

PROFILE

Expert Neuroscientist with a background in management, in vivo biologics, and analytics across rodent and human projects. My research has produced 30 publications covering multiple aspects of health and disease. I am currently an Associate Editor for *Frontiers in Molecular Neuroscience* and have given interviews on pharmaceutical development for the *MIT Technology Review* (published), the *Boston Globe* on Circular RNA therapeutics (unpublished), and Grand Rounds hospital lectures. I am an expert at innovation, identifying productivity gaps, procuring resources, optimizing project timelines, and pushing projects to completion.

CORE COMPETENCIES

Team Management • Research/Protocol Process Optimization • Data Analytics • Data Management • Laboratory Financial Management • Basic Laboratory Skills • Scientific Programming • Molecular Biology • Bioinformatics • Data Visualization • RNA • Pharmacology • Behavior • Neuroscience • Psychology • Memory • Innovation

CAREER EXPERIENCE

Exponent Inc. – Philadelphia, PA 2023 – Pres
Human Factors Scientist

Alien Therapeutics (ATP) Inc. – Philadelphia, PA 2022 – 2023
Founder

Formed a biomedicine company focused on Circular RNA therapeutics. With the help of Columbia Technology Ventures, recruited Wilson, Sonsini, Goodrich & Rossati as corporate attorneys. Networked with people across the biopharmaceutical / biomedicine space (upper pharma as well as suppliers) in Philadelphia and New York to identify vendors and streamline therapeutic development. Identified and vetted laboratory incubator spaces and networked with potential candidates for various positions.

National Institute of Mental Health (NIMH) – Bethesda, MD 2021 – 2021
COVID-19 Special Volunteer

Curated the emerging mental-health literature for NIMH from various worldwide sources to highlight important papers and topics of interest out of service to the Federal focus on COVID19.

University of Wisconsin – Milwaukee, WI 2020 – 2021
Assistant Professor Neuroscience (Tenure-Track) ([Link](#))

Leveraged \$1,000,000 in startup funding and approximately \$1,000,000 in equipment (\$2,000,000 total) to build a world-class laboratory spanning various techniques including: whole-cell patch clamp electrophysiology, micro-electrode array electrophysiology, advanced behavioral testing and tracking, in vivo stereotaxic viral/optical surgery, histology, IHC, fluorescence microscopy, spectrophotometry, pcr, qpcr, with plans to incorporate on site NGS sequencing. Recruited an administrative assistant, graduate students, and interviewed post-doctoral researchers. Built the laboratory for a fraction of the cost of other R1 universities during the COVID-19 Pandemic. Worked with deans and others across the university to improve the biosafety infrastructure for advanced research as well as focus on partitioning my start-up funds to recruit other research-intensive faculty members.

Columbia University | Howard Hughes Medical Institute – New York, NY 2016 – 2021
Associate & Postdoctoral Research Scientist (Video: <https://youtu.be/ipi2LzINUxl>)

Working with Nobel laureate Eric Kandel, I collaborated with numerous companies and worked in house to leverage advanced techniques in molecular biology (e.g., mRNA, circular RNA, and microRNA sequencing), optogenetics, chemogenetics, and basic molecular biology to explore the biological bases of memory. Managed numerous undergraduate students and technicians on projects ranging from their senior thesis to authorship on publications. My work neural circuit work received an NIMH F32 fellowship, pioneered several cutting-edge technologies including an analytic topological approach which garnered an invitation to submit an NIH Director's Pioneer Award from NIAAA.

EDUCATION

University of Delaware , Ph.D., Neuroscience and Psychology	2016
Temple University , B.S., Neuroscience (2 nd major Psychology), magna cum laude	2010

COURSES & CERTIFICATES

IBM Data Science Professional Certificate	In Progress
Complete SQL and MYSQL Course	2023
Microsoft Power BI Desktop for Business Intelligence Course	2023
AS in Finance	2002 – 2005
Cisco CCNA Networking Academy Courses	2000 – 2002