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!

Dear BioQUEST / QUBES Community,

It is my honor to play a small role in coordinating the community of transformation that is BioQUEST. One way to characterize the collection of things that BioQUEST does (including managing the QUBES platform) is to think of it as an accelerator of undergraduate STEM education reform. We drive innovation in three broad ways.

First and foremost, we foster a diverse community of teachers and researchers as they grow professionally by pursuing their scholarship of teaching and learning. Secondly, we partner with a wide range of organizations, projects, and communities to provide resources and tools that support their work while also embedding these groups within the reform community. Thirdly, we provide a platform for discovering, publishing, adapting, and discussing open education resources.

Are you interested in learning more about how you can work with BioQUEST? Drop by an office hour, join us for a webinar, or drop us an email.

We hope to hear from you soon.

Sam Donovan, PhD
Director of Outreach and Strategic Engagement
BioQUEST Curriculum Consortium

In this newsletter:

BioQUEST News

- BioQUEST Begins Webinar Series with “Introduction to the QUBES Educational Resources Library”
- BioQUEST Holds Fall Semester Office Hours
- 3-Minute Survey - How Can We Help You?
- Featured Publications

QUBES Corner

- 11 open educational resources were published to the QUBES Library in September! Browse the new resources here.
FEATURED RESOURCE: Ecological Forecasting Student Resource: Overview of Forecasting, Potential Careers, Helpful Courses

Context: The Ecological Forecasting Initiative Education Working Group created this resource for undergrad and graduate students and people advising them to provide an overview of what ecological forecasting is, career sectors that involve ecological forecasting, and examples of courses that are helpful as students prepare to learn how to create and use ecological forecasts.

Partner News and Opportunities

- Register for Science Gateways 2021
- SIMODE Opens Registration for SCUDEM
- COMAP Announces Mathematical Contests in Modeling for High School and Middle School Students
- Apply to the 2022 HITS Case Fellows Program

Other Opportunities

- Apply for the Antibody Engineering Hackathon
- UN-L Seeks Participants for Study on Quantitative Biology Instruction
- Save-the-Date for RCN-UBE Program Office Hours

Event Round-Up

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

Oct. 18 - ASCN Informal Discussion of Teaching Effectiveness and JEDI

Oct. 19-21 - Science Gateways 2021

Oct. 20 - iDigBio Hosts Collections Education Coffee Break

Oct. 21 - SABER Seminar - The meaning beyond the words: How language, race, & culture impact science teaching & learning

Oct. 26 - AAAS-IUSE Virtual Workshop: Implementing Active Learning in Undergraduate STEM Courses

Oct. 27 - BioQUEST Office Hours

Oct. 28 - BioQUEST Webinar: Introduction to the QUBES Educational Resources Library

Nov. 10 - BioQUEST Office Hours

Nov. 11-14 - NABT 2021

Nov. 12 - NSF RCN-UBE Office Hours
BioQUEST News

BioQUEST Begins Webinar Series with “Introduction to the QUBES Educational Resources Library”

BioQUEST will be hosting a webinar on October 28 at 4:00 PM ET to introduce the QUBES platform and major features of the QUBES Educational Resources Library, including tracking of resources, adaptations, and instructor-only access.

After a brief presentation, participants will have ample time for questions and discussion.

This is the first webinar in a series! Webinars will be held on the fourth Thursday of each month.

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

BioQUEST’s Fall Semester Office Hours

Would you like a personalized tour of the QUBES platform? Have a question about how BioQUEST can advance your science education goals? Do you need help or advice about setting up your community on the QUBES platform?

Drop by our office hours—on alternating Wednesdays, at 12:00 PM ET to connect. You can find the Zoom link here.

Upcoming Dates:

October 27
November 10

3-Minute Survey - How Can We Help You?

Please take this 3-minute survey to let us know your interests for future BioQUEST webinars. We want to hear from you!
Featured Publications

We are so proud of the amazing scholarly work that is coming out of our community. Congratulations to the authors!

**Biochemistry and Molecular Biology Education, September 30, 2021**

“Students authoring molecular case studies as a partial course-based undergraduate research experience (CURE) for lab instruction.”

