Education	Ph.D. University of Oregon, Biology M.S. Penn State University, Soil Science B.S. Cornell University, Plant Sciences	2022 2017 2014
RESEARCH APPOINTMENTS	Postdoctoral Scholar, University of Oslo Postdoctoral Scholar, University of Oregon NSF Graduate Research Fellow ARCS Scholar Graduate Employee, University of Oregon Graduate Research Assistant, Penn State University Research Assistant, University of Delaware	2024-Present 2022-2023 2016-2021 2017-2020 2017-2018 2015-2017 2015

#### **Publications**

- 6. Morris, A. H., Isbell, S. A., Saha, D., and Kaye, J. P. 2021. "Mitigating nitrogen pollution with undersown legume-grass cover crop mixtures in winter cereals" *Journal of Environmental Quality* doi:10.1002/jeq2.20193
- Isbell, S. A., Bradley, B. A., Morris, A. H., Wallace, J. M., Kaye, J. P. 2021. "Nitrogen dynamics in grain cropping systems integrating multiple ecologically-based management strategies" *Ecosphere* doi:10.1002/ecs2.3380
- Meyer, K. M., Morris, A. H., Webster, K., Klein, A., Kroegerv, M. E., Meredith, L. K., Brændholt, A., Nakamurat, F., Venturini, A., Fonseca de Souzat, L., Shek, K. L., Danielson, R., van Haren, J., Barbosa de Camargot, P., Tsait, S. M., Dini-Andreote, F., Nüsslein, K., Saleska, S. R., Rodrigues, J. L. M., Bohannan, B. J. M. 2020. "Belowground changes to community structure alter methane-cycling dynamics in Amazonia" Environment International doi:10.1016/j.envint.2020.106131
- 3. Meyer, K. M., Hopple, A. M., Klein, A., Morris, A.H., Bridgham, S. D., Bohannan, B. J. M. 2020. "Community structure–ecosystem function relationships in the Congo Basin methane cycle depend on the physiological scale of function." *Molecular Ecology*. doi:10.1111/mec.15442
- 2. Morris, A. H., Meyer, K. M., Bohannan, B. J. M. 2020. "Linking microbial communities to ecosystem functions: what we can learn from genotype-phenotype mapping in organisms" *Philosophical Transactions of the Royal Society B*. doi:10.1098/rstb.2019.0244
- Seyfferth, A. L., Morris, A. H., Gill, R., Kearns, K. A., Mann, J. N., Paukett, M., and Leskanic, C. 2016. "Soil-incorporation of silica-rich rice husk decreases inorganic As in rice grain." *Journal of Agricultural and Food Chemistry*, 64(19):3760–3766 doi:10.1021/acs.jafc.6b01201

## Pre-prints

- 2. Week, B., Morris, A. H., and Bohannan, B. J. M. 2024 "The Evolution of Microbiome-Mediated Traits." BioRxiv. doi:10.1101/2024.03.29.587374v1
- Morris, A. H. and Bohannan, B. J. M. 2023. "Response of soil microbiome composition to selection on methane oxidation rate." *BioRxiv* doi:10.1101/2023.06.23.546315

#### In Press

- 2. Morris, A. H. and Bohannan, B. J. M. "Quantitative estimates of microbiome heritability and their implications." *Nature Microbiology*.
- 1. Akdeniz B. C., **Morris, A. H.**, Møller P., Andreassen O., Hovig E., and Dominguez-Valentin M. "Risk stratification of colorectal cancer using a combined effect of polygenic risk score and mismatch repair genes for Norwegian cohort." *Tumori Journal*.

### In Prep

1. Morris, A. H., Kyle M. Meyer, Bohannan, B. J. M., et al. "Identifying the metagenomic drivers of methane emissions from pastures of the brazilian amazon."

## AWARDS AND GRANTS

## University of Oregon, Post-doc

• Flora Brown Award

• Contributed to funded NSF proposal Using Rules of Life to Capture Atmospheric Carbon: Interdisciplinary Convergence to Accelerate Research on Biological Sequestration (CARBS) (\$3,000,000 USD) 2023

University of Oregon, Graduate School

• Elma Hendricks Scholarship	2018
• William R. Sistrom Memorial Scholarship	2018
• Oregon Achievement Rewards for College Scientists (ARCS) Scholar	2017
The Pennsylvania State University, Graduate School	
• Distinguished Master's Thesis Award	2017
NSF Graduate Research Fellowship Award	2016
• Annie's Sustainable Agriculture Scholarship	2016
• Scarlet Graduate Fellowship in Watershed Stewardship Award	2015
• Katherine Mabis McKenna Fellowship Award	2015
Cornell University and Ithaca College, Undergraduate	
• Hatch/Multistate Grant	2013

# PRESENTATIONS AND POSTERS

• Morris, A. H. and Bohannan, B. J. M. Quantitative estimates of microbiome heritability and their implications. Nordic Conference on Future Health. Trondheim, Norway.

