Dear BioQUEST Community,

As we approach the end of this transformative year, I want to take a moment to express my deepest gratitude to each and every one of you. Your unwavering commitment to innovation, exploration, and collaboration in STEM education is the heartbeat of our BioQUEST family.

As we reflect on the past year of connections and partnerships and look ahead to the opportunities awaiting us in the new year, I invite you to consider supporting our ongoing endeavors. Your participation has always been the cornerstone of our success, enabling us to empower educators, inspire learners, and drive meaningful change in STEM education.

Your donation, no matter the size, will directly impact our ability to:

- Develop cutting-edge and community-focused professional development opportunities that spark curiosity and foster critical thinking.
- Provide resources and training that empower educators to transform the classroom experience.
- Enable access to an extensive Open Educational Resources Library
- Support faculty in their role as scholars and change agents.

Please consider contributing to our cause by visiting our new BioQUEST Givelively Page. Your support will enable us to continue pushing the boundaries of STEM education, supporting open education and open science, and building a brighter future through community and collaboration.

Thank you for being an integral part of our community and for considering this opportunity to support our shared vision. Together, we can make an even greater impact and inspire generations to come.

With heartfelt appreciation,

Sarah G. Prescott, Ph.D.
Executive Director

P.S. If you're coming across this newsletter on the QUBES website or on social media, you can subscribe here to keep in touch!
BioQUEST News

- QUBES Corner
- Publications
- Partner Summit

Partner Corner: News & Opportunities

- OB@CC 2024 Opportunities – Applications are Due TODAY!
- BEDE Spring 2024 FMN
- Teaching Faculty Needed: Participate in a Study on the Impact of Teaching with Open Science
- ITYC Reviewer Survey

BioQUEST News

QUBES Corner

Six open educational resources were published to the QUBES Library in November with 2,837 resources in total. Browse the new resources here.

- Featured Resources
  - An Inquiry-Based Project Added to Traditional Labs: Hands-On Fish Awareness Research in Freshwater Systems Conducted by First-Year Biology Students (CourseSource)
    This project involves students in an inquiry-based project added to the introductory biology laboratory course for majors in fall 2019.

  - A CURE in traits and species distributions: Reproductive modes, range sizes, and natural history collections
    This course-based undergraduate research experience (CURE) focuses on developing hypotheses about how traits influence the range sizes of species. Topics with substantive content include symbioses, the Appalachian Mountains, lichen morphology, and natural history collections. Scientific skills development modules focus on hypothesis development and testing, geographic information systems, statistics, and preparing presentations and manuscripts.
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.

**PLOS ONE, November 2023**

*“An international consensus on effective, inclusive, and career-spanning short-format training in the life sciences and beyond”*


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 Molly)!

Partner Summit

We want YOU to come, share your work, connect with others, and get your questions answered! Register now for the 2024 BioQUEST Partner Summit and learn more about sharing your work as either a lightning talk or poster in this document.

To celebrate our partners’ accomplishments, to make their work and BioQUEST and the QUBES Platform’s roles more visible, and to strengthen and connect our communities, we’re inviting partner leaders to the BioQUEST Partner Summit 2024. This virtual event will feature lightning talks from partner leaders to showcase the excellent work we’ve done together and opportunities for networking and discussion with leaders in the BioQUEST/QUBES community. Learn how other groups are using the QUBES platform, find new collaborators and resources, and brainstorm ways to overcome project challenges.

Are you the leader of a project that is not yet a BioQUEST partner? Join us to learn about the benefits of partnering with BioQUEST and meet fellow project leaders.

Partner News and Opportunities
2024 Spring QB@CC Incubator

Are you interested in developing open education resources to introduce quantitative skills in a life sciences classroom AND provide life science context and data in a mathematics classroom? Apply now to join a 2024 Spring QB@CC Incubator!

Participants in incubators will focus on developing modules with a strong focus on quantitative skills that can be used in both undergraduate life science and mathematics courses. Accepted applicants will work in groups that include math and biology faculty, select a mutually interesting quantitative biology topic, and collaborate to develop educational modules appropriate for use in their own classrooms. Teams of math and biology faculty are encouraged to apply. Team applicants may stay together or join different groups to work on their module for the semester. Participants will have weekly virtual sessions to collaborate with and support others in the incubator group. Learn more and apply on the QB@CC Group Page. Applications due December 15, 2023.

Math and Biology: A Correlation Made in Heaven 2024 FMN

Are you a biology instructor who wants to incorporate more linear regression into your course? Are you a math instructor looking for authentic biological contexts to use in a course that covers linear regression? That's where the QB@CC Fall 2023 Faculty Mentoring Network (FMN) comes in! We know that biology and statistics go hand and hand but incorporating mathematics into your biology course or biology into your mathematics course can be a challenge on your own. As a member of the FMN, you will implement one or two linear regression-focused QB@CC modules into one of your courses this Fall with the support of your fellow FMN participants and two faculty mentors.

Participants in this FMN will focus on how to use data-driven modules in undergraduate mathematics courses. Accepted applicants will customize and implement newly designed biology educational modules from a wide range of topics. While doing this, they will participate in biweekly virtual sessions to collaborate with and support others in the network and receive mentoring. Learn more and apply on the QB@CC Group Page. Applications due December 15, 2023.

Applications Still Open for the BEDE Network Spring 2024 FMN

Are you interested in integrating data science skills into your undergraduate biology or environmental science classes? Could you benefit
from support in formalizing data science learning outcomes that are already part of your courses? Join the Biological and Environmental Data Education Network (BEDE Net) Faculty Mentoring Network for the Spring 2024 session.

Participants in this FMN will apply a newly developed ‘data science in biology’ curriculum map to identify appropriate data science learning outcomes for their classes. They will then develop a learning module to be used in their courses, using backward design pedagogy to ensure alignment between student learning outcomes, assessments, and class activities. Indicate your interest using this form!

Applications are due by January 8, 2024.

Teaching Faculty Needed: Participate in a Study on the Impact of Teaching with Open Science

The Allen Institute is recruiting faculty teaching mitosis for both the pilot phase of the project in the first half of 2024, and the main testing phase in fall 2024-first half of 2025.

- Teach a new set of lessons on mitosis and cell structure that are designed to fit into your existing course.
- Recruiting up to 30 faculty at 2-year and 4-year colleges/universities
- Many intro-level biology courses eligible.
- Courses may be in winter/spring 2024 (pilot test) or fall 2024 - winter/spring 2025 (core study).
- They provide teaching and student material for unit designed to fit into your existing course.
- You receive a $500 stipend, and each eligible student who completes all curriculum/survey materials receives a $10 Amazon gift card!

Fill out our interest form to tell them about your 2024-2025 courses. Visit their survey to sign up!

ITYC Reviewer Survey

IUSE Program: Innovation in Two-Year College STEM Education (ITYC) is recruiting reviewers for its next competition. If you are interested, please complete the following survey. You will be contacted by NSF staff only if they need someone with your background to serve in a merit review panel or as an ad hoc reviewer.

Want to learn more about ITYC? The ITYC program directors presented an overview of the program during recent office hours. A recording of the presentation is available here.