Name: Elizabeth Cavanaugh-Broad

Major: Neuroscience Minors: Chemistry and Studio Arts

Honors and Awards:
- Undergraduate Teaching Fellowship
- University Scholar Distinction
- Chancellor's Scholarship

Experience and Community Outreach:
- Board Member, Student Honors Activities Council
- Performer, Circus Juventas, Saint Paul, MN
- Presenter, Science Museum of Minnesota
- Captain, Pittsburgh Summer League Ultimate Frisbee
- Semester at Sea

Future Plans
“I have applied to an assistant scientist position with the Sea Education Association’s SEA Semester program, which allows students to learn about marine biology and oceanography in the context of experiential learning aboard a research vessel.”

Voting Information
Oakland, PA

Project Abstract
The University of Pittsburgh/Pittsburgh Public School District GK–12 program enables graduate and undergraduate students in science to serve in K–12 schools as a “scientist in the classroom,” who is knowledgeable about content, applications, and effective methods of teaching science and math. In 2005–2006, I worked with an elementary science specialist and in 2006–2007 I am working with an eighth grade science teacher. In both cases, I worked with my partner teacher to strengthen the coherency of science content delivered to students via the district’s Full Option Science System (FOSS) curriculum by identifying “big ideas” and incorporating them into lesson plans. As part of these activities, my team has developed lesson plans, curriculum extensions, materials, and assessments—all of which are designed to more effectively communicate science content to students. The limited assessment of this new program has revealed that teachers increased their understanding of the science content as well as gaining novel methods of teaching the curriculum. As for my experiences, I have gained a greater understanding of K–8 teaching practices and challenges and a greater understanding of science within and beyond my own work as a student.

Project Faculty Advisor: Joseph J. Grabowski, Department of Chemistry, School of Arts and Sciences, Pittsburgh Campus