

Publishing Conference Materials on QUBES

A BioQUEST Community Conversation
Shared 5/26/22



This webinar discusses ways to leverage the QUBES platform to support professional meetings for both organizers and participants.



This webinar will address:

1. Brief overview of publishing on QUBES

Tagging, versioning, adapting, commenting

2. Conference/workshop related publishing
 - a. Conference participants
 - b. Conference organizers
3. Additional resources and examples
4. Questions, discussion and hands-on help

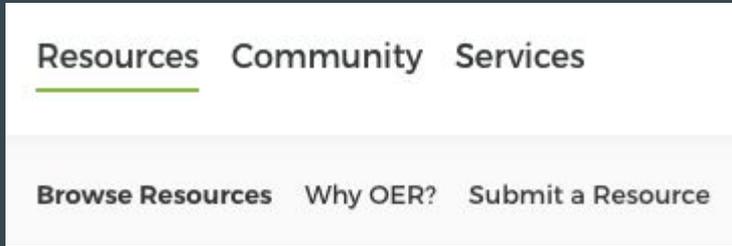
Overview of publishing on QUBES

Full support for the OER lifecycle including versioning and adaptations.

Today (5/26/22) there are 1947 resources available.

Every resource is associated with authors and a group.

Resources draw many visitors to QUBES.

A screenshot of the QUBES website showing the 'BioSkills Guide' resource page. The page has a white background with a green header. The header includes the QUBES logo (A BIOQUEST Project) and navigation links for 'Resources', 'Community', and 'Services'. On the right side of the header, there are links for 'About', 'News & Activities', 'Help', a search icon, and a user profile icon. The main content area features a colorful 'BioSkills' logo on the left, followed by the title 'BioSkills Guide'. Below the title, it lists the authors: 'Alexa Clemmons¹, Jerry Timbrook², Jon Herron¹, Alison Crowe¹'. Underneath, it lists the affiliations: '1. University of Washington 2. University of Nebraska-Lincoln'. A red arrow points from the text 'Visit group or author to find related resources' to the author names. To the right of the author information, there are statistics: '2436 total view(s), 974 download(s), 0 comment(s) (Post a comment)' and buttons for 'Download', 'Adapt', and '0'. Below the statistics, there are buttons for 'Collect' and 'Watch resource'. Further down, there are social media share icons (Facebook, Twitter, YouTube, LinkedIn, Email) and a section 'Brought to you by Core Competencies for Undergraduate Biology' with the 'BioSkills' logo. A red arrow points from the text 'Visit group or author to find related resources' to this section. Below the share icons, there is a 'Summary' section: 'The BioSkills Guide comprises program- and course-level learning outcomes for the Vision and Change core competencies that elaborate what general biology majors should be able to do by the time they graduate.' Below the summary, there is a 'License' section: 'Licensed under CC Attribution-NonCommercial-NoDerivatives 4.0 International according to these terms'. Below the license, there is a 'Version' section: 'Version 5.0 - published on 08 Jul 2020 doi:10.25334/156H-T617 - cite this'. Below the version, there is a 'Tags' section with buttons for 'Other', 'Reference material', 'Reference sheet', and 'Teaching material'. On the right side of the page, there is a 'Contents' section with a link to 'BioSkills Guide Broc...' and 'License terms'. At the bottom of the page, there is a blue banner with text: 'from project BioSkills Guide. This is a live resource with the page and content being available.'

Visit group or author to find related resources

QUBES OER Library- For Authors

The screenshot shows a resource page on the QUBES OER Library. The resource is titled "Grassy Narrows and Muskrat Falls Dam: Hypothesis Testing and t-Tests". The author(s) listed are Alida Janmaat¹, Pete Kaslik², Randall LaRue Moser Jr, Kevin David Simpson, Heather Susanne Zimbler-DeLorenzo³. The resource is licensed under CC Attribution-ShareAlike 4.0 International. It has 468 total views and 325 downloads. The page includes a "Download" button and an "Adapt" button. There are also social media sharing options and a "Cite this work" section.

Total Views & Downloads

468 total view(s), 325 download(s)
0 comment(s) (Post a comment)

Commenting & Adapting

Download **Adapt** 1

Versions

Cite this work

Researchers should cite this work as follows:

Janmaat, A., Kaslik, P., Jr, R. L., Simpson, K. D., Zimbler-DeLorenzo, H. S. (2021). **Grassy Narrows and Muskrat Falls Dam: Hypothesis Testing and t-Tests**. **Spring 2021 QB@CC Incubator #1**, QUBES Educational Resources. doi:10.25334/BGJ0-6W91

BibTex | EndNote

Publishing conference and workshop materials

Most people think about publishing teaching materials.

