

Education

- 2019– **Massachusetts Institute of Technology**
Intended PhD in Brain & Cognitive Sciences. Advisor: Professor Li-Huei Tsai
- 2015–2019 **Harvard College**
AB in Neurobiology. Secondary field in Mathematical Sciences.

Research Experience

- Jun 2018–May 2019 Biology R&D Intern, **Cellino Biotech, Inc** (Cambridge, MA)
Generation of neurons from human iPS cells using CRISPR activation and proprietary laser-based intracellular delivery platform for cell therapy manufacturing
- Jun–Aug 2017 Biopharmaceutics Intern, **Biogen Inc** (Cambridge, MA)
Design and validation of new *in vitro* assay to predict *in vivo* pharmacokinetics of oral extended-release drugs for multiple sclerosis
- Jun 2016–May 2017 Student Researcher, **Z. He Lab**, Harvard Medical School & Boston Children's Hospital
Microglial regulation of oligodendrocyte progenitor cell proliferation and differentiation after optic nerve injury
- Feb–May 2016 Student Researcher, **O'Connell Lab**, Harvard University
Toxin-binding proteins and dietary ecology in Malagasy poison frogs

Publications

- [in review] **LA Akay, AH Effenberger, LH Tsai**. Cell of all trades: oligodendrocyte precursor cells in synaptic, vascular, and immune function. Submitted to *Genes & Development*
- NA Moskowitz et al.** Seasonal changes in diet and toxicity in the Climbing Mantella frog (*Mantella laevis*). *PLOS ONE*, 26 Dec 2018. doi: 10.1101/361998

Teaching

- Fall 2020 **Head TA**, MCB 60: Cellular Biology and Molecular Medicine (Harvard College)
- Jan 2019–Jul 2020 **Course Moderator**, MCB80x: Fundamentals of Neuroscience (HarvardX)
Developed online curriculum and moderated series of open-access introductory neuroscience courses, reaching over 35,000 learners annually: *MCB80.1x* (The Electrical Properties of the Neuron), *MCB80.2x* (Neurons and Networks), *MCB80.3x* (The Brain)

Awards and Honors

- 2017 Finalist, Jacob Wendell Scholarship Prize
- 2016 Harvard College Scholar (top 10% of class)

Outreach and Service

- Sept 2020 **Manchester Neuroscience Society**, invited research talk
Delivered talk on gamma stimulation for Alzheimer's disease to high school students
- Jul–Aug 2020 **High Schentrainmentool Summer Program**, MIT Educational Studies Program
Co-taught 6-week course on neurological diseases to high school students via Zoom
- Apr 2020– **COVID-19 Urgent Resource Video Education (CURVE)**
Massachusetts General Hospital (learn.partners.org/source/curve)
Produced videos on Emergency Medicine topics to educate clinicians on best practices
- April–Jun 2020 **Virtual Mentorship Program**, CovEducation (coved.org)
Provided free 1-on-1 tutoring in biology & neuroscience to middle school students via Zoom
- Mar–Jun 2020 **COVID Student Response Taskforce**
Harvard Medical School (covidstudentresponse.org)
Created informational graphics and data visualizations for lay audiences on COVID-19 safety precautions and scientific/clinical research. Produced graphics for collaborative projects with teams at Beth Israel Deaconess Medical Center and Ariadne Labs