

# How BioQUEST and QUBES Can Support Your Project

A BioQUEST How To Webinar  
Shared 12/16/21



This webinar provides an overview of how BQ & QUBES can support projects and introduces the Spring 2022 FMN.



# This webinar will address:

1. A brief overview of how the QUBES platform is organized.
2. Examples of what you can do with a group.
3. Managing groups (a quick peek behind the curtain)
4. BioQUEST project support services
5. What to expect from the [Hosting a Project with BioQUEST / QUBES FMN](#)
6. Additional opportunities to learn about hosting a project.

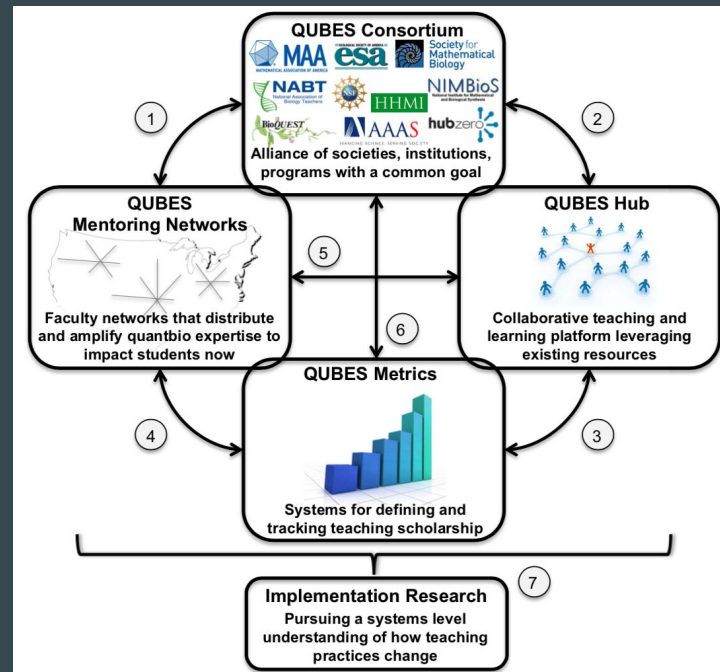
# Part 1

## A brief overview of how the QUBES platform is organized.

QUBES is a scientific gateway platform that combines a variety of tools and resources to support STEM education reform.

It is purpose built by college educators for college educators with an emphasis on collaborative workspaces and open education resources publishing.

Resources Community Services



# Part 1

## How QUBES is organized - Resources

Resources Community Services

[Browse Resources](#) [Why OER?](#) [Submit a Resource](#)

Resources are published into the OER Library.

Full support for the OER lifecycle including versioning and adaptations.

Today (12/16/21) there are 1619 resources available.

Every resource is associated with authors and a group.

Resources draw many visitors to QUBES.

**QUBES**  
A BioQUEST Project

Resources Community Services

About News & Activities Help

### BioSkills Guide

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1. University of Washington 2. University of Nebraska-Lincoln

Summary:  
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.

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Version **5.0** - published on 08 Jul 2020 doi:10.25334/156H-T617 - [cite this](#)

Tags: Other Reference material Reference sheet Teaching material

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Brought to you by  
**Core Competencies for Undergraduate Biology**

**BioSkills**

from project **BioSkills Guide**. This is a live resource with the page and content pages available.

Visit group or author to find related resources

# Part 1

## How QUBES is organized - Community

QUBES is made up of a bunch of Groups.

Each group has a lot of independence with respect to - look and feel, membership management, information sharing, and collaboration tools.

Everyone still publishes into the OER Library

Resources can be displayed in groups - both those published by the group and others.  
(see next slide)

Resources Community Services

Community Groups Faculty Mentoring Networks Partners



About

Freshwat

About QB@CC

QB@CC Mo

NIBLSE Learning Resource Collection

Core Competencies

Conference 2019 Results

QB@CC  
Con

QB@CC Mo

Sorted by Qu

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List of Quantita

Some QBCC modules f  
following categories.

1. Understand the rel
2. Write mathematic
3. Understand rates o
4. Choose appropriat
5. Explain descriptive
6. Use statistics wher
7. Make probability c
8. Convert units of m
9. Estimate accuracy
10. Change scales (or
11. Use elementary fu
12. Create graphs - 8
13. Interpret graphs -
14. Interpret tables - 5
15. Manipulate equat

C1. Role of Bioinformatics

C2. Computational Concepts

C3. Statistical Concepts

C4. Bioinformatics Tools

C5. Data Retrieval

C6. Model

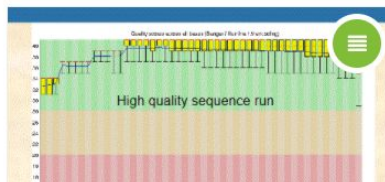
C7. Scripting

C8. Data Types

C9. Implications

Supplemental Resources for Instructors

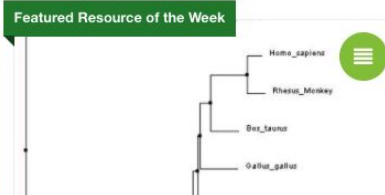
C1. Explain the role of computation and data mining in addressing hypothesis-driven and hypothesis-generating questions within the life sciences



