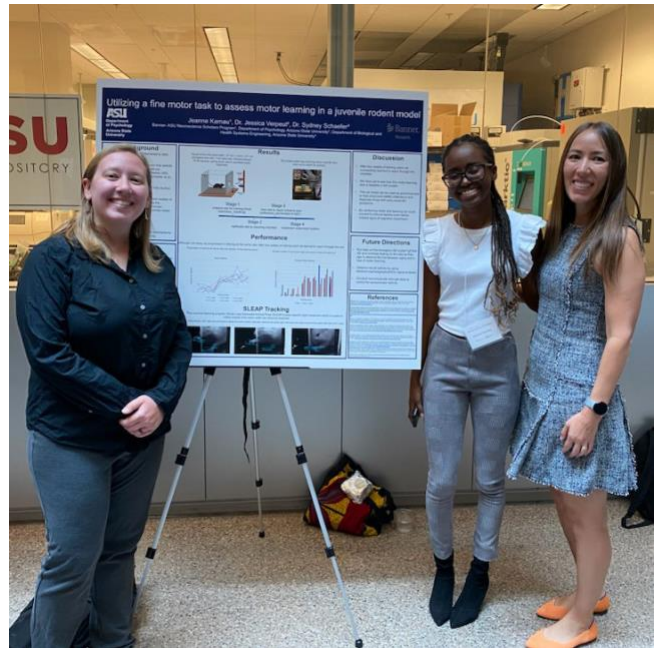


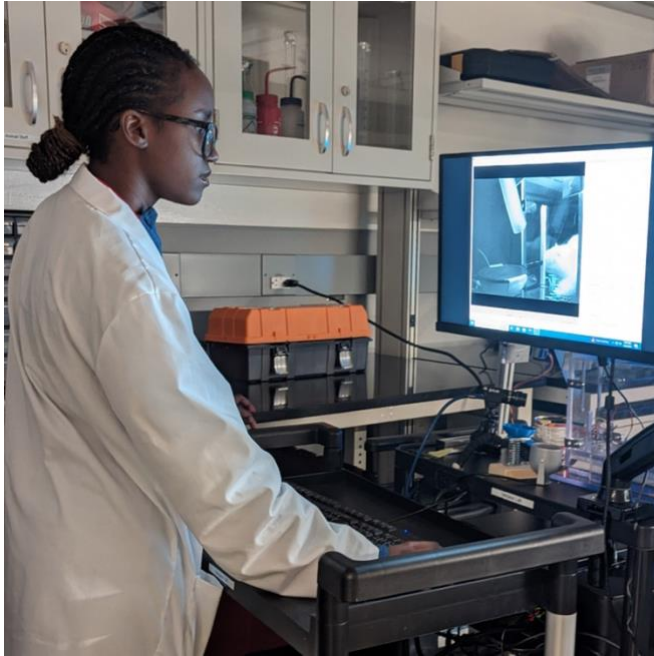
## Mentorship Matters: Summer Research in the Motor Rehabilitation and Learning Lab

For many scientists, their first experiences in a lab helped cement their interest in science, and the training they received from their earliest mentors may have shaped the trajectory of the rest of their career. After working with excellent mentors during her own training, Sydney Schaefer, PhD, is excited to be able to provide these opportunities for students in her lab. Dr. Schaefer is an Associate Professor at Arizona State University (ASU) and a member of ASNR's Member Engagement Committee. This summer, she and her collaborator Dr. Jessica Verpeut hosted Jeanne Kamau, a talented student entering her first year as an undergraduate majoring in biomedical engineering at Georgia Institute of Technology.



Dr. Schaefer's Motor Rehabilitation and Learning Lab at ASU focuses on developing low-cost, high-access solutions for earlier Alzheimer's disease diagnosis, and the lab has begun working with Dr. Verpeut's SOCIAL (Study of Circuits in Adolescent Life) Neurobiology Lab at ASU to identify critical neural mechanisms of motor-based screening tools for Alzheimer's disease. Over the past eight weeks, Dr. Schaefer, Dr. Verpeut, and Jeanne worked together to initiate a brand-new collaboration between the two labs, focused on translating Dr. Schaefer's human studies into rodent models of Alzheimer's disease. Jeanne's project, entitled "Utilizing a fine motor task to assess motor learning in a juvenile rodent model" was the first step in the collaboration, which leverages Dr. Verpeut's expertise in rodent behavior and advanced neurobiology.

As part of the Banner-ASU Neuroscience Scholars Program, students contribute directly to important research projects, and they also get to experience other aspects of lab life, including lab meetings, journal club paper discussions, writing an abstract, and presenting their research. "This prestigious program does a great job of showing students what a 'day in the life' of a researcher is, especially one that is focused on neurodegenerative diseases. Even though the program is only eight weeks, it is amazing to see what the Scholars are able to accomplish, both in terms of their research productivity but also their understanding of the 'what' and the 'why' of their work. In Jeanne's case, she was able to be involved in the very start of a collaboration, which, prior to her joining the lab this summer, was just an idea on paper. Jeanne was a critical member of the team who took this idea and turned it into a reality, for which we now have preliminary data. It is absolutely wonderful to contribute to a student's career development and support them at these early stages," reflected Dr. Schaefer.



Jeanne Kamau graduated *Summa Cum Laude* from Lincoln Preparatory Academy in Chandler, Arizona in May 2023. She was one of a handful of students selected to be a part of the Banner-ASU Neuroscience Scholars Program and the only student selected prior to her freshman year of college. Her diligence, work ethic, and academic achievements made her a great fit for the program. This was Jeanne's first time working in a laboratory, but she plans to be more embedded in research in her undergraduate program at Georgia Tech. "I had always imagined work in a lab to be quite different from what I experienced. For example, I did not have to mix liquids in a test tube but, instead, spent time debugging code and investigating ways to

redesign the plexiglass apparatus for our current rodent model. I learned that patience is important in research because seeing results often takes time. I am grateful and honored to have been given this unique opportunity to participate in real-life research so early in my academic journey. The opportunity was rewarding, exciting, and undoubtedly unforgettable. It was a great privilege to work under such brilliant mentors as Dr. Schaefer and Dr. Verpeut, and it was refreshing to know that the work I was doing could potentially make an impact in ongoing Alzheimer's research."

Beyond providing valuable training opportunities for early career scientists, summer research programs bring fresh perspectives and enthusiasm into research labs and give mentors a chance to further hone their mentorship skills. ASNR and its members are committed to mentorship and education, and these activities are critical for advancing the field and preparing future neurorehabilitation scientists and clinicians.