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Community Spotlight:



BIOME 2022 Keynotes

We are thrilled to have <u>Mica Estrada, PhD</u>, and <u>Ruthmae Sears, PhD</u>, as our BIOME 2022 Keynote Speakers. They will each be giving talks relating to this year's theme, Sparking IDEAS: Inclusive, Diverse, Equitable, and Accessible Communities in STEM Classrooms.

Their presentations will ignite our conversations and inspire innovation and reform. Learn more about their talks and join the conversation at this year's BIOME!

Read more about this year's talks.

Subscribe to the Community Spotlight to receive the full text each month! Hello BioQUEST Community!

I am so excited about the upcoming <u>BIOME Institute</u>, <u>Sparking IDEAS:</u> <u>Inclusive, Diverse</u>, <u>Equitable, and Accessible</u> <u>Communities in STEM</u>



<u>Classrooms</u>. As you saw in our <u>latest Community Spotlight</u>, our <u>keynote speakers</u> are gearing up with some great information to share. And we're collecting our workshops, posters, and works-in-progress—you can see <u>what groups</u> <u>are coming here</u>! There's still time to share what you and/or your group have been working on.

AND we have **extended the deadline to apply until May 17**! So apply! Share the announcement with your communities and colleagues! It is going to be an amazing experience, and we're looking forward to seeing many of you there.

<u>Deb Rook, PhD</u>

Deputy Director, BioQUEST

P.S.

If you're coming across this newsletter on the QUBES website, <u>you can subscribe here</u> to keep in touch!

In this newsletter:

BioQUEST News

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- BioQUEST Community Conversation: Publishing your Conference Materials on QUBES, May 26
- <u>QB@CC Participates in NSF's STEM for All</u> <u>Showcase</u>
- <u>Featured Publications</u>
- BioQUEST Near You!

Partner Corner

New Partner Newsletters

Two of our partners have new newsletters you can subscribe to! Join these groups to get access:

RIOS Institute Undergraduate Student Experiences with Citizen

<u>Science</u>

News and Opportunities

- HHMI Biointeractive offers workshops related to datacentric pedagogy
- Botanical Society to host Inclusive Teaching Initiative at Botany 2022
- <u>ASM and SABER sponsor webinar series: Getting</u> <u>Started in Biology Education Research</u>
- Save the date for Antibody Engineering Hackathon, Aug 8-11
- GEP offers New Member Training in July
- Discounted NABT membership available, registration
 opens for NABT 2022

Other Opportunities

- Nominations open for AAAS Mentor Awards
- <u>TUnE-Bio seeks input on assessment in introductory</u>
 <u>biology courses</u>

QUBES Corner

 QUBES Tips & Tricks: Publish your conference posters and presentations!

As the spring semester gives way to summer, it is professional meeting season again. Many of us will be sharing talks, posters, and teaching resources with our colleagues at these meetings. Publishing those products with BioQUEST is a great way to make them accessible to others, document your scholarship, and build your resume. The QUBES OER Library has a variety of examples, including workshops, posters, and other conference materials. Check out the next <u>Community Conversation</u> (May 26th) for a quick walk through and best practices for publishing.

- 19 open educational resources were published to the QUBES Library in April! <u>Browse the new</u> resources here.
- Featured Resources
 - (from CourseSource): <u>Splicing it Together: Using</u> Primary Data to Explore RNA Splicing and Gene Expression in Large-Lecture Introductory <u>Biology</u>

In this two-day module, students in a largelecture course are immersed in a biological problem related to the Central Dogma and gene expression. doi.org/10.24918/cs.2022.11

• <u>The career of a shark researcher with Dr. Chris</u> Lowe

From blue-collar to deep blue research,

professor of marine biology and director of the Shark Lab at California State University discusses his life journey and his fascinating research of sharks, rays, and gamefishes. This is one of many scientist interviews posted by the Headwaters Science Institute. doi:10.25334/3J1B-K508

Event Round-Up

Link directly to featured events below or <u>browse all</u> events on our calendar.

