Nicholas M George

University of Colorado Anschutz Medical Campus Cell and Developmental Biology

nicholas.m.george@cuanschutz.edu

https://nickgeorge.net

Education

2016- Ph.D. Neuroscience

University of Colorado, Anschutz Medical Campus, Aurora, CO

Thesis: "Excitable axonal domains adapt to olfactory sensory experience in adults"

Advisors: Diego Restrepo and Wendy Macklin

2014-2016 M.S. Anatomy and Neurobiology

Virginia Commonwealth University, School of Medicine, Richmond, VA

Thesis: "Resolution of Inflammation Rescues Axon Initial Segment Disruption"

Advisor: Jeffrey Dupree

2009-2012 B.S. Human Nutrition, Foods, and Exercise

Virginia Tech, Blacksburg, VA

Funding

2019-2022 1F31 DC018459-01

NIH/NIDCD

"Investigating axonal and glial adaptations to sensory manipulations in the olfactory sys-

tem" Role: Pl

2017-2018 TL1 TR001082

Colorado Clinical and Translational Sciences Institute

"Neuronavigation with a fiber-coupled microscope"

Role: Pre-doctoral Fellow

Publications

Gould, E. A., Busquet, N., Shepherd, D., Dietz, R. M., Herson, P. S., de Souza, F. M. S., Li, A., **George, N. M.**, Restrepo, D., and Macklin, W. B. (2018). Mild myelin disruption elicits early alteration in behavior and proliferation in the subventricular zone. *eLife*, 7:e34783.

Benusa, S. D., **George, N. M.**, Sword, B. A., DeVries, G. H., and Dupree, J. L. (2017). Acute neuroinflammation induces AIS structural plasticity in a NOX2-dependent manner. *Journal of Neuroinflammation*, 14(1):116.

Invited Talks

2019 Gordon Research Seminar: Glial Biology, Ventura, CA

"Investigating glial and axonal adaptations to sensory deprivation in the olfactory system"

CU Anschutz Neuroscience retreat, Keystone, CO

"Glial and axonal adaptations to sensory deprivation in the olfactory system"

2018 Translational Science, Washington, DC

"A novel multiphoton microscopy method for neuronavigation in deep brain stimulation surgery"

All Neurosurgery Research Meeting, Aurora, CO

"Characterizing autofluorescence in human STN for deep brain neuronavigation"

Poster Presentations

2019	Gordon Research Conference: Glial Biology, Ventura, CA Association for Chemoreceptive Science, Bonita Springs, FL Rocky Mountain Regional Neuroscience Group, Aurora, CO
2018	Translational Science, Washington, DC
2017	CU Anschutz Neuroscience Retreat, Estes Park, CO
2016	William and Mary Graduate Research Symposium, Williamsburg, VA

Honors and Awards

- Wellcome Fund Trainee Travel Award for Clinical and Translational Research Conference, Washington, DC
- Visiting Scholar Award for Excellence in the Natural and Computational Sciences. Poster and research summary presented at The William and Mary Graduate Research Symposium, Williamsburg, VA
- 2015 Poster presentation award at the Virginia Symposium on Brain Immunology and Glia, Richmond, VA

Other Skills, Experience, and Outreach

2020 Software Carpentry Instructor Training

I attended a Software Carpentry workshop when I first started my Ph.D. and it helped me tremendously with data analysis and organization. I would like to lead Software Carpentry seminars and help other researchers adopt techniques to improve experimental data gathering and analysis.

2018 **CU Neuroscience Outreach**

I was involved with the CU Neuroscience outreach program. We organized a yearly outreach event for pre-kindergarten to high school students at the Science museum, featuring interactive demos illustrating how sensory systems and neurons worked. I wrote a simple RaspberryPi application with a Tkinter interface to control a thermal camera and email photos of the students to demonstrate snake "heat vision". The project was called SnakeSnap.

2017 CU Anschutz Reproducible Research Network

Co-founded the CU Anschutz Reproducible Research Network

This was a short-lived organization meant to provide tutorials and resources to help other researchers with data analysis and statistical computing needs. The RRN was set up in a bi-weekly "clinic" setting, where we would give a short presentation on a reproducible research tool (mostly in the R programming language ecosystem) and would then host office hours for researchers. Initially this was a popular event, but became difficult to maintain early in my PhD work.