**RNAseq data analysis using Galaxy**

Matthew Escobar, Sam S Donovan, Irina Makarevitch, Bill...  
Version: 4.0

Lab, bioinformatics, ... 250 36 P 0 0 07.2021



**Sequence Similarity: Introducing Biological Databases to Community...**

Jennifer Katcher  
Version: 1.0 Adapted From: Sequence Similarity: An I...

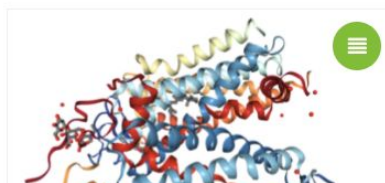
phylogenetics, bioin... 201 48 P 0 0 06.2021



**Yeti or not: Do they exist?**

Keith Johnson, Adam Kleinschmitt, Jill Ruffs, William (Bill)...  
Version: 3.0

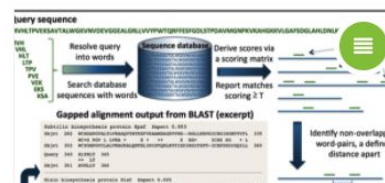
case study, bioinform... 492 448 P 0 0 12.2020



**A Critical Guide to the PDB**

Teresa Attwood, GOBLET Foundation  
Version: 1.0


NIBLSE, GOBLET, In... 322 89 P 0 0 12.2020



**A Critical Guide to BLAST**

Teresa Attwood, GOBLET Foundation  
Version: 1.0

NIBLSE, BLAST, Go... 298 85 P 0 0 12.2020



**Bioinformatics: the Power of Computers in Biology - a Practical...**

Daniel Barker, Heleen Plaisier, Stevie Anne Bain, Teresa...  
Version: 1.0

NIBLSE, GOBLET, U... 247 75 P 0 0 12.2020

Featured Resource of the Week

Featured Resource of the Week



# Part 2

## Examples of what you can do with a group.

## Support a meeting



Northwest Biosciences Consortium

### Northwest Biosciences Consortium Winter Workshop

A face to face meeting that was supported using a QUBES group.



# Part 2

## Using a group to:

# Support a meeting



### 2021 Biology and Mathematics Educators (BIOME) Institute

An online meeting where lots of participant products were captured and lots of pre- and post- meeting collaboration.



# Part 2

## Using a group to

# Support a meeting



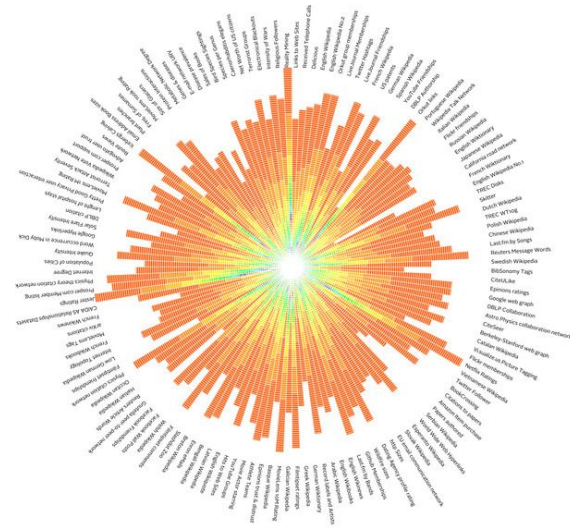
### Southwestern Community College Poster Session

Online space to organize student posters from a CURE - connected to other institutional collaborators.

# Part 2

## Using a group to

# Create a private workspace



[Introduction to Biostatistics at William and Mary](#)

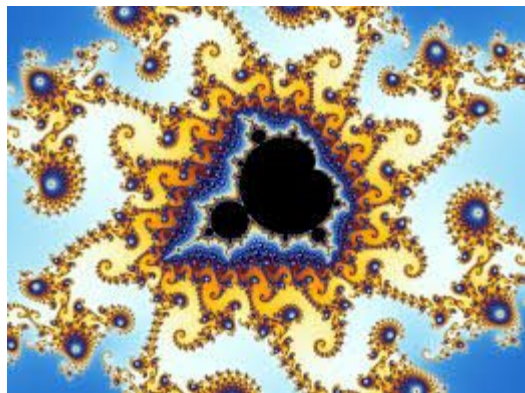
A Group designed to support a course.

