

Mia Michel

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(542)-525-4924

EDUCATION

Carnegie Mellon University (CMU), Pittsburgh, PA

Expected May 2026

Bachelor of Science in Biological Sciences

Minor in Biomedical Engineering

RESEARCH EXPERIENCE

Research Intern

January 2023 - Present

Porges Summer Research Fellow

May 2023 - July 2023

Carnegie Mellon University: Ettensohn Lab, Pittsburgh, PA

- Identified putative cis-regulatory elements, and generated reporter constructs to test their function in purple sea urchins
- Built various deletion constructs of confirmed cis-regulatory elements to identify minimal regions needed to drive expression in sea urchin embryos
- Analyzed cis-regulatory element conservation between sea urchin species
- Collaborated with other undergraduate and graduate students on experimental design and developed valuable experimental troubleshooting skills

Summer Undergraduate MSTP Research Intern

May 2025 - August 2025

University of Iowa: Ahmad Lab, Iowa City, IA

- Investigated the role of sodium-glucose-like transporter 1 (SGLT1) in diabetic cardiomyopathy
- Gained laboratory experience in antibody-based techniques, including western blotting and immunofluorescence
- Shadowed physicians across multiple specialties, including cardiology, infectious disease, and emergency medicine
- Practiced clinical skills such as suturing and case dissections

Data Analyst

University of Oregon Institute of Neuroscience: Miller Lab, Eugene, OR

July - August 2021

- Quantitated electrical synapses in zebrafish from confocal microscope scans using FIJI software

Research Intern

July - August 2019

University of Oregon Institute of Neuroscience: Miller Lab, Eugene, OR

- Tested interaction of candidate zebrafish electrical synapse components by performing binding assays with bacterially expressed and purified proteins
- Developed strong foundation of technical lab skills including pipetting, making stock solutions, PCR, DNA gel electrophoresis, and zebrafish dissection
- Quantitated electrical synapses in zebrafish from confocal microscope scans using FIJI software

WORK EXPERIENCE

Co-Chief Executive Officer

January 2025 - Present

Executive Vice President

August 2024 - January 2025

Team Lead

March 2024 - August 2024

Service Member

January 2023 - March 2024

Chartwells Higher Education Dining Services, Pittsburgh, PA

- Managed team of 30 service members during opening, closing, and operating shifts
- Led executive meetings and worked with executive members on restaurant finances and operations

- Built communication, customer service, and teamwork skills in a fast paced environment
- Learned to regularly apply protocols for food safety and cleanliness

Teaching Assistant

August 2025 - December 2025

Cell Biology, Carnegie Mellon University, Pittsburgh, PA

- Held office hours to provide individualized support and explain complex cellular biology concepts
- Led review sessions and guided students through exam preparation
- Answered student questions, reinforced course material, and fostered deeper understanding
- Graded assignments promptly and provided constructive feedback

Teaching Assistant

August 2025 - December 2025

Restaurant Builder, Carnegie Mellon University, Pittsburgh, PA

- Held office hours and guided students in developing hands-on culinary and business skills
- Supported students in preparing to launch and manage their own restaurant concepts
- Built strong mentoring relationships to encourage entrepreneurial growth
- Served on the executive board selecting the new restaurant concept to debut at CMU
- Contributed to the pilot offering of this first-of-its-kind course

Teaching Assistant

August 2024 - December 2024

Evolution, Carnegie Mellon University, Pittsburgh, PA

- Graded and provided feedback to students' responses
- Collaborated with professor to create assignments and return work
- Led an interactive presentation about echinoderms

VOLUNTEER EXPERIENCE

Chapter Co-Director

May 2024 - May 2025

Site Leader and Co-Supply Manager

January 2023 - May 2024

Mentor

August 2023 - May 2024

Strong Women Strong Girls, Pittsburgh, PA

- Guided 3rd-5th grade students through curriculum highlighting strong female leaders and led activities that encouraged girls' creativity and learning, while being a positive female role model
- Managed mentors to facilitate coordinated, organized mentoring sessions
- Organized and packed supplies for weekly mentoring sessions, as well as for the annual CMU field trip

Mobile Clinic Volunteer

University of Oregon OCCUPY Medical, Eugene, OR

June - July 2024

University of Iowa Mobile Clinic, Iowa City, IA

June - July 2025

- Collected patient medical histories and vital signs
- Assisted in providing care to underserved populations, including unhoused, minority, and food-insecure communities

Podium Greeter and Server

April 2024 - December 2024

University of Pittsburgh Medical Center: Hillman Cancer Center, Pittsburgh, PA

- Greeted and guided cancer patients to appointments
- Interacted with and served lunch to patients

SKILLS

Computer software: FIJI, IGV, Primer Design

Molecular Biology: PCR/qPCR, DNA Purification, DNA Electrophoresis, Restriction Enzyme Digest, Ligation, Bacterial Transformation, Plasmid Subcloning, Western Blotting, Immunofluorescence, Cell Culture

Technical: Microinjection of Sea Urchin Embryos, Zebrafish Dissection

Microscopy: Confocal Fluorescent Microscopy, Light Microscopy

CONFERENCE PRESENTATIONS

Ulowa Summer Undergraduate Research Conference	August 2025
CMU Meeting of the Minds	May 2025
National Conference of Undergraduate Research	April 2025
Annual Biomedical Research Conference for Minoritized Students	November 2024
Southeastern Medical Scientist Symposium - 2nd Place poster award	September 2024
CMU Meeting of the Minds - Finalist	May 2024

AWARDS AND FELLOWSHIPS

CMU Presentation Award	November 2024
CMU Presentation Award	October 2024
CMU Small Undergraduate Research Grant	November 2023
CMU Summer Undergraduate Research Fellowship, Porges Research Fellow	May 2023
Sandra Larson Memorial Scholarship, Fern Ridge Friends of the Library, Veneta, OR	April 2022
Eugene Area Chamber of Commerce Future First Citizen Scholarship, Eugene, OR	February 2022

PUBLICATIONS

Zhao Li, Sydney Freiberg, Meredith L. Music, Lina Gu, Sarah Nacos, Joseph P. Phillips, Adil Hassan, Kamel Shabbani, Sanah S. Munir, Vootha K. Kumar, Luke Halligan, **Mia E. Michel**, Benjamin F. London, Ngan Bui, Michael Cicha, Valerie Buffard, E. Dale Abel and Ferhaan Ahmad. Cardiac sodium-glucose co-transporter 1 (SGLT1) contributes to heart failure in a mouse model of diabetic cardiomyopathy. *Basic Res Cardiol* (2025). <https://doi.org/10.1007/s00395-025-01136-7>.

Jennifer Carlisle Michel, Margaret M. B. Grivette, Amber T. Harshfield, Lisa Huynh, Ava P. Komons, Bradley Loomis, Kaitlan McKinnis, Brennen T. Miller, Ethan Q. Nguyen, Tiffany W. Huang, Sophia Lauf, Elias S. Michel, **Mia E. Michel**, Jane S. Kissinger, Audrey J. Marsh, William E. Crow, Lila E. Kaye, Abagael M. Lasseigne, Rachel M. Lukowicz-Bedford, Dylan R. Farnsworth, E. Anne Martin, and Adam C. Miller (2023) Electrical synapse structure requires distinct isoforms of a postsynaptic scaffold. *PLoS Genetics* **19**(11):e1011045. DOI:10.1371/journal.pgen.1011045.