



Barber Finds Success in Summer 'Aspironaut' Program

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Mary Barber has aspired to study science and become a doctor since growing up in a small Tennessee town. This summer, her dreams of scientific success are coming more and more into view as she completes a 10-week internship as an "Aspironaut" at Vanderbilt University Medical Center. A rising sophomore and biochemistry/molecular biology major at Belmont, Barber is participating in the research intensive program for students with diverse backgrounds and strong desires to pursue careers in medicine.

Barber said she's wanted to devote her life to science and medicine for as long as she can remember. When looking for summer programs or internships after finishing her freshman year, Barber said Vanderbilt's research internship, funded by the National Institute of Diabetes and Digestive and Kidney Disease, stuck out because of its commitment to excellence—both inside and outside the lab.

"I chose this program because of its authentic commitment to diversity, opportunity and science. The Aspironaut program goes beyond laboratory research—it seeks students that can enrich the field with their unique life stories and provides the resources to expand the potential of every single student."

Working in Dr. Billy Hudson's lab in the Division of Nephrology and Hypertension, Center for Matrix Biology and Department of Biochemistry, Barber's research uses chemical and biochemical approaches to focus on understanding Goodpasture's autoimmune disease. Her work seeks to better understand the medical mystery surrounding how the disease develops and how medicine can treat it. Despite the experience of working in a state-of-the-art research facility among the nation's top medical minds, Barber said some of her favorite memories have been the ones shared with her colleagues—fellow students, professors, researchers, doctors and even artists.



"I have enjoyed the amazing networking opportunities—and meeting incredible people with the same vision for life as me," Barber said. "I have been able to have intimate conversations with individuals that can help mold my future in a profound way. We are truly a mosaic of personalities and each person has a special quality they contribute."

Barber looks to the program's directors, Drs. Billy and Julie Hudson, for the experience's transformative qualities. "They told us on the first day that we would learn a lot about science during our time here, but we would learn more about ourselves," Barber said. "The truth within their words is astounding." From learning how she interacts with others, to how she deals with challenges to how thinking creatively within the sciences is necessary, Barber said her time as a Aspironaut has only strengthened the passions she developed as a child.

"Know that what I do in the lab can contribute to the solution for a human problem excites me and encourages me to continue working hard," Barber said. "The key insights that I have gained through my coursework and extracurricular activities show me where my true passion lies and how far I can carry those things with me in the future."