

Students study toxicology at MIT

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Summerbridge Cambridge and the Center for Environmental Health Sciences at MIT recently partnered to create a hands-on, after-school program about toxicology for middle school students from the Cambridge Public Schools.

After learning the basics of toxicology, the science of how poisons affect living things, students engaged in a hands-on experiment. They chose a chemical such as orange juice, salt solution or Mountain Dew, and tested its effect on the germination rates of radish seeds. After analyzing and graphing their own data, students enjoyed an interactive field trip to MIT, visiting labs to see toxicology research in action.

Staff from MIT's Center for Environmental Health Sciences wrote the curriculum and trained Summerbridge Cambridge's after-school teachers - a team of talented high school and college students, most in their first classroom experience - in how to deliver it.

"The field trip was pretty cool," said Summerbridge Cambridge student Tamiru Bruck, a seventh-grader at the Baldwin School. "We got to look at a leaf up close under a microscope. It looked like brilliant crystals."

According to Summerbridge Cambridge teacher Gui Woolston, a junior at Harvard University, "The alliance between MIT and Summerbridge helped bring science to life by showing how the lessons learned in class relate to the frontiers of research."

This partnership advanced the educational goals of both organizations. It offered Summerbridge Cambridge an innovative curriculum and connected MIT's Center for Environmental Health Sciences to a group of curious, diverse Cambridge students.

Founded in 1992, Summerbridge Cambridge is a year-round, tuition-free academic program committed to educational equity. By matching up middle school students with teachers just a few years older than they are, Summerbridge Cambridge inspires excitement, learning, creates paths to college and promotes careers in education. The program currently serves 100 middle school students from Cambridge Public Schools and more than 40 future teachers annually.

The mission of the MIT Center for Environmental Health Sciences is to take a leadership role in facilitating and promoting research on the biological effects of exposure to environmental agents in order to understand and predict how such exposures affect human health. Through the Community Outreach and Education Program, the CEHS offers ideas, training and science supplies to schools and youth programs in Cambridge.