

NATHAN I. WISNOSKI

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EDUCATION

Indiana University, Bloomington

2014 – Present

Ph.D in Biology – Evolution, Ecology, and Behavior

Minor in Environmental Sciences, School of Public and Environmental Affairs

The University of Texas at Austin

2009 – 2013

B.S. in Biology – Ecology, Evolution, and Behavior

Minor in Business, McCombs School of Business

RESEARCH EXPERIENCE

Ph.D. Candidate

August 2014 – Present

Indiana University

Bloomington, IN

Lennon Lab: Microbial Ecology and Evolution

Field/Lab Technician

Spring 2014

University of Texas

Austin, TX

Hawkes Lab: Microbial Ecology and Biogeochemistry

Undergraduate Researcher

June 2012 – February 2014

University of Texas

Austin, TX

Leibold Lab: Community and Evolutionary Ecology

GRANTS

NSF LTER Network Communications Office (NCEAS). *A synthesis to identify how metacommunity dynamics mediate community responses to disturbance across the ecosystems represented in the LTER network.* PI: E.R. Sokol, co-PIs: C.M. Swan, **N.I. Wisnoski**. \$76,000. 2016–2018.

IU Sustainability Research Development Grant. *How does hydrological flow rate alter bioremediation of pesticides at the surface- groundwater interface?.* PI: **N.I. Wisnoski**. \$5400. 2015.

FELLOWSHIPS AND AWARDS

Travel Award, Association for the Sciences of Limnology and Oceanography. \$606 2018

Travel Award, ESA Microbial Ecology Section. \$600 2017

George W. Brackenridge Fellowship, IU Biology. \$2000 2016

Travel Award, International Society for Microbial Ecology. €300 2016

Travel Award, Honorable Mention, ESA Microbial Ecology Section. \$150 2016

Departmental Research Recruitment Fellowship, IU Biology. 2014

MANUSCRIPTS

Wisnoski, N.I., M.A. Leibold, and J.T. Lennon. In review. *Dormancy in metacommunities*. <https://doi.org/10.17605/OSF.IO/UJMZC>

Voelker, N.M., P.L. Zarnetske, **N.I. Wisnoski**, J.D. Tonkin, C.M. Swan, S. Record, L. Marazzi, N. Lany, T. Lamy, A. Compagnoni, M.C.N. Castorani, R. Andrade, and E.R. Sokol. In review. *Novel insights to be gained from applying metacommunity theory to long-term biodiversity data*.

In preparation:

Wisnoski, N.I. and J.T. Lennon. In preparation. *Habitat-specific community assembly in a dendritic metacommunity*.

Wisnoski, N.I., M.E. Muscarella, M.L. Larsen, A.L. Peralta, and J.T. Lennon. In preparation. *Dormancy and dispersal structure bacterial communities across ecosystem boundaries*.

Wisnoski N.I. and J.T. Lennon. In preparation. *The contribution of “seed banks” to bacterial community dynamics*.

Lamy, T., **N.I. Wisnoski**, R. Andrade, M.C.N. Castorani, A. Compagnoni, N. Lany, L. Marazzi, S. Record, C.M. Swan, J.D. Tonkin, N. Voelker, S. Wang, P.L. Zarnetske, and E.R. Sokol. In preparation. *The dual dimensions of metacommunity stability*.

Mueller, E.A., **N.I. Wisnoski**, A.L. Peralta, J.T. Lennon. In preparation. *Microbial rescue effects: how microbiomes can save hosts from extinction*.

Ward, A.S., S.M. Wondzell, N.M. Schmadel, S. Herzog, J.P. Zarnetske, and 33 others. In preparation. *Spatial and temporal variation in river corridor exchange across a 5th order mountain stream network*.

BOOK REVIEWS

Wisnoski, N.I. and J.T. Lennon. 2016. “*Principles of Microbial Diversity*” by James W. Brown. The Quarterly Review of Biology. <https://doi.org/10.1086/685351>.

INVITED TALKS

Wisnoski, N.I., M.A. Leibold, J.T. Lennon. Submitted, 2019. *Dormancy in metacommunities: when can temporal dispersal maintain diversity in variable landscapes?*. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.

Wisnoski, N.I. and J.T. Lennon. 2018. *Contribution of “seed banks” to bacterioplankton community dynamics*. Society for Freshwater Science Annual Meeting. Detroit, MI.

CONTRIBUTED TALKS AND POSTERS

Wisnoski, N.I., E.R. Sokol, R. Andrade, M.C.N. Castorani, C.P. Catano, A. Compagnoni, T. Lamy, N.K. Lany, L. Marazzi, S. Record, A.C. Smith, C.M. Swan, J.D. Tonkin, N.M. Voelker, P.L. Zarnetske. Submitted, 2019. *Patterns and drivers of stability in long-term metacommunity data*. Ecological Society of America Annual Meeting. Louisville, KY.

