

Meet Our Members: Aaron Huynh

Aaron Huynh is a PhD Student in the Department of Neuroscience at the University of Rochester School of Medicine & Dentistry. As an early-stage trainee, Aaron viewed joining ASNR as the perfect opportunity to introduce himself to the neurorehabilitation community. He was very interested in the diverse attendee backgrounds and research topics at the 2025 Annual Meeting. Aaron's ASNR membership and attendance at the 2025 annual meeting allowed him to network with several leaders in the field with varying expertise, making him even more excited to be a part of ASNR and attend future meetings. He is particularly looking forward to hearing updates on projects he learned about during the meeting as well as giving updates and receiving feedback on his own thesis work.



1) How did you get interested in science, and what steps did you take to get to your current role?

For as long as I can remember, I've always been driven to find the answers to questions ranging from "how can I solve a Rubik's cube in under a minute" to "how does my brain send a signal all the way down to tell my big toe to move". It got to a point where I had nearly exhausted the science courses offered at my high school, where my guidance counselor and teachers suggested I seek out independent learning opportunities. During my senior year of high school, I had the opportunity to intern with a team of biomedical engineers at my local hospital as well as work with a group of my peers to prototype a 3D printed myoelectric prosthesis. These were arguably more rewarding and fun experiences compared to the traditional classroom learning environment.

After high school, I was fortunate enough to receive the Alan and Jane Handler Scholarship to attend the University of Rochester as a Biomedical Engineering student. The transition from high school to college was difficult for me, and I struggled very early on. I was engaged in the classroom and with the material, but I was not testing well, my GPA was suffering, and my days were consumed by studying and work. It all took a toll on my mental health and made me question if engineering was the right path for me. However, it was an end-of-year poster session competition in our Introduction to Biomedical Engineering course that made me realize my passion for research. My partner and I were selected as winners of one of the poster session awards for our presentation on the history and application of neuroprosthetics. This research project kept that spark of curiosity and love for learning alive. Rather than letting the struggles of my first year discourage me, I tried to find comfort and humility in change. At the start of my second year, I began studies in the department of Brain & Cognitive Sciences and, slowly but surely, everything started to look up for me.

I did not formally get involved in a research lab until the spring of my third year, amid the COVID-19 pandemic, nonetheless. Despite the restrictions and limitations on human subjects research during my final two years of undergrad, I contributed to several projects spanning a diverse range of topics: human vision and psychophysics; perception and action; as well as prosodic features of language. However, following graduation, I wanted opportunities that would provide me with more experience in clinical and translational research—a field I hoped to explore in pursuit of graduate education. I went on to participate in the Postbaccalaureate Research Education Program (PREP) at the University of Rochester School of Medicine & Dentistry. Under the mentorship of Michelle Janelins, PhD, MPH, and AnnaLynn Williams, PhD, I enrolled in graduate-level coursework and investigated the associations between neuroinflammatory biomarkers and cancer-related cognitive decline; all while applying to graduate programs. My time as a PREP scholar only reinforced my passion for clinical and translational sciences. I am now a rising third year Neuroscience PhD student at the University of Rochester School of Medicine & Dentistry advised by Ania Busza, MD, PhD, in the Movement and Plasticity Lab (MAPL).

2) What is the focus of your current research, and what are some of your findings?

Broadly, the work done by MAPL uses a combination of clinical, behavioral, and novel neurophysiological data collection methods, with the aim of improving the characterization of motor impairments of the upper extremity experienced by stroke survivors. My PhD thesis will attempt to use the aforementioned data to identify clusters, based on the symptoms stroke survivors may experience, in order to guide the development of more effective and individualized therapeutic interventions.

3) What are your longer term career goals?

I've gone back and forth about exploring careers in industry and academia. I think that's what is so attractive about pursuing a PhD—the flexibility regarding options for my future. I came into the first year of my PhD fully believing I wanted to go into industry, but I've had multiple opportunities to teach and mentor during my first two years to the point where I think I would enjoy running my own lab someday.

It's difficult to think that far ahead, especially with the current climate surrounding research. At this point in my training, I'm just hoping to get through the second half of my qualifying exam and my thesis defense. As the first PhD student in MAPL, I'm really excited to see where our work leads. The collective dream is that our findings will lead to a clinical trial where we can fine-tune our system to be an effective neurofeedback intervention that stroke survivors could receive as part of their rehabilitation therapy to facilitate the functional recovery of their upper extremity.

You can follow Aaron on [X \(@NotAaronHuynh\)](#) or [connect with him on LinkedIn](#) for more information and updates.