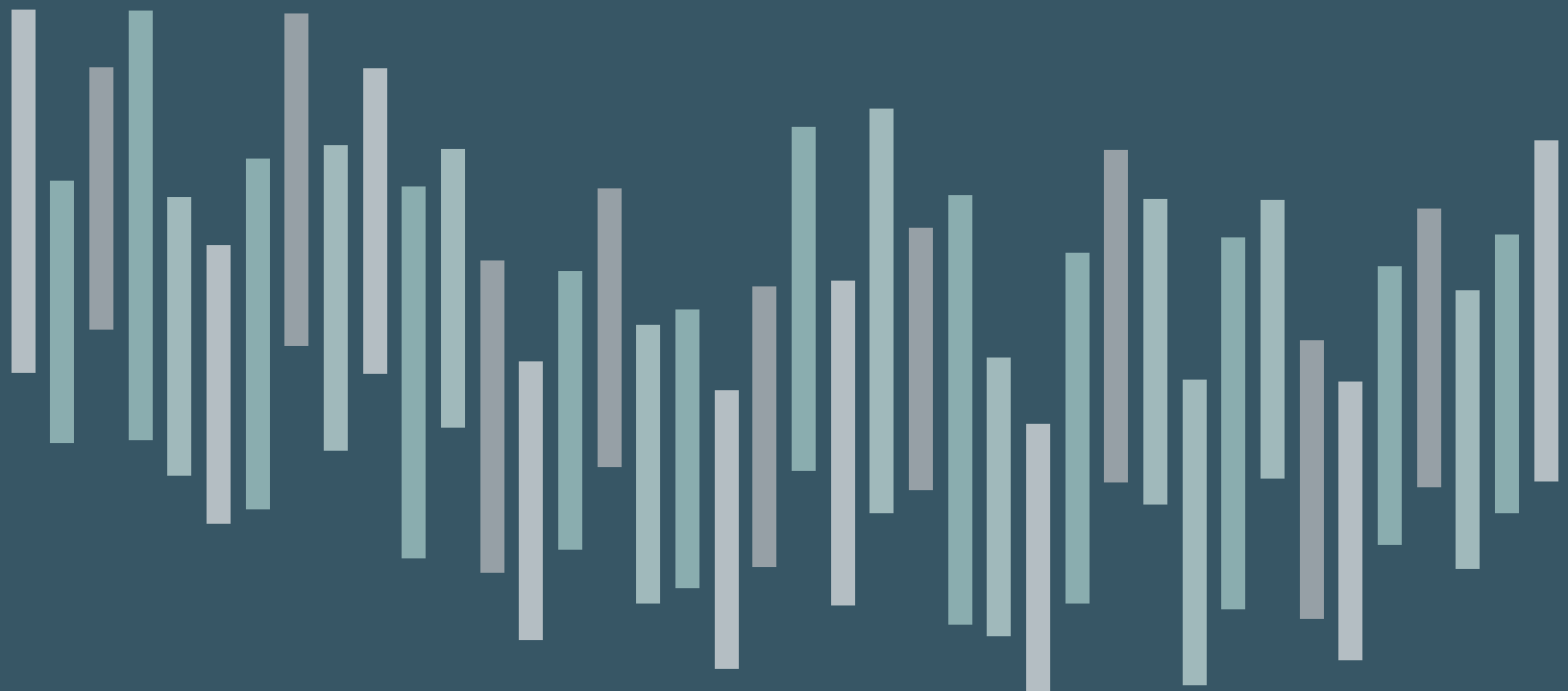


# THURSDAY

NOV 14



## ABBREVIATION KEY

- |                             |                              |
|-----------------------------|------------------------------|
| <b>E:</b> Elementary School | <b>2Y:</b> Two-Year College  |
| <b>MS:</b> Middle School    | <b>4Y:</b> Four-Year College |
| <b>HS:</b> High School      | <b>GA:</b> General Audience  |

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11:00 AM – 3:00 PM

**The Science of Shedd Aquarium Meeting in Lobby for Bus** • Field Trip (SOLD OUT) • GA

Shedd Aquarium has been a Chicago institution since 1930, but it is more than a destination. It is a premier research facility! Dive in to learn more about Shedd Aquarium during this special trip highlighting the science behind the scenes.