Reference materials offer other metadata.

You can make custom tags for your meetings

NABT2022

ASMCUE2022



QUBES
A BioQUEST Project

QUBES Resource Tags **COMPLETE**

- > Teaching material
- ▼ Reference material
 - ▼ Workshop material
 - Abstract
 - Presentation
 - Poster
 - Tutorial
 - ▼ Publication
 - Article
 - Report
 - Book
 - Thesis
 - ▼ Conference material
 - Abstract
 - Presentation
 - Poster
 - Tutorial
 - ▼ Other
 - Study guide
 - Reference sheet
 - Website
 - Manual
 - Software
 - Podcast
- > Dataset

Reasons for publishing conference and workshop materials

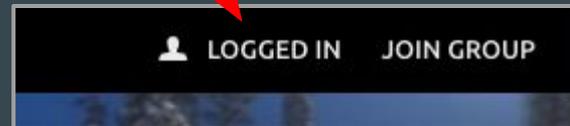
Individuals

- Get a publication citation and stable, public citation for your scholarship.
- Use versioning and adaptations to evolve your materials.
- Use the comments to solicit input and make connections with others.

Meeting Organizers

- Create a permanent record of your event (very helpful for reporting to funders).
- Foster pre- and post- meeting work and collaboration.

You can access your profile through the **mini-dashboard**.



QUBES
A BioQUEST Project

Resources Community Services

About News & Activities Help — Q SD

Join us for 2022 BioQUEST Office Hours and Webinars!

BioQUEST is hosting **Partner Office Hours** this spring on Wednesdays at 12:00 PM ET and Thursdays at 2:00 PM ET. Stop by to connect, ask a question, or tell us what you need!

We're also continuing a webinar series. Visit our **Office Hours and Webinars page** to register for the next webinar or to view past sessions.

Thank you and happy new year!

News

- Check out our new **Grant Services page**: Get a kick start to your grant and...
- NSF Issues RFI on Undergraduate Training in Biology, Mathematics, and...
- BioQUEST/QUBES Newsletter - January 2022

Community Spotlight

BioQUEST/QUBES Community Spotlight - BIOME Fall Working Groups

Visit ROW

Latest Tweet

@BioQUESTed

BioQUEST Curriculum Consortium Retweeted

IDigBio @IDigBio

IDigTRIO Biology Career Conference and Fair is right around the corner but you still have plenty of time to join in the fun! Virtual conference registration, & virtual mentoring sign-ups are open & the 2022 conference agenda is LIVE. [idigtrio.org](#) 1/3

EXCITING

4h

Visit News & Activities

Sam Donovan

SSDONOVA@GMAIL.COM

- Profile
- Dashboard
- My Groups >
- My Projects >
- My Collections >
- Logout

While you are there - you can make sure your profile is up to date

**QUBES**
A BioQUEST Project

[Resources](#) [Community](#) [Services](#)

[About](#) [News & Activities](#) [Help](#)



[Community](#) [Groups](#) [Faculty Mentoring Networks](#) [Partners](#)

You are here: [Home](#) / [Community](#) / [Members](#) / [Sam S Donovan](#) / Profile


[Change Picture](#)

[Dashboard](#)

Profile

[Account](#)

[Blog](#)

[Collections](#) 6

[Contributions](#) 113

[Courses](#) 4

[Groups](#) 224

[Messages](#) 7406

[Projects](#) 332

 **Sam S Donovan**

PROFILE COMPLETENESS 78%

Name	Sam S Donovan	EDIT
Username	sam_donovan	
Password	*****	EDIT
E-mail	sam.donovan+qubes@bioquest.org	EDIT
Organization	BioQUEST Curriculum Consortium	EDIT
Employment Status	Nonprofit / Non-governmental organization / Foundation	EDIT
Website	https://qubeshub.org/community/members/1020/profile	EDIT
Telephone	(not set)	EDIT
ORCID	0000-0003-4021-9878	EDIT
Reason	(not set)	EDIT
Interests	data science education ecology Evolution Model Based Reasoning phylogeny science education	EDIT

