



QUBES

The Power of **Biology** × **Math** × **Community**

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The Genomics Education Alliance invites undergraduate biology educators to complete a survey to gather information on the bioinformatics tools, training materials, and databases that are being used in undergraduate education.

The Genomics Education Alliance (GEA) is a Research Collaboration Network funded by NSF (RCN-UBE # 1827130) to increase and enrich the teaching of genomics and genomics-related subjects in undergraduate biology education.

Survey Purpose:

Gather information on what bioinformatics tools, training materials, and databases are being used in undergraduate education.

Gather opinions on the challenges of maintaining and serving these bioinformatics tools, databases, and related training materials to help identify ways GEA can be of assistance. We are particularly mindful of the need to update curriculum as basic tools and databases change over time.

Survey Audience:

For this survey we are interested in the opinions and needs of people who do any of the following in service of undergraduate biology education and in a way that at least potentially contributes to genomics curriculum:

- Develop or maintain their own bioinformatics software or databases
- Develop or maintain their own bioinformatics platforms
- Customize open/public software or platforms for classroom teaching
- Develop or maintain their own bioinformatics training materials
- Develop or maintain some other form of bioinformatics-related infrastructure

This will be a very small subset of the academic community GEA serves. Subsequent surveys will capture the opinion of faculty users of these tools. We invite faculty to learn more about what GEA would like to accomplish and to join us by visiting our webpage here: <https://qubeshub.org/community/groups/gea>

Time to complete:

This survey is 25 questions and is estimated to take 15-20 minutes to complete

[Take the Bioinformatics Infrastructure Support Survey.](#)

[Learn more about GEA.](#)



Biology Teaching Assistant Project

The Biology Teaching Assistant project (BioTAP) is accepting

applications for the BioTAP Scholars Program.

The **Biology Teaching Assistant Project (BioTAP)** is a network of anyone interested in improving the teaching professional development (TPD) provided to biology graduate students. BioTAP is very pleased to announce that the application for Cohort 3 of the BioTAP Scholars program is now live on the BioTAP website:

https://osu.az1.qualtrics.com/jfe/form/SV_b7Qer1hJXFMQuQB (due January 18, 2019).

BioTAP Scholars will work together over the 2019-2020 academic year to conduct research on biology GTA teaching professional development (TPD). By working together as a network, we intend to generate new evidence to inform recommendations for the improvement of biology GTA TPD. All are invited to apply and no research experience is necessary.

Cohort 3 will be selected in February 2019, and will meet as a group June 3-4, 2019, at The Ohio State University in Columbus, OH.

[Learn more about the BioTAP Scholars Program on the application page of the BioTAP website.](#) If you want an idea of what research might result from the program, you can check out the recordings from the recent BioTAP Scholars Virtual Conference and watch presentations by Linda, Christopher, and Adam; you can also read the abstracts of Star and Heather. See the BioTAP website (biotap.utk.edu) and click on the tab for BioTAP Conference.

If you have questions about the BioTAP Scholars Program, please contact Beth Schussler (eschussl@utk.edu).

[Apply now!](#)



Invitation to participate in a quantitative/math skills research project

Greetings,

My name is Sondra LoRe and I am requesting your assistance in completing an inventory survey regarding quantitative/math skills in introductory biology courses at the

community college and undergraduate level.

As student enrollment in Community College (CC) and undergraduate courses increases along with the needs for career ready professionals in STEM fields, biology faculty continue to experience challenges with student quantitative/math skills in their courses. Students' math and quantitative skills vary greatly and faculty encounter obstacles to teaching biology concepts using data because of these wide-ranging skills.

The purpose of this research study is to determine what quantitative/math skills Community College and undergraduate biology faculty need and value to aid in the design of future curriculum and professional development opportunities. The survey will take approximately 15-20 minutes to complete.

Please click on the link to complete the survey and to indicate consent to participate:

https://utk.co1.qualtrics.com/jfe/form/SV_0JmGwhS9VPYeXK5

If you have any questions, please do not hesitate to contact members of the research team, Sondra LoRe, EdS (slore@utk.edu) or Gary Skolits, PhD (gskolits@utk.edu)

Thank you for your time.

