FENS – Chen Institute – NeuroLéman Summer School JNS-FENS Travel Award 2023

Travel Awardee Review Dr. Richard Nana Abankwah Owusu Mensah Sugihara Lab, Tokyo Medical and Dental University

I am pleased to share my excitement and experiences from attending the maiden edition of the FENS-Chen Institute-NeuroLéman Summer School held from July 2 to 8, 2023, at the beautiful campus of Ecolé Polytechnique Federale de Lausanne (EPFL), Lausanne, Switzerland. The one-week-long workshop brought together experts in Neuroscience, specifically in Motor Control, and early-career neuroscientists from across America, Asia, and Europe. There were 9 speakers and 34 early-career neuroscientists comprising graduate students and postdoctoral fellows.



Lecture session

The well-scheduled packed workshop strategically combined exciting events, primarily academic, spiced up with social events. Notable of these events included plenary sessions, poster presentations, students' oral presentations, laboratory tours, lunchtime pep talks with speakers, a boat cruise, and a farewell dinner on the beautiful Mont Cheseau landscape in Lausanne. While the 7-day event passed too quickly, leaving nostalgic memories of bonding and knowledge acquisition, the experiences are lasting and appear to have been obtained over several weeks, if not months. While this was an academic-intensive program, the lessons did

not only come from the expert presentations and interactions with colleagues and senior scientists but also the silent communication from nature and all other places visited. The broad field of neuroscience and the enormous and inexhaustible information sometimes scare young researchers into believing in finding themselves lost in deep seas. However, the silent whisper from nature during this event was that, while the field may be vast, hard work and good networking with the rest of the scientific community could help one glow from afar, as was depicted by seeing the cruise boat from afar on Lak Leman.

Consequently, I am happy to have a network of colleagues beyond my current lab and school and outside my field of specialization. This will enhance my research by sharing ideas and making collaborations. Meeting and listening to stories of other accomplished senior scientists, such as Prof. Silvia Arber (Winner of Brain Prize, 2022), was very inspirational.



Poster boards

NeuroRestore Clinical Research Lab

The visit to Lausanne University Hospital was one of the best experiences for understanding and witnessing translational research in motor control, technology, and the pursuit of symptom improvement in various motor control-related diseases.

During this visit, we were shown different technologies to improve symptoms of diseases or injuries in the spinal cord and Parkinson's disease. These technologies emphasize innovation in surgical techniques and technology and the quest to personalize treatment for each patient.

Additionally, the focus is on empowering patients to have greater autonomy in deciding the use of this technology, combining it with commercially available technologies such as apps, smartphones, smartwatches, and tablets.

Furthermore, we were allowed to interact with and test various technologies primarily geared toward initial patient rehabilitation. This aspect made the experience even more enriching. The recently popular Nerorestore project was seen first-hand, explaining all the activities behind the project seeking to restore locomotion in paraplegic and quadriplegic patients with brain-spinal cord interphase devices. Seen afar on television screens, translational research is impressive from different perspectives.

I feel fulfilled attending this workshop because I met my objectives of learning other neuroscience techniques and knowing more about other labs and their research techniques and models (for instance, for the first time, I visited a lab using the much-spoken-about Drosophila, which I first heard about in my high school biology, used in Mendel's famous studies, and also the zebrafish). For these, I made a toast to the sun to signify my readiness to pursue excellence in the global field of neuroscience. Thank you, JNS, for making these possible.



View from Mont Cheseau

Network with colleague students



The silent lesson on Lake Leman/Genève



A toast to the universe