Your profile has a summary of activities - including publications

Resources Community ServicesAbout News & Activities Help — Q 

Community Groups Faculty Mentoring Networks PartnersYou are here: Home / Community / Members / Sam S Donovan / Contributions



Sam S Donovan

Categories ↕ ↓ Popular ↓ Title ↓ Date

Publications (1-25 of 90)



The RIOS Institute Strategic Plan

01 Apr 2022 | Contributor(s): [Carrie Diaz Eaton](#), [Karen Cangialosi](#), [Kaitlin Bonner](#), [Bryan Dewsbury](#), [Krystie Wilfong](#), [Sam S Donovan](#), [Jasmine Roberts-Crews](#), [Robin Taylor](#), [Sebastian Alejandro Echeverri](#), [Osceola Heard](#), [Jackson Skinner](#) | doi:10.25334/6HNW-6M58

The Institute for a Racially Just, Inclusive, and Open STEM Education (RIOS Institute) is a virtual synthesis center led by a diverse set of individuals at the interface of open education, STEM postsecondary education, and leadership in social justice, equity, diversity, and inclusion (SJEDI)....

☆☆☆☆☆ out of 5 stars



BioQUEST Partner Support Module: Exploring Community

28 Feb 2022 | Contributor(s): [Hayley Orndorf](#), [Sam S Donovan](#), [Deborah Rook](#) | doi:10.25334/ZCGN-AJ08

A four-week module for BioQUEST's Research Coordination Network partners on using BioQUEST's features, resources, and services to build a community that supports their project goals.

☆☆☆☆☆ out of 5 stars

- Dashboard
- Profile
- Account
- Blog
- Collections 6
- Contributions 113**
- Courses 4
- Groups 224

Search by author to see what else they have published



Message

Kaitlin Bonner

Organization

St. John Fisher College

Website

<http://www.sjfc.edu/academics/arts-science/departments/biology/fac-staff-detail.dot?id=48082c59-1ad0-4920-b54e-1f1ac08240ae>

Biography

I am an Associate Professor at St. John Fisher College in the Biology department. I have a PhD from Oregon State University and a MS from University of New Hampshire, both in Zoology. I currently teach Evolution, Parasitology, Intro to Zoology, and Human Anatomy and Physiology. My research interests are in the fields of ecological genetics, parasitology, and molecular evolution, as well as pedagogical research.

Profile

Blog

Collections

Contributions 16

Search by author to see what else they have published



Resources Community Services

About News & Activities Help — Q



Community Groups Faculty Mentoring Networks Partners

You are here: Home / Community / Members / Kaitlin Bonner / Contributions



Kaitlin Bonner

Categories ↕

↓ Popular ↓ Title ↓ Date

Publications (1-5 of 16) See more results



The RIOS Institute Strategic Plan

☆☆☆☆ out of 5 stars

01 Apr 2022 | Contributor(s): [Carrie Diaz Eaton](#), [Karen Cangialosi](#), [Kaitlin Bonner](#), [Bryan Dewsbury](#), [Krystie Wilfong](#), [Sam S Donovan](#), [Jasmine Roberts-Crews](#), [Robin Taylor](#), [Sebastian Alejandro Echeverri](#), [Osceola Heard](#), [Jackson Skinner](#) | doi:10.25334/6HNW-6M58

The Institute for a Racially Just, Inclusive, and Open STEM Education (RIOS Institute) is a virtual synthesis center led by a diverse set of individuals at the interface of open education, STEM postsecondary education, and leadership in social justice, equity, diversity, and inclusion (SJEDI)...



Sustainability and Justice: Challenges and Opportunities for an Open STEM Education

☆☆☆☆ out of 5 stars

08 Feb 2022 | Contributor(s): [Carrie Diaz Eaton](#), [Kaitlin Bonner](#), [Karen Cangialosi](#), [Bryan Dewsbury](#), [Maggie Diamond-Stanic](#), [Jason Douma](#),

Message

Profile

Blog

Collections

Contributions 16

Reasons for publishing conference and workshop materials

Individuals

- Get a publication citation and stable, public citation for your scholarship.
- Use versioning and adaptations to evolve your materials.
- Use the comments to solicit input and make connections with others.

Meeting Organizers

- Create a permanent record of your event (very helpful for reporting to funders).
- Foster pre- and post- meeting work and collaboration.