2010

- Bob Week, Morris, A. H., and Bohannan, B. J. M. The evolution of microbiome mediated traits. Joint Congress on Evolutionary Biology. Montreal, QC, Canada. 2024
- Morris, A. H. and Bohannan, B. J. M. Microbiome heritability and the evolution of host-level traits. Symbiosis Theory Workshop. Eugene, OR. 2023
- Morris, A. H. and Bohannan, B. J. M. Artificial ecosystem selection reveals relationships between microbiome composition and ecosystem function. ISME Meeting. Lausanne, Switzerland.
- Morris, A. H., Meyer, K. M., Bohannan, B. J. M. Linking microbial communities to ecosystem functions: what we can learn from genotype-phenotype mapping in organisms. Achievement Rewards for College Scientists Annual Luncheon. Portland, OR
- Morris, A. H., Isbell, S., Kaye, J. Improving nitrogen retention of agroecosystems using interseeded cover crops. Ecological Society of America. Portland, OR. 2017
- Morris, A. H., Isbell, S., Kaye, J. Mitigating nitrogen pollution by interseeding cover crops into spelt. Sustainable Agriculture Cropping Systems Symposium. State College, PA.
- Morris, A. H., Kaye, J. P. Managing Inter-Seeded Cover Crops and Tillage to Decrease Nitrate Leaching and Nitrous Oxide Emissions from Agricultural Soils. Soil Science Society of America Meeting. Phoenix, Arizona.

- Morris, A. H., Isbell, S., Kaye, J. Kemanian, A. Managing cover crops and tillage to decrease nitrogen pollution from organically managed soils in Pennsylvania. Sustainable Agriculture Cropping Systems Symposium. State College, PA. 2016
- Isbell, S. and Morris, A. H.. Nitrogen dynamics in cover crop-based reduced tillage cropping systems. Rodale Institute U.S.-Argentina Travel Program. Russell E. Larson Agricultural Research Center, Rock Springs, PA. May 2016
- Saha, D. and Morris, A. H.. Unraveling the interactive controls of tillage, residue, and manure additions on nitrous oxide emissions in grain and silage systems. Rodale Institute U.S.-Argentina Travel Program. Russell E. Larson Agricultural Research Center, Rock Springs, PA.

  May 2016
- Morris, A. H. Greenhouse gases in the Reduced-Tillage Organic Systems Experiment (ROSE). ROSE Annual Advisory Board Meeting. Pine Grove Mills, PA. Jan. 2016
- Seyfferth, A. L., Morris, A. H., Kearns, K., Mann, J., Teasley, W., Limmer, M., Amaral, D.. Impacts of Increased Soil Si on Fe Mineral Composition and As Cycling in Rice Paddies. Soil Science Society of America Meeting. Minneapolis, Minnesota. 2015
- Teasley, W, Seyfferth, A. L., Morris, A. H., Johansson, A. The Effect of Si Amendments on As Accumulation and Greenhouse Gas Emissions in Rice (Oryza sativa L). Soil Science Society of America Meeting. Minneapolis, Minnesota. 2015

## TEACHING APPOINTMENTS

	Faculty, Juneau Icefield Research Program: Geobotany and Ecology	
Guest Lecture, University of Oregon: Ecology and Evolution,		
	Evolutionary Processes	2018
	Teaching Assistant, University of Oregon: Ecology and Evolution	2018
	Teaching Assistant, University of Oregon: Genetics and Molecular Biology	2018
	Teaching Assistant, University of Oregon: Cells	2017
	Guest Instructor, Penn State University: Impacts of Changing Hydrology on	
	Ecosystem Services in Glacial Systems	2017
	Teaching Assistant, Penn State University: Soil Science	2017

## MENTORSHIP

Graduate student peer mentor, Institute of Ecology and Evolution, University of Oregon 2020-2021
Rotation student mentor, Bohannan Lab, University of Oregon 2019
Undergraduate student mentor, Kaye Lab, Penn State University 2016
Undergraduate student mentor, Seyfferth Lab, University of Delaware 2015

# SERVICE

Organizer of the Oslo Bioinformatics Workshop Week 2024, Oslo, Norway 2024 Student Volunteer at the Ecological Society of America meeting, Portland, OR 2017 Reviewer for American Naturalist, Environmental Microbiology, FEMS Microbiology Ecology, Molecular Ecology, Nature Ecology and Evolution, Scientific Data, Scientific Reports