

**Harvard University**  
Cambridge, MA

**Earth and Planetary Sciences**  
Bachelor of Arts, June 2004

**NASA Academy Research Project:**  
**Biogeochemistry of Microbial Ecosystems**

Principal Investigator: Dr. Tori M. Hoehler



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**Education and Experience:**

My curiosity about the origin of our world first drew me to the stars. During the last two years I have become increasingly curious about the origin of life, taking my interest in astronomy in a new direction. I now major in Earth and Planetary Sciences, allowing me to study everything from organic chemistry to biogeochemistry, in addition to astronomy. I am completely enthralled by these subjects. I am driven by a desire for answers: why? how? and sometimes disturbingly, for how much longer?

I spent the summer after my sophomore year of college in the Laboratory for Astronomy and Solar Physics at the NASA Goddard Space Flight Center. I worked with Dr. Ken Carpenter analyzing stellar spectra and assisting in the development of a testbed for the Stellar Imager, a space based UV/optical interferometer. Most recently, I have been working in Ann Pearson's lab at Harvard, investigating possible sterol production in bacteria and the effect of an oil spill on microorganisms in marshes on Cape Cod. It is projects like these that get me excited to keep learning and studying, both during the summer and after I graduate.

**Extracurricular Activities:**

Since I love science, it is not surprising that many of the activities I enjoy are outside, or directly related to science. I love to run, hike, bike, and play tennis and basketball. I also have recently developed a fascination with both rock climbing and surfing, so I hope to begin what I understand is the slow process of learning both of those soon. I teach weekly hands-on science lessons to second graders through ExperiMentors, a program which I co-directed this past year. I have been the captain of the Kirkland House Women's Intramural Basketball team for the past two years, and I coach basketball in a local elementary school through After School Hoops. I love photography – both taking pictures and going to exhibits – and I take noncredit photography courses. I also really enjoy cooking, particularly cookies and desserts involving dark chocolate or exotic fruit, and with the exception of being an astronaut, owning a bakery is the best job I can imagine.