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 everyone!

Deb Rook here, Deputy Director of BioQUEST, but previously the Faculty Mentoring Network (FMN) Manager. As we prepare to announce our Spring 2022 FMNs, I’d love to say a few words about them. I have had the privilege of not only assisting in the creation and running of these professional development opportunities, but also connecting with mentors and participants working together over the years to adapt, implement, and share teaching materials. I often hear how lovely it is to connect with a group of like-minded peers from all over the country, especially when their home institution environment hasn’t gotten there yet.

Spring 2020 was a very surprising time for all of us—including me. I assumed that as school sent students home and everyone scrambled to move classes online that the FMNs would end early. I was wrong. Though the FMNs shifted their discussions, they continued because that community was so helpful and important for these participants. I highly recommend you check out the offerings when we advertise later this month, or to think about how running an FMN in the future could strengthen your community and advance your goals.

If you have questions about FMNs, we’ll be running a webinar on the topic on Nov. 18, and we also have weekly partner office hours.

Hope to see you there,

Deb Rook, PhD
Deputy Director, BioQUEST

In this newsletter:

BioQUEST News

- BioQUEST Webinar: Faculty Mentoring Networks, Nov. 18
- BioQUEST Expands Fall Semester Office Hours
- NSF Solicits Feedback from BioQUEST Community
- BIOME Fall Working Groups to Present Final Products
QUBES Corner

- 14 open educational resources were published to the QUBES Library in October! Browse the new resources here.

- FEATURED RESOURCE (from CourseSource): Teaching Cancer Biology Through a Lens of Social Justice

  Summary: The authors present an example of antiracist teaching using the molecular/cellular biology of cancer in an introductory biology course as a topic through which to address historic racial disparities.

Partner News and Opportunities

- Multiple Partners Collaborate on New IUSE Grant
- Project EDDIE to Host Module Development and Community Building Workshop
- Genomics Education Partnership Offers Training for New Members
- Registration Opens for COMAP’s Mathematical and Interdisciplinary Modeling Contests
- SIMIODE Seeks Judges for SCUDEM
- Biotechnology Teaching Program at NC State Seeks Postdoc, Postbac
- Apply to the 2022 HITS Case Fellows Program

Other Opportunities

- BSCS Science Learning to Host Humane Genetics Education Institute
- NSF’s Directorate for Undergraduate Education Welcomes New Program Directors
- 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.

Nov. 12, 19 - NSF RCN-UBE Office Hours
Nov. 18 - SABER Seminar: Mapping the Terrain of Othering
Nov. 18 - BioQUEST Webinar - Faculty Mentoring Networks
Nov. 19 - Online with LSE Webinar
Nov. 19 - Project EDDIE Meet the Author Event
**BioQUEST News**

**BioQUEST Webinar: Faculty Mentoring Networks, Nov. 18**

BioQUEST will be hosting a webinar on November 18 at 4:00 PM ET to introduce and discuss Faculty Mentoring Networks: what they are, how to run or participate in one, and what they can accomplish. We’ll also preview FMNs that are being offered in Spring 2022.

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

The Zoom link can be found here.

This is the second in a series! BioQUEST webinars will be held on the fourth Thursday of the month (the third in November and December), topics TBD.

Nov 18, 2021 04:00 PM  
Dec 16, 2021 04:00 PM  
Jan 27, 2022 04:00 PM  
Feb 24, 2022 04:00 PM  
Mar 24, 2022 04:00 PM  
Apr 28, 2022 04:00 PM

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

**BioQUEST's Expands Fall Semester Office Hours**

Our Partner Office Hours have been such a success that we’re adding an hour per week! We’ll now be available on 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.

Dates:

Wednesdays at 12:00 PM ET
Nov. 17
Dec. 1
Dec. 8
Dec. 15

Thursdays at 2:00 PM ET
Nov. 18
Dec. 2
Dec. 9
Dec. 16

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**NSF Solicits Feedback from BioQUEST Community**

The National Science Foundation has reached out to us for input on the value and need for an interdisciplinary training program for undergraduate students at the intersection of biology, mathematics, and computer science. You can read the full Request for Information here. They will be accepting comments until December 31, 2021 but hope that BioQUEST/QUBES community members might respond with thoughts sooner than that. The RFI describes NSF’s interest in developing a new program and a request for stakeholder input on some specific questions.

Please feel free to reach out to Mary Crowe with questions. You are also invited to share this information with others who might have interest or insights related to undergraduate education at the interface of biological sciences, mathematics, and computer science.

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**BIOME Fall Working Groups to Present Final Products**

Our 13 BIOME Fall Working Groups will be presenting their final products and reports at a viewing party on December 9—we can’t wait to hear about the discussions and progress made and where our participants might go next.

The final presentations will be posted to the BIOME group page shortly after December 9.
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!