May 20 - Online with LSE: A Framework of College Student Buy-in to Evidence-Based Teaching Practices in STEM: The Roles of Trust and Growth Mindset

May 23-25 - Open Education Global Conference

May 23-26 - Citizen Science Association Conference

May 26 - <u>BIOME Community Conversation:</u> Publishing your Conference Materials on QUBES

May 26-27 - Northeast OER Summit

June 7 - NSF IUSE Office Hours

BioQUEST News

BIOME 2022 Deadline Extended to May 17!

We know it has been a mad dash to the end of many semesters, so we are extending our deadline to May 17. Join us for community and conversation that will inspire and transform.



Sparking IDEAS: Inclusive, Diverse, Equitable, and Accessible Communities in STEM Classrooms July 18 - 29, 2022

July 18-22 will be our workshop intensive week, with synchronous sessions, while the following week will provide time to connect asynchronously and form fall working groups.

Application and deadlines:

Final deadline is May 17

Keynotes:

Ruthmae Sears, Associate Professor at University of South Florida

<u>Mica Estrada</u>, Associate Professor at University of California, San Francisco

More on our theme:

Creating equitable, inclusive learning environments for all of our students is paramount for empowering them as thinkers, scientists, and citizens, and for advancing scientific discovery and innovation. How do we foster a sense of belonging in each student and a sense of community for the class as a whole? How do we reduce barriers to participation and engage all perspectives? How do we position ourselves as leaders but also empower students to guide their own learning? In turn, what strategies for fostering inclusion and equity carry from the classroom into our professional networks?

The BioQUEST community, through the 2022 BIOME Institute, will aim to support faculty in building a sense of community and belonging within their classrooms and groups with the goal of creating networks and partnerships founded on mutual trust, respect, and open collaboration between students and educational leaders. BioQUEST has been a leader in STEM education reform for the past 35 years, and this year we will continue to grow our community through conversations focused on shifting the relationship between instructors and students, reframing instructional practice, and improving all student outcomes and feelings of belonging in STEM.

Stay tuned to this newsletter for updates on our keynotes, workshop offerings, and more!

BioQUEST Community Conversation: Publishing your Conference Materials on QUBES

May 26, 4:00PM ET

It is professional meeting season again! Many of us will be sharing talks, posters, and teaching resources with our colleagues at these meetings. Publishing those products with BioQUEST is a great way to make them accessible to others, document your scholarship, and build your resume. The QUBES OER Library has a variety of examples including workshops, posters, and other conference materials. Join us for a quick walk through and best practices for publishing!

Register for the session here.

Visit our Office Hours and Community Conversations page for recorded sessions.

QB@CC Participates in NSF's STEM for All Showcase

<u>QB@CC will be featured</u> here May 10-17.

Quantitative Biology at Community Colleges (QB@CC) will be featured in the <u>2022 STEM for All</u> <u>Video Showcase</u> funded by the National Science Foundation. <u>The event will</u> <u>be held online May 10th -</u> <u>17th</u>. The theme for this year's event is "Access, Inclusion, and Equity."

The QB@CC video briefly addresses the history of the project before highlighting four pillars of equity, and finally, calling





viewers to action by participating in the project and/or developing their own interdisciplinary network that meets the challenges in their fields.

Now in its eighth year, the annual showcase will feature over 250 innovative projects aimed at improving Science, Technology, Math, Engineering and CS education, which have been funded by the NSF and other federal agencies. During the 8-day event, researchers, practitioners, policy makers and members of the public are invited to view the short videos, discuss them with the presenters online, and vote for their favorites.

Check out other BioQUEST partners who are also participating:

iDigTRIO Biology Career Conference

Passion-Driven Statistics

The STEM for All Video Showcase is hosted by TERC, in partnership with: STEMTLnet, CADRE, CAISE, CIRCLS, STELAR, CS for All Teachers, NARST, NCTM, NSTA, NSF INCLUDES, and QEM. The Showcase is funded by a grant from the National Science Foundation (#1922641).

