

Gejla Toromani

EDUCATION

Miami University, Oxford, Ohio

Major in Biology, Premedical Studies concentration
Minor in Molecular Biology
Member of the Honors College

Expected Graduation: May 2026

RESEARCH EXPERIENCE

Department of Pharmacology & Regenerative Medicine, College of Medicine, University of Illinois Chicago (UIC)

Chicago, IL

Graeme Carnegie Fellow

Summer 2025

- Analyzed serotype-dependent effects of Dengue virus NS1 on endothelial integrity, YAP1 signaling, and vascular leakage.
- Employed live cell imaging, immunofluorescence, and a novel liposome-based NS1 delivery method to identify its transmembrane receptor.

Department of Microbiology, Miami University/ Research

Oxford, OH

Research Assistant/ Antarctic Algae Study

Spring 2024 - Present

- Investigated Antarctic green algae using fluorescence and spectroscopic analyses to assess photosynthetic efficiency under abiotic stress.
- Analyzed 2004–2023 ecological data from Lake Bonney to correlate temperature rise and ice loss with shifts in algal depth distribution; presented findings at the 2024 Photosynthesis Conference.

Med-RAMP Program

Online

Research Collaborator

Spring 2024- Present

- Collaborated with medical students from Creighton University and the University of Arizona to analyze demographic and prognostic factors of rare malignancies using the National Cancer Database.
- Conducted literature reviews, interpreted treatment and survival data, and contributed to multiple manuscripts.

Miami University/ Independent Research

Oxford, OH

The use of VR therapy for patients with Parkinson's disease

Fall 2023 - Present

- Conducted independent research on VR therapy for Parkinson's disease, including literature review, design of therapeutic applications, and presentation of findings at the 2024 Parkinson's Together Conference (University of Cincinnati) and Undergraduate Research Forum (Miami University.)

Department of Physics, Miami University/ Research

Oxford, OH

Research Assistant

Fall 2022 – Spring 2024

- **Commendation in Undergraduate Research, 2023–24**
- **Staff Development Award, Spring 2024** – Recognized for outstanding performance as a Resident Assistant in Stonebridge Hall.
- **2025 Undergraduate Research Award (URA)** – \$750 grant supporting research in the Rachael Morgan-Kiss Lab.
- **Spring 2025 TRIO Foundation LEAF Award** – \$2,500 grant supporting summer internship at University of Illinois at Chicago (UIC).
- **2025 Provost's Student Academic Achievement Award (PSAAA)** – Recognized for exceptional academic excellence and sustained contributions to the intellectual life of Miami University.

CONFERENCES ATTENDED

- **2025 Joint MMM-Intermag Conference, January 2025** – Poster Presentation and publication in AIP Advances: “Exploring the Magnetic and Magnetocaloric Properties of PLA Composite Filaments of $Mn_{0.5}Fe_{0.5}Ni_{0.95}Cr_{0.05}Si_{0.95}Al_{0.05}$ for Additive Manufacturing.”
- **OAS/OhioPKAL Conference, April 2025 – Poster Presentation:** “Assessing Climate-Induced Shifts in Green Algae Abundance in Lake Bonney, Antarctica (2004–2023).”
- **Undergraduate Research Forum, April 2025, Miami University** – Poster Presentation and EnLightening Talk: “Assessing Climate-Induced Shifts in Green Algae Abundance in Lake Bonney, Antarctica (2004–2023).”
- **Photosynthesis Conference (50th anniversary), Oct 2024** – Poster Presentation: “Shedding light on Phytoplankton in Antarctic Lakes.”
- **CAACURH Leadership Conference, Fall 2024** – Represented NRHH chapter as President; chapter received five awards among 22 universities.
- **Undergraduate Research Forum, April 2024, Miami University** – Poster Presentation: “Use of VR Therapy for patients with Parkinson’s disease.”
- **Parkinson’s Together Conference, April 2024** – Poster Presentation: “Use of VR Therapy for patients with Parkinson’s disease.”
- **CAACURH Leadership Conference, Fall 2023** – Represented the Miami University NRHH chapter as Service Officer.
- **Undergraduate Research Forum, April 2023, Miami University** – 20-min Oral Presentation: “Exploiting the magnetocaloric properties of advanced materials in magnetic refrigeration and hyperthermia cancer treatment.”
- **Harvard World Pre-Health Conference, Fall 2023, Online** – Served as an ambassador.

