Last updated September 12th, 2023

Mitchell B. Slapik

MD/PhD Candidate
McGovern Medical School
mslapik@gmail.com

Education

2027	McGovern Medical School, *Houston, TX* Medical Scientist Training Program	MD
2025	University of Texas at Houston, *Houston, TX* Neuroscience, Advisor: Valentin Dragoi	PhD
2017	Johns Hopkins University, *Baltimore, MD* Post-Baccalaureate Premedical Program	
2014	Swarthmore College, *Swarthmore, PA* With High Honors in Philosophy and Linguistics	BA
2013	University of Oxford, *Oxford, UK* Study Abroad: Philosophy of Mind	

Awards

2023	Osborne Endowed Scholarship in the Neurosciences Department of Neurobiology and Anatomy, McGovern Medical School
2023	National Research Service Award (F30) National Institutes of Health: National Eye Institute
2023	Best Work-In-Progress Talk Department of Neurobiology and Anatomy, McGovern Medical School
2022	Clinical and Translational Science Predoctoral Fellowship (TL1) National Institutes of Health: National Center for Advancing Translational Sciences
2022	Osborne Endowed Scholarship in the Neurosciences Department of Neurobiology and Anatomy, McGovern Medical School
2022	Travel Awards for Society for Neuroscience in San Diego, CA McGovern Medical School
2018	Travel Award for 8th Annual Ataxia Investigator's Meeting The National Ataxia Foundation
2014	High Honors in Philosophy and Linguistics Swarthmore College Honors Program
2009	National Merit Semifinalist National Merit Scholarship Program

Publications

M. Joyce, P. Nadkarni, S. Kronemer, […], **M. Slapik**, et. al. (2022). "Quality of Life Changes Following the Onset of Cerebellar Ataxia: Symptoms and Concerns Self-reported by Ataxia Patients and Informants." Cerebellum.

O. Morgan., **M. Slapik**, K. Iannuzzelli, et. al. (2020). "The Cerebellum and Sequencing in Motor and Cognitive Domains: Evidence from Cerebellar Ataxia." Cerebellum.

S. Kronemer, **M. Slapik**, J. Pietrowski, et. al. (2020). "Neuropsychiatric Symptoms as a Reliable Phenomenology of Cerebellar Ataxia." Cerebellum.

M. Slapik, S. I. Kronemer, O. Morgan, et. al. (2018). "Visuospatial Organization and Recall in Cerebellar Ataxia." Cerebellum.

Presentations

Talks

M. Slapik, Shouval, H. (2023). "Unshattering Dimensionality." Post-candidacy Talk at Fall Neuroscience Retreat for UTHealth. Cleveland, TX.

M. Slapik, Andrei, S. Khan, et al. (2022). "Optimal Stimuli as a New Method to Investigate Neural Networks." Pre-candidacy Talk at Fall Neuroscience Retreat for UTHealth. Cleveland, TX.

O. Morgan, **M. Slapik**, K. Iannuzzelli, et al. (2018). "Motor and Cognitive Sequencing in Cerebellar Ataxia." Hot Chair Talk. National Ataxia Foundation's 9th Ataxia Investigators Meeting. Virtual.

O. Morgan, **M. Slapik**, S. Kronemer, et al. (2018). "Motor-cognitive Multitasking in Cerebellar Ataxia." Presentation to the faculty and staff of the Johns Hopkins Ataxia Clinic, Baltimore, MD.

M. Slapik, O. Morgan, J. Creighton, et. al. (2018). "Timing and Sequencing in Cerebellar Ataxia." Nanosymposium talk accepted for presentation at: Society for Neuroscience San Diego, CA.

O. Morgan, J. Creighton, **M. Slapik**, et. al. (2018). "Neural correlates of value-driven attentional capture in addiction." Nanosymposium talk accepted for presentation at: Society for Neuroscience, San Diego, CA.

M. Slapik, O. Morgan, C. Marvel. (2018). "Language Abilities in Cerebellar Ataxia." Presentation to the faculty and staff of the Johns Hopkins Ataxia Clinic, Baltimore, MD.

M. Slapik, S. Kronemer, O. Morgan, et. al. (2017). "Visuospatial Organization and Recall in Cerebellar Ataxia." Talk presented at: Sensorimotor Day, Johns Hopkins University, Baltimore, MD.

Posters

S. Egranov, R. Milton, **M. Slapik**, et al. (2023). "Influence of Intracortical Microstimulation on Synaptic Efficacy between Visual and Executive Cortical Areas in Macaques." Washington, D.C.

S. Khan, A. Andrei, **M. Slapik**, et al. (2023). "Optogenetic Control of Inhibitory Neurons in Macaque Visual Cortex." Washington, D.C.

M. Slapik, A. Andrei, S. Khan, et al. (2023). "A Deep Learning Approach to Naturalistic Surround Modulation." Society for Neuroscience. Washington, D.C.