Organize an online poster session

Best Practices and Recommendations for Designing Activities for Highlighting Diverse Scientists Through Quantitative Skill Development



Best Practices and Recommendations for Designing Activities for Highlighting Diverse Scientists Through Quantitative Skill Development

Kristen A. Butela¹, Pratima Jindal², and Sheela Vemu³
University of Pittsburgh¹ and Waubesa Community College^{2,3}

Abstract: Highlighting and showcasing diverse scientists through quantitative skill development is a critical step in faculty professional development. This document provides recommendations for designing activities for highlighting diverse scientists through quantitative skill development. The document is organized into three sections: (1) Introduction, (2) Recommendations for Designing Activities, and (3) Conclusion. The document is intended for faculty members who are interested in designing activities for highlighting diverse scientists through quantitative skill development.

Best Practices and Recommendations for Designing...

Kristen Butela, Sheela Vemu, Pratima Jindal
Version: 1.0

quantitative skills,... 1.0K 204 P 0 0 07.2021

Meet the presenter during Community Hour

July 30th from 11 am - 12 pm ET

Zoom Information

Forum Discussion

Faculty Mentoring Networks: Community Professional Development for the Digital Age



Faculty Mentoring Networks:
Community Professional Development for the Digital Age

Deborah Rook¹, Sam S. Donovan², Carrie Diaz Eaton³, Kristin...
University of Pittsburgh¹, Pennsylvania State University², and Pennsylvania State University³

Abstract: Faculty mentoring networks (FMNs) are a critical step in faculty professional development. This document provides recommendations for designing activities for highlighting diverse scientists through quantitative skill development. The document is organized into three sections: (1) Introduction, (2) Recommendations for Designing Activities, and (3) Conclusion. The document is intended for faculty members who are interested in designing activities for highlighting diverse scientists through quantitative skill development.

Faculty Mentoring Networks bring together like-minded educators to learn, create, and grow together.

Faculty Mentoring Networks:
Community Professional...

Deborah Rook, Sam S Donovan, Carrie Diaz Eaton, Kristin...
Version: 1.0 Adapted From: Faculty Mentoring Net...

fmn, Poster, Work... 695 143 P 0 2 07.2020

Meet the presenter during Community Hour

July 30th from 11 am - 12 pm ET

Zoom Information

Forum Discussion

Easy to access posters



Students Authoring Molecular Case Studies

Author(s): [Elizabeth Pollock](#)¹, [Kasandra Riley \(She/Her\)](#)², [Didem Vardar-Ulu](#)³, [Shuchismita Dutta](#)⁴

1. Stockton University 2. Rollins College 3. Boston University, Chemistry Department 4. RCSB Protein Data Bank, Rutgers University

Summary:

Poster on using case studies to help students develop their skills in reading primary literature and identifying authentic scientific problems by authoring their own case studies. Presented at the 2021 BIOME Institute.

Licensed under CC Attribution-NonCommercial-ShareAlike 4.0 International according to [these terms](#)

Version **1.0** - published on 22 Jul 2021 doi:10.25334/M0P7-DQ22 - [cite this](#)

Tags

Workshop material

Poster

case studies

Protein Structure

Protein Data Bank

Molecular Case Study

2021 BIOME

277 total view(s), 73 download(s)
0 comment(s) [\(Post a comment\)](#)

[Download](#)

[Adapt](#) 0

[Collect](#)

[Watch resource](#)

Share: [f](#) [t](#) [p](#)



Brought to you by
**2021 Biology and
Mathematics**

Contents:

[Students Authoring Mo...](#)

[License terms](#)

Introduction

Case studies are high impact ways to engage students more fully with course material by giving real world context to critical course content. Molecular case studies (MCSs) focus explicitly on visualizing and exploring the shapes and interactions of macromolecules as well as applying bioinformatics approaches to make connections between structure and function. Here, we describe an extension of the use of MCSs suitable for upper-level students which gets them to delve more deeply into the literature and think critically about scientific questions by authoring their own such case studies. For a description of molecular case studies and their use in courses from the introductory to advanced levels see both the poster introducing MCSs and the WIP on successful implementation of MCSs in class.

Motivation

The sudden shift to remote learning in Spring of 2020 presented challenges, particularly in retaining authentic research experiences in laboratory courses. We were engaged in pilot testing MCSs that semester, so we decided to involve our students in authoring MCSs as a replacement for planned lab-based CUREs. Encouraged by high student engagement, we continued to refine the guidelines for such an assignment during the past academic year, prioritizing discovery, iteration, and student ownership.

