress toward systemic change in undergraduate STEM

- Indicators of sustained change at the university
- Department performance indicators
- Effective teaching evaluation approaches

10:00 - 10:15 a.m.

**Break and Transition** 

10:15 - 11:30 a.m.

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Thinking Bigger – The Science Education Initiative: Results from a Large Scale Experiment in Transforming Teaching throughout Multiple Science Departments

Dr. Carl Wieman, Professor of Physics and of the Graduate School of Education at Stanford University

11:30 – 12:00 p.m.

Room 200

Room 200

**Future Directions of AAU Undergraduate STEM Education Initiative** 

Emily Miller, Director, AAU Undergraduate STEM Education Initiative Tobin Smith, Vice President for Policy, Association of American Universities

12:00 – 1:00 p.m.

Main Dining Room, 3<sup>rd</sup> floor

**Closing Lunch**