Transforming Undergraduate Education in the Molecular Life Sciences
July 20 – 23 • University of Tampa

Meeting rooms and event space:
- **Board Room**, Vaughn Center, 9th Floor
- **Café**, Vaughn Center, 1st Floor
- **Crescent Club**, Vaughn Center, 9th Floor
- **Grand Salon**, Plant Hall
- **Reeves Theater**, Vaughn Center, 2nd Floor

Thursday, July 20

10:00 a.m. – 6:00 p.m. **Meeting Registration Check-In and Program Pick-Up**
(Meeting Desk, Vaughn Center, 9th Floor Lobby)

3:00 p.m. - 3:50 p.m. **Reeves Theater**
Welcome and Meeting Introduction
2017 Symposium organizers

4:00 p.m. – 5:00 p.m. **Reeves Theater**
Keynote Speaker: Moving from Surviving to Thriving: Transforming the First Year Science Experience (I)
April Hill, *University of Richmond*

5:00 p.m. - 5:30 p.m. Coffee break (outside Reeves Theater)

5:30 p.m. - 6:30 p.m. **Reeves Theater**
Individual goal setting
2017 Symposium organizers

6:30 p.m. - 9:00 p.m. **Crescent Club**
Dinner
* Sponsored by The University of Tampa, College of Natural and Health Sciences

Friday, July 21

7:30 a.m. - 9:00 a.m. Breakfast (Café – display meeting badge)

9:00 a.m. - 10:00 a.m. **Reeves Theater**
**Plenary Session I: High Impact Instructional Strategies (12)**
Drew Sieg, *Young Harris College*

10:00 a.m. – 10:30 a.m. **Reeves Theater**
Coffee break (outside Reeves Theater)
* Sponsored by Bio-Rad Laboratories

10:30 a.m. - 11:30 a.m. **Reeves Theater**
**Platform Session I: CURES: Building communities to support and sustain protein biochemistry research in the teaching laboratory (11)**
Joe Provost, *University of San Diego*
Michael Pikaart, *Hope College*
Friday, July 21 cont.

11:30 a.m. - 12:30 p.m. Lunch (Café – display meeting badge)

1:00 p.m. - 2:15 p.m.
Board Room
Platform Session II: Teaching Students to Think... with models (7)
Tim Herman, Milwaukee School of Engineering

2:15 p.m. - 2:30 p.m.
Coffee break (9th Floor, President’s Conference Room)
*Sponsored by Bio-Rad Laboratories

2:30 p.m. - 3:45 p.m.
Board Room
Concurrent session: Authentic Citizen Science Research –
The Student Lionfish Project: Facilitating Student Understanding of
Methods and Data presented by Bio-Rad (3)
Sherri Andrews, Bio-Rad Laboratories

2:30 p.m. - 3:45 p.m.
Reeves Theater
Concurrent session: What is the ASBMB Student Chapters all about?
(13)
Jim Lawrence, University of Wisconsin
Regina Stevens-Truss, Kalamazoo College

3:45 p.m. - 7:00 p.m.
Free-time to relax or explore
Shuttle information (to/from Columbia Restaurant/Ybor City) available on Friday
afternoon at the Meeting Desk, 9th Floor Lobby

7:00 p.m. - 10:00 p.m. Dinner & Flamenco!
Columbia Restaurant, 2117 E. 7th Ave., (Ybor City location) Tampa, FL 33605
Shuttle schedule available on Friday afternoon at the Meeting Desk, 9th Floor
Lobby
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Saturday, July 22

7:30 a.m. - 9:00 a.m. Breakfast (Café – display meeting badge)

9:00 a.m. – 10:00 a.m.
Reeves Theater Plenary Session II: Formative Assessment: A Key Ingredient for Student Learning (2)
Tracie Addy, Yale Center for Teaching and Learning

9:00 a.m. – 10:00 a.m.
Reeves Theater Plenary Session II: Formative Assessment: A Key Ingredient for Student Learning (2)
Tracie Addy, Yale Center for Teaching and Learning

10:00 a.m. – 10:30 a.m. Coffee break (outside Reeves Theater)
* Sponsored by Wiley

10:30 a.m. – 11:45 a.m.
Reeves Theater Concurrent session: Teaching graduate students how to teach (9)
Doreen Leopold, University of Minnesota