**New Directions for Community Colleges, June 2021**

“Biology educators, professional societies, and practitioner networks within community colleges”

Holmberg, TJ, Gusky, S, Kiser, S et al

*A detailed overview of the professional development landscape from a community college perspective. QB@CC, BioINSITES, and BioQUEST are called out as important models for CC PD.*

**BioScience, October 2021**

“Data Science in Undergraduate Life Science Education: A Need for Instructor Skills Training”


*This important paper came out of an RCN-Incubator that was just funded for a full 5-year cycle. It surveys faculty about teaching data science principles and practices in biology and environmental science courses.*

*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

Multiple Partners Collaborate on New IUSE Grant

Representatives from the Center for Scientific Collaboration and Community Engagement, Academic Data Science Alliance, The Carpentries, Native BioData Consortium, Atlanta University Center Data Science Initiative, the SCORE-UBE Network, and the National Environmental Observation Network are teaming up to increase capacity in environmental data science through improved access to training and workforce development resources for diverse student populations. In particular, they will be supporting a series of working groups and workshops for instructors at Historically Black Colleges and Universities (HBCUs) and Tribal Colleges and Universities (TCUs).

Congratulations to the awardees, and we can’t wait to see the difference this grant will make.

Learn more about the grant.

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Project EDDIE to Host Module Development and Community Building Workshop

The Project EDDIE Module Development & Community Building Experience will be held online via Zoom as half day meetings on January 20, 27, and February 10. This workshop facilitates participants developing teaching modules that pair scientific concepts and quantitative reasoning with teaching with data. They follow a tested design rubric developed by Project EDDIE and resulting materials will be published as part of a growing collection.

During the workshop you will construct a 1-day module that uses an openly available dataset for a specific ecology, limnology, geology, oceanography, hydrology, or environmental science course. Each module will focus on a scientific concept and address a set of quantitative reasoning or analytical skills using large, openly available datasets following the Project EDDIE module structure. Interactive peer review, module share out meetings following the workshop will help you improve your materials before you pilot them.

Participants will be expected to:

- attend the workshop and develop a module
- attend one virtual peer review and one module share
Out and planning session
• teach and revise their materials
• and make revisions from the peer review and an external review before publishing.

Final modules will be published online by December 2022. Participants will be provided a $1500 stipend for completing, testing and publishing their module.

This workshop also provides special opportunities to:

• Understand how working with large datasets improves quantitative reasoning in students
• Incorporate your module into your syllabus/course schedule and develop an assessment plan
• Meet new people who share similar interests in teaching and working with data

There is no registration cost for attending this meeting.

The application deadline for this workshop is November 28, 2021 (extended). We hope to see you there!

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**Genomics Education Partnership Offers New Member Training**

January 3-14, 2022 | 2:00 – 3:30 PM (CT)

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. [Learn more about the training and find the application here.](#)

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**Registration Opens 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 Seeks Judges for SCUDEM

SCUDEM needs volunteer faculty judges for a one-hour time commitment during the period 20 November – 5 December 2021. Register here to be a Judge.

The essence of SCUDEM is the modeling and team experience for each student and the professional networking of students, faculty, and industry colleagues.
Biotechnology Teaching Program at NC State Seeks Postdoc, Postbacc

The Biotechnology Teaching Program (BIT) at NC State is hiring for two positions, a postdoctoral teaching scholar and a postbaccalaureate research assistant.

[Postdoctoral Teaching Scholar]
[Postbaccalaureate Research Assistant]

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

BSCS Science Learning to Host Humane Genetics Education Institute

BSCS Science Learning will be offering a professional development institute on Humane Genetics Education for college biology faculty beginning on January 14th, 2022. This institute will provide instructors with the instructional frameworks and curriculum needed to teach about race and human population genetics in order to reduce racially biased beliefs in students.

- The institute begins on Tuesday, January 14th at 2pm MST
- It will continue each Tuesday for 10 weeks
- Weeks 1-4 and 6-9 we will meet from 2-5pm Mountain Time
- Weeks 5 and 10 we will meet 1-5pm Mountain Time
- There are 14 seats available for the institute
- The institute will occur online via the gather.town platform

To apply to the institute, please fill out this survey by November 15.

To learn more about Humane Genetics Education, please refer to the following open-access papers, websites, and presentations:

Ending genetic essentialism through genetics education

Towards a More Humane Genetics Education

Webinar led by Brian Donovan, PhD

We will notify applicants who are accepted into the institute by mid-December.

NSF’s Division of Undergraduate Education Welcomes New Program Directors

This fall the Division of Undergraduate Education (DUE) welcomed new temporary Program Directors, called rotators, who make recommendations about which proposals to fund, support awards, and influence new directions in STEM education.

DUE is introducing the new program directors in their weekly newsletters.
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 are now available on the RCN-UBE website.