S. Khan, A. Andrei, **M. Slapik**, et. al (2023). "Inhibitory Control of Up and Down Cortical States during Sleep." Spring Neuroscience Retreat for UTHealth, Houston, TX.

M. Slapik, A. Andrei, S. Khan, et al. (2022). "Deep Networks Design Optimal Stimuli for Early Visual Cortex." Society for Neuroscience. San Diego, CA.

M. Slapik, S. Patwardhan, R. Costa, et al. (2020). "Using Machine Learning To Classify Feeding Behavior in Aplysia." American Physician Scientists Association. Houston, TX.

O. Morgan, **M. Slapik**, S. Kronemer, et al. (2019). "Motor-Cognitive Multitasking in Machado-Joseph's Disease." The International MJD Research Conference, Washington, DC.

E. Hill, **M. Slapik**, O Morgan, et al. (2018). "Abstract Thinking in Cerebellar Ataxia." Poster at: Iowa Neuroscience Institute Workshop, Cerebellum in Bipolar Disorder and Other Neuropsychiatric Diseases, Iowa City, IA.

C. Marvel, J. Creighton, O. Morgan, **M. Slapik**, et al. (2018). "Cerebro-Cerebellar Contributions to Working Memory in Early Lyme Disease." International Society of Behavioral Neuroscience, Anchorage, AK.

O. Morgan, **M. Slapik**, S. Kronemer, et al. (2018). "Motor-cognitive Multitasking in Cerebellar Ataxia." The National Ataxia Foundation's 8th Ataxia Investigator's Meeting, Philadelphia, PA.

M. Slapik, J. Pietrowski, O. P. Morgan, et al. (2018). "A Characterization of Language Impairment in Cerebellar Ataxia." The National Ataxia Foundation's 8th Ataxia Investigator's Meeting. Philadelphia, PA.

C. Marvel, J. Creighton, O. Morgan, **M. Slapik**, et al. (2018). "Cerebro-Cerebellar Contributions to Working Memory in Early Lyme Disease." Society for Neuroscience, San Diego, CA.

M. Slapik, S. Kronemser, J. Mandel, et al. (2017). "Visuospatial Processing and Strategy Formation in Cerebellar Ataxia." Society for Neuroscience, Washington, D.C.

Work

2021 – Now **Graduate Research Assistant, Dragoi Lab**
McGovern Medical School, *Houston, TX*

Investigate how the brain processes visual information

- Design optimal stimuli for neurons in visual cortex using an image generator and optimizer
- Analyze communication subspaces between brain areas and how they transform based on brain state

2016 - 2019 **Research Assistant, Marvel Lab**
Johns Hopkins Medical School, *Baltimore, MD*

Examined the cognitive and emotional effects of cerebellar ataxia

- Designed new cognitive tasks assessing visuospatial skills, gestalt processing, sequence learning and verbal encoding
- Administered cognitive tasks, emotional questionnaires and motor tests to ataxia patients and controls

Volunteering

2021 – Now **Volunteer Counselor**
Crisis Text Line, *Houston, TX*

- Provide counseling to callers on the crisis line experiencing thoughts of suicide and self-harm
- Refer to personalized resources on depression, anxiety, substance use disorder, and gender/sexual identity

2021 – Now **Shadowing, Department of Psychiatry**
UTHealth, *Houston, TX*

- Work with a team of psychiatrists, residents and social workers treating patients with a variety of psychiatric disorders

2017 – 2019 **Team Leader, Health Resource Coordinator**
Charm City Clinic, *Baltimore, MD*

- Assisted clients with a variety of challenges related to medical care, employment, and housing
- Trained a new group of volunteers

2016 – 2019 **Shadowing, Parkinson's Neuropsychiatric Clinic**
Johns Hopkins Medicine, *Baltimore, MD*

- Shadowed a psychiatrist treating Parkinson's disease, including psychiatric, cognitive and motor symptoms

2015 – 2016 **Emergency Room Volunteer**
Penn Presbyterian Medical Center, *Philadelphia, PA*

- Took incoming calls, paged nurses, restocked supplies, and observed procedures

2015 – 2016 **Front-Desk Volunteer**
Washington West Project, *Philadelphia, PA*

- Enrolled patients for STD screening and counseling

Certificates

2023 **Machine Learning Specialization**
Stanford University (Coursera)

2023 **Deep Learning Specialization**
deeplearning.ai (Coursera)

2023 AI for Medicine Specialization
deeplearning.ai (Coursera)

Organizations

2017 - Now Society for Neuroscience

2017 - 2019 National Ataxia Foundation

Skills

Electrophysiology: Acute and chronic recording

MRI: Structural scans

Eye-Tracking: Eyelink

Data analysis: Matlab, Python, SPSS

Machine Learning: Matlab, Python

Task Development: E-Prime, PsychToolbox

Languages

English: Fluent

Spanish: Basic

Hobbies

Jazz Saxophone
The Chirp Chirps, Bayou City Funk

Machine Learning Journal Club
Leadership Committee

Classical and Jazz Piano