Sondra

Sondra LoRe, EdS

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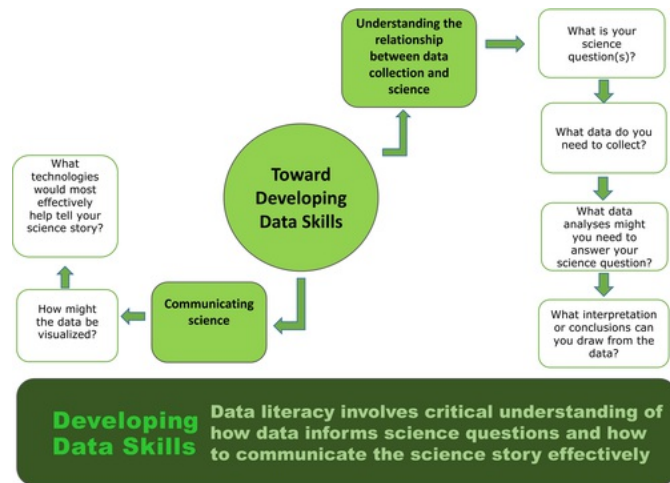
Knoxville, TN 37996

Slore@utk.edu

Publications of Interest

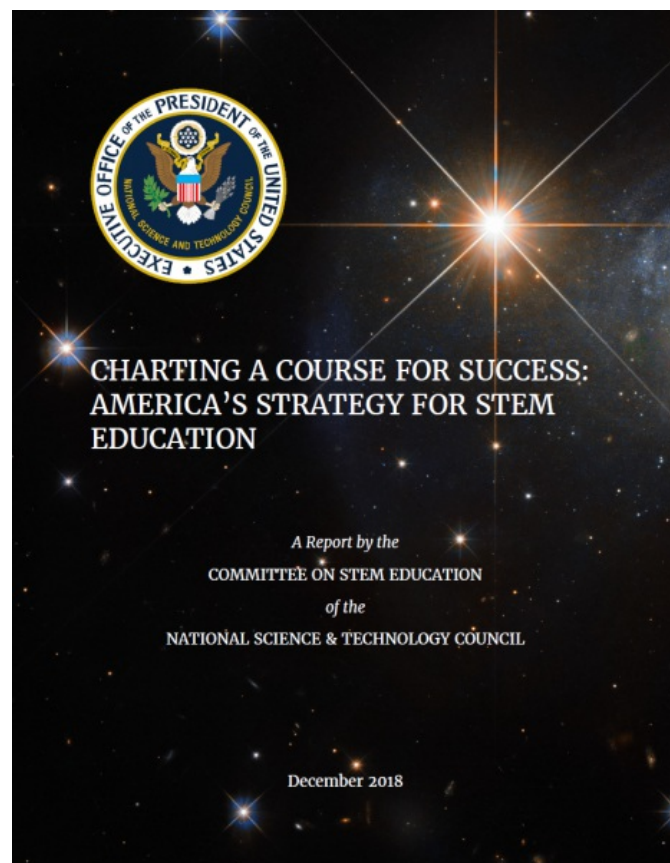
In case you missed them, we would like to share some recent publications that may be of interest to the QUBES community.

The growing importance of data literacy in life science education



[“The growing importance of data literacy in life science education”](#) by **J. Phil Gibson and Teresa Mourad** was recently published in the American Journal of Botany. This article summarized discussions by attendees of the 4th Life Discovery Conference - Data: Discover, Investigate, Inform, where attendees participated in a networking session focused on identifying key features of data literacy and approaches for helping students develop these skills. This is a great article to stimulate reflection and discussion on data literacy in biology education.

Charting a Course for Success: America’s Strategy for STEM Education



[Charting a Course for Success: America's Strategy for STEM Education](#) is a recently published report by the Committee on STEM Education of the National Science & Technology Council. This report describes the 5-year Federal strategy to improve STEM education, based on a vision for a future where all Americans will have lifelong access to high-quality STEM education and the United States will be the global leader in STEM literacy, innovation, and employment.



The American Society for Microbiology is accepting session proposals for ASMCUE 2019.

Calling all Undergraduate Microbiology and Biology Educators!

Planning is underway for the 2019 [ASM Conference for Undergraduate Educators \(ASMCUE\)](#) happening August 1–4, in Tysons, Virginia. This is a perfect event for you to share best practices with colleagues from community colleges, undergraduate institutions and doctoral-granting universities. ASMCUE offers multiple [unique presentation types](#). Consider sharing your project and help us shape the program by submitting a session proposal.

The submission deadline is: January 10, 2019 ,11:59 p.m. PST

[Submit a session proposal.](#)



Resource of the Week

ROW Recap

If you are considering any changes to your courses for the spring semester, now might be a good time to take advantage of the large and growing collection of open education resources (OER) that are freely available on QUBES. Most resource have open licenses, allowing you to easily find, use, and adapt the materials.

