

Colin Riley

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Education

- June 2020 **University of Michigan-Rackham Graduate School, Ann Arbor, MI**
Master's degree in Physiology
GPA: 3.808
- May 2018 **Fordham University, Bronx, NY**
Major in Biology-Bachelor of Science
Minor in Psychology and Theology

Work Experience

- Nov. 2022 - Current **Research Associate IV/Lab Manager**
Sirianni Laboratory for Nanomedicine, Worcester, MA
As part of the Neurosurgery Department at UMass Chan Medical School, our lab is focused on the development and translation of novel therapeutics for the treatment of pediatric brain tumors. We focus on encapsulation of drugs within biocompatible and biodegradable nanoparticles, which serve as drug carriers to prolong drug action and target drug delivery to specific tissue sites. We develop these systems for intrathecal and intraventricular drug delivery for treatment of brain tumors in children.
- Oct. 2021 – Sept. 2022 **Clinical Research Coordinator**
Oncology Clinical Trials Support Unit, Ann Arbor, MI
I facilitated multiple oncology clinical research trials conducted by investigators at the University of Michigan Rogel Cancer Center. I work directly with the physician and oversee 40+ patients, ensuring that the clinical support requirements are delivered according to “Good Clinical Practice” and “CTSU Standard Practice” Guidelines.
- Nov. 2020 - Oct. 2021 **Clinical Subjects Coordinator**
Oncology Clinical Trials Support Unit, Ann Arbor, MI
I worked on phase 1 trials in the inpatient unit. I had the responsibility of monitoring clinical trial inpatient infusions. Over the course of the infusion, I would take vital signs of the patient every 15 minutes and watch for any indicators of adverse events such as tumor lysis syndrome or cytokine release syndrome.
- June 2017-Aug. 2017 **Research Technician**
June 2018-Aug. 2019 *Brigham and Women's Hospital, Boston, MA*
Aug. 2020-Nov. 2020 Worked in the Center for Experimental Therapeutics and Reperfusion Injury (CETRI), Department of Anesthesiology, Perioperative and Pain Medicine at Brigham and Women's Hospital. Performed in depth lipidomic analysis via liquid chromatography tandem mass spectrometry. Proficient in lab techniques including solid phase extractions, protein assays and genotyping.

- Nov. 2017-April 2018 **Research Assistant**
Fordham University Psychology Department, Bronx, NY
 Volunteered time to help facilitate human trials in a study which measured the effects of how sleep and racially charged auditory scenarios affected learning and memory. Responsibilities included running two-hour experiments and measuring heart rate, skin conductance, and taking saliva samples for analysis.
- May 2015-Aug. 2015 **Administrative Assistant**
Cannon Design, Boston, MA
 Organized/processed data and documents for outside storage. Completed projects to ensure continuous improvement throughout the office.

Extracurriculars

- Sept. 2019-June2020 **Treasurer, Master's Association of Pre-health Professionals**
 Responsible for general financial oversight for the Master's Association of Pre-health Professionals Club (MAPP) at the University of Michigan.
- Jan. 2016- May. 2016 **EMT training, Fordham University**
 Completion of an EMT course through the Fordham University Emergency Medical Services club (FUEMS). The course consisted of basic EMT training both in the classroom and in the field. Following completion of the course, I passed the New York City EMS exam becoming a certified EMT in the state of New York.
- Aug. 2016-May2018 **Fordham University Rugby Team**
 Played for the Fordham University Rugby team. The team practiced three times a week for three hours followed by games on the weekends against neighboring colleges/universities.

Publications/Presentations

- June 2019 **Dynamic Changes to Lipid Mediators Support Transitions Among Macrophage Subtypes During Muscle Regeneration**
 Nature Immunology, Co-author
 PMID: 31048759
- Feb. 2020 **Resolvin D1 Promotes the Targeting and Clearance of Necroptotic Cells**
 Cell Death and Differentiation, Co-author
 PMID: 31222041
- Jan. 2020 **Resolvin D1 Promotes Efferocytosis in Aging by Limiting Senescent Cell-Induced MerTK Cleavage**
 FASEB Journal, Co-author
 PMID: 31914705
- Jun. 2021 **PCTR1 Enhances Repair and Bacterial Clearance in Skin Wounds**
 The American Journal of Pathology, Co-author
 PMID: 33689792
- Mar. 2023 ****In Review**Engineering subarachnoid trabeculae with electrospun poly(caprolactone) (PCL) scaffolds to study leptomenigeal metastasis in medulloblastoma**
 Biomaterials Advances, Co-author

Dec. 2019

Advanced Physiology Lab Poster Presentation

University of Michigan, Ann Arbor, MI

Presented on the intricacies of rat lung isolation procedures. Explained lung compliance curves via negative and positive pressure ventilation and disease states associated with lung compliance complications.

Spring 2018, Fall
2016, Spring 2015

Accepted into Fordham University's Undergraduate Research Symposium Three Times

Ecology-Illustrated how urbanization affects native animal species. The poster specifically explored how urbanization effects avian species richness, relative densities and abundance within New York City and the effects urbanization has on habitat fragmentation.

Genetics-Emphasized the dangers of rapidly mutating diseases. The primary focus being on how viruses such as influenza are subject to mechanisms such as "Antigenic drift" and "Antigenic shift", and what factors cause rates of viral mutations, rapid spread of disease, and how these viruses can affect the overall population.

Physiology-Explored the effects that both age and ethnicity have on the development of diabetes within the United States. Discussed how genetics and socioeconomic status can influence diabetes and possible future studies to strengthen our understanding of the development of the disease.

Honors/Awards

June 2020

Honor Society

Became an Honor Society member after achieving a master's degree from the University of Michigan

Aug.2016 - June 2020

Dean's List

Achieved Dean's List recognition in both undergraduate and graduate studies.

June 2014

Eagle Scout

Highest achievable rank through the Boy Scouts of America, the process of which is built around leadership and service to others.

Volunteer

Aug. 2019-Feb. 2020

Science Education & Engagement for Kids (SEEK)

SEEK travels to underserved elementary schools with the mission of promoting science in the community. As a member, I helped design and lead hands-on activities specifically designed to introduce how the brain, heart, digestive, immune, and respiratory systems work. The purpose is to make science a part of the curriculum for kids as well as gain valuable teaching and communication skills.