# 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
Indiana University

August 2014 – Present

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. $ \in 300 $	2016
Travel Award, Honorable Mention, ESA Microbial Ecology Section. $\$150$	2016
Departmental Research Recruitment Fellowship, IU Biology.	2014

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#### **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 processes in a dendritic metacommunity*.
- Wisnoski, N.I., M.E. Muscarella, M.L. Larsen, and J.T. Lennon. In preparation. *Dormancy and dispersal 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*.

# **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. 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

- 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 meta-communities 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.

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- 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.

Associate Instructor. Biology Laboratory. Indiana University. Fall 2014, Fall 2017.

**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

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#### **EcoLunch Co-Organizer**

August 2015 – May 2016

Indiana University

Led student research and professional development seminar series

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# Metacommunity Reading Group Organizer

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 International Society for Microbial Ecology Association for the Sciences of Limnology and Oceanography Society for Freshwater Sciences

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Summer 2015