

KRISTY M. BARNES

2134 Fairfax Ave. Apt. D7 ◊ Nashville, TN 37212

603-793-2925 ◊ kristy.m.barnes@gmail.com

EDUCATION

Yale University Forestry and Environmental Studies, <i>Ph.D.</i>	8/18 - Present
Vanderbilt University Earth and Environmental Sciences, <i>Master of Science</i> Cumulative GPA: [3.96]/4.0	8/16 - 8/18
Boston College Environmental Geoscience and Philosophy, <i>Bachelor of Science</i> Cumulative GPA: [3.72]/4.0	8/11 - 5/15
Berkshire School Cumulative GPA: [3.8]/4.0 Class Rank: 3rd	8/08 - 5/11

AWARDS AND HONORS

2017

NSF Graduate Research Fellowship, *National Science Foundation*

GSA Student Research Grant, *Geological Society of America*

Tinker Travel Award, *The Tinker Foundation*

Graduate Student Travel Grant, *Vanderbilt University*

2015

Fulbright Student Research Fellow, *The Institute of International Education*

The Seydel Award, *The Institute of International Education* - Declined

Boston College Arts and Sciences Honors Program, *Boston College*

Geosciences Honors Program, *Boston College*

Philosophy Honors Program, *Boston College*

Member of the Order of the Cross and Crown, *Boston College*

2014

ACC-IAC Thesis Research Grant, *Boston College*

2013

Sophomore Scholar, *Boston College*

RESEARCH EXPERIENCE

Vanderbilt University Department of Earth and Environmental Sciences 8/16 - Present
NSF Graduate Research Fellow, Masters Student

- Conducted a Master's project exploring how ungulates impact nutrient cycling in the Cerrado of Brazil
- Designed and implemented an original sampling scheme for this project using quantitative analysis of available nitrogen, $\delta^{15}\text{N}$, and other soil characteristics

Vanderbilt University Women of Earth and Environmental Science 6/17 - 8/17
Research Assistant

- Conducted a comprehensive literature review on the impacts of implicit bias in student teaching evaluations supported by a Vanderbilt Equality, Diversity, and Inclusion SEED Grant
- Organized a group of professors and students to conduct an evaluation of student teaching evaluations across the sciences at Vanderbilt

University of Bern Department of Paleoecology 8/15 - 8/16
Fulbright Student Fellow

- Created a high resolution chironomid-based Alpine paleoclimate reconstruction

- Learned paleoclimate reconstruction methods, microscope techniques, chironomid identification, and the appropriate data manipulation and statistical analyses

University of Edinburgh School of Geosciences 5/14 - 8/15
Atlantic Coast Conference-International Academic Collaborative Research Fellow

- Conducted a paleoclimate reconstruction using the Mutual Climatic Range Method with funding from the ACC-IAC
- Learned paleoclimate reconstruction and beetle identification methods

Boston College Department of Earth and Environmental Science 5/14 - 5/15
Undergraduate Thesis

- Environmental Geoscience Honors Program Thesis: Reconstructing Paleoclimates of Cheshire, UK, Using Beetle Fossils
- Used beetle remains to reconstruct the paleoclimate and paleoenvironment of Cheshire, UK during the Early Devensian
- Provided evidence of the Chelford Interstadial, a brief warm period in Great Britain during the Late Pleistocene

Boston College Department of Philosophy 5/14 - 5/15
Undergraduate Thesis

- Philosophy Honors Program Thesis: Eating Ethically: the Philosophy of Vegetarianism
- Investigated the ethical obligation man has to animals using Benthamian Utilitarianism as a framework
- Developed the skills needed to dissect complicated theories and communicate via the mode of text effectively

Boston College Department of Earth and Environmental Science 5/14
Undergraduate Research Assistant

- Conducted field work to help gather data on sediment formation in the Connecticut River

RELEVANT WORK EXPERIENCE

Vanderbilt University Department of Earth and Environmental Sciences 8/16 - 12/17
Teaching Assistant

- Independently taught discussion courses for an introductory undergraduate Oceanography course of 75 students for three semesters
- Modified Excel based weekly activities to teach both conceptual oceanography themes and data analysis skills

University of Bern Department of Paleoecology 8/15 - 8/16
Lecturer's Assistant

- Conducted individual training for a future PhD student on the methods used for chironomid-based paleoclimate reconstruction, including identification of chironomid and statistical methods of analysis
- Aided in teaching an intensive two-week practical-based course on paleoclimate reconstruction methods

Boston College Student Services, Boston College 9/12 - 5/15
Tutor

- Tutored a visually impaired student in Environmental Geosciences and in labs for the major, which required creating innovative ways to help her understand the physical aspects of the labs

PRESENTATIONS

Poster

Simulating Ungulate Impact in Forests: A Century-Based Model of White Lipped Peccary Presence in the Forests of the Cerrado, Brazil

WORKSHOPS

Survivor's Guide to Stable Isotope Ecology

4/17

- Participant in a week long workshop on stable isotope ecology

STEM Policy and Advocacy: Making Your Voice Heard

11/17

- Selected to participate in a day-long workshop designed to help researchers understand the history of federal funding for university research, develop practical communication strategies to engage policymakers about STEM research, and learn how to engage the public with social media for STEM outreach

PUBLICATIONS

Barnes, K.M., Jorge, M.S.P. , (in prep). The Role of Furgivours Unuglates in Forest Nitrogen Cycling

Barnes, K.M., Heiri, O., Tinner W., Kaltenrieder P., (in prep). A High Altitude Chironomid-based reconstruction of the Holocene in the Swiss Alps

TECHNICAL SKILLS

Programming Languages

R, MATLAB

Software & Tools

LaTeX, CENTURY, Microsoft Office

PROFESSIONAL MEMBERSHIPS

Vanderbilt Women in Earth and Environmental Sciences

American Women in Geosciences

Ecological Society of America

Geological Society of America