For the next few months, we’ll start each newsletter with a message from BioQUEST staff and volunteers—a way for the QUBES community to get to know us, if you don’t already! If you’re coming across this newsletter on the QUBES website, you can subscribe here to keep in touch!

Hello to our community and Happy New Year!

I’m the communications manager for BioQUEST and QUBES, which means I facilitate—most importantly—our outreach to our community. The fall semester was a period of transition for BioQUEST, with new leadership and a more formal role as stewards of the QUBES platform. This semester we are ready to hit the ground running, and one of our goals is strengthening our support for our partners.

One of the ways we can support you is by helping you communicate your successes and opportunities to our broader community. Please reach out if you have a publication, resource, opportunity, or event that you’d like us to share. (And for Group Managers: please see the Message for Group Managers in this newsletter to find more details about how we are ramping up communication with project leadership!)

As an organization that aims to empower faculty to lead STEM education reform, we also want to facilitate connections and collaborations between all of you. We do this primarily through our professional development programming but also through communications channels like our social media accounts (Twitter, Facebook, LinkedIn), newsletters, office hours and webinars, QUBES group forums, resource commenting, and our website and group pages. (We’re also working to make it easier for you to connect with people and resources in your discipline—stay tuned!). By following, subscribing, and engaging, you can stay up to date on the latest new projects, opportunities, and possible connections in our community.

We’re so excited about connecting with you soon. Please reach out with questions, comments, ideas, and news to share.

Caitlin Hayes
Communications Manager, BioQUEST

In this newsletter:

BioQUEST News
Community Spotlight:

**BIOME 2021 Fall Working Groups**

For this month's Community Spotlight, we featured the outstanding work of our BIOME 2021 Fall Working Groups. These groups, which formed at the end of our BIOME summer session, met twice a month throughout the Fall 2021 semester to discuss areas of interest, individual to each group, that will help instructors reform and improve the student experience in STEM.

Collectively, these descriptions show enormous innovation and commitment and demonstrate how faculty communities, formed around their own interests, can excel at developing, driving, and leading education reform.

Numerous projects and conversations will continue in the spring through working groups, faculty mentoring networks, and the development of resources and papers.

Learn more and join the conversations!

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

Partner News and Opportunities

- **AAAS-IUSE Features QB@CC**
- **HHMI Biointeractive Offers New Slate of Workshops**
- **The RIOS Institute Calls for Working Group Proposals**
- **BCEENET Sends Winter and Spring 2022 Implementation Survey**
- **Save-the-Date for iEMBER’s June 2022 Conference**
- **SIMIODE EXPO February 2022, Invitation and Call for Engagements**
- **Registration Opens for COMAP’s Mathematical and Interdisciplinary Modeling Contests**

Other Opportunities

- NSF Announces Taking Action: COVID-19 Diversity, Equity, & Inclusion Challenge
- UN-L Seeks Participants for Study on Quantitative Biology Instruction

QUBES Corner

- **QUBES platform tips!** Did you know? You can use Collections to organize your favorite OERs.
  - There is a lot to explore in the QUBES OER Library, and it can be tricky to keep track of all of the resources that you are considering for use in your classroom. Luckily the Collections tool makes it easy to organize and annotate materials. You can choose to keep your collections private or share them with others.
  - Join us for the next BioQUEST Webinar (January 27 - see more info below) where we will demonstrate using collections with CourseSource articles. You can also get a quick overview of collections 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)* [Using Bioinformatics and Molecular Visualization to Develop Student Hypotheses in a Malate Dehydrogenase Oriented CURE](#)

This lesson demonstrates how students use
facets of molecular evolution and bioinformatics approaches involving protein sequence alignments and 3D structure visualization, along with an analysis of pertinent background literature, to construct a novel hypothesis and develop a research proposal to explore their hypothesis.

- Are you learning R? Suggestions to help you as you learn

Learning how to code and analyze data in R is an important skill. Olivia Tabares and the Ecological Forecasting Education Working Group created this resource to encourage individuals who are learning R.