10:30 a.m. – 11:45 a.m.
Board Room Concurrent session: Assessing for Durable Learning: A SALG Workshop (5)
Stephen Carroll, Santa Clara University

12:00 p.m. - 1:00 p.m. Lunch (Café – display meeting badge)

1:15 p.m. – 2:30 p.m.
Board Room Concurrent session: Teaching molecular visualization - A workshop to develop competencies for facilitating bio-molecular visual literacy (6)
Diane Dean, University of St. Joseph’s
Daniel Dries, Juniata College

1:15 p.m. – 2:30 p.m.
Reeves Theater Concurrent session: What’s up at NSF? Funding Opportunities for Undergraduate Education (4)
Ellen Carpenter, National Science Foundation

2:30 p.m.– 2:45 p.m. Coffee break (9th Floor, President’s Conference Room)
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Saturday, July 22 cont.

2:45 p.m. - 4:00 p.m.
Reeves Theater  Concurrent session: Bridging Community College to 4-year college/university transitions
Jessica Schrader, Eastern Florida State College
James Wysong, Hillsborough Community College - Dale Mabry Campus

2:45 p.m. - 4:00 p.m.
Board Room  Concurrent session: Seven Weird Tricks to Getting the Most From and Writing a Textbook (10)
Joe Provost, University of San Diego
John Tansey, Otterbein University

4:30 p.m.-6:00 p.m.
Grand Salon  Poster Session and Reception
* Sponsored by The University of Tampa,
Department of Chemistry, Biochemistry and Physics &
Department of Biology

7:00 p.m. - 9:00 p.m.
Crescent Club  Dinner

Sunday, July 23

7:30 a.m. - 9:00 a.m.  Breakfast (Café – display meeting badge)
9:30 a.m. - 11:30 a.m.
Reeves Theater  General Session and Action Plan Discussion
2017 Symposium organizers

12:00 p.m. – 1:00 p.m.
Crescent Club  Box lunches/ Departures
### Poster session and reception

**Saturday, July 22, 4:30 p.m. – 6:00 p.m.**
**Grand Salon in Plant Hall, 1st Floor**

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<td>1</td>
<td>14</td>
<td>Zahilyn</td>
<td>Roche</td>
<td>Miami Univ., Oxford, OH</td>
<td>Investigating Protein Structure using Molecular Graphics and Modeling Software: An Experiment for Biochemistry Students</td>
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<td>2</td>
<td>15</td>
<td>Jessica</td>
<td>Bell</td>
<td>Univ. of San Diego</td>
<td>Teaching the art of scientific communication in the context of a Biochemistry laboratory course</td>
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<td>Martin</td>
<td>Buckley</td>
<td>Slippery Rock Univ.</td>
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<td>Barbara</td>
<td>Cascella</td>
<td>Washington Univ. in St. Louis</td>
<td>The Biotech Explorers Pathway: Tackling Scientific Challenges with a Teams-Focused Interdisciplinary Curriculum</td>
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<td>5</td>
<td>18</td>
<td>Diane</td>
<td>Dean</td>
<td>Univ. of Saint Joseph</td>
<td>Analysis of the ASBMB certification exam student’s responses indicates a significant proportion of the students have not mastered the free energy threshold concept</td>
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<td>6</td>
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<td>Nitin</td>
<td>Jain</td>
<td>Univ. of Tennessee</td>
<td>Use of process analogies to enhance student learning</td>
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<td>Timothy</td>
<td>Larson</td>
<td>Virginia Tech</td>
<td>Laboratory module for teaching fundamental recombinant DNA technology while investigating mechanisms used for regulation of bacterial transcription and translation.</td>
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<td>8</td>
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<td>Betsy</td>
<td>Leverett</td>
<td>Univ. of the Incarnate Word</td>
<td>Microalgae in the Undergraduate Biochemistry Laboratory</td>
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<td>9</td>
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<td>Judith</td>
<td>Levine</td>
<td>Goucher College</td>
<td>A Collaborative Program to Enhance the Development of Teaching Skills at the Undergraduate Level Among Graduate Students and Postdoctoral Fellows in the Life Sciences</td>
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<td>23</td>
<td>Paul</td>
<td>March</td>
<td>Emmanuel College</td>
<td>Experimental Biology; an inquiry – based research laboratory class for sophomore biology majors</td>
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## Poster session and reception

