Noah Leonardo

(248) 982 - 2937 noahleonardo@gmail.com

EDUCATION

Bachelor of Science - Biochemistry University of Michigan - Dearborn 2015-2019

Minor in Philosophy

Doctor of Philosophy – Psychology University of Michigan 2022- Present

RESEARCH INTERESTS

Dissect interactions of corticolimbic and mesolimbic circuits in pursuit of new unifying perspectives on how we understand the causal relationships of motivation, cognition, and the mind-body problem.

RESEARCH EXPERIENCE

RESEARCH LABORATORY TECH INTERMEDIATE

PRINCIPLE INVESTIGATOR: JILL B. BECKER

2019 - 2022

The University of Michigan Medical School, Department of Psychiatry,

Michigan Neuroscience Institute, Ann Arbor, MI

Responsible primarily for development of experimental methods and data analysis for Fast Scan Cyclic Voltammetry experiments, immunohistochemistry, and computational social behavior assays. Contributed scientifically to multiple ongoing dissertations.

UNDERGRADUATE RESEARCHER

PRINCIPLE INVESTIGATOR: SHEILA R. SMITH

2017-2019

The University of Michigan – Dearborn College of Arts, Sciences, and Letters, Natural Sciences Department Biochemistry Program, Dearborn, MI Developing floating protein cyclic voltammetry procedures on copper ligated riboflavin binding protein using a self-assembling monolayer.

HONORS AND AWARDS

DEPARTMENT OF NATURAL SCIENCES DISTINGUISHED RESEARCH AWARD	2019
DEPARTMENT OF NATURAL SCIENCES GRADUATE WITH UNIVERSITY HONORS AWARD	2019
CERTIFICATE OF MERIT IN SARGON PARTNERS UNDERGRADUATE RESEARCH SHOWCASE	2018

PUBLICATIONS

Quigley, J.A., Logsdon, M., Turner, C., Gonzalez, I, Leonardo, N., Becker, J.B. Sex differences in vulnerability to addiction. Neuropharmacology, 2021. Feb 7:108491. doi: 10.1016/j.neuropharm.2021.108491.

Gonzalez, I.L., Turner, C.A., Patel, P.R., Leonardo, N., Luma, B.D., Richie, J.M., Cai, D., Chestek, C.A., Becker, J.B., 2022. Sex Dependent Regional Differences in Dopamine Release Determined In Freely Moving Rats: Multichannel Carbon Fiber Electrode for Chronic Detection of Dopamine in the Nucleus Accumbens and Dorsal Striatum by Fast Scan Cyclic Voltammetry. Manuscript in preparation.

POSTERS

Leonardo, N., Cai, D., Patel, P.R., Chestek, C.A., Becker, J.B., IN SITU VALIDATION OF FAST-SCAN CYCLIC VOLTAMMETRY MULTIELECTRODES. Poster to be presented at: Neuroscience 2022, Society for Neuroscience. 2022 Nov 15-18. San Diego, CA.

Gonzalez, I.L., Leonardo, N., Luma, B.D., Patel, P.R., Jacklic, D.C., Chestek, C.A., Becker, J.B., The effects of social housing on social behavior and stimulated DA release after methamphetamine exposure. Poster to be presented at: Neuroscience 2022, Society for Neuroscience. 2022 Nov 15-18. San Diego, CA.

Turner, C.A., Luma, B.D., Leonardo N., Patel, P.R., Chestek, C.A., Becker, J.B., ACTIVATION OF G-PROTEIN COUPLED ESTRADIOL RECEPTOR-1 MODULATESS TIMULATED DOPAMINE RELEASE IN THE DORSAL STRIATUM OF MALE RATS. Poster to be presented at: Neuroscience 2022, Society for Neuroscience. 2022 Nov 15-18. San Diego, CA.

Leonardo, N., Smith, S., Determination of the reduction potential of copper bound Riboflavin Binding Protein using Cyclic Voltammetry. Poster presented at: ACS Spring National Meeting and Exposition. 2019 Mar 31-April4. Orlando, FL.

Leonardo, N., Smith, S., Determination of Reduction Potential of Copper Bound-Riboflavin Binding Protein. Poster presented at: University of Michigan Sargon Partners Research Showcase. 2018 Apr 8. Dearborn, MI.

Leonardo, N., Smith, S., Investigation of Copper Cofactor Ligand Environment of Riboflavin Binding Protein using Cyclic Voltammetry. Poster presented at: Ohio Inorganic Weekend. 2018 Nov 9. Athens, OH.

RELEVANT SKILLS

Free floating immunohistochemistry
Multiplex confocal microscopy using Ziess LSM 780
Cryostat sectioning of perfused brain tissue
Operating self-administration chambers
Regulation and administration of scheduled chemicals
Euthanasia and Dissection of Rats
Network analysis of longitudinal data in R
Signal processing and data analysis in MATLAB
Computational Behavioral analysis using deep learning in python in vivo Fast scan cyclic voltammetry

TEACHING EXPERIENCE

Instructing graduate students in rodent surgery preparation, craniotomy, and post operative care. Instruction of undergraduates in lab maintenance and experimentation including rodent handling, data organization, and rodent fast-scan cyclic voltammetry and self-administration testing procedures.