May 1, 2024

Nicholas Bone

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Education

Virginia Tech Blacksburg, VA

PhD: Biological Sciences: Uyeda Lab 2019 - 2024 (expected)

Cornell Lab of Ornithology

Ithaca, NY Visiting PhD student with Eliot Miller Jan 2023 - April 2023

Beloit College Beloit, WI

Bachelor of Science: Evolution, Ecology and Behavioral Biology 2015 - 2019

with Honors

Manuscripts

Fundamental constraints on the evolution of vertebrate life histories

George Brooks, Holly Kindsvater, Chris Mull, Nicholas J. Bone, Josef C Uyeda submitted

 How should functional relationships be evaluated using phylogenetic comparative methods? A case study using metabolic rate and body temperature

Josef C. Uyeda, Nicholas J. Bone, Sean McHugh, Jonathan Rolland, Matthew W. Pennell

Evolution 75 (5): 10971105.

Awards, Grants & Honours

NSF Graduate Research Fellowship	// Jarch 2020
Dean's Diversity Fellowship	2019
American Naturalist Travel Award	Sept. 2019
Honors Graduate – Biology	May 2019
Dean's Award	2015-2019
WiscAMP Scholar Grant	2017-2018
WiscAMP Travel Award	2018
Dean's List	2016, 2017

Presentations

• Interfaces of Global Change Symposium (April 2023)

Talk: A Community-Science Driven Invasive Species Inventory and Management Guide for Brush Mountain

Science Friday Seminar, Cornell Lab of Ornithology (March 2023)

Talk: Macroevolution of migratory behavior

Evolution Conference (June 2022)

Poster: Doors and dead-ends in the evolution of avian migration

• Evolution Conference (June 2021)

Talk: Testing the effectiveness of structured hidden Markov models

• Society for Systematic Biology Conference (Jan 2020)

Poster: Hidden states and threshold traits: dimensions of avian migration

VT Research Day (Jan/Feb 2020)

Poster: Hidden states and threshold traits: dimensions of avian migration

• Milwaukee Undergraduate Biological Research Conference (April 2018)

Poster: Limitations of testing for phenotypic convergence using phylogenetic comparative methods

 Yellow River Institute Kaifeng Uni, Henan and Beloit College International Symposium (Nov. 2017)

Talk: Rivers in Transition: Cultural and Physical Landscapes Along China's Yellow River

• Mid-States Undergraduate Conference: Washington University (Nov. 2017)

Talk: Evidence of Convergence in Liolaemus and Sceloporus

• 23rd McNair Undergraduate Conference: SUNY Buffalo (July 2017)

Talk: Evidence of Convergence in Liolaemus and Sceloporus

Teaching and Mentoring

- Instructor: Principles Biology Lab three sections (Fall 2023)
- Undergraduate research mentor Colin Greear, BIOL2964, BIOL2994 (3 semesters, Summer 2022 Spring 2023)
- Guest lecturer: Principles Biology Lab two sections (Spring 2022)
- Guest instructor: Quantitative Evolutionary Biology (Spring 2022)

Service

Interfaces of Global Change: Invasive Species BioBlitz project (2022-2023)

Organized community iNaturalist sampling event and did data visualization for the Town of Blacksburg.

• Reviewer (ongoing)

Evolution journal (3 manuscripts)

• Restoration Ecology Intern (Summer 2019)

Organized and ran Invasive Species Removal Days for high-school students in the Chicago-area

• WiscAMP/LSAMP Mentor (2016-2018)

Participated in programs and workshops relating to expanding the participation of underrepresented minorities in STEM fields. Mentored underclassmen in research practices