Featured Publications

We are so proud of the amazing scholarly work that is coming out of our community. Congratulations to the authors and thank you for your work.

Proceedings of the 55th Hawaii International Conference on System Sciences, 2022 "<u>Open Science via HUBzero: Exploring Five</u> Science Gateways Supporting and Growing their <u>Open Science Communities</u>"

Sandra Gesing, Claire Stirm, Gerhard Klimeck, Lynn Zentner, Su Wang, Braulio Misael Villegas Martinez, Carrie Diaz Eaton, Sam Donovan, Lan Zhao, Carol Song, Luk I Kim, Alejandro Strachan, Michael Zentner, Rajesh Kalyanam

Are you interested in a peek behind the curtain of a scientific gateway? This conference paper looks across a collection of five cyberinfrastructure projects, including QUBES, that are built on the HubZero platform.

Bulletin of Mathematical Biology, August 2020

"Building Community-Based Approaches to Systemic Reform in Mathematical Biology Education"

Olcay Akman, Carrie Diaz Eaton, Dan Hrozencik, Kristin P. Jenkins & Katerina V. Thompson

It takes a community to address big challenges. This paper explores BioQUEST, MathBench, QUBES, and IBA as examples of systemic, community-based efforts to integrate biology, mathematics, and computational approaches in undergraduate settings.

If you have published a paper related to your work with BioQUEST and/or the QUBES platform, please let us know (send the link to Caitlin)!

BioQUEST Near You

We'd love to connect with you in-person or online at these upcoming conferences and meetings! We've also created <u>a</u> <u>forum</u> where you can let us know where you will be (join the BioQUEST group first, if you haven't already!).

If you will be attending	Feel free to look for
May 20-22 - <u>IGELS working</u> <u>meeting (virtual)</u>	Sam Donovan
May 23-25 - <u>HITS meeting at</u> <u>UNC</u>	Sam Donovan Pat Marsteller
May 26-27 - <u>Northeast OER</u> <u>Summit (</u> virtual)	Sarah Prescott Deb Rook
May 31 - <u>CC Bio INSITES</u> (virtual)	Stacey Kiser

June 1-3 - IUSE Summit (virtual)

Sarah Prescott

Partner News and Opportunities

HHMI Biointeractive offers workshops related to data-centric pedagogy

Scientific Figures: Pairing Data Points with Other BioInteractive Resources Thursday, May 19, 4:30–6:00 PM ET



Barriers to Student Engagement with Data Tuesday, May 17, 4:00–5:30 PM ET Wednesday, June 8, 7:00–8:30 PM ET

Botanical Society to host Inclusive Teaching Initiative at Botany 2022



The Botanical Society of America is happy to offer several awards including normal travel and conference expenses for the Botany 2022 Conference in Anchorage, Alaska (July 23-27). These

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travel awards are designed for faculty at 2-Year Colleges, Community Colleges, Tribal Colleges, HSI-HE and HBCU institutions. This is an exciting opportunity to attend an international botanical conference of six scientific societies and to share pedagogical and research ideas, as well as interact with 1000+ plant scientists from across the globe.

Learn more about this initiative.

ASM and SABER sponsor webinar series: Getting Started in Biology Education Research

Engage in skill-building content and activities relevant for biology education research (BER) when you enroll in the <u>Getting Started in Biology</u>



Education Research webinar series, co-sponsored by the Society for the Advancement of Biology Education Research (SABER) and the American Society for Microbiology. In this intensive 7-part webinar series, you'll take part in weekly webinars and group discussions led by

BER scholars who will introduce you to the fundamentals of BER including: Quantitative and Qualitative Research Methods in BER, Mixed Methods Study Design in BER, Developing Assessment Tools, and Ethics for Education Researchers.

When you register for the course, you also get to attend ASM Conference for Undergraduate Educators (ASMCUE), virtual, July 13-15, for free! Questions? Email Rachel Horak.

