Lily Pohlenz

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# Education

### PhD, Medical Sciences Matriculation August 2024

University of South Florida, *Tampa, FL*

### B.S., Biology and Sociology May 2021

St. Mary’s College of Maryland, *St. Mary’s, MD*

**Undergraduate Thesis:** *“What’s In Our Water?”: Predicting Rates of Exposure to Per and Poly-Fluoroalkyl Substrates in Accordance to Socioeconomic Status*

## Relevant Professional Experience

**Research Specialist, Retrovirus Lab July 2022–July 2024**

Johns Hopkins, *Baltimore, MD*

* BioRad Droplet Digital PCR specialist, acted as person of contact for all ddPCR related training and questions
* Actively participated in designing new experiments, completed independent data analysis and assisted in writing scientific papers
* Trained and assisted lab members, undergraduate students, and collaborators with experiments and equipment usage
* Assisted with the daily lab operation and ensured that all equipment is in optimal and proper working condition
* Performed routine cell culture, CD4+/TLR2+ selections, blood and tissue processing from non human primates in BLS2 and BLS2+ settings

**Research Technician, Retrovirus lab July 2021–July 2022**

Johns Hopkins, *Baltimore, MD*

* Served as a hands-on technician performing molecular biology assays such as DNA/RNA extraction, PCR amplification, digital droplet generation, cell purification
* Monitored CO2 and nitrogen tanks for incubators, maintain ultra cold freezers, maintain a log of safety equipment inspections, and arrange repairs if needed
* Followed and upheld a lab-specific safety manual to be compliant with CDC/NIH BMBL (Biosafety in Microbiological and Biomedical Labs) requirement

**Undergraduate Research Fellow, Emerson Lab May 2018–December 2019**

St. Mary’s College, *St. Mary’s City, MD*

* Participated in Summer Undergraduate Research Fellowship (SURF) investigating the development of somatic *Wolbachia* infection in *Drosophila melanogaster* as a model to understand the control of disease transmission in mosquitoes
* Performed oophorectomies on *Drosophila melanogaster,* utilized Maxi/Mini Prep, PCR, Gel Electrophoresis, and assisted PI in the development of protocols. Maintained large colony of our fruit fly lines.

**F45 Group Fitness Instructor August 2022–August 2024**

F45 Fells Point, *Baltimore, MD*

* Taught scheduled classes while instructing patrons on effective workout methods, explained proper techniques and demonstrated exercises
* Maintained current NASM personal trainer certification and NASM nutrition coach certification

**Organic Chemistry Lab Assistant August 2020–May 2021**

St. Mary’s Chemistry Department, *St. Mary’s City, MD*

* Assisted students in the development of research materials and methods for data collection and analysis
* Assisted in the development and isolation fluorescent dyes
* Prepared stock solutions and chemical reagents for student use through the creation of experimental formulas and following standardized formulas
* Sterilize laboratory instruments utilizing the KOH base bath and maintain cleanliness of equipment

**Emergency Department Medical Scribe November 2019–February 2021**

Calvert Hospital, *Calvert County, MD*

* Retrieve data for physician review (labs, radiology reports, medical records) while also transcribing patient consultations and maintaining HIPAA compliance
* Prepare computerized physician order entry for review and discharge orders
* Facilitate communication between physician and medical team

**Resident Assistant August 2018–May 2021**

St. Mary’s College, *St. Mary’s City, MD*

* Develop an inclusive community among 50 residents, maximizing positive resident interactions
* Implemented and enforced College policy, while acting as a role model for other students

# Publications

Veenhuis, R. T., Abreu, C.M., Costa, P.A.G., Ferreira, E. A., Ratliff, J., **Pohlenz, L**., Shirk, E. N., Rubin, L. H., Blankson, J. N., Gama, L., Clements, J. E. Monocyte-derived macrophages contain persistent latent HIV reservoirs. *Nat Microbiol* **8**, 833–844 (2023)

Rubin, L.H.\*, Shirk, E. N.\*, **Pohlenz, L.**, Romero, H., Roti, E., Dastgheyb, R.H., Santiuste, I., Riggs, C., Coughlin, J. M., Brown, T. T., Maki, P.M., Clements, J. E., Veenhuis, R. T. Intact HIV Reservoir in Monocytes Is Associated With Cognitive Function in Virally Suppressed Women With HIV. *The Journal of Infectious Diseases*, 2024.

## Volunteer Experience

**Maryland COVID-19 Vaccination Site Student** Volunteer **January 2021–December 2022 STEM - Inspiring the Next Generation** Workshop Facilitator **August 2020–May 2021 St. Mary’s Domestic Violence Awareness Month** Committee Member **August 2019–May 2021 Camp Open Arms** Summer Camp Counselor **July 2019–August 2022**

**Healthy Harford** Program Coordinator **August 2015–June 2017**