







#### **Visit QUBES Hub**

## Community Spotlight:



#### Our 2022-23 FMN Mentors

Over the 2022-2023 school year, BioQUEST facilitated 14 Faculty Mentoring Networks, bringing together more than 100 educators to connect over a broad common goal: to improve the student experience in today's STEM classrooms. Over 30 mentors led the way in these groups, creating community at a crucial time and providing expertise, advice, and guidance. In doing so, they have made significant contributions to STEM education, the professional growth of their peers, and to creating a vibrant, scholarly, innovative community around STEM education reform. Read the June Community Spotlight to find a list of mentors, links to the 2022-2023 FMNs and their resources, and a sneak peek for upcoming Fall FMNs!



#### Greetings BioQUESTer's

June is PRIDE month which means we are celebrating our colleagues, friends, and family that are part of the wonderfully diverse LGBTQ+ community. For allies, this is also an excellent time to reflect on your involvement with, and support of, the LGBTQ+ community and how you might become a better ally.

Here are some LGBTQ+ resources to hopefully stimulate conversation and action!

- Gender and LGBTQ+ in Natural Sciences: This is a
  collection of papers that is part of the Blueprint for
  Accelerating Change in Social Justice, Equity,
  Diversity, and Inclusion in STEM Curricula. Interested
  in adding to this reading list or joining this new
  project? Contact us!
- How We Help: Human Elements of Restoration
   <u>Ecology</u>: This module introduces the basics of restoration ecology, but also includes an interview with Dr. Anna Sher, an ecologist who belongs to the LGBTQ+ community. This lesson gives an example of how you can weave identity and representation into STEM content.
- Small is Beautiful: OER for Cultural Change in a STEM Institution: This report serves as a resource for faculty, staff, and students interested in co-creating Open Education Resources (OERs). In particular, we embrace OERs as an invitation to co-create, revise, and collaborate in designing course materials to address systemic issues of racism by aligning with social justice principles of redistribution, recognition, and representation.

BLUE is developing a series of modules for introductory major/non-major biology courses on the process of science centering different biologists from the LGBTQ+ community. These will be available through their QUBESHub Portal soon, so stay tuned!

There are also many STEM-focused LGBTQ+ organizations. These provide support to LGBTQ+ students and professionals in STEM by providing a wealth of information, support, and workshops, among other offerings. Please visit these sites to learn more ways to help and consider donating.

• Out to Innovate

- oSTEM (Out in Science, Technology, Engineering, and Mathematics)
- Pride in STEM

Do you have resources you would like to share? Visit the Knowledge Base to learn more about publishing on QUBESHub, or contact us with any questions!

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

In this newsletter:

#### **BioQUEST News**

- Call for Fall FMNs
- New Book Chapter Teaser
- Featured Publications

# Partner Corner News and Opportunities

- OCELOTS' Fall Incubator Accepting Applications
- New EcoEdDL Publications from the Life Discovery FMN
- Student Success & Equity Podcast

#### **QUBES Corner**

**65 open educational resources** were published to the QUBES Library in March with **2,744** resources in total. Browse the new resources here.

• Featured Resources

in the lesson.

<u>Learning How to Make "Good Enough"</u>
 <u>Estimations (CourseSource)</u>

The ability to estimate physical quantities is a useful skill that can help develop critical thinking and scientific literacy. This lesson provides an accessible way to teach students how to estimate physical quantities by focusing on three key aspects: making assumptions based on previous experiences, explicitly converting units, and communicating the solution clearly.

• Biodiversity Counts! Making Sense of Diversity

Metrics and Graphs (BioGraphl)

In this lesson students 1) become familiar with

various graphs that are used to study diversity

patterns within and across sites, 2) learn about

some of the questions that can be addressed by

metabarcoding studies, and 3) reflect on an

interview with evolutionary ecologist Maria

Rebolleda Gomez, who collected the data used

July 10-14 BIOME Institute Virtual Synchronous Week

July 24-27 <u>BIOME Institute Optional In-person</u> <u>Session at the University of New Hampshire</u>

#### **BioQUEST News**

#### Call for Fall 2023 Faculty Mentoring Networks



Faculty Mentoring Networks (FMNs) are long-term, low-intensity professional development opportunities hosted through QUBES. An FMN brings a small group of likeminded educators together to: discuss pedagogy; share resources; adapt, implement, and share teaching materials; and create a community around a given topic.

