

SUMMER WORKSHOP INSPIRES TEACHERS TO BRING CURRENT SYNTHETIC BIOLOGY RESEARCH TO THEIR CLASSROOMS AND LABORATORIES

All over the world, engineers and biologists are collaborating in new ways through the emerging field of synthetic biology. Just as computer scientists and electrical engineers collaborated in the 1980s to usher in the age of information technologies, synthetic biologists are developing the genetic code as a language for reliably programming cells. Biology is poised to “grow” into the transformative technology of the 21st century.

To connect Missouri-area teachers with this cutting-edge content, a professional development opportunity will be offered in early July. A three-day workshop for high school and college teachers is made possible thanks to a partnership between The BioBuilder Educational Foundation and UMKC. [BioBuilder](#) is a public benefit organization that converts ongoing research in the field of synthetic biology into teachable modules. It has also provided teacher training in this classroom and laboratory content for the past four summers, training 100s of teachers from all over the world. UMKC will host this summer’s workshop, thanks to the efforts of Prof. Len Dobens from UMKC’s School of Biological Sciences and one of his former students, Kevin McCormick, who is a BioBuilder Master teacher at Summit Technology Academy.

“By putting current synthetic biology science and engineering research into the hands of teachers, our hope is to increase understanding and engagement with this exciting new field—for both the teachers and their students,” said Dr. Natalie Kuldell, who teaches in MIT’s department of Biological Engineering and is president and founder of the BioBuilder Educational Foundation.

The UMKC workshop teachers got connected through BioBuilder workshops in previous summers. Kevin McCormick reports, “Since 2013, I have been showcasing how wonderful it is to incorporate BioBuilder into a biomedical science curriculum that is rooted in engineering.” He co-taught a summer workshop for teachers in 2014 with Eric Kessler, director of the Bioscience Program in the Blue Valley’s CAPS program, and Dr. Dave Westenberg, Professor of Microbiology in the Dept. of Biological Sciences at Missouri University of Science and Technology. The three attended a BioBuilder Leadership Summit at MIT in August of 2014 and will reunite this summer to teach the UMKC workshop.

More information about this summer’s BioBuilder workshop at UMKC and a link to register can be found at <http://biobuilder.org/workshops/>

