Stanford

Duc Tan Huynh

Postdoctoral Scholar, Neurosurgery

Bio

BIO

As a cell biologist interested in neuroscience, I am fascinated about the molecular basis of nervous system disorders that reveal therapeutic targets and/or biomarkers. My long-term research goal is to identify strategies that revert dysregulation in aging or neurodegeneration. For my postdoctoral training in the Zuchero lab (Neurosurgery), I will investigate how myelination, an essential developmental process, contributes to intelligence and neurodegeneration at the biochemical, cellular, and physiological level. I received my BSc at UCLA and my PhD at Duke University.

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- Phi Beta Kappa, University of California, Los Angeles (2017)
- Duke International Chancellor’s Scholarship, Duke University (2018)
- Duke Biosciences Collaborative for Research Engagement (BioCoRE) Scholarship, Duke University (2018)
- Travel Award, American Society for Biochemistry and Molecular Biology (2020)
- Duke Scholar in Molecular Medicine Program (Neuroscience), Duke University, Clinical and Translational Science Institute (2022)
- Graduate Student Research Award, Ruth K. Broad Biomedical Foundation (2022)
- Trainee Professional Development Award, Society for Neuroscience (2022)
- Kamin Travel Award, Duke University, department of biochemistry (2022)
- Graduate School Conference Travel Award, Duke University (2022)
- Professional Development Award, Duke University (2023)
- Gerald D. and Ruth L. Fischbach Endowed Scholarship, Marine Biological Laboratory (2023)
- Ellen Luken Student Award, Ruth K. Broad Biomedical Research Foundation (2023)
- Graduate Student Pilot Research Grant Award, Precision Genomics Collaboratory, Duke University (2023)
- Society of General Physiologists Scholar, Marine Biological Laboratory (2023)
- Weill Institute Emerging Scholar, Cornell University (2023)
- Dean’s Award for Research Excellence, Duke School of Medicine (2024)
- DISCOVER award, Salk Institute for Biological Sciences (2024)
- INSPIRE award, Washington University in Saint Louis, department of neuroscience (2024)
- Graduate Student Rising Star, University of Utah, department of biochemistry (2024)

- Pathways to Neurosciences Fellow, Wu Tsai Neuroscience Institute (2024)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Duke University (2024)
- BS, University of California, Los Angeles , Biochemistry (2017)

STANFORD ADVISORS

- Brad Zuchero, Postdoctoral Faculty Sponsor

LINKS

- ORCID: https://orcid.org/0000-0002-4832-8369
- Zuchero lab: http://zucherolab.stanford.edu/

Research & Scholarship

LAB AFFILIATIONS

- Brad Zuchero (7/1/2024)

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biochemistry (Phd Program)

Publications

PUBLICATIONS

- **O-GlcNAcylation regulates neurofilament-light assembly and function and is perturbed by Charcot-Marie-Tooth disease mutations.** *Nature communications*
  Huynh, D. T., Tsolova, K. N., Watson, A. J., Khal, S. K., Green, J. R., Li, D., Hu, J., Soderblom, E. J., Chi, J. T., Evans, C. S., Boyce, M.
  2023; 14 (1): 6558
- **Chemical Biology Approaches to Understanding Neuronal O-GlcNAcylation.** *Israel journal of chemistry*
  Huynh, D. T., Boyce, M.
  2023; 63 (1-2)
- **Evidence for nutrient-dependent regulation of the COPII coat by O-GlcNAcylation.** *Glycobiology*
  Bisnett, B. J., Condon, B. M., Linhart, N. A., Lamb, C. H., Huynh, D. T., Bai, J., Smith, T. J., Hu, J., Georgiou, G. R., Boyce, M.
  2021; 31 (9): 1102-1120
- **Kelch-like Proteins Have a Sweet Spot: Site-specific Glycosylation Influences Metabolic Regulation and Protein Homeostasis**
  Huynh, D., Chen, P., Hu, J., Smith, T., Chi, J., Boyce, M.
  WILEY.2020
- **Gigaxonin glycosylation regulates intermediate filament turnover and may impact giant axonal neuropathy etiology or treatment.** *JCI insight*
  Chen, P. H., Hu, J., Wu, J., Huynh, D. T., Smith, T. J., Pan, S., Bisnett, B. J., Smith, A. B., Lu, A., Condon, B. M., Chi, J. T., Boyce, M.
  2020; 5 (1)
- **A 3.8 Å resolution cryo-EM structure of a small protein bound to an imaging scaffold.** *Nature communications*
  Liu, Y., Huynh, D. T., Yeates, T. O.
  2019; 10 (1): 1864