We are currently recruiting for Fall 2023 FMNs with commitments needed by August 4, 2023, but the earlier, the better. If you are interested in running one, please contact Molly Phillips soon!

#### **Book Chapter Teaser**



As a collaboration among the Accelerating Systemic Change (ASCN) Working Group on Social Justice, Equity, Diversity and Inclusion, the BioQUEST Curriculum Consortium and SENCER we are developing an open education book and resources. Our plan is first to publish outlines for papers on the BioQUEST/QUBES site to solicit feedback and additions. We invite all interested people to submit a brief outline of a chapter or a resource that should be part of this effort by August 15, 2023. The purpose of initial applications is to form groups of people who may wish to collaborate. We invite any other groups or individuals to join us. We plan to form working groups this fall. We hope to have a complete first draft by Dec. 1, 2023.

We have created a collaborative group page on the BioQUEST/ QUBES hub. This home for a collaborative community is working on projects associated with social justice, equity, diversity, and inclusion in STEM undergraduate programs. This site will have discussion forums and a collection set for resources related to Social Justice in STEM undergraduate curricula, including publications, curriculum descriptions, and chapters for the proposed book. Please visit our site for more details. You can join through this link, submit a proposal for the book chapter here, and/or submit a new resource here.

We hope you will also consider joining our ASCN working group on <u>Social Justice</u> and <u>DEI in STEMM</u>.

To see some of what we presented at the ASCN Transforming Institutions Conference, <u>check out our materials</u>.

#### **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.

Computing in Science & Engineering, June 2023

"Hubzero: Community Growth for Four Science Gateways Supporting Open Sciencey"

Sandra Gesing, Claire Stirm, Gerhard Klimeck et al.,

Hubzero is a widely used science gateway framework designed to support online communities with efficient sharing and publication processes. The paper discusses the growth of communities for the four science gateways nanoHUB, MyGeoHub, QUBEShub, and HublCL using the Hubzero Platform to foster open science and tackling education with a diverse set of approaches and target communities.

ASCN DEI in STEMM Blog, June 2023

"From Civic Engagement to Civic Courage— Science Education's Next Chapter"

Eliza Jane Reilly

This article talks about the connections among science, education and democracy and how SENCER is helping educators teach science in relevant civic frameworks.

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 News and Opportunities OCELOTS Fall Incubator

Are you interested in creating an online, open-source module in tropical biology that is based on your own research? Apply now to join us for the Fall 2023 – Spring 2024 Incubator hosted by OCELOTS (Network for



Facilitating Online Content for Experiential Learning of Tropical Systems) & BioQUEST/QUBES.

Participants in this Incubator will create an online module in tropical biology for use in undergraduate life science courses, with the module hosted on the <u>Gala platform</u>. This will likely involve taking your case study that is based on your own research and working with a team of 1-3 mentors who will enable you to use best teaching and learning practices, the Ecological Society of America's 4DEE framework, media, and/or interactive data tools. As part of the process, teams will participate in bi-weekly virtual sessions to collaborate with and support others in the network. Applications are due August 1, 2023. Learn more and apply here.

#### **EcoEdDL New Publications from LDC FMN**

**Ecoed Digital Library** 



(EcoEdDL), Ecological

Society of America's online education resource portal, recently published several modules from the Life Discovery FMN that was hosted on QUBES Hub in Spring 2022. The LDC FMN was built off the Life Discovery – Doing Science Education Conference 2021's theme, Pushing Past Barriers: Ecological Science for All.

Find the published modules here.

#### **Student Success & Equity Podcast**

Continuous Learning Institute released a new Student Success podcast episode entitled Student Success and Equity with Dr. Tia McNair, Vice



President, Diversity Equity, and Student Success American Association of Colleges and Universities. Learn why equity work is everyone's work at every institution. Listen <u>here</u>.







