

Emma Dando

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EDUCATION

PhD, Rensselaer Polytechnic Institute, Troy, NY August 2023-Present

- Rensselaer Graduate Fellowship

George Mason University, Fairfax, Virginia

Bachelor of Science, Bioengineering; GPA: 3.88

Received: May 2022

- *magna cum laude*, Dean's List, Honors College, Alpha Lambda Delta, Phi Kappa Phi

Master of Science, Bioengineering; GPA: 3.83

Received: May 2023

EXPERIENCE

Master's Work, George Mason University August 2022 – May 2023

- Analyzed a cell model of sLOX-1 in neutrophils using ELISA and Western blots
- Analyzed a clinical dataset of patients with acute respiratory distress syndrome using FIJI

Research Assistant, George Mason University June 2022 – December 2022

- Utilized MATLAB and ImageJ to perform morphometric analyses on data from patients with sagging eye syndrome
- Worked with other students to create three dimensional models of relevant muscle groups

Undergraduate Senior Design Project, George Mason University August 2021 – May 2022

- Worked to design and build a neurosurgical tool to reduce surgical times and complications
- Consulted with a neurosurgeon and surgical nurse to tailor the device to users' needs

Grader for Biomedical Data Analytics, George Mason University September 2022 – December 2022 & February 2022 – May 2022

- Worked with students to improve understanding of data analytics and task completion
- Evaluated, fixed, and made recommendations on code

Virtual Internship in Bioengineering, Worcester Polytechnic Institute June 2021 – July 2021

- Engaged with field professionals to understand designing for low resource communities
- In a small team, created and conveyed a light therapy device to improve bone healing using design sketches, circuit diagrams, a CAD model, and a prototype

Mentored Research, George Mason University January 2020 – May 2020

- Learned the basics of laboratory work, including writing protocols, maintaining laboratory notebooks, filling out grant applications, and participating in team meetings
- Wrote and presented a literature review on immunostaining with pimonidazole in hypoxia

VOLUNTEER WORK

Honors College Connects, George Mason Honors College September 2017-May 2020

- Aided local non-profits with capacity building projects
- Worked with faculty and local non-profits to mentor undergraduates, run the program, and redesign it into a for credit course

SKILLS

Coding and computational: MATLAB (moderate), Python (beginner), C (beginner), Arduino (moderate), CAD (beginner), Fiji/Image J (beginner), Microsoft Office (proficient)

Other: Basic Circuitry, Certificate in Understanding Patents, Soldering, Wet Lab Basics