As an internationally-recognized leader in synthetic biology education, BioBuilder's workshops introduce synthetic biology curriculum with a mixture of classroom, laboratory and design activities that are applicable in many settings.

By presenting authentic research questions in accessible, modular, and teachable form, BioBuilder aims to spark interest, engagement, and understanding in STEM fields.

Who should attend?
Teachers who have previously completed a 3-day BioBuilder Bio-engineering Essentials Workshop who:

- are seeking to deepen their knowledge of synthetic biology;
- are preparing to further integrate BioBuilder curriculum into their classroom and/or enhance their BioBuilderClub offering;
- are seeking to further engage with the BioBuilder community.

What can participants expect?
- Days 1-2: Instruction in advanced curriculum and teaching methods;
- Days 3-5: Participants will instruct portions of the BioBuilder Bio-Engineering Essentials Workshop;
- Instruction from BioBuilder Founder and Executive Director Dr. Natalie Kuldell and longtime BioBuilder Master Teacher Dr. Rebekah Ravgia;
- A mixture of engaging classroom lecture, laboratory, and interactive design activities;

Participants who complete this workshop may be eligible to co-lead future BioBuilder Bio-Engineering Essentials Workshops or serve as mentors to new teachers adopting the BioBuilder curriculum.

Feedback from Past Attendees

"The format and the labs are very well structured. Excellent instructors."

"I hope to start a BioBuilderClub at my school, and incorporate part of the BioDesign into my science research program."

"It was a lot of fun and quite challenging. Everything was incredibly well designed and organized and the manipulatives were amazing."

"I learned a lot of new strategies to use right away! This was awesome!!!"
Ready to gain new knowledge and skills in the emerging field of synthetic biology?

Register here

More information at biobuilder.org/program/workshops/
Questions? Email carla@biobuilder.org

Meet the Instructors

Dr. Natalie Kuldell is the Founder and Executive Director of BioBuilder. Natalie has taught for more than a dozen years in the Department of Biological Engineering at the Massachusetts Institute of Technology. She is a highly regarded educator who develops discovery-based curricula drawn from the current literature to engage students in structured, reasonably authentic laboratory and project-based experiences. She studied Chemistry as an undergraduate at Cornell, completed her doctoral and postdoctoral work at Harvard Medical School, and taught at Wellesley College before joining the faculty at MIT in 2003.

Dr. Rebekah Ravgiala teaches Biology and Advanced Placement Biology at Tyngsborough High School in Tyngsborough, Massachusetts. She holds a B.A. in Biology and a doctorate in Mathematics and Science Education. She has been actively involved in the BioBuilder community since 2011, leading a BioBuilderClub team, and serving as a member of its Board of Directors. She is a recipient of the ASBMB Fostering K12/University Partnership Grant and the AMGEN Excellence in Science Teaching Award.