

THURSDAY



9:00AM–2:30PM

PALM Network Vision and Change Workshop

Essex B & C (4th Floor) • Committee Meeting • Invitation Only

11:30AM–1:30PM

NABT Board of Directors Meeting & Leader Lunch

Dover B & C (3rd Floor) • Committee Meeting • Invitation Only

11:30AM–3:30PM

1536-94538 Interactions in General Education Life Science Courses (IGELS): Introducing the LifeSkills Guide for Undergraduate Faculty

Grand I Ballroom (3rd Floor) • Science Practices • Special Workshop (Tickets Required) • 2Y, 4Y

This interactive, inquiry-based workshop will engage participants in practical activities to help students increase their reasoning and science process skills. Workshop participants will be introduced to a newly developed tool, the “LifeSkills Guide”, based on Vision and Change. IGELS faculty will share learning outcomes, activities, and assessments for undergraduate non-science students’ LifeSkills.

In the second part of the workshop, participants will use the IGELS LifeSkills Guide to refine or revise their own classroom activity. Participants should bring an activity or draft activity to work on.

Bryan Dewsbury, Florida International University, Miami, FL; Sam Donovan, BioQUEST, Pittsburgh, PA; Karla Fuller, Gutmann Community College, New York, NY; Tamar Goulet, University of Mississippi, MS; Gabriela Hammerlinck, University of Florida, Gainesville, FL; Elizabeth Harrison, Kennesaw State University, Kennesaw, GA; John Moore, Taylor University, Upland, IN; Heather Rissler, North Iowa Area Community College, Mason City, IA; Davida Smyth, Texas A&M University-San Antonio, San Antonio, TX; Gordon Uno, University of Oklahoma, Norman, OK

12:30PM–3:00PM

Tour of the Institute of Marine and Environmental Technology (IMET)

Offsite • Field Trip (SOLD OUT) • GA

The Institute of Marine and Environmental Technology (IMET) is a premier marine and environmental sciences research and education facility. The tour of IMET will spotlight some of the institute’s current research, including an exclusive tour of the Aquaculture Research Center (ARC), home to some of the most advanced recirculating aquaculture in the world.

12:30PM–3:30PM

1536-94452 Tackling Misconceptions in Climate Change: The Power of Place-Based Resources

Grand Ballroom II (3rd Floor) • Ecology / Environmental Science / Sustainability • Special Workshop (Tickets Required) • MS

The National Center for Science Education (NCSE) has developed free place-based NGSS-aligned lessons to help overcome student misconceptions about climate change. Come preview these activities, then learn how to create relevant lessons based on local climate issues.

Lin Andrews and Cari S. Herndon, National Center for Science Education, Oakland, CA

12:30PM–3:30PM CONT.

1536-94506 Introducing OpenSciEd Biology!

Grand Ballroom VII (3rd Floor) • General Biology • Special Workshop (Tickets Required) • HS

Learn how OpenSciEd’s materials can help you build science learning experiences anchored in compelling phenomena and in important community and global problems. This session will introduce you to the first unit in the OpenSciEd biology course, providing you with a launch point for teaching OpenSciEd Biology in your classroom. Teachers will put on a “student hat” so they can feel what it’s like to be a student whose thoughts and questions help drive learning forward in the unit. We will then open up and explore the structure of units and discuss the routines and resources to promote equitable science learning in high school.

Kate Henson, University of Colorado Boulder, Boulder, CO

SPECIAL PROGRAMMING PRESENTED BY CAROLINA & PARTNERS

1536-99226 Hands-on Activities from Carolina, HudsonAlpha, and Wisconsin Fast Plants

Grand Ballroom IX (3rd Floor) • General Biology • Special Workshop (Tickets Not Required) • HS

Stop by for a special open pop-up event! Carolina, HudsonAlpha, and Wisconsin Fast Plants showcase new activities and resources with multiple hands-on stations. Be introduced to Carolina’s new *Labskills* series of free instructional content for teaching essential lab skills such as testing pH, micropipetting, measuring volume, and more. HudsonAlpha’s authentic genetic and biotechnology activities will be available. Wisconsin Fast Plants will demonstrate how rapid growing brassica plants can be used to teach selection and inheritance.

12:30PM–3:30PM CONT.

1536-96584 Storylining in Biology for Coherent Instruction

Grand Ballroom VIII (3rd Floor) • Nature of Science • Special Workshop (Tickets Required) • ML, HS

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 the workshop hosted by the team at All Species Animal Consulting.

