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EDUCATION

Icahn School of Medicine at Mount Sinai

PhD Neuroscience

Advisor: Peter Rudebeck, D.Phil

Thesis: A comparative analysis of amygdala anatomy and physiology in mice, macaques, and man

New York, NY

February 27, 2024

Mercer University

BS Neuroscience, BA Latin

Advisors: Katherine Northcutt, PhD & Achim Kopp, PhD

Macon, GA

May, 2019

PUBLICATIONS

Zeisler, Z., Heslin, K.A., Stoll, F.M., Hof, P.R., Clem, R.L., Rudebeck, P.H. 2023

Comparative basolateral amygdala connectomics reveals dissociable single-neuron projection patterns to frontal cortex in macaques and mice. *bioRxiv* 2023.12.18.571711.

Zeisler, Z., London, L., Janssen, W.G., Fredericks, J.M., Elorette, C., Fujimoto, A., Zhan, H., 2023

Russ, B.E., Hof, P.R., Clem, R.L., Stoll, F.S., Rudebeck, P.H. Single basolateral amygdala neurons in macaques exhibit distinct connective motifs with frontal cortex. *Neuron* 111, 3307-3320.

INVITED TALKS

Friedman Brain Institute Annual Retreat.

May 12, 2023, New York, NY

Zeisler, Z., Heslin, K., Clem, R., Rudebeck, P.H. A comparative analysis of amygdala neuron branching in macaques and mice.

Neuro RECEPTR, Rutgers University, Brain Health Institute.

April 27-28, 2023, New Brunswick, NJ

Zeisler, Z., London, L., Janssen, W.G., Fredericks, J.M., Elorette, C., Fujimoto, A., Zhan, H., Russ, B.E., Hof, P.R., Clem, R.L., Stoll, F.S., Rudebeck, P.H. High-throughput sequencing of macaque basolateral amygdala projections reveals dissociable connective motifs with frontal cortex.

UCLA Science Outreach Symposium

November 10, 2022, Los Angeles, CA

Zeisler, Z., Loo, H. Project SHORT: Diversifying STEM through one-on-one mentorship.

ORAL PRESENTATIONS

Friedman Brain Institute Cells, Circuits, and Behavior WIP

December 1, 2022, New York, NY

Zeisler, Z., London, L., Janssen, W.G., Fredericks, J.M., Elorette, C., Fujimoto, A., Zhan, H., Russ, B.E., Hof, P.R., Clem, R.L., Stoll, F.S., Rudebeck, P.H. High-throughput sequencing of macaque basolateral amygdala projections reveals dissociable connective motifs with frontal cortex.

Center for Neurotechnology and Behavior Seminar Series

March 15, 2022, New York, NY

Zeisler Z., Stoll, F.S., Love, M., Rudebeck, P.H. Intrinsic timescales reflect neuroanatomical differences across species.

Friedman Brain Institute Cells and Circuits WIP

January 14, 2022, New York, NY

Zeisler, Z., Fredericks, J.M., Janssen, W.G., Stoll, F.S., Clem, R.L., Rudebeck, P.H. The Primate Amygdala: Projections at single-neuron resolution.

POSTER PRESENTATIONS

Winter Conference on Brain Research

Jan. 27-Feb. 2, 2024, Breckenridge, CO

Zeisler, Z., Heslin, K., Clem, R.L., Rudebeck, P.H. The comparative organization of single amygdala neuron projection patterns to frontal cortex and striatum in macaques and mice

Society for Neuroscience

Nov. 11-15, 2023, Washington, DC

Zeisler, Z., Heslin, K., Clem, R.L., Rudebeck, P.H. The comparative organization of single amygdala neuron projection patterns to frontal cortex and striatum in macaques and mice

Society for Neuroscience

Nov. 11-17, 2022, San Diego, CA

Zeisler, Z., London, L., Janssen, W.G., Fredericks, J.M., Elorette, C., Fujimoto, A., Zhan, H., Russ, B.E., Hof, P.R., Clem, R.L., Stoll, F.S., Rudebeck, P.H. High-throughput sequencing of macaque basolateral amygdala projections reveals dissociable connectional motifs with frontal cortex.

Gordon Research Conference – Frontal Cortex

August 8-12, 2022, Ventura, CA

Zeisler, Z., Fredericks, J.M., Janssen, W.G., Stoll, F.S., Clem, R.L., Rudebeck, P.H. High-throughput sequencing of macaque basolateral amygdala projections reveals dissociable connectional motifs with frontal cortex.

Friedman Brain Institute Neuroscience Retreat

May 13, 2022, New York, NY

Zeisler, Z., Fredericks, J.M., Janssen, W.G., Clem, R.L., Rudebeck, P.H. Single neurons in macaque basolateral amygdala exhibit distinct patterns of collateral projections.

International Congress of Neuroendocrinology

July 15-18, 2018, Toronto, Ontario

Zeisler, Z., Smith, S., Northcutt, K.N. Sex-specific modulation of juvenile midbrain dopamine expression by perinatal serotonin.

Society for Neuroscience

Nov. 11-15, 2017, Washington, DC

Zeisler, Z., Smith, S., Northcutt, K.N. Perinatal hyperserotonemia influences dopamine expression in the midbrain.

OTHER EDUCATION

Machine Learning for Large-Scale Neuroscience

October 9, 2021

Workshop attended as part of 2021 CRCNS Meeting.

NeuroMatch Academy

July, 2020 – August, 2020

3-week intensive computational neuroscience training course: Python programming, machine learning, big data; group project working with Human Connectome Project fMRI data

OUTREACH ACTIVITIES

Project SHORT – Director of Outreach July, 2020 – August, 2023
Assisted with organization and recruitment of students from underrepresented communities to receive *pro bono* admissions consulting for graduate or medical school. Oversaw redesign of website.

MiNDS -Mentoring in Neuroscience Discovery at Sinai August, 2019 – August, 2023
Annual Brain Fair during Brain Awareness Week; monthly classes at local middle school; other STEM advocacy activities across NYC

TEACHING EXPERIENCE

Icahn School of Medicine New York, NY
Teaching Assistant, Behavioral and Cognitive Neuroscience (for PhD students) Spring 2021, 2022
CEYE – Sherman Scholars program August, 2020, 2021, 2022
MiNDS – Intro neuroscience course for middle school students August, 2019 – August, 2021

Mercer University Macon, GA
Lab Teaching Assistant, Intro to Environmental Science Fall 2018
Lab Teaching Assistant, Intro to Biology I Spring 2017, Spring 2018
Lab Teaching Assistant, Intro to Biology II Fall 2017