11:00 AM – 3:30 PM

**2672 Writing Assessments that are Relevant, Engaging, and Evaluate Outcomes**

**Chicago Ballroom IX** LEVEL 4 • General Biology • Special Workshop (Tickets Required) • HS, 2Y, 4Y

Participants will focus on writing measurable learning objectives, and learn how to create a “fair” test by populating it with multiple-choice items at several cognitive levels that are assessing outcomes equitably.

Peggy Brickman, University of Georgia, Athens, GA; Rebecca Orr, Collin College Plano, TX; Melissa Csikari, HHMI, Chevy Chase, MD



11:30 AM – 2:00 PM

**NABT Board of Directors Meeting & Leaders Lunch**

**Columbus A&B** LEVEL 3 • Invitation Only • Special Program • GA

12:30 PM – 3:30 PM

**2668 Using and Creating BioInteractive Video Case Studies**

**Chicago Ballroom X** LEVEL 4 • Curriculum Development • Special Workshop (Tickets Required) • HS, 2Y, 4Y

HHMI BioInteractive features video case studies that encourage students to think scientifically (formulate hypotheses, construct explanations). Come and learn how to use, customize, or create your own video case study.

Phil Gibson, University of Oklahoma, Norman, OK; Annie Prud'homme-Genereux, Capilano University, North Vancouver, BC, Canada; Laura Bonetta, HHMI Chevy Chase, MD



**2552 Designing Courses to Integrate Student-centered Learning: A Constructivist Workshop for College and High School Instructors**

**Michigan A** LEVEL 2 • Instructional Strategies • Special Workshop (Tickets Required) • HS, 2Y, 4Y

Come explore a high-rigor toolkit of non-lecture instructional strategies for high school and college courses to reimagine your biology instruction based on national standards and authentic science practices.

Stephen Traphagen, Oak Park and River Forest High School, Oak Park, IL; Julie Minbiole, Columbia College Chicago, IL; Jim Lane, Mahtomedi High School, Mahtomedi, MN; Kirstin Milks, Bloomington South High School, Bloomington, IL; Margaret Silliker, DePaul University, Chicago, IL

**2621 Evolution of Data in Biology Education: From Data to Data Science**

**Mississippi** LEVEL 2 • General Biology • Special Workshop (Tickets Required) • HS, 2Y, 4Y

Come explore resources for teaching data science practices, and join a community discussion on the role of data science in biology education and its relationship to the current curriculum.

Kristin Jenkins, BioQUEST, Boyds, MD; Stacey Kiser, Lane Community College, Eugene, OR; Vedham Karpakakunjaram, Montgomery College, Rockville, MD; Brad Williamson, University of Kansas (retired), Lawrence, KS

**2583 American Modeling Teacher Association (AMTA) Presents: Energy in Biology**

**Missouri** LEVEL 2 • General Biology • Special Workshop (Tickets Required) • HS

Energy? Respiration? Conceptual models? Modeling instruction? Why is modeling great for helping students become critical thinkers? How does modeling work in Biology? Join us to learn more!

Tanea Hibler, Brophy College Preparatory, Phoenix, AZ; Clarissa Furlong, South-Western City School District, Grove City, OH; Renee Ashlock, Arizona School for the Arts, Phoenix, AZ

**2441 Using Guided Inquiry to Teach Anatomy and Physiology Core Concepts**

**Ohio** LEVEL 2 • Anatomy & Physiology • Special Workshop (Tickets Required) • HS, 2Y, 4Y

Participants will explore inquiry-based activities addressing anatomy and physiology core concepts. In these activities, students use scientific process skills to develop their understanding of principles such as homeostasis and communication.

