## Aspire2STEAM.org

## Heather O'Donnell Awarded Aspire2STEAM Scholarship

Aspiring biostatistician and chronic disease and environmental epidemiologist focuses on serving vulnerable patients

ANKENY, IA, UNITED STATES, February 16, 2023. <u>Aspire2STEAM.org</u>, which provides educational scholarships and mentoring to young women and girls who are working toward careers that require education in science, tech, engineering, the arts, or math (STEAM), has awarded Heather O'Donnell an ASPIRER scholarship.

Heather is currently attending Rutgers University-New Brunswick majoring in public health. "Heather has a great passion for serving vulnerable patients and being their advocate," said Cheryl O'Donoghue, CEO at Aspire2STEAM. "Combined with her interest in researching chronic and rare diseases, she is poised to be of great service to humanity."



"I want to provide insights into medical research questions by collecting and analyzing data on the causes, patterns, and treatments of genetic, infectious, and chronic diseases" Heather O'Donnell Heather transferred to Rutgers from Heather O'Donnell, Aspire2STEAM scholarship recipient

Brookdale Community College with an Associate of Science degree in Public Health. In addition to her school studies, Heather is the New Jersey Public Health Student Association Community Service Chair, Answer for Cancer Co-Event and Fundraising Coordinator, and STEM Ambassadors Public Relations Chair.

During her time at Brookdale, Heather served as the Vice President of Service of Alpha Pi Theta, the

Brookdale Phi Theta Kappa (PTK) Honor Society chapter. In this role, she coordinated both in person and virtual service projects that ranged from Coastal Habitat for Humanity (which helps build affordable homes for those in need) to partnering with the Ashley Lauren Foundation (which provides emotional and financial support to youth residents of New Jersey living with cancer). Heather has focused her efforts on implementing service projects that benefit people with intellectual and developmental disabilities, specifically those who were previously

overlooked by pandemic response programs. One of these projects included connecting with Oasis TLC to participate in a yard clean-up at one of their farm centers that promotes inclusion and acceptance of autistic individuals.

Additionally, Heather was able to begin research on rare diseases during her time in the Brookdale Honors Program. As a Brookdale Honors Program Mentor and Ambassador, she not only provided support to those students transitioning from high school to college but also took on a leadership role in the lab. Heather dove into public health issues such as sickle cell anemia, the long-term effects of pediatric cancer, and how children are disproportionally impacted by natural disasters. At the Spring 2021 Honors Symposium, Heather presented her research project called "Susceptibility to COVID-19 in People with Down Syndrome" and explained how she found that certain biological and social factors make people with Down Syndrome more vulnerable to COVID-19.

Another interest Heather has cultivated is in the field of medical writing, where she hopes to be able to convey to her audience members the complexity of clinical research trial results and various disease mechanisms. The coronavirus pandemic intensified her interest in public health and has motivated her to take action. Heather began contributing to several university journals, including *The Examiner: Rutgers Pre-Health Journal*. In her spring semester of 2022, Heather wrote an article that explored how understanding the epigenetic mechanisms of ataxia-telangiectasia and other neurological disorders can facilitate the development of treatments that improve systems. In the fall of 2022, she contributed another article to *The Examiner*, this one about the health effects of PFAS "forever" chemicals. Heather also serves as an associate editor for the Rutgers Journal of Bioethics, where she helps write and edit articles that focus on current bioethical issues in academia.

One day, Heather plans to make her mark on the world by working for an organization like the Centers for Disease Control and Prevention or the National Institute of Health as a biostatistician and chronic disease and environmental epidemiologist. "I want to provide insights into medical research questions by collecting and analyzing data on the causes, patterns, and treatments of genetic, infectious, and chronic diseases," she explained. Heather acknowledges that even though she will be playing a small role in the overall big picture of public health and disease research, she still finds the work extremely rewarding as improvements are being made in the health and wellbeing of millions of people currently suffering from chronic diseases.

## About Aspire2STEAM

Established in 2018, Aspire2STEAM.org is a charitable 501(c)(3) nonprofit organization, which has earned Guidestar's Gold Seal for integrity, transparency, and accountability. Aspire2STEAM provides educational scholarships and mentoring to young women and girls who are working hard—aspiring—to achieve careers that require education in science, tech, engineering, the arts, or math. Aspire2STEAM is committed to helping women and girls with a hand up over the incredible barriers of student debt and rising education costs, and



the real, ever-present opportunity barriers that keep them out of most male-dominated industries.

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