2-21-2017

Partnerships with Professors Helped GWU Grad Chart a Course for his Future

Office of University Communications

Partnerships with Professors Helped GWU Grad Chart a Course for his Future

webpublish.gardner-webb.edu/newscenter/partnerships-with-professors-helped-gwu-grad-chart-a-course-for-his-future-2/

Office of University Communications

February 21, 2017

Josh Johnson ('15) Working at Purdue in Analytical Chemistry

The research conducted by Gardner-Webb University alumnus Josh Johnson ('15) identifies the amount and type of chemicals present in a compound. The findings have a variety of applications, including the discovery of new drugs, breakthroughs in cancer research or forensics analysis.

Johnson's passion to explore the chemical makeup of various materials began in the GWU Laboratory Center in Withrow Mathematics and Science Hall. During a chemistry course, Johnson discovered a desire to research issues that really matter. Recognizing his interests, Professor Dr. Stefka Eddins encouraged Johnson to explore environmental chemistry. She and other faculty members also gave him several opportunities for experiential learning through the GWU Honors Program and Alpha Chi National College Honor Society.

With the support of his professors, Johnson applied and was accepted into the competitive summer research program at National High Magnetic Field Laboratory, Florida State University. The experience confirmed his desire to be a professional analytical chemist.

Johnson believes guidance from the GWU faculty helped him discover his interests and pursue graduate school at Purdue University in West Lafayette, Ind. "Gardner-Webb professors go out of their way to get to know students, to help us imagine what we want from our future," he offered. "That's not something that's unique to me. I've seen those mentorships develop between many professors and students."

In his studies at Purdue, Johnson is working with Dr. Scott McLuckey, a pioneer in his field. They work with a one-of-a-kind mass spectrometer that was built at Purdue. Mass spectrometry is an analytical chemistry technique that helps identify the chemicals present in a sample. Johnson and another graduate student are working to refine the instrument to also have the ability to measure physical dimensions of the chemical compounds.

Josh Johnson and another student

Josh Johnson and another student are developing and optimizing this Electrostatic Linear Ion Trap Mass Spectrometer at Purdue University.

“Gardner-Webb provided me with a solid background from which to build my knowledge of chemistry,” Johnson observed. “The small class sizes allow students and professors to get to know each other, which increases the educational investment of both parties. My involvement in extracurricular activities including independent research, Alpha Chi, student government, and honors allowed me to broaden my understanding, while the commitment of the chemistry professors let me gain depth of knowledge in my major.”

Not only did Johnson benefit from the personal attention he received from GWU professors, he was also inspired to hear from GWU alumni doing their own research. “Gardner-Webb offers a small school environment with many of the connections afforded at a larger University,” Johnson explained. “Gardner-Webb graduates are committed alumni who seek to help students gain real-world experience. I stay in contact with most of the chemistry faculty and plan to make visits back to campus to talk to younger students about my research.”