Ward, A.S., S. Herzog, S.M. Wondzell, N. Schmadel, P. Blaen, J. Drummond, D.M. Hannah, C.J. Harman, J. Knapp, S. Krause, M.J. Kurz, A. Li, E. Marti, M. Miller, A. Milner, K. Neil, S. Plont, K. Roche, A.I.

- Packman, N. **Wisnoski**, J. Zarnetske. 2018. *How do hydrologic forcing and geologic setting control river corridor exchange in a 5th order mountain stream network?*. Geological Society of America Annual Meeting. Indianapolis, IN.
- Sokol, E.R., **N.I. Wisnoski**, C.M. Swan. 2018. *Using long-term data to understand when metacommunities respond to disturbance*. Ecological Society of America Annual Meeting. New Orleans, LA.
- Wisnoski, N.I.**, M.E. Muscarella, and J.T. Lennon. 2018. *Dispersal and dormancy across ecosystem boundaries*. Association for the Sciences of Limnology and Oceanography. Victoria, BC, Canada.
- Wisnoski, N.I.** and J.T. Lennon. 2017. *Microbial community assembly in dendritic metacommunities*. Ecological Society of America Annual Meeting. Portland, OR.
- Sokol, E.R., **N.I. Wisnoski**, C.M. Swan, R. Andrade, H.L. Bateman, A.G. Hope, J. Kominoski, N.K. Lany, L. Marazzi, S.J. Presley, A. Rassweiler, S. Record, M.R. Willig, and P.L. Zarnetske. 2017. *The role of long-term ecological research programs for testing metacommunity theory and understanding biodiversity patterns*. Ecological Society of America Annual Meeting. Portland, OR.
- Voelker, N.M., E.R. Sokol, **N.I. Wisnoski**, C.M. Swan, T. Lamy, M.C.N. Castorani, L. Marazzi, A. Compagnoni, J.R. Blanchard, R. Andrade, and N.K. Lany. 2017. *Evaluating the link between metacommunity stability and environmental variability across trophic groups represented at LTER sites*. Ecological Society of America Annual Meeting. Portland, OR.
- Wisnoski, N.I.** and J.T. Lennon. 2016. *Community assembly processes differ between surface water and sediment-associated communities in stream networks*. Ecological Society of America Annual Meeting. Fort Lauderdale, FL.
- Wisnoski, N.I.** and J.T. Lennon. 2016. *Local and regional processes in stream microbial community assembly (poster)*. International Symposium on Microbial Ecology (ISME 16). Montreal, QC.
- Wisnoski, N.I.**, A.S. Ward, and J.T. Lennon. 2015. *Bacterial metacommunity structure across a stream network (poster)*. LTER All Scientists Meeting. Estes Park, CO.

TEACHING

- Co-Instructor.** Quantitative Biodiversity (<https://goo.gl/y4oK7c>). *Indiana University*. Spring 2017.
- Associate Instructor.** Foundations of Biology: Diversity, Evolution, and Ecology. *Indiana University*. Spring 2016, Fall 2016, Spring 2018, Spring 2019.
- Associate Instructor.** Biology Laboratory. *Indiana University*. Fall 2014, Fall 2017, Fall 2018.
- Grader.** Microbial Ecology. *University of Texas*. Spring 2014.
- Teaching Assistant.** Biostatistics. *University of Texas*. Spring 2013, Fall 2013.

MENTORSHIP AND SERVICE

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| Undergraduate STEM Mentor | Jan 2015 – Present |
| Indiana University | |
| Undergraduate Mentees: Luke Pryke, Mollie Carrison | |
| Summer REU Program: Jaylen Beatty, Mary Wallace, SydneyEllen Gooding | |

High School STEM Mentor	Summer 2015 – Present
Jim Holland Summer Scholars Program	
High School Mentees: Dakayla Calhoun, Samuel Iwu, Ian Schowe	
High School Riverwatch Sampling Coordinator	Summer 2017 – Present
Jim Holland Summer Enrichment Program	
Supervised macroinvertebrate sampling activity with high school students to analyze stream quality	
EcoLunch Co-Organizer	August 2015 – May 2016
Indiana University	
Led student research and professional development seminar series	
Metacommunity Reading Group Organizer	Summer 2015
Indiana University	
Organized a graduate reading group on metacommunity ecology	

COMPUTATIONAL SKILLS

Scripting	python, bash
Analysis	R, Mathematica
Productivity	L ^A T _E X, markdown, git/GitHub, Microsoft Office

PROFESSIONAL SOCIETY MEMBERSHIP

Ecological Society of America
 Association for the Sciences of Limnology and Oceanography
 Society for Freshwater Sciences