Honors Student Stephen Crooke Selected for Research Fellowship

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University Honors Program senior Chemistry major Stephen Crooke has won the National Science Foundation Graduate Research Fellowship.

With this fellowship, Crooke will receive significant monetary support to fund three full years of study pursuing a research-based doctoral degree at an accredited US institution. This prestigious award is given in recognition of his outstanding academic and research accomplishments as an undergraduate at Georgia Southern University.

Crooke is a Paulson Scholar, and his research focuses on developing a more efficient and cost effective way of creating certain chemical compounds in synthetic sponges that have the same properties as sea sponges. His research will be used in the fight against cancer.

"Over the past four years, I was able to synthetically develop five separate compounds. Our group is in the process of screening these compounds for antibacterial activity, and in the near future, we will be sending them to the National Cancer Institute for screening against cancer cells," Crooke explains.

"Research of this nature is critical to the medical community due to the need for an effective treatment for cancer, and it also has important implications in the field of synthetic chemistry because of the new methodology introduced for the potential development of other therapeutic compound."

In his research Crooke works closely with both Dr. Christine Whitlock and Dr. Michele McGibony. During the course of his research, Crooke has spent a significant amount of time creating biologically-active compounds in Dr. Whitlock's lab and testing the compounds in the lab with Dr. McGibony.

Dr. McGibony encourages her students to participate in research experiences as undergraduates and says of her work with Crooke: "I was fortunate that Stephen chose me and my collaborator Dr. Christine Whitlock as his research mentors. Stephen is one of the most hardworking students I have ever met in my fourteen years of higher education."

"Often scientific experiments do not work out properly the first time you set them up, Stephen will keep making alterations to the experiment until he gets a result; he is interested in understanding everything he can about chemistry and biochemistry," Dr. McGibony continues.

The Georgia Southern senior intends to earn his Ph.D. in Biochemistry upon graduation and plans to attend either the Georgia Institute of Technology or the University of Florida.

Crooke says that his participation in the Honors program was a major influence on his undergraduate career at Georgia Southern.

Article by Kelsey Keane

Posted in Uncategorized
University Honors student Leigh Sundem recently earned the outstanding score of a thirty-nine on the Medical College Admission Test (MCAT). The average score of each MCAT administration is twenty-four, and Sundem’s results place her in the 99.1-99.4 percentile range of all who participated in the testing sessions of August 2011.

As a non-traditional student, Sundem returned to school to pursue her undergraduate degree in Chemistry several years after graduating high school. She believes that coming to Georgia Southern University with such a different perspective than the traditional student has made her especially grateful for every opportunity she has received and motivated to do her very best.

Since beginning at GSU Sundem has become highly involved academically, completing significant lab research, teaching as a Chemistry supplemental instructor, and shadowing five different professionals in the medical field. She has also volunteered her time to such organizations as the Hearts and Hands Clinic and Georgia Southern University’s Center for Addiction Recovery. Sundem is currently participating in extensive academic lab research with Dr. Mohammed Shaikh of the Chemistry Department as they work to synthesize compounds they hope could one day be used as therapeutics for various types of cancers and Alzheimer’s disease.

"Leigh has strong convictions and an outstanding work ethic. I came to understand that, unlike countless other students, she did not consider her scientific course work just a stepping stone to her degree but an opportunity to explore a field she genuinely found interesting. I had the pleasure to meet a person who displayed such an interest for high-level work and an ability to grasp the intricacies of chemical concepts. She has a friendly personality and a positive attitude, which has certainly contributed to be excellent student," said Dr. Shaikh.

Sundem entered the University Honors Program as a sophomore student at Georgia Southern. She believes that her initial goal of gaining entrance to UHP motivated her to excel during her first year and that the program itself continues to encourage her academic growth. "It became very important to me that I get into the University Honors Program, stay in, and excel. The Program encourages me to do my best, providing me with resources and outlets that make me want to do my best academically and personally," she said.

Sundem said, "Georgia Southern is where I belong. Our chemistry program is top-notch. I think I’ve gotten the best education possible; each professor has helped me gain a deeper understanding of subject materials and of the hard sciences, which enabled me to be successful in the critical thinking necessary to succeed on the MCAT."

After receiving her Chemistry degree from Georgia Southern, Sundem plans to attend medical school and to then practice primary care in a rural setting. She also dreams of serving with Doctors Without Borders in Africa. “Wherever I am most needed, that’s where I’ll go.”

Through her accomplishments, Sundem has earned other significant recognition, being named to Who’s Who Among Students in American Universities and Colleges as well as an Outstanding Student in Organic Chemistry in 2011. She is a Watson-Brown Scholar and a recipient of the Jiann-Ping Hsu College of Public Health Service Award.

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