Kasandra J. Riley, Didem Vardar-Ulu, Elizabeth Pollock, Shuchismita Dutta

A nice description of a group of faculty collaborating to adapt to remote instruction while retaining key elements of a research-based course.

(behind a paywall)

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**Plos One, September 10, 2021**

“Community development, implementation, and assessment of a NIBLSE bioinformatics sequence similarity learning resource.”

Kleinschmit, A. J., Ryder, E. F., Kerby, J. L., Murdoch, B., Donovan, S., Grandgenett, N. F., ... & Tapprich, W.

This publication is a great example of how collaborating around a teaching resource can lead to a CourseSource article and a multi-institution research project.

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If you have published a paper related to your work with BioQUEST, please let us know (send the link to Caitlin)!
Register for Science Gateways 2021

October 19 - 21, 2021
The path forward...

Gateways 2021 will offer a variety of presentations, diverse options for interaction, and opportunities to influence the future of the Science Gateways Community Institute (SGCI), the gateways community, and the Gateways Conference series.

Registration for Gateways 2021 is FREE but required.
Register now!

What you’ll get from our program:

- Tutorial sessions where you can gain in-depth expertise on specific topics
- Sessions, panels, and working groups for community planning and to identify needs: What services should SGCI offer? What should the conference look like in the future? What type of community interactions should we foster?
- A session on the vision for science gateway technologies in the next 10 years and how to broaden outreach and bridge gaps
- A session for short talks on topics contributed by the community
- Opportunities to grow your network by meeting people in the community who are users, developers, or providers of gateways
COMAP Announces Mathematical Contests in Modeling for High School and Middle School Students

24th High School Mathematical Contest in Modeling (HiMCM®) and NEW! Middle Mathematical Contest in Modeling (MidMCM)

November 3 – 16, 2021

Teams choose their own working times within this contest window. COMAP announces results in January 2022.

COMAP’s High School Mathematical Contest in Modeling (HiMCM) and Middle Mathematical Contest in Modeling (MidMCM) are international contests designed to provide high school and middle school/level students the opportunity to work as team members to engage in and improve their modeling, problem solving, and writing skills. Teams of up to four students from your school apply mathematics to model and develop a solution to a real world problem. There is no limit to the number of teams per school. Teams with all students 14 ½ years of age or younger participate in MidMCM. See the contest website for complete rules.

HiMCM/MidMCM start soon! Follow COMAP on Twitter @COMAPMath for up-to-date contest information. In addition, the HiMCM/MidMCM webinar featuring COMAP’s Executive Director, Contest Coordinator, and Contest Director provides contest tips and guidance.
Register for SIMIODE's SCUDEM

SIMIODE is now taking registrations for our SIMIODE Challenge Using Differential Equations Modeling (SCUDEM). SCUDEM is a group modeling challenge for students at the undergraduate or high school level. The challenge happens online and if you don't have a group, you can ask to be matched with a group that needs members. The challenge takes place October 23 - November 14, 2021.

Coaches can volunteer with or without their own team. Please volunteer early so you will have lots of time to meet and work with your team prior to the start of the challenge on October 23.

We are also looking for volunteer Judges. Judging will take place November 20 - December 5, 2021.

See the SCUDEM page for more information and to register.

Registration is $20USD for students, and free for students in developing countries. Registration as a Coach or Judge is free.
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.
Other opportunities

**Apply for Antibody Engineering Hackathon**

The first [Virtual Hackathon for Developing CURES in Antibody Engineering](https://www.unl.edu) will take place January 13-16th, 2022.

Applications are due by November 5th.

Participants will work together in teams to develop research projects for undergraduate students studying biotechnology or related topics. Hackathon participants will learn about the uses of antibodies in diagnostics, research, and therapeutics, develop new skills in immunology-related bioinformatics programs and databases, learn about new laboratory techniques for working with antibodies, and become part of an exciting community.

Faculty with varying levels of experience in working with antibodies are encouraged to apply. Participants will be selected based on experience and motivation to attend. Applicants from community colleges will receive the highest priority.

Learn more about the Hackathon!

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**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.
Save-the-Date for RCN-UBE Program Office Hours

- Office Hours for the RCN-UBE Program are on the following dates:
  - November 12 and 19
  - December 3, 10, and 17
  - January 7, 14, and 21.

Links will be available on the RCN-UBE website when it gets close.