ASBMB-RCN Workshop: Assessment of Students’ Reasoning with Core Concepts and Visualizations in Biochemistry

Purdue University Saturday, November 3, 2012
9:00 AM – 5:00 PM

Workshop Team:
- Hal White, Co-PI on ASBMB-RCN grant, Director, HHMI Undergraduate Program, Department of Chemistry and Biochemistry, University of Delaware
- Trevor Anderson, Visualization in Biochemistry Education (VIBE) Research Group, Divisions of Chemical Education and Biochemistry, Department of Chemistry, Purdue University
- Nancy Pelaez, Purdue International Biology Education Research Group (PIBERG), Department of Biological Sciences, Purdue University
- Ellis Bell, PI on ASBMB-RCN grant, Laboratory for Structural Biology, Biophysics & Bioinformatics, Department of Chemistry: Biochemistry & Molecular Biology Program, University of Richmond
- Cheryl Bailey, Senior Program Officer, HHMI

Preliminary Meeting Agenda:

9:00 am - 9:30 am Arrival Check-In (Coffee and tea provided)

9:30 am - 10:00 am Introduction and Overview of the ASBMB-RCN grant - Hal White

10:00 am - 10:45 am Keynote “The Design and Mixed Mode Validation of Assessment for Students' Reasoning and Visualization in Biochemistry” - Trevor Anderson

10:45 am - 11:45 am Workshop - Training and practice on validation procedures using sample questions with a range of typical student responses provided - facilitated by Trevor Anderson and Nancy Pelaez

11:45 am - 12:30 pm Lunch (provided)

12:30 pm - 2:00 pm Workshop and reporting out in small groups, share 2-3 questions plus answers of your own that should be focused on assessing (revealing) students' difficulties with ways of reasoning and visualizing of biochemistry concepts - facilitated by Hal White and Trevor Anderson

2:00 pm - 2:30 pm Panel discussion - "Critical friends" report their observations and raise "critical questions" about their validation of the assessment questions - Ellis Bell, Cheryl Bailey, and Nancy Pelaez

2:30 pm – 2:45 pm Coffee and tea break

2:45 – 4:00 pm Workshop In a "shredding" exercise, small groups make the questions from another group even better - facilitated by Hal White and Trevor Anderson

4:00 pm - 4:40 pm Final Report Out and Discussion - facilitated by Hal White and Ellis Bell

4:40 pm - 5:00 pm Planning for the future and Wrap-up, Goals, Net-working, Assignments, Deadlines, Meeting Assessment - facilitated by Cheryl Bailey and Ellis Bell

5:00 pm Workshop Concludes. Participants may continue discussion over dinner.

6:00 pm No-host Dinner (Venue to be decided)