Murray Jensen, University of Minnesota, Minneapolis, MN and Kerry Hull, Bishop's University, Sherbrooke, QC, Canada

12:30 PM – 3:30 PM continued

### 2517 Storylining in Biology for Coherent Instruction

**Superior A LEVEL 2** • General Biology • Special Workshop (Tickets Required) • MS, HS, GA

Storylines led by engaging phenomena improve student engagement and understanding of the overarching biological concepts. Using phenomena to anchor instruction and lead instruction are modeled in this workshop.

Jason Crean, Lyons Township High School and Saint Xavier University, Western Springs, IL; Michele Koehler, Riverside-Brookfield High School, Brookfield, IL; Kristin Rademaker and Kathy Van Hoeck, All Species Education Consulting, Woodridge, IL

1:00 PM - 3:30 PM

### 2490 20 in 20: The Next Generation

**Erie LEVEL 2** • General Biology • Special Workshop (Tickets Required) • MS, HS, GA

Come try numerous 20-minute inquiry based activities that are sure to engage and excite your students. You and your students will be glad you did!

Whitney Hagins, MassBioEd/BioTeach, Cambridge, MA

### 2661 AP Biology Course Deep Dive into the Changes, 2019

**Michigan B LEVEL 2** • AP Biology • Special Workshop (Tickets Required) • HS

New and experienced teachers will have the opportunity to gain understanding for use of the CED. Time permitting, teachers will collaborate on working with the CED in the first months.

Catherine Walsh, The College Board, New York, NY

1:30 PM – 3:30 PM continued

### 2660 Practice & Learn – Laboratory Techniques in 10 Minutes!

**Superior B LEVEL 2** • Science Practices • Special Workshop (Tickets Required) • HS, 2Y, GA

Join us for 10 minutes (or more)! Go through a hands-on speed demonstration of popular classroom techniques, learning tips to help you. Take away techniques, classroom resources, and promos.

Crystal Risko, Dhani Biscocho, and Scott Eddleman, Carolina Biological Supply Company, Burlington, NC



### 2446 Developing Resources for Teaching Evolutionary Medicine: Understanding Teachers' Needs

**Arkansas LEVEL 2** • Evolution • Special Workshop (Tickets Required) • HS, 2Y, GA

The International Society for Evolution, Medicine, and Public Health (ISEMP) is developing resources for teaching about evolutionary medicine. This workshop will summarize evolutionary medicine and seek your input about needed resources.

Jay Labov, International Society for Evolution, Medicine, and Public Health, Vienna, VA; Barbara Natterson-Horowitz, University of California Los Angeles and Harvard University, Los Angeles, CA; Robert Perlman, University of Chicago, Chicago, IL

### 2656 NABT Intro Bio Task Force: Advancing the Intro Bio Experience

**Colorado LEVEL 2** • Instructional Strategies • Special Workshop (Tickets Required) • GA

Attendees will help develop a more unified vision for the introductory biology courses that focuses on the improving science practice skills in introductory biology – regardless of content focus (e.g. majors vs. non-majors) – for ALL students.

Anna Hiatt, University of Nebraska-Lincoln and Chair of the NABT Introductory Biology Task Force, Lincoln, NE

2:30 PM – 3:30 PM

### Graduate Student Workshop: Poster Presentation Practice Session

**Gold Coast LEVEL 3** • Invitation Only • Special Program • GA

Graduate and undergraduate students invited! Come meet fellow biology students and receive feedback on presentation skills for the poster competition this Saturday! Refreshments are provided! Information about a special social event for graduate and undergraduate students will also be shared.

Coordinated by the NABT Student Committee

3:00 PM – 3:30 PM

### NABT Open Forum

**Mayfair LEVEL 2** • Committee Meeting • GA

The volunteer leaders and executive director of NABT will lead this interactive discussion highlighting the “state of the association.” Learn more about the projects and programs that support you as a biology educator and share your ideas as well. Everyone is welcome to get more involved with NABT.

Jaclyn Reeves-Pepin, NABT, Colorado Springs, CO

### NABT/BSCS AP & Academy Meet Up

**Sheraton Ballroom I LEVEL 4** • Invitation Only • Special Program • GA

Participants of the NABT/BSCS Teacher Academies are invited to “meet up” and network with other academy leaders and attendees to enjoy a light snack before opening session.