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# Part 2

## Using a group to

# Create a private workspace



Postdoc and grad student QB Journal  
Club

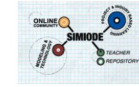
Special interest groups, advisory  
boards, Faculty Mentoring Networks,

...

# Part 2

## Using a group to

# Host a Project



## Partners Page

Professional societies, grant funded projects, pet projects, ...

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HHMI BioInteractive has partnered with QUBES to raise awareness of their free science education resources with undergraduate faculty. Bio multimedia resources, including apps, animations, videos, interactive and virtual labs, supplemented by teacher guides and classroom activities. developed quantitative and data-centric resources, including statistics, data manipulation, and graph generation and interpretation activities. stories with interviews and discussions with actual scientists.

## New Faculty Mentoring Network opportunity: HHMI BioInt Data Explorer FMN Spring 2020

### Apply now!

Join us to develop data visualization/statistical analysis teaching modules featuring authentic scientific research data to tell exciting biological stories! This faculty mentoring network (FMN) focuses on producing a suite of data analysis modules for college introductory biology or advanced high school level biology. Modules will cover a range of topics identified to be of interest to students, based on empirical student audience research. The participants will coordinate with each other to avoid redundancy of topics, help locate data, and provide feedback to each other. The resulting modules will be published on the QUBESHUB website and receive a DOI, similar to [this example](#). The developed modules will eventually be incorporated

### Dates and Location

This FMN will take place from February–June 2020. Participants will meet for three weeks) to support the development of the modules, culminating in a QUBES/BioQUEST Summer Workshop at the University of Pittsburgh, which will cover registration and housing costs, but each participant will be responsible for travel to the workshop. More information regarding the Summer Workshop can be found at <https://qubeshub.org/community/groups/summer2020>. Apply using

# Part 3

## Managing groups (a quick peek behind the curtain)

Membership settings / join policy

Developing pages

Communications / collaboration tools

Publishing in the QUBES OER Library



LOGGED IN

MANAGER



### Manager Dashboard



from here you can manage membership, edit settings, add pages, etc

#### MEMBERSHIP

Invite, promote, manage roles, etc

#### SETTINGS

Modify settings & access

#### PAGES

manage group pages & modules

#### CANCEL MEMBERSHIP

Leave group & revoke privileges

#### DELETE

Permanently Remove Group



# Part 3

## Managing groups

Membership settings /  
join policy

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Communications /  
collaboration tools

Publishing in the  
QUBES OER Library

Who can join? REQUIRED

☒ **Open/Anyone**

Membership requests are automatically accepted (no pending status).

☐ **Restricted**

Membership requests are pending and must be approved/denied by a manager.

☐ **Invite Only**

Membership can only be gained through an invite.

☐ **Closed**

Membership cannot be requested.

## Membership settings / join policy

## Communications / collaboration tools

# Publishing in the QUBES OER Library

Manage Pages

Manage Page Categories

Manage Modules

+ New Page

- Filter By Category

Or

Search Pages...

Home

Overview

/community/groups/big\_data\_is\_big\_fun

Manage Page

Menu

Quick Links

/community/groups/big\_data\_is\_big\_fun/quick\_links

Manage Page

Content: REQUIRED

Source

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Add Macro



From left to right: Harry, Ron, Hermione, Dobby

**Big Data is Big Fun**

Big Data is Big Fun is a working group branching from the 2016 National Academies Special Topics [Summer Institute](#) on Quantitative Biology. This group is working specifically on creating and implementing lesson plans that incorporate the use of large datasets in undergraduate classrooms. The group will use databases like DryadLab to form lessons that allows students to

Visitor)

Versions:

Browse Versions (12)

Cancel

Save Page

Settings

Category: OPTIONAL

- Select Page

Category –

Organize your content pages.

Comments: OPTIONAL

Use Group

# Part 3

## Managing groups

Membership settings /  
join policy

Developing pages

Communications /  
collaboration tools

Publishing in the  
QUBES OER Library

Overview	Any HUB Visitor ▼
Members	Any HUB Visitor ▼
Announcements	Any HUB Visitor ▼
Blog	Any HUB Visitor ▼
Calendar	Disabled/Off ▼
Collections	Any HUB Visitor ▼
Forum	Any HUB Visitor ▼
Projects	Disabled/Off ▼
Usage	Any HUB Visitor ▼
Wiki	Disabled/Off ▼
Wish List	Disabled/Off ▼
Citations	Disabled/Off ▼
Files	Disabled/Off ▼
Activity	Group Members Only ▼

