

# Kyle C. McGill Percy

[kmcgillpercy@gmail.com](mailto:kmcgillpercy@gmail.com)

2054 Fairview Ave. Apt 3, Cleveland Ohio 44106 · (813) 895-8701

---

## EDCUATION

### **Case Western Reserve University**, School of Medicine

- PhD Graduate student; Department of Physiology & Biophysics

Cleveland, OH

2022 - Current

### **University of South Florida**, Morsani College of Medicine

- Master's Degree in Aging & Neuroscience

Tampa, FL

December 2020

### **University of South Florida**, College of Arts & Science

- Bachelor of Science in Biomedical Science
- Graduated Magna Cum Laude with an overall GPA of 3.75

Tampa, FL

December 2017

### **Hillsborough Community College**,

- Associate of Arts in Premedical Science
- Graduated with High Honors

Tampa, FL

December 2014

## RESEARCH EXPERIENCE

### **Case western Reserve University, Department of Physiology & Biophysics**

*PhD student in School of Medicine in Dr. Xin Qi's lab*

Cleveland, OH

July 2023 – Current

My research project centers on exploring mitochondrial dysfunction in tauopathy, with a specific emphasis on identifying novel proteins for potential therapeutic interventions. The techniques and assays listed below represent the breadth of my scientific and technical expertise.

### **Case Western Reserve University Department of Pathology**

*Research Assistant for Dr. David Kang & Dr. JungA Alexa Woo*

Cleveland, OH

July 2021 – June 2022

My responsibilities include 1) researching neuron-derived exosomes in relation to neurodegeneration, 2) role of beta-arrestins in Alzheimer's disease and related dementia, 3) role of Slingshot 1 in tauopathies, and 4) role of CHCHD2 and CHCHD10 in neurodegenerative diseases.

### **University of South Florida Byrd Alzheimer's Institute**

*Biological Scientist for Dr. David Kang & Dr. JungA Alexa Woo*

Tampa, FL

January 2021 – July 2021

### **University of South Florida Byrd Alzheimer's Institute**

*Graduate Student with Dr. JungA Alexa Woo*

Tampa, FL

August 2020 - January 2021

## PUBLICATIONS

1. Kee TR, Khan SA, Neidhart MB, Masters BM, Zhao VK, Kim YK, McGill Percy KC, Woo JA. The multifaceted functions of β-arrestins and their therapeutic potential in neurodegenerative diseases. *Exp Mol Med.* 2024 Feb;56(1):129-141.
2. Kee TR, Wehinger JL, Gonzalez PE, Nguyen E, McGill Percy KC, Khan SA, Chaput D, Wang X, Liu T, Kang DE, Woo JA. Pathological characterization of a novel mouse model expressing the PD-linked CHCHD2-T61I mutation. *Hum Mol Genet.* 2022 Nov 28;31(23):3987-4005.
3. Yoo JY, Sniffen S, McGill Percy KC, Pallaval VB, Chidipi B. Gut Dysbiosis and Immune System in Atherosclerotic Cardiovascular Disease (ACVD). *Microorganisms.* 2022 Jan 5;10(1):108.
4. Woo JA, Yan Y, Kee TR, Cazzaro S, McGill Percy KC, Wang X, Liu T, Liggett SB, Kang DE. β-arrestin1 promotes tauopathy by transducing GPCR signaling, disrupting microtubules and autophagy. *Life Sci Alliance.* 2021 Dec 3;5(3):e202101183.

## LICENSE & CERTIFICATIONS

<b>Lab &amp; Research Safety</b>	Issued: June 2020
• University of South Florida	
<b>Lab Safety – Comparative Medicine</b>	Issued: June 2020
• University of South Florida	
<b>Biomedical Investigator and Key Personnel</b>	Issued: May 2020
• CITI Program	
<b>Biomedical Responsible Conduct of Research</b>	Issued: May 2020
• CITI Program	
<b>Educator Certificate Biology (Grades 6-12)</b> The Florida Department of Education	Issued: April 2019

## SKILLS & TECHNIQUES

### Cell and Molecular Biology

- Microbial culture
- Mammalian cell culture
- Transfections of cDNA and siRNA
- SDS-PAGE and immunoblotting
- Plasmid preparation (miniprep & maxiprep), amplification, and purification.
- Immunocytochemistry
- Confocal microscopy

### Microbiology/Genetics

- DNA extraction
- Routine DNA subcloning and mutagenesis
- PCR genotyping
- Prepare, perform, and analysis of agarose gel electrophoresis.

### Blood-based Biomarker Research

- Exosome isolation
- Antibody-based exosome isolation form human plasma
- Enzyme-linked immunosorbent assay (ELISA)

## **Histology**

- Perfusion
- Brain extraction
- Prepare and slice whole animal brain
- Immunohistochemistry

## **Animal Care (mice)**

- Handle and restrain
- Weight animals
- Breed species
- Anesthetize
- Maintain and evaluate animal records
- Assist in sterile neurosurgical procedure
- Perform brain extraction
- Mouse behavior experiments (grip strength, rotarod, open field, and fear conditioning)

## **Laboratory/Research instruments**

- Light microscope
- Centrifuge: standard, high speed
- Incubators
- Volumetric glassware
- Sonication
- Confocal microscope includes models Zeiss LSM 880, Olympus Fluoview FV10i, and Nikon C2 Ti-E.
- Microtomes
- PCR machine
- pH meter
- UV transilluminator
- Fujifilm LAS (Luminescent Image Analyzer) 4000
- Nanodrop microvolume spectrophotometer
- Autoclave

## **Relevant Skills**

- Data processing
- Statistical analysis
- Database skills
- Proficient in scientific applications. Includes GraphPad Prism and ImageJ
- Proficient in Microsoft office applications. Includes Microsoft Excel, PowerPoint, and Word
- Proficient in Adobe suite application. Includes: Adobe Illustrator and Photoshop
- Communicate findings using models, charts, and graphs
- Communicate new research findings to an audience.
- Communicate biological research findings using scientific writing
- Ability to use a scientific approach to problems.
- Ability to work with a diverse team.
- Time and task management skills.

## **LEADERSHIP EXPERIENCE**

### **Science Educator, July 2018- November 2018**

#### **Sports Leadership and Management Academy, Tampa, Florida**

- Facilitate an engaged classroom environment conducive to learning and promoted excellent student-teacher interaction
- Utilized knowledge of science to construct interactive curriculum for middle school science.
- Collaboration with team members to increase student learning.
- Infused scientific essential ideas with real world applications

### **Volunteer Caregiver, Jamie's Adult Day Center. September 2019- December 2019**

Jamie's adult day center focuses on providing a stimulating and engaging environment for individuals suffering from debilitating conditions associated with cognitive impairment. Majority of the patients were suffering from diseases associated with dementia symptoms such as Alzheimer's disease. I worked as a volunteer with varies of task these include

- Organizing and participating in varies cognitive therapies. (Example: Memory exercises).
- Conversating with patients.
- Prepare and distribute food and beverages.
- Help assist in patients in mobility and comfort. (Rolling wheelchairs or help aid in walking).

### **Shadowing experience, Pediatric Healthcare Alliance. 2016**

- Shadowed pediatric doctor Sara Ansari.
- Learned about infant's and adolescent's safety and health.
- Observed immunization and general medical checkup and practices.

### **Personal Tutor, 2016- Present**

- Tutored individuals in math and science course.
- Range includes middle school – college level.
- Subjects includes Algebra, Biology, and Chemistry.