You can check out the exceptional resources that have been featured in the [Resource of the Week \(ROW\)](#) where we shine the spotlight on an outstanding QUBES resource on a weekly basis. Each ROW includes a brief description of the education resource along with related materials and opportunities that might be of interest to faculty.

In this ROW Recap, we've rounded up the last 5 resources featured on the ROW since our last newsletter. Browse the titles below and click on the images to visit the resource featured in the ROW. You can also browse all past ROWs on the [ROW landing page](#) and [subscribe to the ROW](#) to get it automatically sent to your email inbox. You do not need a QUBES account in order to subscribe!

Of course, you can also [browse the entire collection of OER](#) shared by QUBES users and partners.

If you adapt or customize a QUBES resource for your particular classroom setting, we highly encourage you to share it back with the community. QUBES has an OER publishing platform that makes it easy to share your work and track its impact. [Learn more about OER on QUBES.](#)

Equity, Social Justice and Biology: Demystifying Race with Genetics of Human Skin Color (Version 1.0) By Vedham Karpakakunjaram



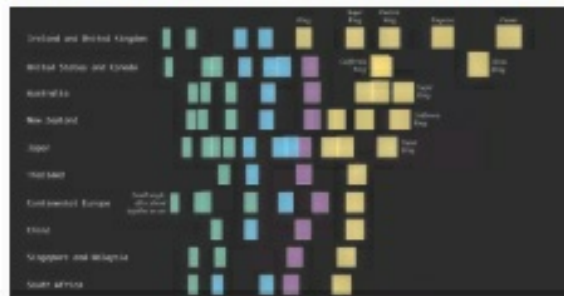
Environmental Drivers of Ecosystem Carbon Fluxes from Minutes to Years (Version 1.0)

By Christopher Gough, Cindee Giffen, and Thomas W Woodward



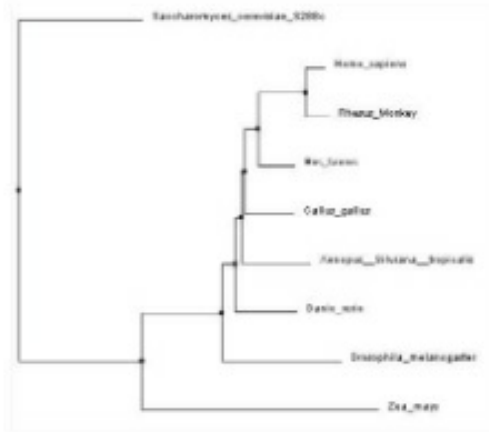
Figure of the Day (Version 1.0)

By Arietta Fleming-Davies and Jeremy M Wojdak



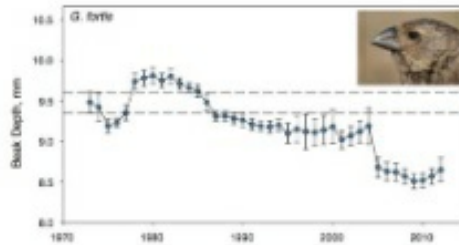
Bioinformatics - Investigating Sequence Similarity (Version 4.0)

By Adam Kleinschmit, Benita Brink, Steven Roof, Carlos Christopher Goller, and Sabrina Robertson




Evolution in Darwin's Finches: Using Darwin's Theory of Evolution by Natural Selection postulates to evaluate evidence of evolution (Version 1.0)

By Kaitlin Bonner



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 QUBES Blog

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Best of the Blog



Reflections on the 2018 QUBES/BioQUEST Summer Workshop

Four highly motivated future faculty volunteers attended the 2018 QUBES/BioQUEST Summer workshop. Over the last couple months, they have been sharing their experience with the QUBES Community in a series of blog posts. Future faculty and guest blogger, Darcy Taniguchi, shares her experience with the QUBES Community in the final post in this series.

[Learn more...](#)

Opportunities



**Applications are open for HITS
Case Fellows and HT
Researchers.**

Apply to become a HITS
Case Fellows (faculty and
instructors) or HT
Researchers (graduate
students and postdoctoral
fellows).

[Learn more...](#)



Join the QUBES team!!!
QUBES is looking for a full-time
web developer!

QUBES is looking for a full-time web developer, working with PI, Drew Lamar at the College of William and Mary, to join the team. Remote work possible, collaborative spirit necessary.

[View the job posting and apply.](#)



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QUBES Newsletter: Issue 12