Hi All,

As BioQUEST’s workshop coordinator, I am excited to let you know that planning is underway for the 2022 Biology and Mathematics Educators (BIOME) Institute, "Sparking IDEAS: Inclusive, Diverse, Equitable, and Accessible Communities in STEM Classrooms." The BIOME is an entirely online experience with a Summer Session running from July 18 - 29, 2022, followed by working groups in the fall semester. Applications will open later in the spring!

In my role as workshop coordinator, I have worked alongside many staff and volunteers to support the development of BioQUEST's annual Summer Workshops and BIOME Institutes. Each year, I am impressed not only by what participants accomplish, but also the persistent, welcoming spirit of the community. So it is now bittersweet for me to share that I will be leaving this role as I shift to focus on full-time work in learning design. I will remain with BioQUEST as a Universal Design for Learning consultant but would like to take this opportunity to thank the BioQUEST and QUBES communities for their endless support over the past eight years. I could not have asked for better people to work and learn with.

I am thrilled that Katrina Wells will be taking on the role of Workshop Coordinator! She joined the BioQUEST team last year and is excited to connect with all of you as the BIOME kicks off. Be sure to join the Community Conversation about the BIOME in March to meet Katrina and learn more about this year’s BIOME!

With thanks and gratitude,
Hayley Omdorf

In this newsletter:

BioQUEST News

- BioQUEST Webinars are now Community Conversations!
Community Spotlight:

**OER for Diversity, Equity, and Inclusion in STEM Classrooms**

This month we featured a selection of recent resources from the QUBES Open Educational Resources Library that are related to all things DEI: Diversity, Equity, and Inclusion in STEM classrooms.

The resources incorporate social justice issues, broaden representation in course materials, place science in the context of history, help align lessons with Universal Design for Learning principles, and more.

Check out:
- The full community spotlight
- Our public collection of DEI resources on QUBES (please add resources!)
- Our Community Conversation around DEI Resources on Feb. 24!

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

---

**Partner News and Opportunities**

- [Deep Teaching Residency Recruits for 2022 Residency](#)
- [Stipends Available for Implementing BCEENET CURES](#)
- [CourseSource to Run Workshop at Society of Toxicology Annual Meeting](#)
- [Submit a Proposal to 2022 ASMCUE: Empowering Students With Science Literacy](#)
- [Updating the “Liberal Art of Science” Report](#)
- [Call for NABT 2022 Proposals Now Open](#)
- [Mini Gateways 2022 Call for Community Participation](#)
- [Registration is now open for iEMBER’s June 2022 Conference](#)
- [BIT at NC State Seeks Two Teaching Postdocs](#)

**QUBES Corner**

- **New Feature Alert! The mini-dashboard!** Navigating QUBES just got a lot easier. When you are logged into your QUBES account, you can access the mini-dashboard from any page within the QUBES site by clicking in the upper right corner of a page (either on “logged in” or your icon).

The mini-dashboard makes it easy to jump to groups you belong to, access your collections, and update your profile. You can learn more about using the mini-dashboard in [this knowledge base article](#).

- **17 open educational resources** were published to the QUBES Library in December! [Browse the new resources here.](#)

**Featured Resources**

- (from CourseSource) **Meiosis Remodeled: Inclusion of New Parts to Poppit Bead Models Enhances Understanding of Meiosis**

  The authors’ use of orthodontic latex bands to model cohesion of sister chromatids, and plastic coffee stirrers as microtubules, extends what can normally be achieved with ‘standard’ commercial kits of beads, emphasizing the importance of key elements of meiosis.

- [Coloring and Keying Great Lakes Trees](#)
In this set of activities, you will use the Michigan Trees Coloring book to learn and practice plant identification. You will also simulate some of the steps of specimen preparation by keying and labeling your plant “specimens.”

Event Round-Up

Link directly to featured events below or browse all events on our calendar.

Feb. 24 - BioQUEST Community Conversation: OER for DEI

Feb. 25 - iEMBER Coffee Hour

Mar. 4 - JMBE Live Webinar: The Effects of Specifications Grading on Students’ Learning and Attitudes in an Undergraduate Cell Biology Course

BioQUEST News

BioQUEST Webinars are now Community Conversations!

We’ve renamed our webinars to better reflect what these sessions are—a chance to come together, to briefly learn about the topic, and to have conversations about what you are working on and how we can help. Visit our webpage to see the presentations at the start of past sessions.

Please join us for our next Community Conversation on February 24!
BioQUEST Community Conversation: OER for Diversity, Equity, and Inclusion in STEM Classrooms

February 24, 4:00 PM ET

In this session, we will be discussing teaching resources related to Diversity, Equity, and Inclusion, featuring a few resources listed in this month’s Community Spotlight. BioQUEST staff will give a brief introduction to using QUBES collections and our inclusive teaching ontologies to find and organize resources on these themes, and a few of the authors will be in attendance to talk about their resources. We encourage participants to bring DEI resources to share in our collection on QUBES!

