New Vision Research Focus

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I was fortunate to be invited to the 2020 Charleston Conference on Alzheimer's disease, at a time when I was struggling to try to get my Alzheimer's disease research off the ground. I am by nature more of a method developer than a biologist; my PhD was centered on understanding the basic mechanisms of how viral tools used to map brain circuits work, and my postdoc focus was to apply these viruses to understand how brain circuits are constructed and how they are modified by experience. As a method developer, I am most interested in identifying biological problems that cannot be solved using existing methodologies, and applying our approaches to provide answers to important questions. Given how little we know about how brain connectivity is altered during Alzheimer's disease, and the potential of our approaches to map the sources of Alzheimer's-related pathology, I found Alzheimer's disease an appropriately appealing target of research.



Unfortunately, breaking into a completely new field as an Assistant Professor is not easy. I lacked both a publication record in the field, as well as a scientific network that is essential for being an Alzheimer's disease researcher. While I had what I thought was a great idea, not surprisingly, my first few attempts at obtaining funding were not successful. CCAD was the first Alzheimer's disease-related award that I won. To me, this award was validation that my questions were worth asking, that others were interested in the same questions as I was. Moreover, it was an impetus to continue and not be dissuaded by the many failures that had preceded it.

My lab has since taken off, and our team now consists of over 35 researchers from diverse personal and scientific backgrounds. We are engaged in research in a variety of topics in addition to Alzheimer's disease, including substance abuse, mental health, and autism. I have so far obtained several major grants through the NIH, such as the prestigious DP2 New Innovator Award and 2 R01s, as well as the One Mind Rising Star Award, and many others. While my work in Alzheimer's disease is still in the early stages, I have now obtained more funding for it, including from the Alzheimer's Association and Brightfocus Foundation. I'm also somewhat pleasantly surprised that the work supported by New Vision Research has worked out almost exactly as proposed, and we hope to have our first manuscript submitted by the end of the year.

CCAD has been a wonderful opportunity for me to build a network in Alzheimer's disease research, and to establish a belief in myself that I could succeed and that what was doing actually mattered. I highly recommend it to any new investigators interested in Alzheimer's Disease research. I still keep in contact with several of the investigators that I met in 2020, and was fortunate enough to meet many more during the 2022 meeting in Honolulu. I look forward to continuing to be a part of the CCAD community in years to come, where I hope to be able to expand my network and be a positive resource for other early stage scientists.