

Learning and engagement in citizen science

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Current world events have placed public health and wellbeing in the forefront of public concerns and interests, transforming the ways people interact, engage and learn science. One way to support and expand such engagement is through citizen science, a collaborative research effort of citizens and scientists, which has seen huge growth over the past decade. While citizen science has been suggested as a tool for promoting science learning, environmental awareness and critical thinking, how this learning takes place and what factors are involved in this process are not well understood.

This seminar will describe the processes involved in learning and engagement in *Breaking Good*, a citizen science initiative that empowers members of the public to be active researchers in projects that improve human health. *Breaking Good* includes both lab-based projects exploring the synthesis of new drug candidates, and an online project exploring the accessibility of the world's most important medicines. Through active participation in these projects, undergraduate student, school students and the community at large contribute to ongoing drug discovery research while encountering unique learning experiences such as exposure to the complexity and uncertainty of scientific process and gaining authentic experiences as scientists. These experiences will be outlined, discussing expected and observed learning outcomes and considering their potential to increase student grounded understanding of science and assist them in making future career choices. Opportunities for expanding such learning to a variety of settings and for people from diverse backgrounds and life experiences will be discussed.