Neuroscience Camp 10 Years Later: A Mind Is (Still) a Wonderful Thing to Embrace

The College of Medicine welcomed its 10th cohort of high school sophomores and juniors to its annual Neuroscience Camp in July. Each year, students are selected to learn the fundamental concepts of neuroscience and basic lab techniques during the two-week program. In addition to lectures, the students experience live brain activity recordings and engage in group research projects led by senior neuroscience graduate students.

The camp is led by Jed Shumsky, PhD, professor, and Michael Lane, PhD, associate professor, both in the Department of Neurobiology & Anatomy. This year, 13 high school students from Philadelphia and beyond attended the camp. They enjoyed a field trip to see the brain exhibit at the Franklin Institute and a behind-the-scenes tour of the Academy of Natural Sciences of Drexel University.

“The Neuroscience Camp is designed to expose students to what they might encounter in graduate and medical training. This community outreach aims to spark a love for and interest in neuroscience amongst the students, and that in itself is a worthy cause,” says Shumsky.

The camp attendees’ research projects allow them to broaden their exposure to neuroscience methodology. Recent experiences have included culturing neurons that were grown from stem cells, performing physiological studies to record how neural pathways function under normal or pathological conditions, and surgical procedures to study and repair neural tissues. Students use these experiences to build a research project that they can report on at the end of the program. Lane notes, “Being a part of this ongoing neuroscience research provides the participants with an enriched training experience, shedding light on what it’s like to be a neuroscientist.”

While the camp is clearly an enriching experience for the students, it also benefits the graduate students in the department, who gain additional teaching experience while working with the students. They get the opportunity to demonstrate lab techniques and guide the students through their research projects. Whether they go on to pursue careers in academia or industry, the ability to teach concepts and demonstrate skills will serve them in the future.

Lyandysha Zholudeva, PhD neuroscience ‘18, who participated in the program for four summers, says, “I think the most rewarding part about the program is seeing the students’ excitement about being in the lab and being able to participate in research. Personally, [the camp] has helped me to step back and put our research into a greater perspective.”

Students who are interested in attending camp in 2023 can contact Tsz Kwok, EdD, associate director, Graduate College, at tsk22@drexel.edu or 215.571.4526.