

Delaney McMahon

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(804) 461-8005

EDUCATION

Longwood University, Farmville, VA

Expected Graduation: May 2023

Bachelor of Science, Biology

GPA: 3.7

HONORS/AWARDS

- LIFE STEM Scholar/ Scholarship Recipient (2019 – Present)
- Hull Biology Scholarship Recipient (2020)
- Longwood University's Dean's List (Fall 2019 – Fall 2022)

PRESENTATIONS

Association of Southeastern Biologists Regional Conference, Winston-Salem, NC. Poster Presentation. "Epigenetic consequences of poor parenting can be partially ameliorated by environmental enrichment in a rat model," March 2023.

Longwood University Undergraduate Research Showcase, Farmville, VA. Poster Presentation. "The Effect of Water Quality on *Daphnia*," April 2022.

Longwood University Undergraduate Research Showcase, Farmville, VA. Poster Presentation. "The Effect of Loss on *Rattus norvegicus* Behavior," April 2022.

Longwood University Undergraduate Research Showcase, Farmville, VA. Poster Presentation. "Article Summary and Independent Proposal, "Enhancing the Antitumor Effect of Doxorubicin with Photosensitive Metal-Organic Framework Nanoparticles Against Breast Cancer (Q. Jiang et.al. Mol. Pharmaceutics 2021)," April 2022.

Longwood University Undergraduate Research Showcase, Farmville, VA. Poster Presentation. "Using FreeMoCap Software to Examine and Quantify Bodily Movements," November 2021.

RESEARCH

Department of Biology and Environmental Sciences, Longwood University, Farmville, VA.

Undergraduate Research Assistant, August 2021 – Present

Faculty Mentor, Dr. Adam Franssen

Awarded grant funding through the Office of Student Research (OSR), Fall 2021 & Spring 2023

- Maternal Rat Behavior, in response to loss, August 2021 – May 2022
 - Assisted with fellow undergraduate research peers to create and implement an experimental procedure examining the effect of loss on maternal behavior with or without enriched environments

- Performed behavioral tests such as pup recognition, novel object preference, object location maze, forced swim test, and elevated plus maze on female rats while adhering to a strict timeline schedule
- Ensured health and well-being of animals by providing clean housing and daily nutrition
- Performed cryosection of various brain regions for future staining of stress hormones
- Maternal Rat Behavior, in response to enrichment, May 2022 – Present
 - Examined the effects of enrichment on adverse effects of poor parenting
 - Neuronal quantification using cell Sens
 - Performed statistical analysis of previous data using Microsoft Excel
 - Read and discussed research articles related to current research and procedures
 - ASB Regional Conference Poster Presentation, March 2023

LIFE STEM Summer Bridge, Baliles Environmental Center, Montross VA
Longwood University, August 2019

- Collected sediment samples from multiple locations in the Chesapeake Bay using a sediment dredge
- Prepared samples to determine percent organic matter from each location through dehydration

CAMPUS INVOLVEMENT

Pre-Professional Health Society, Longwood University, January 2021 – Present
President Fall 2022 – Spring 2023

- Served as head of the Executive Board by maintaining integrity and uniformity of the council
- Led bi-weekly society meetings and workshops for members interested in a future career in professional health, including career opportunities and application workshops
- Served as the official spokesperson and point of contact for the society

Pre-Professional Health Society, Longwood University, January 2021 – Present
Vice President Spring 2021 – Spring 2022

- Served as the secondary spokesperson for the society
- Served as a liaison between the society members and the President
- Co-facilitated all society meetings in association with the President

Women in STEM Club, Longwood University, August 2022 – Present
Member

- Supported fellow women in STEM majors in a supportive environment to achieve academic and professional goals, advocate for diversity, and connect with like-minded individuals
- Participated in community outreach and leadership to encourage others to pursue dreams of being a woman in STEM

Sustainability Scholars, Longwood University, January 2021 – May 2021

Founding Member

- Collaborated with peers from STEM majors to implement sustainable practices on Longwood's campus and student lifestyle
- Researched and discussed sustainability books that would benefit and educate non-majors
- Aided in the push for more bike racks on campus to encourage more sustainable commuting on campus

Baliles Environmental Center, Montross VA, November 2022

Volunteer

- Assisted in the growth of Longwood University's student research opportunities through fundraising for future student housing and laboratory supplies

RELEVANT COURSEWORK

Biodiversity and Conservation

A Sustainable Brain for Global Change

Applied Statistics

Biogeography

Entering Research, I & II

Microbiology

Physics

Perspectives in Toxicology

Vertebrate Physiology

Vertebrate Morphology

Organic Chemistry, I & II

Animal Behavior

SKILLS

Proficient use of Microsoft Word, Excel, and PowerPoint

Field sampling

Histology cryosection

Statistical analyses

Oral and written communication skills

Customer service