

## ONIS Newsletter Vol. I, no. 1 (November 1, 2019)

*Editor's Note: This is the first issue of the ONIS newsletter, a monthly record of news concerning applications for nationally and internationally competitive scholarships, primarily for undergraduates and primarily for the Twin Cities campus of the University of Minnesota. If you would like to have a copy emailed directly to you, please send a request to [natschol@umn.edu](mailto:natschol@umn.edu). TSJ.*

### Scholar Profile:

**Stephanie Hart of Grand Rapids, MN entered the College of Science and Engineering in 2013 and graduated with Honors and majors in Chemistry and Chemical Engineering in 2017. She is currently a Ph.D. student in Chemistry at MIT.**



**What scholarships did you apply for and what did they allow you to do?**

I applied for the Barry Goldwater Scholarship, Astronaut Scholarship, and the National Science Foundation Graduate Research Fellowship (NSF-GRFP), and I received the Goldwater and the NSF-GRFP. The Goldwater Scholarship was used to fund tuition while in my final year as an undergrad at the University of Minnesota, and also allowed me to take a 3-credit engineering design course in Iringa, Tanzania during winter break in my senior year. The NSF-GRFP is a fellowship that currently funds part of my PhD research at MIT. As a graduate student, the NSF-GRFP allows for extensive flexibility in the focus of my research projects so I don't have to rely exclusively on external funding sources that are typically earmarked for answering specific scientific questions. So

basically I have a little more freedom to follow where my scientific curiosity takes me.

**How did being awarded a scholarship change your academic and/or professional development? What other opportunities has been opened for you?**

Having a national scholarship was advantageous when putting together a competitive graduate school application, and was also a useful introduction to the writing skills necessary for graduate applications and scientific proposals. The process of applying also led me to explore other research opportunities while in undergrad such as spending a summer at MIT as an Amgen Scholar and a summer as a fellow at the National Renewable Energy Lab.

**What did you learn about yourself through the application process? What particular skills or knowledge did you develop? How has the experience continued to be valuable?**

The process of applying for national level scholarships and graduate fellowships was extremely helpful in nailing down why I was passionate about science and what problems I really wanted to try to solve in my scientific career. This might sound lofty as an undergrad, but putting pen to paper and writing down what you want to do with your academic life and why can be quite eye-opening. Interestingly, some scientific ideas I was most excited about earlier in my undergraduate career when applying for these scholarships seem to have stayed with me, as the researcher I cited the most in the original proposal for my Goldwater application is now supervising my PhD research.

**What are you working on now?**

I am currently a PhD candidate in physical chemistry at MIT. My research focuses on using ultrafast laser spectroscopy to study light-harvesting in biomimetic systems with applications to solar energy generation.

**You have accomplished a lot. Really, how much do you sleep at night and what do you do to unwind?**

Ha! As an undergrad probably around 4-5 hours per night, but now it's closer to 6-7. I've found in graduate school that I'm significantly better at problem solving when I get more sleep, which is probably something I should have done as an undergrad. To unwind and get away from school/work in undergrad I was very into road cycling and racing in Minneapolis. As a graduate student I've added swimming and running to the mix and race triathlons when I need to get away from my research.

**Is there anything that you wish someone had told you at the beginning of your college career?**

See the point above about sleep. I also wish someone would have told me to be a little more open minded and follow the science/engineering topics I was most excited about in college. Attending a research university is a phenomenal opportunity to explore different areas of any field and find out where your passion is, and keeping an eye out for new opportunities and open doors is a critical step in that process. For example, I came to the University of Minnesota with the intention of getting an engineering degree and then a job as quickly as possible, but I instead started getting into undergraduate research which has opened a number of doors for other career options. Now six years removed from my freshman year of college I'm in graduate school and spend my time immersed in cutting edge photo-physics research with the eventual goal of becoming a principle investigator and running my own lab, which is definitely something I would not have considered in the early part of my college career.

## Events:

Astronaut Scholars recognition—Col. Robert Cabana, Space Shuttle Astronaut and Director of the Kennedy Space Center will be on campus November 6 to recognize 2019 Astronaut Scholars Matt DeJong and Macy Vollbrecht and give a [public lecture on the future of space exploration](#) at the Bell Museum of Natural History.

## Scholarship Deadlines:

[Critical Language Scholarship](#): Open to any student studying a language critical to U.S. interests to cover expenses of a 10-week immersive summer study program. National deadline: November 19.

[Carnegie/Gaither Junior Fellowship](#): \$40K. Seniors to spend a year as a research assistant with the Carnegie Foundation. Open to international students. Campus nomination: December 2.

[DAAD RISE Program](#): Travel and stipend. Sophomores and Juniors to spend 10 weeks performing STEM research in Germany. Open to international students. National deadline: December 15

[Boren Scholarship](#): \$8-20K. Open to any students interested in careers related international affairs and national security to support language-centered study abroad. Campus nomination: January 6.

[Beinecke Scholarship](#): \$34K. Open to Juniors in the Arts, Humanities and Social Scientists who plan to complete graduate research degrees and have a record of qualifying for need-based aid. Campus nomination: January 13.

[Udall Scholarship](#): \$7K. Open to Sophomores and Juniors working toward solutions to environmental challenges or Native American students planning careers in tribal policy or health care. Campus nomination: January 24.

[Hollings Scholarship](#): \$19K. Open to Sophomores studying Oceanic or Atmospheric sciences, or other subjects related to the interests of NOAA, including science education, National deadline: January 2.