

Justin McCurdy

215 Clarkewoods road, Athens, GA 30601 ▪ justin.mccurdy@uga.edu ▪ (740) 225 2412

EDUCATION

UNIVERSITY OF GEORGIA

Athens, GA

PhD in Neuroscience

Ongoing

- Elective specialization: Human motor behavior
- GPA: 3.6/4.0

OTTERBEIN UNIVERSITY

Westerville, OH

Bachelor of Science in Zoo and Conservation Science

May 2019

- Double Major: Biology
- GPA: 3.7/4.0
- Awards: Jean Willis Life Science Endowed Award, NCAA DIII Track & Field Academic All-American

RESEARCH EXPERIENCE

UNIVERSITY OF GEORGIA

Athens, GA

Graduate Research Assistant

August 2020 - Present

- Identified a research question in the field of human motor behavior, developed a research plan and milestones, and am actively collecting data with a high degree of independence.
- Developed soft skills of working with and overseeing a research team with broader goals, and communicating project needs to relevant administrative units.
- Administered neurostimulation to humans within a research setting.
- Designed rigorous data collection and processing software programs.
- Research presented at:
 - 2022 Society for the Neural Control of Movement Conference
 - 2022 Brainbox Initiative Conference
 - 2022 UGA NeuroSymposium

OTTERBEIN UNIVERISTY

Westerville, OH

Undergraduate Research Assistant

August 2016 – May 2019

- Developed and executed a series of biological experiments to study the impact of resource availability on tissue development.
- Designed a novel lab approach for delineating organic and inorganic matter development in anurans.
- Performed post-mortem measurements of brain tissue mass development.
- Oversaw care and collection of all live specimens.

TEACHING EXPERIENCE

UNIVERSITY OF GEORGIA

Athens, GA

Graduate Teaching Assistant (Biomechanics, Anatomy and Physiology)

August 2020 - Present

- Independently oversaw instruction of model-based and live dissection curriculum (Anatomy and Physiology).
- Led 30+ undergraduate students through physical (Biomechanics) laboratory experiments.
- Creation and proctoring of evaluation materials, including assignment of final grades.
- Average teaching evaluation score was over 90%.

OTTERBEIN UNIVERSITY

Westerville, OH

Undergraduate Teaching Assistant

August 2016 – May 2019

- Aided in preparation of course materials.
 - Hosted material review sessions for students prior to exams.
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RELATED EXPERIENCE

OTTERBEIN UNIVERSITY

Aquatics Lab Manager

Westerville, OH
August 2016 – May 2019

- Managed the care and maintenance of marine science lab.
- Trained a small group of volunteers in aquaculture every semester.

RACINE ZOOLOGICAL SOCIETY

Seasonal Animal Husbandry Specialist

Racine, WI
May 2016 – August 2016

- Provided husbandry and implemented behavioral training techniques for a variety of exotic species.
- Daily community engagement and public speaking opportunities through education and outreach programs.

DIAMOND M VETERINARY CLINIC

Vet Assistant

Kenton, OH
May 2017 – August 2018

- Experience performing a wide range of veterinary medical procedures in both domestic and exotic animals.
- Exposure to biomedical lab sample preparation in both clinical and field work settings.
- Health communication skills with both clinic staff and patient populations.

TECHNICAL SKILLS

Programming/Software:

- 3+ years' experience with **MATLAB** in various academic and research projects for signal processing, electromyographic event identification, and general visuomotor task design.
- Intermediate level programming skills in **Rstudio** and **Python**, mainly using **Psychopy® software**.
- 4+ years' experience with **Pandas**, a Python package, for data analysis and machine learning.
- Publication standard statistical analysis and data visualization using **RStudio**.

Electronics Design and Hardware:

- Analog and digital circuit integration for the operation of sensorimotor experiments.
- Hands on experience designing experiments that combine electromyographic (EMG), motion capture (MOCAP), neurostimulation (TMS), and neuroimaging (fNIRS/fMRI) techniques.

Neurostimulation:

- Advanced training in the application of Transcranial Magnetic Stimulation (TMS) in both human research and clinical settings.
- Moderate experience with combinatory use of TMS with peripheral nerve stimulation (pNS) techniques.
- Integration of robotic kinesiological instrument for normal and altered reaching movement (KINARM) with TMS.

RELATED COURSEWORK

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| ▪ Anatomy and Physiology I & II | 2014 |
| ▪ Molecular Biology | 2015 |
| ▪ Organismal Biology and Ecology | 2016 |
| ▪ Comparative Vertebrate Anatomy | 2018 |
| ▪ Animal Reproduction | 2018 |
| ▪ Biochemistry I: Biomolecules and Metabolism | 2018 |
| ▪ Cellular Biology | 2019 |
| ▪ Neuroanatomy | 2021 |
| ▪ Neurophysiology | 2021 |
| ▪ Bases of Human Motor Control | 2022 |
| ▪ Statistical Methods in Experimental Psychology | 2022 |

CERTIFICATES AND MEMBERSHIPS

- Founding Member of Otterbein's Animal Conservation Club
- Phi Eta Sigma Honors Society
- CPR/AED Certified
- National Center of Neuromodulation's Advanced TMS for Rehabilitation Workshop
- KINARM Design Camp
- Neuromatch Academy Techniques in Computational Neuroscience Workshop