

# Nora Hamovit

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## Education

### University of Maryland

Ph.D. Biological Sciences, Advisor: Stephanie Yarwood, Ph.D. 2024

### Kenyon College

B.A. Biology, Anthropology, and Environmental Studies 2017

## Experience

### Faculty Assistant

*University of Maryland Department of Environmental Science and Technology* Aug. 2024-present  
Manage projects in a biogeochemistry and environmental microbiology lab.  
Run day-to-day operations, train lab personnel, and operate instrumentation.  
Act as the direct supervisor for a MSc student project.

### Postdoctoral Researcher

*University of Maryland Department of Environmental Science and Technology* Aug. 2025-present  
Project Title "Using whole genome sequencing to explore microbial community functional diversity in wetland and upland systems"

### Lecturer

*University of Maryland Environmental Science and Technology* Jan.-May 2025  
Prepared material for and taught advanced applied soil chemistry course titled "Soil and Water Pollution". Course content included lectures and guided discussion.

### Doctoral Researcher

*University of Maryland Department of Biological Sciences* Aug. 2018-Aug. 2024  
Project Title "Microbial communities and methane biogeochemistry in natural and restored freshwater depressional wetlands"

### Laboratory Technician

*University of Maryland Environmental Science and Technology* Jan. 2021-Jan. 2024  
Operated and maintained a LECO Elemental Analyzer. Managed sample submission, preliminary data analysis, and data delivery.

### NSF Traineeship Fellow

*National Science Foundation National Research Traineeship program* Dec. 2020-Dec. 2021  
Trained as a future leader in the nexus of food, energy, and water research with a focus on conducting interdisciplinary research with real-world outcomes.

### Research Assistant

*National Socio-Environmental Synthesis Center* June 2019-Jan. 2020  
Conducted graduate research with a focus on socio-environmental implications

## Publications

*submitted: Hamovit, N., Yarwood, S.* Methane production is higher in newly restored depressional wetlands compared to natural and older restored counterparts. (Aug. 2025) 2025  
Manuscript #: GEODER-D-25-02251

**Hamovit, N.,** RoyChowdhury, T., Akob, D.M., Zhang, X., McCarty, G. Yarwood, S. Comparative assessment of a restored and natural wetland using <sup>13</sup>C-DNA SIP reveals a higher potential for methane production in the restored wetland. (Feb. 2025).  
*Applied and Environmental Microbiology.* [10.1128/aem.02161-24](https://doi.org/10.1128/aem.02161-24)

Haghnegahdar, M.H., Hultquist, N., **Hamovit, N.,** Yarwood, S., Kaufman, A.J., Bouyon, A., Sun, J., Magen, C., Farquhar, J. "A Better Understanding of Atmospheric Methane Sources Using

13CH3D and 12CH2D2 Clumped Isotopes" (Nov. 2024). *Journal of Geophysical Research*. [10.1029/2024JG008172](https://doi.org/10.1029/2024JG008172)

Morris, K.A., Smith, M., Bailey, V.L., Bittencourt-Peixoto, R., Day, D.J., **Hamovit, N.**, Hopple, A.M., Lee, J., Patel, K.F., Wilson, S., Yarwood, S., Megonigal, P., Bond-Lamberty, B. "Methane flux from transplanted soil monoliths depends on moisture, but not origin" (June 2024). *Soil Biology and Biochemistry*. [j.soilbio.2023.109296](https://doi.org/10.1016/j.soilbio.2023.109296)

Haghnegahdar, M.H., Sun, J., Hultquist, N., **Hamovit, N.**, Kitchen, N., Eiler, J., Ono, S., Yarwood, S., Kaufman, A.J., Dickerson, R.R., Bouyon, A., Magen, C., Farquhar, J. "Tracing sources of atmospheric methane using clumped isotopes" (Nov. 2023). *PNAS*. [pnas.2305574120](https://doi.org/10.1073/pnas.2305574120) 2023