Save the date for Antibody Engineering Hackathon, Aug 8-11



The second Virtual Engineering will be held

August 8-11th, 2022. The application will be available soon. Sign up here and they will send you an email when registration begins, or visit the Antibody Engineers website.

GEP to offer New Member Trainings in July



Genomics Education Partnership July 6–9 | Washington University in St. Louis July 11-22, 2-3:30p (CT) | Virtual

New Member Training will help faculty integrate GEP curriculum materials into existing courses and engage their students in scientific research through Course-based Undergraduate Research Experiences (CUREs) centered in genomics. Those who complete the training become members of our Partnership and thus are expected to implement GEP materials in one of their classes.

Discounted NABT membership available, registration for NABT 2022 opens

Thanks to generous support from <u>HHMI</u> <u>BioInteractive</u>, you can become a new NABT member (or renew your membership) for only \$35



when you choose an online subscription to <u>The American</u> <u>Biology Teacher</u>.

Use code HHMIGoGreen to get access to the entire ABT archive (going back to 1938!), but only in a faster, more sustainable format.

Make an impact in life science education, go green, and save!

Visit <u>https://member.nabt.org/</u> to use the discount today.

Offer valid until May 31, 2022. Discounts will be applied to new & renewing Full Members.

Also...

Registration for the 2022 NABT Conference is now open! Join NABT in Indianapolis from November 10-13 for a great program of educational sessions, engaging speakers, an interactive exhibit hall, special events, and more! <u>It's easy to</u> <u>register online</u>.

Other Opportunities

TUnE-Bio seeks input on assessment in introductory biology courses

Please see the calls for participation (for faculty and students) from Sharon Homer-Drummond below.

CALL FOR FACULTY PARTICIPATION:

Dear fellow biology faculty,

I am a contributing participant in an NSF-funded Research

Coordination Network in Undergraduate Biology Education (RCN-UBE) called <u>Transforming Assessment</u>, Feedback, and Grading in Undergraduate Biology Education (TUNE-Bio). The first step of this research program is to get a birds-eye view of current assessment, feedback, and grading practices in introductory biology lecture sections in the U.S.

As such, I invite you to complete an approximately 10 minute survey aimed at better understanding current grading and assessment practices in introductory biology courses.

Please see the advertisement below for more information:

Researchers at Simmons University are looking for teachers of introductory undergraduate biology classes for a study on how you measure student learning and grading. For this survey, we welcome introductory biology instructors from 2 and 4 year institutions. If you participate, you will be asked to complete a survey. This survey will ask questions about your background and your teaching practices. The survey takes approximately 10-15 minutes to complete. Four randomly chosen people who respond to the survey will receive a \$200 Amazon gift card.

If you are interested, you can find the survey here.

If you have questions, feel free to contact the study co-PI: <u>Dr.</u> <u>Sarah Cavanagh</u>.

CALL FOR STUDENT PARTICIPATION:

Students: Want to earn a \$30 Amazon gift card by participating in a 30-45 zoom interview with a few other students?

Researchers at Simmons University are looking for current college students (including 2-year schools) who have taken at least one introductory biology course in the United States for an interview about your learning! You will be asked to complete a brief survey that will help us select students from different backgrounds. Some people who complete the survey will be invited to a 30-45 minute Zoom interview. This interview will take place with 1-4 other students from your school or others. In this group interview, you will answer questions about your experience in biology classes. These questions will be about how your learning was measured and how you were graded. All interviewees will receive a \$30 Amazon gift card. You must be 18 years old to participate.

If you are interested, here is the prescreening link.

If you have questions, feel free to contact: <u>Dr. Sarah</u> <u>Cavanagh</u>.

Nominations open for AAAS Mentor Awards

AAAS is in search of our next Mentor Award recipients! Know a professional who is making a major difference for the underrepresented groups in science and engineering fields and careers? Have you had an outstanding mentor who cultivated a culture of diversity, equity, and inclusion in STEMM? Nominate them or invite them to apply for the Mentor or Lifetime Mentor Award today - applications close

