Andrew H. Morris ***Curriculum vitae***

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

5. 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

4. 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

1. 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

1. **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 Review

2. **Morris, A. H.** and Bohannan, B. J. M. "The microbiome heritability concept at age ten." In review at *Nature Microbiology.*

1. **Morris, A. H.** and Bohannan, B. J. M. "Response of soil microbiome composition to selection on methane oxidation rate." In review at *Soil Biology and Biochemistry.*

In Prep

2. Weeks, B., **Morris, A. H.**, Bohannan, B. J. M. "The evolution of microbiome-mediated traits."

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

- 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* 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
- Flora Brown Award 2010

Presentations and Posters

- **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. 2022
- **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. 2019
- **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. 2017
- **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. 2016
- **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	2018
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

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