

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

The Neuroscience 2023 annual conference, hosted by the Society for Neuroscience, brought together neuroscientists from around the world at the Walter E. Washington Convention Center in Washington, D.C. As a recipient of the Chen Science Writer Fellowship, I had the privilege of attending this prestigious event. The conference provided a platform for scientists to share their latest discoveries, exchange ideas, and establish valuable connections within the neuroscience community. In this meeting report, I will highlight some of the impactful experiences, notable lectures, and connections made during the conference.

Day 1: November 11, 2023

Several lectures stood out during the conference. One such lecture was delivered by Sarah J. Tabrizi. Her talk on "New Genetic Therapies for Huntington's Disease and Other Neurodegenerative Diseases" was both enlightening and inspiring. Dr. Tabrizi's emphasis on the importance of basic research in understanding complex diseases left a lasting impact..



In the evening, I also attended the "Early Career Poster Sessions" with other TPDA recipients. It allowed me to present my work and communicate with other poster presenters, gaining valuable feedback and insights from researchers in the field and enabling me to connect with other award recipients from diverse backgrounds. The

experience was truly inspiring and broadened my perspectives on neuroscience research.

Day 2: November 12, 2023

Day two was filled with several fascinating symposiums. One that particularly caught my attention was "Common Mechanism of Learning in Motor and Cognitive Systems." The speakers, including Dr. Christos Constantinidis and Dr. Joni Wallis, provided compelling evidence on how learning impacts cortical plasticity and emphasized the need for further research in this area.

"The Emotional Brain: Embracing the Complexity," a lecture given by Dr. Huda Akil, provided a thought-provoking discussion on the quest to understand the brain biology of emotions and uncover the role of distinct temperaments in shaping vulnerability to mood and addictive disorders.

Day 3: November 13, 2023

On the third day, there was a memorable lecture given by Dr. Karl Deisseroth, a pioneer in the field of optogenetics. His talk on "Inner Workings of Channelrhodopsins and Nervous Systems" was incredibly engaging and showcased the potential of this technique in understanding neural circuits.



I also had the opportunity to present my research poster on "The Anterior Cingulate Cortex Top-down Modulates Auditory Responses in the Auditory Cortex through Direct and Indirect Pathways in Mice." The feedback and suggestions I received were invaluable and will undoubtedly enhance my future research. The poster sessions allowed for the exchange of knowledge, the exploration of new research avenues, and the establishment of meaningful connections.



Day 4: November 14, 2023

The SfN 2023 Annual Conference was a bustling hub of knowledge and scientific enthusiasm. The sheer scale of the event was awe-inspiring, with thousands of attendees, numerous symposia, and a vast exhibition hall showcasing cutting-edge technologies and research. I spent much time touring the exhibition hall and learned a lot.



Day 5: November 15, 2023

The highlight of the last day was a Special Lecture by Dr. Dan Yang on "The How and Why of Sleep." She works on the fundamental process of sleep and found that sleep is controlled by a highly distributed network spanning the forebrain, midbrain, and hindbrain, and the sleep neurons are part of the central somatic and autonomic motor circuits. This lecture sparked a thought-provoking discussion and opened new avenues for future research in the field of sleep neuroscience.

In summary, the SfN 2023 Annual Conference offered a rich and diverse program, encompassing a wide range of neuroscience topics. It was a unique opportunity to immerse oneself in the latest advancements and trends in the field and provided an

invaluable opportunity to connect with fellow neuroscientists, collaborators, and industry professionals.

Attending this meeting has enriched my understanding of the field, inspired new research directions, and reinforced the importance of collaboration in advancing neuroscience. I am grateful for the opportunity provided by the Chen Institute at this prestigious gathering and look forward to applying the knowledge gained to our ongoing research endeavors.

Overall, the SfN 2023 Annual Conference was a testament to the vibrancy and dynamism of the neuroscience community. I am already looking forward to next year's conference.

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