**Saturday, July 22, 4:30 p.m. – 6:00 p.m.**  
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<td>Debra</td>
<td>Martin</td>
<td>St. Mary's Univ. of Minnesota</td>
<td>Atrazine inhibition of murine electron transport chain: a guided inquiry-biochemistry laboratory</td>
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<td>11</td>
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<td>Pamela</td>
<td>Mertz</td>
<td>St. Mary's College of Maryland</td>
<td>A Multiweek Tyrosinase Inhibitor Synthesis and Analysis Project: A Capstone Experiment for the Undergraduate Biochemistry Laboratory Course</td>
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<td>12</td>
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<td>Karla</td>
<td>Moriel</td>
<td>Univ. of Texas in El Paso</td>
<td>Cogenerated Dialogues and Research-Teaching Integration in Undergraduate Biochemistry Teaching</td>
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<td>Phuong</td>
<td>Nguyen</td>
<td>Oklahoma State Univ.</td>
<td>Community Action Projects: Applying Biotechnology in the Real World</td>
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<td>Valerie</td>
<td>Olmo</td>
<td>George Mason Univ.</td>
<td>The “mixed-bag”- a year-long approach for undergraduate research</td>
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<td>Marvin</td>
<td>Payne</td>
<td>La Sierra Univ.</td>
<td>Incorporating 3D-printed protein models in teaching structure/function: A simple, low-cost method.</td>
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<td>Mary</td>
<td>Peek</td>
<td>Georgia Institute of Technology</td>
<td>Using Scenarios to Frame Experiments in the Undergraduate Biochemistry Teaching Laboratory</td>
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<td>Supriyo</td>
<td>Ray</td>
<td>Univ. of Texas in El Paso</td>
<td>Authentic Circadian Rhythm Based Research Driven Courses (RDCs) as an Early Intervention to Promote Student Success in STEM Research</td>
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<td>Norbert</td>
<td>Reich</td>
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<td>Active learning in a large format one-year Biochemistry series</td>
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<td>SciTrek: Improving 7th and 8th grade students’ understanding of science</td>
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<td>36</td>
<td>Melissa</td>
<td>Rowland-Goldsmith</td>
<td>Chapman Univ.</td>
<td>Approaches in Raising Social Awareness in Undergraduate Biochemistry and Molecular Biology Courses.</td>
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<td>William</td>
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<td>Univ. of Central Florida</td>
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<td>John</td>
<td>Shabb</td>
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<td>Interpreting the Okazaki experiment: An active learning dive into the mechanism of DNA replication</td>
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<td>Sue</td>
<td>Wick</td>
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<td>The Promoting Active Learning and Mentoring (PALM) Research Coordination Network</td>
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<td>Joshua</td>
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<td>Using Yeast to Make Scientists: A Six-Week Student-Driven Research Project for the Cell Biology Laboratory</td>
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<td>Amy</td>
<td>Springer</td>
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<td>Using the teaching laboratory to explore comparative studies of malate dehydrogenase isoforms in trypanosomes</td>
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<td>Evelyn</td>
<td>Swain</td>
<td>Presbyterian College</td>
<td>Use of Compact/Semi-Spacefilling Molecular Models in Biochemistry I Course</td>
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<td>Uma</td>
<td>Swamy</td>
<td>Florida International Univ.</td>
<td>Transforming the Biochemistry experience using active learning and other student centered teaching strategies</td>
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<td>Cassidy</td>
<td>Terrell</td>
<td>Univ. of Minnesota</td>
<td>Seeing and Knowing: Assessing Visual Literacy and Structure-Function Using Card Sorting Activities in Undergraduate Biochemistry</td>
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<td>Ken</td>
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<td>Univ. of Central Florida</td>
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<td>Sonia</td>
<td>Underwood</td>
<td>Florida International Univ.</td>
<td>Use of evidence to inform instructional transformation: An investigation into student understanding of structure-property relationships</td>
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<td>46</td>
<td>Melanie</td>
<td>Van Stry</td>
<td>Lane College</td>
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<td>Jessica</td>
<td>Warns</td>
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<td>Instructor and Learner Behaviors in a Medical School Classroom Designed for Active Learning</td>
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