The Society for Neuroscience 2023 Annual Meeting Report: Advancing the Understanding of the Brain and Nervous System

The Society for Neuroscience's 2023 Annual Meeting was held at the Walter E. Washington Convention Center in Washington D.C. from Saturday, November 11th through Wednesday, November 15th. This meeting brought distinguished neuroscientists together from around the world together to share cutting-edge research, exchange ideas about and solutions to questions in the field, and create connections with other enthusiastic scientists. With featured and special lectures, symposia, mini-symposia, featured panel sessions, poster sessions, profession development, meet-the-expert, meet-the-clinician-expert sessions, and sponsored networking events, each day was filled with endless opportunities.

From students just getting started to eminent scholars, every attendee was able to learn and grow through this meeting. For early career professions, professional development workshops such as "How I Survived Grad School: Perspectives From Black in Neuro" which shared tips about navigating the hidden curriculum in academia and creating work/life balance, and "Building Up the Nerve to Develop Your NIH Training Application" that prepared attendees to create their NIH application helped demystify early career steps and allowed students to learn from experts and one another. For more senior scientists, there were many panel sessions such as "Found in Translation: Medication Development for Substance Use Disorders From Animals to Humans"

which brought together preclinical and clinical experts to discuss new medication discoveries across the pipeline, and "The Long Haul: Brain Dysfunction After Acute Illness" that looked at mechanisms from basic science, preclinical, and clinical perspectives that allowed scientists to learn from others with different interests and expertise that work together to create change. It was a memorable and worthwhile experience for all those in attendance.

From the cellular to preclinical to the clinical level, the Society for Neuroscience's annual meeting showcased the importance of each in understanding the brain's full story and is essential to the mission of SfN. This conference dug deep into the questions of "what", "how", and "so what". We are learning more than ever about what the brain does, how the brain does what it does, and how to use this knowledge to treat diseases of the brain. This was exemplified by the choice of Special Lectures, which covered a wide array of topics and methods. The first special lecture was given by Dr. Mala Murthy entitled "The Neuroscience of Dynamic Social Behavior: Uncovering Circuit Mechanisms in Drosophila", highlighting the role of fruit flies in bolstering our understanding of neural mechanisms by developing whole-brain connectomes. The first Presidential Special Lecture, given by Dr. Sarah Tabrizi entitled "New Genetic Therapies for Huntington's Disease and Other Neurodegenerative Diseases", discussed the process of developing genetic treatments and how they impact patients and families. This lecture used videos of patients with Huntington's Disease to showcase the real people that they are working to help.

From protein synthesis to clinical trans magnetic stimulation to leveraging cross-cultural perspectives for neuroethics and global neuroscience, the depth and breadth of knowledge covered during this meeting was astounding. The diversity of thought, interests, and scientific background created a positive environment that allowed for lively discussion and sharing of ideas. With all that was offered, it was difficult to decide which events to choose. Each day there were two poster sessions spanning three conference halls, each presenter eager to discuss their work. I had the opportunity to present twice during the conference: once during the Trainee Professional Development Award, which was sponsored by the Tianqiao and Chrissy Chen Institute, and another during the nicotine-specific poster session. I felt honored to be a part of a monumental event and learn from the best neuroscientists in the world.

Annika Quam is a researcher fellow at National Institute on Drug Abuse. She wrote this meeting report as part of the Tianqiao and Chrissy Chen Institute Science Writers Fellowship which aims to extend the conversation beyond the meeting with the hopes of sparking new ideas and collaborations.