Register for the session here.

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

Save the Date for BIOME 2022

We are thrilled to announce the dates for the Summer Session of BIOME 2022. Mark your calendars and get excited to meet with the most passionate and innovative STEM education reformers…and get excited for snacks!

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 lots of synchronous sessions, while the following week will provide time to connect asynchronously and form fall working groups.

We can’t wait.

Apply for the Science, Communication, & SARS-CoV-2 Faculty Mentoring Network

Are you interested in adopting teaching modules that address the process of science, communicating core biological science fields, and quantitative reasoning skills? Apply now to join us for the Spring 2022 SARS-CoV-2: Understanding, Communicating, and Applying Science & BioQUEST/QUBES Faculty Mentoring Network (FMN).

Participants in this FMN will focus on how to use data-driven modules in high school, community science, and undergraduate life science courses. Accepted applicants will help customize and implement newly designed educational modules from microbiology, physiology, genetics and pharmacology, using SARS-CoV-2 as a focus. The modules also help learners develop critical thinking skills, science communication skills, and biological quantification skills. Members of this FMN will participate in bimonthly virtual sessions to collaborate with and support
others in the network and receive mentoring.

Learn more on the FMN overview page.

Applications are due February 20, 2022.

---

**Share Your BioQUEST Story: 35th Anniversary Celebrations**

As many of you may know, BioQUEST is celebrating its 35th anniversary this year (we’ll be 36 in June!). As part of the celebration, we’re inviting our community to share BioQUEST stories—we’re hoping these stories can express what the organization has meant to you and your career and are a chance to celebrate the amazing colleagues and collaborations that have come out of your work with BQ. These stories will be shared on a 35th Anniversary page on our website, in a forum (where others can comment and connect), and may be used in marketing for our next BIOME (!)

We’ve created a form for sharing stories here, or feel free to send something to Caitlin directly.

You can also share a BQ photo here or send photos to Caitlin.

Last thing! We’re also trying to fill in our BioQUEST timeline and could use your help in adding important milestones throughout our 35-year history.

Thank you for your input!
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.

*BioScience*, February 2022

"Collections Education: The Extended Specimen and Data Acumen"

Anna K Monfils, Erica R Krimmel, Debra L Linton, Travis D Marsico, Ashley B Morris, Brad R Ruhfel

The BioQUEST community places a lot of emphasis on engaging students in realistic science experiences. In this study the *Biodiversity Literacy in Undergraduate Education: BLUE Data Network* provides a great example of how specimen data and citizen science can contribute to authentic scientific engagement.

Check out:

- [The podcast from BioScience Talks](#)
- [The teaching module used in this study](#)
- [Other BLUE materials published on QUBES](#)

*BioScience*, January 2022

"Citizen Science in Postsecondary Education: Current Practices and Knowledge Gaps"

Heather D Vance-Chalcraft, Allen H Hurlbert, Jennifer Nesbitt Styrsky, Terry A Gates, Gillian Bowser, Colleen B Hitchcock, Michelle Anne Reyes, Caren B Cooper

The Undergraduate Student Experiences with Citizen Science project recently transitioned from Incubator funding to a full RCN by publishing this literature review and survey results describing the state of citizen science in postsecondary settings. Are you interested in incorporating citizen science into your teaching? [Join their community and get involved!](#)

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](#))!
Partner News and Opportunities

Deep Teaching Residency Recruits for 2022 Residency

The Deep Teaching Residency (DTR) is a year-long faculty development program in inclusive pedagogy that aims to meaningfully transform faculty mindsets and practices. ‘Deep Teaching’ is an inclusive pedagogical philosophy that seeks to engage faculty in a critical evaluation of how instructor self-awareness, students’ personal histories, and broad social structures impact the development of an equitable pedagogy.

Included in the year-long experience is a five-day immersive in-person workshop (contingent on health and safety measures related to COVID 19), where we come together as co-learners to examine, discuss, and apply inclusive teaching theories, models, and practices.

Applications are due March 18, 2022.

Learn more about the DTR and find the application.

---

Stipends Available for Implementing BCEENET CURES

BCEENET will be supporting 10 new BCEENET CURE Implementers during the 2022-2023 academic year with a stipend of $1000 each. Preference will be given to educators at community colleges and minority-serving institutions, and early career educators are encouraged to apply.

If you are interested in becoming a new BCEENET implementer check out the full position description and apply today!

If you have any questions about this opportunity, reach out directly to the coordination team.
CourseSource to Run Workshop at Society of Toxicology Annual Meeting

Workshop at the SOT Annual Meeting - Preparing Educational Articles for CourseSource

Joshua Gray, Course Editor for Toxicology

Do you have a fantastic lesson related to toxicology that you’d like to share with fellow educators or an idea for a lesson that you’d like to pitch and get feedback on before digging deeper?