CERTIFICATIONS

- HIPAA Compliance
- Stop the Bleed
- QPR Suicide Prevention
- Bloodborne Pathogens
- Constructive Dialogue Facilitation
- Mental Health First Aid (MHFA)

PUBLICATIONS

- Ashika Bhatta, Thomas F. McKenzie, Jemma R. DeFeo, Jacob Casey, Venkateswara Yenugonda, Shakhzodkhon Mukaddashkhonov, Gejla Toromani, Arjun K. Pathak, Mahmud Khan; Exploring the magnetic and magnetocaloric properties of PLA composite filaments of $Mn_{0.5}Fe_{0.5}Ni_{0.95}Cr_{0.05}Si_{0.95}Al_{0.05}$ for additive manufacturing. *AIP Advances* 1 March 2025; 15 (3): 035216. <https://doi.org/10.1063/9.0000942>
- Hsia B, Tade Y, Rafie S, et al. (February 10, 2025) Prognostic Landscape of Lymphoepithelial Carcinoma: Analysis of a National Database. *Cureus* 17(2): e78828. doi:10.7759/cureus.78828
- Hsia B, Tade Y, Rafie S, et al. (April 16, 2025) A National Cancer Database Study on the Demographic, Prognostic, and Socioeconomic Factors Affecting Survival in Adenocarcinoma in Villous Adenoma. *Cureus* 17(4): e82367. doi:10.7759/cureus.82367
- Taghizadeh, C. S., Toromani, G., Hsia, B., Rafie, S., Barrera, A., & Kalmar, C. L. (2025). Primary Cutaneous Follicle Center Lymphoma: Demographic, Socioeconomic, and Clinical Prognostic Factors in a National Cohort. *Annals of plastic surgery*, 95(5), e64–e70. <https://doi.org/10.1097/SAP.0000000000004434>
- Toromani, G., Saglimbeni, G. S., Upadhyayula, B. S., Manu, E., Morris, T. J., Hsia, B., & Tauseef, A. (2026). Comprehensive Genomic Characterization of 102 Cervical Adenocarcinoma Tumors. *Medicina*, 62(1), 123. <https://doi.org/10.3390/medicina62010123>

WORK EXPERIENCE

Office of Residence Life Resident Assistant

Oxford, OH
Fall 2023 - Present

- Supervised 500+ honors students, mediated conflicts, organized weekly programs, and received the Staff Development Award for exceptional performance.

CAMPUS INVOLVEMENT, COMMUNITY SERVICE AND VOLUNTEERING

Mallory-Wilson Center Student Advisory Board Alumni Newsletter Co-Editor

Oxford, OH
Spring 2025 - Present

- Coordinated article writer sign-ups and managed content development for the Mallory-Wilson Center (the only pre-health institution at Miami University) Alumni Newsletter.

Undergraduate Research Committee, Associated Student Government (ASG) Student Representative

Oxford, OH
Spring 2024 - Present

- Collaborated with faculty and administrators to enhance undergraduate research opportunities and evaluate student grant proposals.

National Residence Hall Honorary (NRHH)

Oxford, OH

Service Officer	Fall 2023-Spring 2024
President	Spring 2024-Spring 2025
• Organized service initiatives, led chapter operations, represented the club at conferences, and coordinated major events for residence hall leadership.	
Student Organization for Undergraduate Research and Career Exploration (SOURCE)	
Treasurer	Spring 2023 - Fall 2024
STEM Program Coordinator	Fall 2024 – Present
• Managed finances, coordinated STEM program presentations, and facilitated discussions on research and professional development.	
Parkinson's Together Research Coordinator	Oxford, OH
	Spring 2024- Present
• Designed and implemented research projects on Parkinson's disease and presented findings at conferences.	
Crisis Textline Counselor	Online
	Summer 2023 - Present
• Provided immediate text-based support to individuals in crisis, assessed risk, and escalated emergencies when necessary.	
McCullough-Hyde Memorial Hospital Student Volunteer	Oxford, OH
	Spring 2023 – Spring 2024
• Assisted healthcare staff in the ER and provided support to patients and families in a high-stress environment.	