

Mentorship philosophy

My view is that teaching is one of the most crucial obligations that we have as scientists. I view being a scientist as a deeply enjoyable, satisfying, and exciting profession and consider imparting this passion on students to be a central part of our job. My own approach to teaching and mentorship is shaped by the experiences I have had as both a mentor and mentee. When reflecting on my own time as a student, the professors and lectures that engaged me most strongly were the ones that used illustrative examples to convey general concepts, marrying broad ideas with tangible details. Indeed, the series of lectures that first inspired me to consider neuroscience as a career were ones that related the behavior of ion channels and neurons to electronic circuits. I have tried to imitate this approach in my own mentoring style, often using examples from sport to introduce context for my studies of the cerebellum, a brain region intimately involved in motor control and learning.

I also view teaching and mentoring as an opportunity to build confidence and problem-solving skills in new generations of scientists by demonstrating to them that their own determination, rigor, and skill can lead to the thrill of making new discoveries. In my experience, this confidence is the key ingredient that many young researchers entering a lab environment for the first time are missing, so providing a reassuring hand to guide them through difficult times – and relaying that even the most successful scientists often struggle to make progress – is an opportunity to ensure that they will have a greater chance of lasting success.

Commitment to promoting a diverse, equitable, and inclusive community

Addressing the explicit and implicit barriers to success faced by underrepresented groups is one of the major challenges that we face as a scientific community. On a most basic level, this is a moral issue – the existence of any barriers is reprehensible and should not be endured. It is the obligation of those of us who aspire to hold positions of power to not stand idly by but to affect the change we wish to see in our communities. Moreover, I strongly believe that diversity, equity, and inclusion in thought and experience are immensely beneficial to scientific progress, which often requires a multitude of perspectives to address hard problems. Going forward, I am fully committed to creating an environment that actively combats disparities in access and amplifies the voices of underrepresented populations both in my own future research group and also within the wider scientific community. I will treat this challenge with the same ardor as I would any scientific task.

My philosophy for cultivating a diverse, equitable, and inclusive research environment is informed by my own lived and professional experience. I am a serial immigrant – I was born in Bulgaria, raised in the USA, studied as an undergraduate in Canada, and now live in the United Kingdom. At every stage of my life, I have benefited from policies designed to engender community and promote good will across borders, but I can also recall moments when I have felt like an outsider due to my own split national identities. This perspective has made me aware of how my own character may be perceived by others and affect the students that I have taught and mentored and motivates me to appreciate how other people's identity (which may not always be visibly different) can affect their ability to learn and engage. For example, at international institutions, there may be students who are not used to interrupting and asking questions, but in my experience, breaking this barrier can lead to a learning environment that is more beneficial to both the lecturer and students. More recently, I was deeply influenced by attending a session on barriers to progression in science at a Gordon Research Conference on the Cerebellum. In this forum, several leading female cerebellar scientists spoke frankly about the gender-based challenges that they had faced as they ascended to their senior faculty positions^{1,2} and provided stark statistics that certify that these difficult experiences were not unique and are common to a variety of underrepresented groups^{3,4}. These experiences point to the fact that progress has been slow and there is much work to be done, but also to the hopeful ideas that solutions exist, and that change is possible.

1 Raman, I. M. Power analysis. *Elife* **8**, doi:10.7554/eLife.52232 (2019).

2 Murray, D. *et al.* Author-Reviewer Homophily in Peer Review. *bioRxiv*, doi:10.1101/400515 (2019).

3 Dworkin, J. D. *et al.* The extent and drivers of gender imbalance in neuroscience reference lists. *Nat Neurosci* **23**, 918-926, doi:10.1038/s41593-020-0658-y (2020).

4 Stevens, K. R. *et al.* Fund Black scientists. *Cell* **184**, 561-565, doi:10.1016/j.cell.2021.01.011 (2021).