Haghnegahdar, M.H., Hultquist, N., Sun, J., Dickerson, R.R., Magen, C., Kaufman, A.J., **Hamovit, N.**, Scott, J.G., Yarwood, S., Chowdhury, T.R., Bouyon, A., Farquhar, J. "An Insight into Atmospheric Methane Sources and Sinks Using 13CH3D & 12CH2D2 Clumped Isotopes" (Dec.2022). *Goldschmidt 2022*. Conference Paper. [10.46427/gold2022.10405](https://doi.org/10.46427/gold2022.10405) 2022

Hu, G., **Hamovit, N.**, Croft, K., Niemeier, D., Roberts, J. "Assessing Inequities Underlying Racial Disparities of COVID-19 Mortality in Louisiana". (June 2022). *Proceedings of the National Academy of Sciences Journal*. Volume 119:27. [pnas.2123533119](https://doi.org/10.1073/pnas.2123533119)

Thapa, R., Tully, K.L., **Hamovit, N.**, Yarwood, S., Schomberg, H.H., Cabrera, M.L. Reberg-Horton, C., Mirsky, S.B. "Microbial processes and community structure as influenced by cover crop residue type and placement during repeated dry-wet cycles". (April 2022). *Applied Soil Ecology*. [j.apsoil.2021.104349](https://doi.org/10.1016/j.apsoil.2021.104349)

### **Presentations**

**Soil Science Society of America CANVAS, presentation**, "Heightened potential for CH<sub>4</sub> production in restored freshwater wetlands" 2025

**American Geophysical Union, Poster**, "Distinct methanogen and methanotroph communities and a high potential for methane production in restored freshwater depressional wetlands" 2024

**American Geophysical Union, Poster**, "<sup>13</sup>C-DNA stable isotope probing reveals active methanogens are more numerous and oxygen tolerant in a restored freshwater wetland" 2023

**International Society of Microbial Ecology, Presentation**, "Active microbial community of a restored freshwater wetland assessed using <sup>13</sup>C-DNA based stable isotope probing (SIP)" 2022

**American Society of Microbiology National Meeting, Poster Talk**, "Assessing methanogen community composition and activity in a restored freshwater mineral wetland using <sup>13</sup>C-DNA SIP"

**Society of Wetland Scientists; Joint Aquatic Sciences Meeting, Poster**, "Assessing methanogen community composition and activity in a restored freshwater mineral wetland using <sup>13</sup>C-DNA SIP"

**Society of Wetland Scientists, Invited Talk**, "Controls of Wetland Methane Biogeochemistry: Lessons for Restoration" 2021

**American Geophysical Union, Poster**, "Assessing methanogen community composition and activity in a restored freshwater mineral wetland using <sup>13</sup>C-DNA SIP" 2020

### **Teaching and Mentorship**

#### **Graduate Teaching Assistant**

*University of Maryland Honors College<sup>1</sup> and Biology Department<sup>2</sup>*

1. Helped lead innovative project and discussion-based course "Setting the table: Challenges and Opportunities for Sustainable Agriculture" Aug. 2022-Dec. 2023
2. Taught two lab sections and assisted one lecture section per semester "Principles of Ecology and Evolution" Aug. 2018-Jan. 2021

#### **Undergraduate Researcher Mentor**

*University of Maryland Environmental Science and Technology* Feb. 2022-May 2024

“Utilizing functional gene qPCR to explore microbial communities”

**Graduate Student Involvement**

*University of Maryland Biological Sciences*

1. Graduate student mentor

Sept. 2018-May 2024

2. Department’s graduate student task force, secretary/treasurer

Sept. 2020-May 2023

**Grants and Awards**

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**University of Maryland Ann G. Wylie Fellowship \$15,000**

*University of Maryland Graduate School*

**University of Maryland Summer Research Fellowship \$5,000**

*University of Maryland Department of Biological Sciences*

**Behavior, Ecology, Evolution, and Systematics Research Award 2024**

*University of Maryland Department of Biological Sciences*

**Garden Club of America \$5,000**

*Award in Coastal Wetland Studies*

**Global STEWARDS Travel Grant \$1,500**

*National Science Foundation National Research Traineeship program travel grant*