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**Event Round-Up**

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

- Jan. 20 - [SABER Seminar - Effective, culturally responsive mentorship](#)
- Jan. 21 - [Last NSF RCN-UBE Office Hours](#)
- Jan. 27 - [BioQUEST Webinar - An Introduction to CourseSource](#)
- Jan. 27 - [iEMBER Coffee Hour](#)
A Message for our Group Managers

After a semester of transition, BioQUEST is now ready to ramp up our support for our partner projects! And we want to strengthen the channels of communication by which we can send you news, calls for engagement, and opportunities that are specifically geared for group managers and project leadership. We’ll be using our BioQUEST/QUBES Support for Partner Projects group to send out messages.

- If you are not already a part of the BioQUEST/QUBES Support for Partner Projects group, please join here.

- If you are a member of this group, please go to the forum and check your email preferences to make sure you receive emails from this group.

We’ll be sending a few messages a semester—with important information about how we can support your project and invitations to tell us what you need.

These messages might include:

- information about updates to the QUBES platform
- calls for content for our monthly newsletter
- invitations to BioQUEST programming and support (e.g., office hours, webinars)
- opportunities specifically for leaders in STEM education reform

As stewards of the QUBES platform, we at BioQUEST are very excited to support, engage, build, and connect this outstanding community. Stay tuned for more.
BioQUEST Webinar: An Introduction to CourseSource, Jan. 27

In this webinar, BioQUEST staff and CourseSource Managing Editor Erin Vinson will give a brief overview of CourseSource, a journal of evidence-based teaching resources for undergraduate biology and physics. We'll give a tour of the CourseSource pages on QUBES, with special attention to using collections to keep track of articles that interest you. After the short presentation there will be ample time to ask questions about publishing your teaching resources with the journal.

Register for the webinar here.

Visit our Office Hours and Webinars page for recorded webinars.

This is the fourth in a series! BioQUEST webinars will be held on the fourth Thursday of the month.

Please take our survey to let us know what future webinar topics would be of interest to you!

Welcome to Rhianna Kozinski and Tara Graham

Please join us in welcoming Tara Graham, our new administrative assistant, and Rhianna Kozinski, our new project intern!

Tara Graham joins the BioQUEST team as Administrative Assistant. She has a Bachelor's Degree in Communication from the University of New Hampshire and is currently attending Eastern Washington University for her Masters in Public Health. She resides in Pembroke, NH and works as the Health Care Data and Quality Projects Manager for Amoskeag Health.

Rhianna Kozinski joins the BioQUEST team as Project Intern. She is a senior Biomedical Sciences student at the University of New Hampshire living in Merrimack, NH. As she enters her final semester, Rhianna is planning to continue her education and further study Epidemiology.

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 (captions appreciated) or send photos to Caitlin.

Thank you!

BioQUEST’s Spring Semester Partner Office Hours

Our Partner Office Hours are continuing this semester: Wednesdays at 12:00 PM ET and on Thursdays at 2:00 PM ET. Join us!

Have questions about how BioQUEST or the QUBES platform can advance your science education goals? Do you need help or advice about setting up your community on the QUBES platform? You can find the Zoom link here.
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.

Transformative Dialogues: Teaching and Learning Journal, April 2021

“Northwest Biosciences Consortium: The Evolution of a Faculty Network”

Erin Baumgartner, Anne Kruchten, Stacey Kiser, Lori Kayes, Stasinos Stavrianeas

Learn how to coordinate across institutions while implementing Vision and Change recommendations in this write-up of an RCN-UBE project.

Journal of microbiology & biology education, March 2021

“Three Steps to Adapt Case Studies for Synchronous and Asynchronous Online Learning”

Andrea Bixler, Melissa Eslinger, Adam J. Kleinschmit, Monica M. Gaudier-Diaz, Usha Sankar, Patricia Marsteller, Carlos C. Goller, Sabrina Robertson

This short paper is full of concrete tips for successfully implementing case studies in diverse teaching settings. Don’t skip the supplement where you will find a comprehensive list of case resources.

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

AAAS-IUSE Features QB@CC

AAAS-IUSE is currently showcasing Quantitative Biology @ Community Colleges' work in their Resources Page—a testimony to the fantastic and important work of this community. Congratulations, QB@CC!