Sponsored by



4:00 PM – 5:30 PM

**GENERAL SESSION SPEAKER**

**Savannah Martin**

See page 8 for biography.

**Says Who? Disrupting the Feedback Loops of Authority and Legitimacy in Scientific Knowledge Production and Science Education**

**Chicago Ballroom VI & VII LEVEL 4** • Special Speaker • GA

Historically, most STEM fields have been unwelcoming to scientists from under-represented communities and they can continue to be unwelcoming to marginalized scholars today. This is largely due to the unaddressed colonial roots of western science and the failure to acknowledge how these foundations result in Eurocentric biases that value western epistemologies above all others.

The Summer Internship for Indigenous Peoples in Genomics (SING) is a week-long program aimed at disrupting the historic underrepresentation of Indigenous scientists and Indigenous ways of knowing in science research. Biological anthropologist and Siletz Tribal member Savannah Martin will discuss her experiences as both a participant and faculty member of SING, how her research has been shaped by exposure to and affirmation of Indigenous epistemologies, and how these experiences have resulted in a more ethical, engaged approach to research and science communication. Additionally, Savannah will provide examples of steps individuals can take to disrupt Eurocentric narratives and hierarchies presently dominating scientific knowledge production and science education, to realize a more inclusive and intellectually robust field for current and future scholars.

5:30 PM – 7:30 PM

**Exhibit Hall Grand Opening Reception**

**Riverwalk A & B LEVEL 2** • Special Event • GA

Welcome to the “windy city” with a special reception in the 2019 NABT Exhibit Hall. Our vendor and partner community will showcase the latest and greatest resources for teaching biology, helping you find those familiar favorites and new innovations.

6:30 PM – 7:30 PM

**NABT Past President's Advisory Council Meeting & Reception**

**President's Suite** • Invitation Only

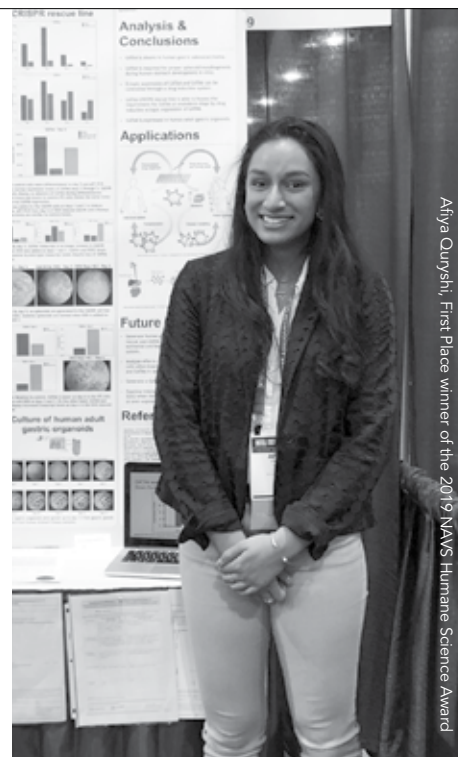
**ARE SCIENCE FAIRS IN YOUR STUDENTS' FUTURE?**

Science fairs allow students to transform classroom knowledge into real-world results. At the National Anti-Vivisection Society, we're excited to see students using their talents to advance science in innovative, humane ways.

Each year at the International Science and Engineering Fair (ISEF), the world's largest pre-college science competition, NAVS presents its Humane Science Award to exceptional students who develop or use non-animal research methodologies for their projects.

When your students take part in local science fairs, encourage them to select projects that advance humane science—maybe they'll be the next recipients of NAVS' Humane Science Award.

**Cash prizes totaling \$17,500 will be awarded.**  
Learn more at [www.NAVS.org/ISEF](http://www.NAVS.org/ISEF).



**National Anti-Vivisection Society** / 53 W. Jackson Blvd., Suite 1552 / Chicago, IL 60604 / [navs.org](http://navs.org)