Participants in the 2017 Summer Workshop "Making Meaning through Problem solving in Biology"
Making Meaning through Modeling: Problem solving in Biology.

At this summer’s workshop, which ran from July 23-28, we delved into how to engage our students more productively with models and the process of modeling. We discussed how to enhance the skills students need to understand and build models, how to expand upon models already in our curriculum, and ultimately how to enhance student understanding of the nature and process of science modeling. All of this discussion occurred in the context of effective pedagogical approaches, the sharing of excellent resources, and the building of community around use of models. Workshop participants will continue to work with colleagues on the QUBESHub through the fall semester to develop and implement new approaches and materials.

Learn More

What's New with Faculty Mentoring Networks

Registration is open. Early bird deadline September 8, 2017.
QUBES Faculty Mentoring Fellows Program

During the Spring of 2017, QUBES launched an initiative – the Faculty Mentoring Fellows Program. Individuals with interesting instructional ideas and materials to share with others were recruited to become fellows and to lead upcoming QUBES Faculty Mentoring Networks (FMNs).

Fellows met online to learn how QUBES Faculty Mentoring Networks operate, how they could best reach out to others to share their educational know-how and materials with QUBES, and develop plans for Fall 2017 or Spring 2018 Faculty Mentoring Networks. Scroll down to see the upcoming Faculty Mentoring Networks led by our Fellows!

Read the following blog post by Jeremy Wojdak to meet the mentoring fellows and to learn more about participating in the Fellows Program.

Upcoming Faculty Mentoring Networks

Beanbag Biology: Teaching Quantitative Biology through Hands-on Activities

Dates: September 15, 2017 - April 27, 2018
Peer Mentor: Holly Gaff - QUBES Fellow
2017 Professional Development Conference

St. Louis Union Station Hotel
St. Louis, Missouri
November 9-12, 2017

Join other leaders in biology and life science education for four days of renowned speakers, hands-on workshops, informative sessions and special events that you can’t get anywhere else!

Learn more...

Registration: Open till September 15 - REGISTER

Approachable modeling for biologists, without calculus

Dates: November 1, 2017 - May 31, 2018
Peer Mentor: Erin Bodine - QUBES Fellow
Registration: Open till September 30 - REGISTER

Developing video tutorials for computational genomics

Dates: August 28 - November 3, 2017
Peer Mentor: Hong Qin - QUBES Fellow
Registration: Closed

Math Modeling Faculty Mentoring Network

Dates: September 11 - December 4, 2017
Peer Mentors: Ben Galluzzo and Maria Hernandez Fellows
Registration: Closed

Explore Authentic Data with Nuggets

Dates: August 28 - December 08, 2017
Peer Mentors: Melissa Kjelvik and Liz Schultheis
Registration: Closed
Current Faculty Mentoring Network

Resources for Collections-Based Undergraduate Education

Dates: April 1 - December 31, 2017
Peer Mentors: Molly Phillips and Anna Monfils

HHMI BioInteractive Faculty Mentoring Network

Dates: June 1, 2017 - January 31, 2018
Peer Mentors: Melissa Csikari and Kristine Grayson

Science gateways allow science and engineering communities to access shared data, software, computing services, instruments, educational materials, and other resources specific to their disciplines. This conference will be an opportunity for gateway creators and enthusiasts to learn, share, connect, and shape the future of gateways as
The Network for Integrating Bioinformatics into Life Sciences Education (NIBLSE, “nibbles”) seeks to establish bioinformatics as an essential component of undergraduate life sciences education. NIBLSE has developed a set of bioinformatics core competencies that are available on its homepage (here) and that are described in a paper recently posted on bioRxiv. In addition, NIBLSE is developing the Learning Resource Collection (here), a collection of curated bioinformatics learning resources. To enrich the Collection, NIBLSE partnered with QUBES on Development Incubators, in which authors work collaboratively with NIBLSE members to refine a learning resource for submission to a peer-reviewed journal, such as CourseSource. In addition, previously-published learning resources can be added to the Collection.

If you would like to submit a resource, use this submission form. If you would be willing to participate in an Incubator, please fill out this form. You can learn more about NIBLSE, Incubators, and the Learning Resource Collection at niblse.org.
been traveling to workshops and conferences, experiencing the landscape of research at the interface of mathematics and life and environmental science.

I see the research front moving with much progress - even more so as it synthesizes with other disciplines.

Read more...

Using DataCamp to help teach data science in a biostatistics class

A large part of science can be described as the process,
through observation and measurement, of extracting information from the world in the form of data. Even with in-silico models, we construct analytic information through mathematical analysis, or record "measurements" on resulting simulations. Statistics or machine learning can then be used on the results or data to extract relevant information.

Read more...