Francesca Rose Germano

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Education

Doctorate of Public Health: Environmental and Occupational Public Health- Advisor: Diana Rohlman, *Oregon State University,* Corvallis, OR- **Start date:** September 27th, 2023

Master of Science: Environmental and Molecular Toxicology – Advisors: Susan Tilton and Stacey Harper, *Oregon State University,* Corvallis, OR**- Graduation date:** June 17th, 2023

Bachelor of Arts - Environmental Studies, Minor Women's and Gender Studies – *Ithaca College,* Ithaca, NY
Awards & Distinctions: Flora Brown Award Scholarship – **Graduation date:** June 19th, 2020

Related Experiences

Faculty Research Position- *Rohlman Lab- Oregon State University* (June 2023-September 2023)

- Analyzed survey data from participants involved in polyclic aromatic hydrocarbon air quality study
- Data analysis of PAHs from wristband and stationary samplers
- Data visualization of exposure and survey results

Graduate Level Research– *Harper and Tilton Labs– Oregon State University* (January 2022-Current)

- Created experimental designs and method development for nanoplastic cell culture study
- Learned 2D cell culturing methods for primary human bronchial epithelial cells
- Contributed to preparation of nanoplastics for cell culture including dialysis, sonication, and cryomilling
- Frequently used cell culture assay kits including Lactate Dehydrogenase Leakage, CellTiter-Glo Oxidative Stress, and Mitochonidrial Membrane Potential

Advanced Undergraduate Research – *IC Tox Lab - Ithaca College*, Ithaca, NY (September 2018-June 2020)

- Curated independent pilot experiments on sources of microplastics and environmental fate of plastics in Cayuga Lake tributaries
- Field work in microplastic collection with water, sediment and snow samples in the Cayuga Lake watershed
- Lab work including density separation of water samples, chemical digestion of water samples using hydrogen peroxide, staining and quantification of microplastics using Olympus SZ61 microscope

Other Experiences

Development of Environmental Management Plan Fall 2019

- Assisted in creating a cyanotoxin management plan for the city of Ithaca drinking water plant
- Included research on cyanotoxin's ecological implications, human health implications of harmful algal blooms and management plan options for HAB contamination fit for the Ithaca area
- Worked with the City of Ithaca Waste Water Treatment Facility to discover solutions and HAB prevention methods

Invited Presenter- 2019 Finger Lakes Youth Climate Summit Fall 2019

- Presented to groups of representatives from ~20 high schools from upstate New York including teachers, administrators and students
- Presented microplastic research and created an interactive experience for the audience that showcased field and lab work methods
- Helped curate sustainability plans for the individual schools and provided sustainable practices they could implement into their daily lives to decrease environmental footprint

Invited Presenter- Ithaca College Whalen Symposium Fall 2019

- Poster presentation- "*The Presence of Microplastics in Cayuga Lake"*(Germano, 2019).
- Presented to public, faculty and students

Relevant Coursework

Graduate Level, Oregon State University:

- Fundamentals of Toxicology
- Ecotoxicology
- Target Organ Toxicology
- Computational Toxicology
- Scientific Skills and Ethics
- Special Topics: Venoms
- Public Health Toxicology
- Chemical Behavior in the Environment
- Exposure Science 1

Undergraduate Level, Ithaca College:

- Environmental Toxicology: Human Health and Medicine
- Ecotoxicology
- The Unnatural Disaster, Hurricane Katrina: Special Topics in Environmental Injustice
- Prisons and Democracies
- Enviornmental Humanities

Skills

- 2D Primary Human Bronchial Epithelial Cell Culturing
- Science communication
- Environmental field sampling
- Foundational knowledge of Graphpad Prism
- Ability to work on interdisciplinary teams
- Familiar with common cell culture assay kits