MSU STEM EDUCATION ALLIANCE MEETING
December 14, 2016
11:30 a.m.-1:30 p.m.
International Center, Room Spartan B&C

Overview

The December STEM Education Alliance Winter Meeting that will feature *Lightning Talks*: short, engaging presentations about STEM education research and other efforts to improve STEM education at MSU. During this meeting, multiple presenters will describe new ideas, new projects, or updates to existing projects in a relatively short period of time. The goal is to improve communication, start conversations, and facilitate collaborations across campus.

Agenda

11:20 a.m. Registration begins, Lunch available

11:40 a.m. Welcome and Overview
MSU Student Success Program Update
Sekhar Chivukula, Associate Provost for Undergraduate Education, Dean of Undergraduate Studies

11:55 p.m. Lightning Talks Session 1: Quantitative and Computational Skills Across the Disciplines

- Exploring Unprompted Quantitative Reasoning
  Luke Tunstall, Graduate Student, Program in Mathematics Education (PRIME)
- Figure the Figures Out
  Bei Zhang, Academic Specialist, Biomedical and Laboratory Diagnostics Program
- Projects and Practices in Physics (P^3)
  Paul Irving, Assistant Professor, Department of Physics
- DATA Lab - Design-Focused Transformation of Introductory Physics Labs
  Bill Martinez, Research Associate, Department of Physics
- On-demand Instruction in Quantitative Fields
  Denis A. Proshlyakov, Assistant Professor, Department of Chemistry

12:40 p.m. Lightning Talks Session 2: Improving Learning and Enhancing Success for STEM Students

- Flipping the Pre-lab
  Jennifer Taylor, Academic Specialist, Neuroscience Program
- On-line Student Discussions: Successes and Failure
  Casey Henley, Academic Specialist, Neuroscience Program
- Beyond Multiple Choice: Leveraging Technology to Assess Student Thinking in STEM
  Mark Urban-Lurain, Associate Professor, CREATE for STEM Institute
- Maximizing the Learning Outcomes of Demonstrations via Embedded Iterative Prediction
  Brittland DeKorver, Academic Specialist, Lyman Briggs College
- Grading by Contract to Improve Performance of Struggling Students
  Terri McElhinny, Assistant Professor, Department of Integrative Biology

1:25 p.m. Wrap-up and Announcements

Mark your calendar for the next STEM Education Alliance Meeting:
Friday, May 5, 2017
11:30 a.m.-1:30 p.m.
International Center, Room Spartan B&C