

Microsymposium

MS84.O02

High School Enrichment: Scientific Research

E. Wasserman¹

¹*High School Science Research, Westchester, NY, USA*

Science Research is a three-year program that offers gifted students the opportunity to journey into scientific research under the apprenticeship of a research mentor, where they can gain an understanding of the underpinnings of modern scientific research – an opportunity that most high school students do not encounter in their formal science coursework. Come learn about this program, which skillfully marries the ideas of experiential learning and social experience, which is supported and structured by classroom learning. The talk will include information about the classroom course, which serves as a support system for the literacy skills needed to successfully design an original project, independently. In addition, an example of a high school crystallography partnership project will be presented. “Senior scientists (e.g., teachers, researchers, etc.) and students working together in a mutual learning process is the strongest model for student retention and personal involvement in science. Furthermore, there is no better way to excite students and to insure their continued involvement in scientific pursuits than to give them individualized active engagement and ownership of part of a creative scientific activity at an early stage in their development.” Science Research provides a unique opportunity for students to join a professional laboratory where advanced skills and critical thinking strategies are developed with concomitant support from their school in the development of college-level scientific learning skills and an understanding of the true meaning of scientific inquiry.

[1] Private communications with James T. Spencer, Syracuse University, 2013

Keywords: education, science research, undergraduate education