

Nicholas Bone

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December 19, 2020

Education

- **Beloit College** Beloit, WI
Bachelor of Science: Evolution, Ecology and Behavioral Biology 2015 - 2019
with Honors
- **Virginia Tech** Blacksburg, VA
PhD: Biological Sciences: Uyeda Lab 2019 - 2024 (expected)

Manuscripts

- **How should functional relationships be evaluated using phylogenetic comparative methods? A case study using metabolic rate and body temperature**
*Josef C. Uyeda, **Nicholas Bone**, Sean McHugh, Jonathan Rolland, Matthew W. Pennell*
Evolution, In revision

Conference Presentations

- **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; Beloit College International Symposium (Nov. 2017)**
Oral presentation: Rivers in Transition: Cultural and Physical Landscapes Along China's Yellow River
- **Mid-States Undergraduate Conference: Washington University (Nov. 2017)**
Oral presentation: Evidence of Convergence in *Liolaemus* and *Sceloporus*
- **23rd McNair Undergraduate Conference: SUNY Buffalo (July 2017)**
Oral presentation: Evidence of Convergence in *Liolaemus* and *Sceloporus*

Awards, Grants & Honours

NSF Graduate Research Fellowship	March 2020
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	2015, 2016, 2017

Research Experience

- **Independent Research (2017-Present):** Evidence of Convergence in the Lizard Genera *Liolaemus* and *Sceloporus*

Dr. James Schulte, Wisconsin Alliance for Minority Participation (WiscAMP)

- Formulated and tested hypothesis regarding convergence of sexual size dimorphism in two lizard genera (*Liolaemus* and *Sceloporus*).
- Combined previous specimen measurements with new measurements of taxa from the Field Museum of Natural History
- Used multiple phylogenetic comparative methods (bayou, surface, l1ou) to estimate convergence and compared the methodology and results of each.
- Manuscript in process: Evolution of Body Size in Replicated Continental Lizard Radiations

- **Research Assistant (2016-2017):** Rivers in Transition: Cultural and Physical Landscapes Along China’s Yellow River

Dr. Sue Swanson & Dr. Daniel Youd, Luce Initiative

- Participated in an interdisciplinary research group which investigated various historic and modern aspects of the Yellow River as relating to environmental issues as seen in the field
- Used GPS-based surveying methods to answer questions about landscape modifications
- Worked with international colleagues in the field (Henan Province)
- Translated historical maps and simple texts from Chinese to English
- Presented results of research to the Yellow River Civilization and Sustainable Development Institute at Henan University and the 16th Annual International Symposium at Beloit College

Skills and Abilities

- **Proficient In:**

- **Computational:**

R, vim, Mesquite, Fr, GIS, PAUP, Unix

- **Experience With:**

- Java, emacs, JMP, SAS, Python, tpsDig2 morphometrics, mrBayes, BEAST

- **Languages:**

- Mandarin Chinese (intermediate), English (native)

Service and Leadership

- **Restoration Ecology Intern (Summer 2019)**

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

- **WiscAMP/LSAMP Member (2016-2018)**

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