Tulane University student spends summer conducting brain tumor research in Switzerland

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Tulane senior James Rogers spent the summer of 2019 researching a type of brain cancer called glioblastoma, an extremely aggressive type of tumor, in patients in Zürich, Switzerland. (Photo courtesy of James Rogers), Tulane senior James Rogers spent the summer of 2019 researching a type of brain cancer called glioblastoma, an extremely aggressive type of tumor, in patients in Zürich, Switzerland. (Photo courtesy of James Rogers)

Tulane University senior James Rogers has been charting a course in the name of research since he arrived on campus in the fall of 2016. Rogers' journey has led him

from New Orleans to Bethesda, Md., across the Atlantic to Scotland and, most recently, Switzerland, where he spent the summer as a visiting research scholar in the Brain Tumor Center at the University Hospital Zürich (USZ).

Rogers' clinical research focused on the role of antidepressant drug use in a type of brain cancer called glioblastoma (GBM), an extremely aggressive type of tumor, in patients. He focused on describing the prevalence of antidepressant drug use among Zürich GBM patients who were diagnosed between 2005 through 2014. His research compared overall survival differences between antidepressant drug-free patients and patients who took antidepressants.

Rogers stated that current findings on the role of antidepressant drugs in GBM patients are mixed and inconclusive. His research was descriptive and took a population-based approach to understand the frequency of antidepressant drug use among GBM patients and determine whether taking these drugs was associated with improved survival.

"This research topic was given to me based on the USZ Brain Tumor Center's data availability and my interest in clinical glioblastoma research. My research will be ongoing. I am currently working with several of my mentors on a manuscript on the topic which we plan to submit to the *Journal of Neuro-Oncology*," Rogers said.

A native of Monroe, New York, Rogers is a pre-medicine student who is seeking a double major in neuroscience and psychology with a minor in social innovation and social entrepreneurship. He is a research assistant and the lab manager for Dr. Michael Hoerger's Psycho-Oncology Research Program. Rogers hopes to attend medical school post-graduation and become either a neurologist or neurosurgeon with a particular focus on brain tumor management and research.

"Jimmy has contributed countless hours to the Psycho-Oncology Research Program since his freshman year, engaging in writing, statistical analysis and data collection. These skills will put him on a path toward becoming a physician-scientist over the next decade," Hoerger said.

Rogers' road to Zurich began when he was awarded a ThinkSwiss Research Scholarship from the Embassy of Switzerland in Washington, D.C. He was 1 of 28 ThinkSwiss Research Scholarship recipients for 2019. The ThinkSwiss Research Scholarship is available for undergraduate and graduate students in the U.S. and Canada who want to conduct research in any discipline at a public Swiss university

or research institute for up to three months.

"The experience I gained this summer was extremely valuable because it taught me how to conduct truly independent research that requires adaptive change and resiliency. With ThinkSwiss you must create your own opportunity by securing a position in a research laboratory and then conducting independent research there. Thus, the student is largely responsible for the coordination of the research stay and the research itself," Rogers said.

In addition to the ThinkSwiss Scholarship, Rogers took advantage of resources available at Tulane. He received the Dean Jean Memorial Scholarship and a David Cameron Taylor, M.D. Memorial Summer Travel and Enrichment Scholarship from the Newcomb-Tulane College (NTC) Honors Program and Dean's Office, respectively.

"I discovered the ThinkSwiss Research Scholarship through a Tulane neuroscience major listserv email while I was abroad in Scotland. This goes to show that Tulane constantly presents once-in-a-lifetime opportunities and students must take advantage. Additionally, I discovered the NTC Dean's Office Grant and the Honors Program funding through email communication with Melissa Weber and Norah Lovell," Rogers said.

Following Rogers' freshman and sophomore years at Tulane, he was selected for internships at the National Institutes of Health (NIH) in Bethesda, Md., and worked in the Neuro-Oncology Branch (NOB) of the National Cancer Institute (NCI).

"James has worked in the Outcomes Program of the Neuro-Oncology Branch for two summers and has worked as a special volunteer over the last year to continue his work and submit a manuscript for publication. James is focused, organized and approaches his projects with curiosity and insight. He took data collected as part of an international survey on clinical trial barriers and participation in neuro-oncology, did the primary analysis and served as a corresponding author on a soon to be published manuscript. He worked collaboratively with a large group of multi-disciplinary investigators. This work is novel and important to improved patient care and treatment. He is an outstanding college researcher who has a bright future as a future physician and scientist," said Terri Armstrong, senior investigator and deputy branch chief of the Neuro-Oncology Branch at NIH.

During the fall semester of his junior year in 2018, Rogers participated in a Tulanesponsored study abroad program at The University of Edinburgh in Edinburgh, Scotland. He served as a visiting research assistant in the Centre for Clinical Brain Sciences, Edinburgh Centre for Neuro-Oncology and the Department of Clinical Neurosciences at Western General Hospital.

Rogers recently produced his <u>third publication</u>, a first-authored piece that was accepted in *Neuro-Oncology Practice* on clinical trial referral barriers in neuro-oncology. The article is the result of his work at NIH and was published online in early September. He also <u>co-authored a publication</u> based on his work at the University of Edinburgh on the effects of brain tumors upon medical decision-making capacity.

"These opportunities must be taken advantage of by Tulane students who wish to explore their research interests and fine-tune their career aspirations. Going abroad and studying independently allows a student to face struggles and hardships that domestic research would never entail. I urge students to push themselves and to seek out unique opportunities that will expand their academic and personal horizons. Tulane is certainly willing to financially support such endeavors," Rogers said.

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