Any HUB Visitor  
✓ Registered HUB Users  
Group Members Only  
Disabled/Off

# Part 3


## Managing groups

Membership settings /  
join policy

Developing pages

Communications /  
collaboration tools

Publishing in the  
QUBES OER Library



Updates22

Info

Team9

Files1

OER/UDL/Ungrading Mashup Master Repository

Databases

To Do

Notes

Publications1


## OER/UDL/Ungrading Mashup

Project by group **summer2021**

### Updates

Source

**B** **I** **U** **S** **x** **x²**



Stacey Kiser

Dec 6 at 03:28 PM

posted version 1.0 of resource "Ungrading to Decentered Grading Lightning Talk 2021 - YouTube"

### Publications

Start a new resource

Showing all 1 resource(s)

Title+	ID+	Content Type+	Status+	Version Releases
Ungrading to Decentered Grading Lightning Talk 2021 - YouTube v.1.0	2814	qubesresource	<span>POSTED</span> released 06 Dec 2021	1

# Part 4

## Hosting a Project with BioQUEST / QUBES FMN

FMN will run from mid January through mid April 2022

### Week 1 - Basic Group Participation

Establishing the norms for our group, learning the basics of how we are going to communicate and share things.

### Week 3 - Mapping Project Goals to QUBES Functionality

Connecting specific goals and strategies from your project to the tools and techniques to help make it happen.

### Week 5 - Basic Group Management

Getting under the hood. Building pages, sharing resources, managing membership, integrating other productivity tools.

### Week 7 - Promoting Community

Revisiting the organization and function of your group through the lens of community.

### Week 9 - Promoting Open

Why open? What are good open practices, and how can we promote them?

### Week 11 - Promoting Equity

What can we do to make the project more invitational and inclusive?

### Week 13 - Promoting Outcomes

How can you establish good practices that will make it easier to document and evaluate your work?

### Week 15 - Disseminating / Scaling / Sustaining

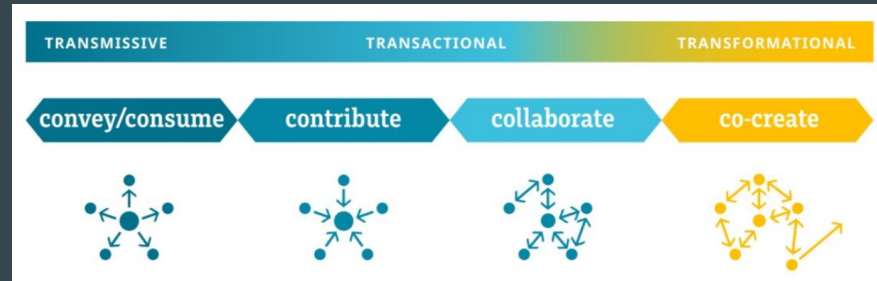
These are parts of any NSF supported activity and early planning is essential.

# FMN Workflow

Meet every other week for 1-hour synchronous discussion.

Between meeting weeks

1. Reviewing the recommended reading
2. Completing small assignments that give you relevant experience with the topic on QUBES.
3. Work on your project implementation plan for this topic (some groups may choose to meet during off weeks).
4. There will be office hours and help discussions available between synchronous sessions.



Week 7 - Promoting Community

Associated resources and opportunities

1. The CSCCE Community Participation Model – A framework for member engagement and information flow in STEM communities.
2. Contribute to our FMN collections with resources for community
3. Map out opportunities for participation and the broader social context for your project
4. Drop by the office hours for feedback, troubleshooting and discussion.





Group Manager ▾

Overview

FMN  
Requirements  
Application  
Information  
FAQs  
outline

# BioQUEST Partner Projects FMN

## Overview

Hosting a Project with BioQUEST / QUBES  
FMN Group

Applications Due: December 31, 2021

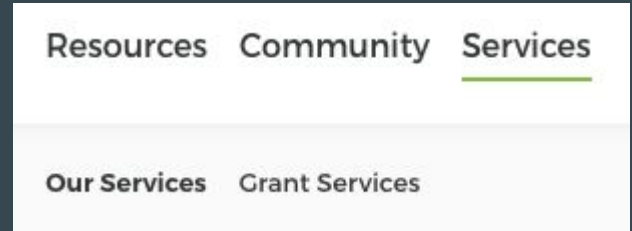
[Visit the Application Page](#)

Are you interested in learning more about the ways that your project can leverage BioQUEST and QUBES

<https://qubeshub.org/community/groups/bqpartnerfmn22/>

# Additional Resources

[Google Form to reach out to us](#)  
[Grant Support](#)  
[Services](#)  
[Partner Support Group](#)  
[Office Hours and Webinars](#)



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



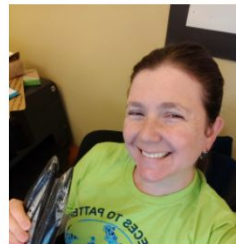
Jenny Kwan

Full Stack Developer



Hayley Orndorf

Workshop Coordinator and UDL Program Manager



Deborah Rook, PhD

Deputy Director



Katrina Wells

Project Assistant