Assignment Design

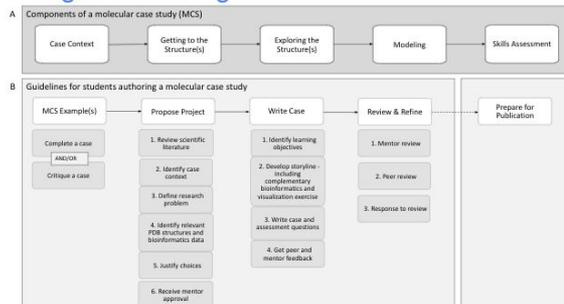


Figure 1. Structure of a molecular case study. A. All such cases use an exploration of protein structure via visualization of atomic level interactions to better understand functional aspects. B. Steps involved in having students write their own molecular case studies.

Implementation

Institution	Course/Term/# students	Assigned Topic	Course Context Notes
Boston University	Biochemistry Lab Fall 2020 30 students	One student-purified enzyme	Related to and replaced wet lab CURE components
Rollins College (PU)	Advanced biochemistry Spring 2021 7 students	One type of organism	Replaced wet lab CURE components on an unrelated topic
	Advanced biochemistry elective Fall 2020 8 students	One metabolic pathway	Supplemented a wet lab CURE completed at home
Stockton University (PU)	Advanced biochemistry Spring 2020 5 students	Student-selected from PDB	Extension of a literature assignment
	Biochemistry Lab Spring 2021 14 students	Student-selected from PDB	Replaced wet lab CURE component on an unrelated topic

Examples of Student Authored Cases:

Links made between protein structure and use of various bioinformatics resources

- Lysosomal hydrolase (Sanfilippo's syndrome)
 - Genetic testing
 - KEGG database to explore metabolic pathways
 - Chemical mechanism from literature
- Mpro from SARS-CoV2
 - BLAST searches to identify proteins with similar sequences
 - Analyzing data from literature
- Cytochrome P450s and Vitamin D deficiency
 - Analyzing data from literature
 - Sequence alignment
- Lactate dehydrogenase
 - Analyzing literature and/or student-generated data

Notes

- Reviewing a published case study gets students thinking critically about what makes a case effective.
- The most challenging part for students writing a case are steps 1 and 3, both of which may be new to students. Students are encouraged to look at learning goals from national standards. Writing learning objectives helps them better articulate how and why each component of their case study is relevant to the scientific questions addressed. It also guides the writing of assessment questions.
- Students found both giving and receiving peer feedback valuable while developing their case studies. Generally, much of the feedback received was addressed and necessary edits were incorporated. Peer feedback also lessens the amount of time faculty need to spend reviewing the submitted work.

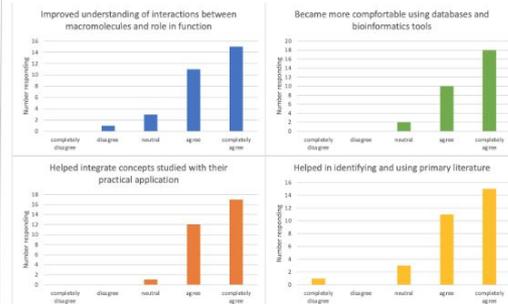


Figure 2. Responses to some of the student self-reported gains after writing a case study. The 30 students surveyed were at Boston University in Fall 2020, who wrote a case on lactate dehydrogenase as part of their biochemistry lab. Student responses were positive on key learning objectives.

Summary

Challenges presented during the COVID-19 pandemic inspired an innovative alternative to traditional lab-based CUREs that is applicable for both in-person and remote instruction models in upper-level courses. Our pilot worked remarkably in cultivating a scientific community of students working toward a common goal within the guided, but flexible remote working spaces. Testing the assignment in several different curricular settings and varying class sizes allowed us to revise the student and teacher guidelines for running such assignments. The revised guidelines and resources for implementation are available for reuse.

Available Resources

Can be made available upon request

Writing a Molecular Case Study - Student Handout

Writing a Molecular Case Study - Teacher guide

Draft rubric for evaluating a case study for publication on Molecular CaseNet

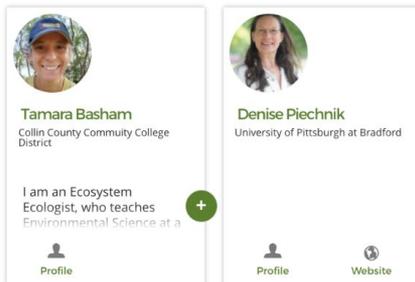
Acknowledgements

Molecular CaseNet is funded by the National Science Foundation.