The Society of Toxicology is hosting a CourseSource workshop at the 2022 Annual Meeting in San Diego. The workshop “Publishing Education Toxicology Exercises in CourseSource: A Step-by-Step Workshop for Preparing Your Manuscript” will be Monday, March 28th from 1:45 pm-4:30 pm in the San Diego Convention Center.

Anyone registered for the meeting may access the live-streamed and recorded session.

Learn more about this opportunity!

Submit a Proposal to 2022 ASMCUE: Empowering Students With Science Literacy

Undergraduate microbiology and biology educators attend this conference to share teaching strategies, brainstorm solutions for common classroom challenges, and collaborate with colleagues. Regardless of your professional level, you will leave the conference with renewed inspiration for your work.

2022 ASMCUE will be an entirely live virtual program, July 13-15, 2022, and we are inviting you to contribute to the program!

Deadline to submit a proposal for a talk or poster is March 15, 2022.

Questions? Contact Dr. Rachel Horak. | Learn more about the conference.

Updating the “Liberal Art of Science” Report

James Collins (Arizona State University) and Gordon Uno (University of Oklahoma) are coordinating an effort to revise and update the LAS report published by AAAS in 1990. They have just released the project’s first collection of...
essays in cooperation with the National Center for Science & Civic Engagement (SENCER).

Read the essays that aspire to, “promote the radical change in the broader American science education landscape recommended by the original LAS.”

---

**Call for NABT 2022 Proposals Now Open**

Do you have a great classroom strategy you want to share? Have you got a recommendation for a resource you can’t teach without? Do you want to facilitate a discussion about that hot topic you keep seeing in your online PLC?

NABT wants to highlight all of those ideas (and more!) during our in-person 2022 Professional Development Conference planned for November 10-13. We are now accepting proposals for education sessions using our online portal, and the deadline is 11:59 PM on Friday, April 1st.

[Learn more about submitting your proposal!](#)

---

**Mini Gateways 2022 Call for Community Participation**

Mini Gateways 2022 will be online April 5-7.

With the success of our online meetings in 2020 and 2021, SGCI has decided to offer two versions of the conference in 2022: one “mini” version online in the spring in addition to a “full” in-person version in the fall.

The mini conference is planned as an opportunity to learn about technologies and communities and to build connections for today and tomorrow. It will offer diverse options for sharing work and networking in the community. The format includes tutorial sessions, panels, presentations in the form of lightning talks, and an open forum.

Registration will be free.

We invite the submission of abstracts (500 words) related to science gateways. All contributions will be subject to standard peer review on quality and relevance, which will decide acceptance of a lightning talk, panel, or tutorial. Open forum topic abstracts are limited to 200 words.

All submissions are due on March 7, 2022.

[Read more details in the Call for Community Participation.](#)
Register for iEMBER’s June 2022 Conference

The Inclusive Environments and Metrics in Biology Education and Research (iEMBER.org- National Science Foundation Grant number 2010716) is excited to invite you to join them for the 2022 iEMBER Conference on June 27-29, 2022 in Billings, MT.

The conference theme is Visualizing and Taking Action on Authentic Inclusion. Session discussions include:

- Bringing Your Authentic Self (Values and Biases) to Inclusion Work
- Expanding Approaches to Inclusion
- Real Talk: an open invitation to share experiences on implementing DEI
- Structural Frameworks

Registration is now open!
BI Program at NC State seeks two teaching postdocs

The Biotechnology Program is hiring TWO teaching postdoctoral scholars to develop molecular biology courses in cutting-edge areas of research. We are looking for researchers who are completing a postdoctoral position and are interested in education. The Postdoctoral Teaching Scholar will teach sections at the graduate and undergraduate levels of an existing course that covers manipulation and expression of recombinant DNA and CRISPR. The Scholar will also be expected to develop and implement a new laboratory course in a cutting-edge area of molecular biotechnology within their area of expertise.

The two positions are listed below:
[https://jobs.ncsu.edu/postings/153451](https://jobs.ncsu.edu/postings/153451)
[https://jobs.ncsu.edu/postings/151460](https://jobs.ncsu.edu/postings/151460)

---

Apply for the 2022 HITS Case Fellows Program

Become a HITS Case Fellow! Faculty and postdoctoral fellows devoted to the use of case studies and problem-based learning pedagogies can apply to become HITS Case Fellows.

The HITS network has the goal of training researchers and educators in data analysis and current trends in high-throughput (HT) experimentation and support the design and implementation of inquiry-based case studies using authentic HT data. The HITS network will train Case Fellows in the use of case studies based on HT data by using a yearly workshop.

Fellows receive:

- Support to attend summer HITS workshops
- Stipend
- Exposure to different high-throughput (HT) approaches and graduate students, faculty, and postdoctoral fellows from different fields.
- Opportunity to design novel case studies using authentic datasets that can be implemented in a variety of courses.

Case Fellows are expected to attend two summer workshops and participate in monthly virtual check-ins to continue making progress on their cases.

[Find more information and the application here.](https://www.ncsu.edu/hits/case-fellows.aspx)