Jason Crean, Britt Czupryna, Gloria Latta, Madeline Munar, Lisa Pavic, Kristin Rademaker, and Kathy van Hoeck, All Species Education Consulting, Orlando, FL

2:30PM–3:30PM

NABT Open Forum
Dover B & C (3rd Floor) • Committee Meeting • GA

The NABT Board of Directors and Executive Director will lead this interactive discussion focused on the current state of the association. They will also share updates on current and future strategic initiatives. Everyone is invited to learn more about our operations, provide feedback on the programs we support, and get more involved with NABT.

4:00PM–5:30PM

Lauren Feldman

See biography on page 8

Finding Hope: Challenges and Opportunities in Climate Change Communication

Grand Ballroom V & VI (3rd Floor) • Special Speaker • GA

Even as the realities of climate change grow starker, communicating about climate change in ways that engage the public and motivate collective action remains a challenge. Despite widespread scientific agreement about climate change's causes, consequences, and solutions, misinformation and misperceptions abound. Powerful industries and actors pollute the communication environment and stymie meaningful climate action. Media coverage of climate change often reinforces partisan divides and falls short of providing the quality and quantity of information that citizens need to respond effectively to the climate crisis. As a result, much of the public is immobilized by apathy or despair. This talk will first consider these and other climate communication challenges, focusing on the role of media.

Dr. Feldman will then discuss how media can be harnessed to more productively engage the public, especially young people, with climate change. From comedy and entertainment to innovations in journalism to social media activism, media can be used to spark hope, promote climate justice, and inspire action. Communicating effectively about climate change is not just about scientific facts; it requires engaging emotions and meeting people where they are, while also providing tools to navigate the increasingly complex information environment. These ideas have implications for the classroom and beyond.

5:30PM–6:00PM

NABT Four-Year College & University Executive Committee Meeting

Iron (4th Floor) • Committee Meeting • 4Y

5:30PM–7:30PM

Exhibit Hall Grand Opening Reception

Harborside Ballroom (4th Floor) • Special Event • GA

We welcome everyone to Baltimore with a special opening of the 2023 NABT Exhibit Hall. Our vendor and partner community will showcase the latest and greatest resources for teaching life science, helping you find those familiar favorites and new innovations.

6:00PM–7:00PM

NABT Past President's Advisory Council Meeting & Reception

Presidential Suite • Invitation Only

2023 NABT EVOLUTION SYMPOSIUM
Friday, November 3, 2023 | 10:30 am – 12:30 pm | Room: Laurel C&D

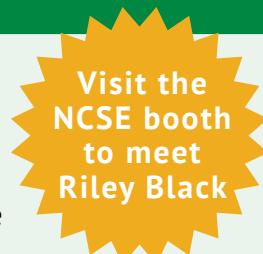


The Road to Extinction



How to Survive A Mass Extinction
Riley Black, Science Writer

Join award-winning author Riley Black as she discusses what made the difference between survival and extinction as the Age of Dinosaurs ended and the Age of Mammals began.



NCSE TEACHER WORKSHOP: The Road to Extinction
Chandler Tawney, Blake Touchet, Lin Andrews

Explore the relationship between extinction, evolution, and biodiversity as part of an NGSS-aligned storyline that utilizes hands-on activities focused on the fossil record.



Join us at the Baltimore Marriott Waterfront Hotel
Friday Nov 3, 2023 – Grand ballroom II

8:00 – 9:00 AM
PCR Amplified: Advanced Topics & Techniques
Learn about the versatile techniques of PCR (qPCR, ddPCR etc.) and the real-world applications in life science research, clinical and molecular diagnostics like gene expression, disease outbreaks, mutation detection and more.



10:30 – 11:45 AM
Hands-On Chromosomal Gene Editing with the Out of the Blue CRISPR Kit
CRISPR's most relevant uses require more than just knockouts! In this hands-on workshop you'll use CRISPR-Cas9 to cut and repair an *E. coli* chromosomal gene while learning about essential experimental controls.

12:00 – 12:30 PM
Track Norovirus Spread Using Modeling and Gel Electrophoresis
Put your epidemiologist hat on and determine the transmission mode of a norovirus using molecular data, patient histories, and clues hidden in a restaurant.

2:00 – 3:15 PM
The Plight of the Bumblebee: Studying Bee Genetic Biodiversity using DNA Barcoding
Taxonomy in action: use visual cues and biotechnology techniques to sort bumblebees into separate species. Experience how PCR, sequencing, and bioinformatics help scientists distinguish bee species.

3:30 – 4:00 PM
Personalized medicine: Cell and Gene Therapy in Cancer treatments!
Learn about CAR-T cells and how immunotherapies are produced, how viral vectors deliver gene therapies and how physicians use them to treat inherited genetic disorders.

There's more to learn! Register now at Bio-Rad.com/ExplorerEvents for our upcoming webinars.

Bio-Rad Explorer – Advancing Student Discovery