HHMI Biointeractive Offers New Slate of Workshops

HHMI Biointeractive is offering the following workshops in January and February. Learn more about these offerings:

- **Using Snail Data to Understand Trophic Cascades in a Climate-Stressed Salt Marsh**
  - Monday, January 24, 7:00–8:30 PM ET
  - Monday, January 31, 7:00–8:30 PM ET

- **Using BioInteractive Resources to Engage Students in Earth Science Content in Biology Courses**
  - Wednesday, February 3, 6:00–7:00 PM ET

- **Out of the Ashes: From Dinosaur Extinction to Mammal Evolution with BioInteractive**
  - Tuesday, February 16, 6:00–8:00 PM ET
The RIOS Institute Calls for Working Groups Proposals

The RIOS Institute invites proposals for Working Groups that will function as innovation sandboxes or think tank incubators. Accepted proposals will receive a $2000 budget. Participants will bring new ideas and address challenges as they develop a tangible product aligned with the RIOS mission.

Rolling deadline until Feb 15, 2022; decisions will be made within 2-4 weeks of proposal receipt. See MORE DETAILS HERE. For more information, contact Dr. Karen Cangialosi.

BCEENET Sends Winter and Spring 2022 Implementation Survey

Are you thinking about implementing a BCEENET CURE this winter or spring? Or do you know someone who may be interested? If so, please fill out or share the survey below. This short survey gives the BCEENET team important data to make sure they provide the proper level of support and training for all implementers.

BCEENET Winter and Spring 2022 Implementation Survey!

If you would like to learn more about each CURE, go to the BCEENET website or contact the BCEENET coordination team.

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

If you are interested in collaborating and investigating authentic inclusion in STEM education, please review the travel award link. iEMBER still has grant funds to support travel for attendance. They welcome all who are interested from biology educators, biology education researchers, social scientists, and policy advocates.

For more information on this conference, please email either of the meeting co-facilitators: Candice Idlebird or Jana Marcette. If you would like more information about the iEMBER NSF-RCN-UBE, visit our website.

Registration Open for COMAP’s Mathematical and Interdisciplinary Modeling Contests

February 17-21, 2022

Mathematical Contest in Modeling (MCM), an international contest for high school students and college undergraduates. It challenges teams of students to clarify, analyze, and propose solutions to open-ended problems. The contest attracts diverse students and faculty advisors from over 900 institutions around the world.

The Interdisciplinary Contest in Modeling (ICM), is an extension of the Mathematical Contest in Modeling (MCM). It is designed to develop and advance interdisciplinary problem-solving skills as well as competence in written communication.

Learn more and register by February 17, 2022.

SIMIODE EXPO 2022, Invitation and Call for Engagements

SIMIODE – Systemic Initiative for Modeling investigations and Opportunities with Differential Equations is hosting an international, virtual, conference


SIMIODE’s Community of Practice and EXPO 2022 are focused on helping teachers and students in teaching and learning differential equations through modeling.
This year’s conference has expanded from two to four days and will include rich immediate conversation and gathering mode for one-to-one conversations and small group interactions or meetings, all due to the exceptional MathDept.org platform on which the conference is offered. Think hallway conversations and small group, focused engagements.

While SIMIODE is about teaching differential equations in context with modeling, the EXPO 2022 conference will offer a wider set of gatherings in support of broader mathematical studies and experiences for high schoolers through retired colleagues.

SIMIODE is now accepting full registrations and submissions for your contributors. Send your inquiries and details to Director [at] simiode [dot] org and include full name, institution name, location, title, abstract, intended audience, and session to which you are submitting.

### Other opportunities

**NSF Announces Taking Action: COVID-19 Diversity, Equity, & Inclusion Challenge**

The aim of this challenge is to identify systemic strategies to address long-term impacts of COVID-19 on DEI in STEM.

NSF is seeking submissions in a 3-page narrative format describing the steps that IHEs have taken, or will take, to mitigate the long-term negative impacts of the COVID-19 pandemic on DEI in STEM. Learn more about the challenge here.

**UN-L Seeks Participants for Study on Quantitative Biology Instruction**

Do you integrate quantitative skills into your biology course?

Researchers at the University of Nebraska-Lincoln are looking for instructors who take different approaches to integrating quantitative skills with biology concepts in their courses to participate in an NSF-funded research project. Examples include working with graphs/formulas, developing quantitative models, or reflecting on the purpose of mathematical models.

Participating instructors will be engaged intermittently over the course of three years and will be compensated $500.

For more details about expectations, please visit our blog announcement, or sign up to participate in the study here. Questions can be directed to Joe Dauer.