NATHAN I. WISNOSKI

Department of Biology, Indiana University \diamond 1001 E. Third Street, Bloomington, IN 47405 wisnoski@indiana.edu \diamond nwisnoski.github.io

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
Indiana University

August 2014 – Present
Bloomington, IN

Lennon Lab: Microbial Ecology and Evolution

Field/Lab TechnicianUniversity of Texas

Spring 2014

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

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 LATEX, markdown, git/GitHub, Microsoft Office

PROFESSIONAL SOCIETY MEMBERSHIP

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