

Nora Hamovit

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ORC ID: 0000-0002-8416-4090

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

Postdoctoral Researcher

Pacific Northwest National Lab, Sequim WA March 2026-present
Project Title "Greenhouse gas exchange from tree stems in upland forest ecosystems"

Faculty Assistant

University of Maryland Department of Environmental Science and Technology Aug. 2024-March 2026
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.

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.

Publications

Hamovit, N., Yarwood, S. Methane production is higher in newly restored
depressional wetlands compared to natural and older restored counterparts. (April 2026)
Geoderma [10.1016/j.geoderma.2026.117814](https://doi.org/10.1016/j.geoderma.2026.117814) 2026

Hamovit, N., RoyChowdhury, T., Akob, D.M., Zhang, X., McCarty,
G. Yarwood, S. Comparative assessment of a restored and natural wetland using ¹³C-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) 2025

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) 2024

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., 2023
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)

Haghnegahdar, M.H., Hultquist, N., Sun, J., Dickerson, R.R., Magen, C., Kaufman, A.J., 2022
Hamovit, N., Scott, J.G., Yarwood, S., Chowdhury, T.R., Bouyon, A., Farquhar, J.
“An Insight into Atmospheric Methane Sources and Sinks Using $^{13}\text{CH}_3\text{D}$ & $^{12}\text{CH}_2\text{D}_2$ Clumped
Isotopes” (Dec.2022). *Goldschmidt 2022*. Conference Paper. [10.46427/gold2022.10405](https://doi.org/10.46427/gold2022.10405)

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_4 2025
production in restored freshwater wetlands”

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

American Geophysical Union, *Poster*, “ ^{13}C -DNA stable isotope probing reveals 2023
active methanogens are more numerous and oxygen tolerant in a restored freshwater wetland”

International Society of Microbial Ecology, *Presentation*, “Active microbial community 2022
of a restored freshwater wetland assessed using ^{13}C -DNA based stable isotope probing (SIP)”

American Society of Microbiology National Meeting, *Poster Talk*, “Assessing methanogen
community composition and activity in a restored freshwater mineral wetland using ^{13}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 ^{13}C -DNA SIP”

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

American Geophysical Union, *Poster*, “Assessing methanogen community composition 2020
and activity in a restored freshwater mineral wetland using ^{13}C -DNA SIP”

Teaching and Mentorship

Graduate Teaching Assistant

University of Maryland Honors College¹ and Biology Department²

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

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

Grants and Awards

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