Share Workshop materials and pre-work

Integrating Social Justice into your STEM Classroom: Redlining & Environmental Science



Two profile cards are shown side-by-side. The left card features a circular profile picture of Tamara Basham, a woman with short brown hair wearing a blue cap. Below the photo, her name 'Tamara Basham' is written in green, followed by her affiliation 'Collin County Community College District'. Underneath, the text reads 'I am an Ecosystem Ecologist, who teaches Environmental Science at a' with a green plus sign to the right. At the bottom, there is a 'Profile' link with a person icon. The right card features a circular profile picture of Denise Piechnik, a woman with long dark hair. Below the photo, her name 'Denise Piechnik' is written in green, followed by her affiliation 'University of Pittsburgh at Bradford'. At the bottom, there are two links: 'Profile' with a person icon and 'Website' with a globe icon.

Monday, July 26

1:00 - 2:30 pm ET

Recording

Forum Discussion

Co-Authors: Durrain Ansari-Yan, Diablo Valley College, Mackenzie Boyer, Arizona State University, Marci Cole Ekberg, Diablo Valley College, Matthew Heard, Belmont University, Adriane Jones, Mount Saint Mary's University, Shannon Jones, University of Richmond, Jennifer Kovacs, Agnes Scott College, Erica Lannan, Prairie State College, Pat Marsteller, Emory University, Mary Mulcahy, University of Pittsburgh at Bradford, Denise Piechnik, University of Pittsburgh at Bradford, Sarah Prescott, University of New Hampshire, Gustavo Requena Santos, Science Yourself organization, Ethell Vereen, Morehouse College

Description: By intentionally incorporating social justice activities and conversations in your classroom, you afford your students opportunities to engage in authentic examinations of their world and to make positive changes. This spring, our Faculty Mentoring Network (FMN) created models for introducing social justice issues into a variety of classes (introductory to upper-level STEM majors, non-STEM majors, and first-year experience). In this interactive workshop, our FMN members will discuss promises and pitfalls of design and integration for activities that they developed. Maximizing interactivity in smaller breakout groups, participants will be able to gain hands-on experience with some of the tools that can be used to explore social justice issues in STEM classrooms. Participants will also be encouraged to consider and provided guidance for adapting the presented tools and activities within their own communities. This workshop is one of two that use the historical practice of redlining as a gateway to discussing social justice issues in STEM courses. This first workshop introduces redlining in the context of Environmental Science, and a second complementary workshop is offered that focuses on redlining in the context of human health. Participants are encouraged to attend both workshops, as the two will discuss different tools and educational resources.

Pre-Workshop Assignment: Complete the handout, [Incorporating Social Justice into STEM Classrooms: Environmental Justice Workshop](#)

Workshop Materials



A thumbnail image for the workshop materials. It features a title 'Integrating Social Justice into your Classroom: Redlining and Environmental Science' at the top. Below the title is a collage of images including a map of Detroit and a green circle with the text 'Grosse Pointe'. At the bottom, there is a green banner with the text 'Integrating Social Justice into your STEM Classroom: Redlining &...' and the names of the authors: 'Tamara Basham, Denise Piechnik, Durrain Ansari-Yan, ...'. Below the names, it says 'Version: 1.0'. At the very bottom, there is a small footer with the text 'sustainability, envi...' and some statistics: '422', '109', '0', '0', and '07.2021'.

Additional Resources

[Links to Publishing Help Files](#)
[Submit a Resource](#)

[Partner Support Group](#)
[Office Hours and Webinars](#)

[View Posters](#)
[View Workshops](#)
[View Presentations](#)



Thanks for joining us. Please feel free to share questions and comments.



Sarah Prescott, PhD

Executive Director



Sam S. Donovan, PhD

Director of Outreach and Strategic Engagement



Drew LaMar, PhD

Director of Cyberinfrastructure

Follow us for updates and announcements.

@BioQUESTed
@QUBES

Newsletter



Caitlin Hayes

Communications Manager



Jenny Kwan

Full Stack Developer



Hayley Orndorf

Workshop Coordinator and UDL Program Manager



Deborah Rook, PhD

Deputy Director



Katrina Wells

Project Assistant