Education

**Michigan State University,** *College of Natural Sciences* 2015-2019

Majors: Zoology *with Honors* and Statistics

Minor: Computer Science

Study Abroad: Kenya, Behavioral Ecology of African Mammals 2017

Positions and Employment

**Lab Coordinator** 2020 - pres.

Cognitive Evolution Group (Dr. Alexandra Rosati)

*University of Michigan*

**Research Assistant and Interim Project Manager** 2019

Bwindi Impenetrable National Park, Uganda(Dr. Martha Robbins)

*Max Planck Institute for Evolutionary Anthropology*

Honors and Awards

STATE Scholarship, MSU Honors College, 2015 - $5000/yr for 4 years

Stiles-Butcher Award, Awarded to a sophomore showing promise in Zoology, MSU, 2017 - $740

Dean’s List MSU, Fall 2015, Spring 2016, Fall 2016, Fall 2017, Spring 2018, Fall 2018, Spring 2019

Distinguished Member Award, MSU Neuroscience Club, 2016

Presentations

**P. E. Barnes** and Warneke, C. R. Why are some individuals demographically important in fragmented landscapes? 7 August 2018. Ecological Society of America. Poster.

**P. E. Barnes** and Warneke, C. R. Why are some individuals demographically important in fragmented landscapes? 13 April 2018. University Undergraduate Research and Arts Forum (UURAF). Poster.

**P. E. Barnes,** Lehmann, K. D. S., and Holekamp, K. E. Spotted Hyena (*Crocuta crocuta*) Vocal Ontogeny. 13 April 2018. University Undergraduate Research and Arts Forum (UURAF). Poster.

**P. E. Barnes** and Warneke, C. R. Why are some individuals demographically important in fragmented landscapes? 25 July 2017. Savannah River Ecology Lab Undergraduate Student Symposium. Oral presentation.

**P. E. Barnes,** Lehmann, K. D. S., and Holekamp, K. E. Do immigrated male spotted hyenas show vocal variation in accordance with females present? 7 April 2017. University Undergraduate Research and Arts Forum (UURAF). Poster.

**P. E. Barnes,** Johnson-Ulrich, L., and Holekamp, K. E. Does variation in behavioral traits influence problem solving behavior in spotted hyenas? 8 April 2016. University Undergraduate Research and Arts Forum (UURAF). Poster.

Research Experience

**Bwindi Impenetrable National Park, Uganda** May 2019 – Sep. 201

**Supervisor:** Dr. Martha Robbins

Worked as a Research Assistant and Interim Project Manager

researching the behavioral ecology and genetics of mountain

gorillas in the field. Collected data on tablets, organized the

research team’s data, and compiled reports.

**San Diego Zoo Institute for Conservation Research,** *San Diego, CA* May 2018 – Aug. 2018

**Supervisors:**  Jennifer Tobey, Dr. Megan Owen

Used digital recording software for continuous focal animal sampling.

Tested various animal behavior recording apps. Assisted on

endocrinology assays.

**MSU Hyena Lab,** *Michigan State University* Aug. 2015 – May 2019

**Supervisors:** Dr. Kay Holekamp, Lily Johnson-Ulrich, Kenna Lehmann, Zach Laubach

Examined several features of spotted hyena behavior and

cognition including examining recordings of vocal communication,

coding videos of problem-solving tasks, and working with

observational data on maternal care.

**Restoration Ecology Lab**, *Savannah River Site* Apr. 2016 – May 2019

**Research Experience for Undergraduates**

**Supervisors:** Dr. Lars Brudvig, Christopher Warneke

Investigated plant recruitment in fragmented landscapes.

**Oak Creek Zoological Conservatory***, Madisonville, Texas* Aug. 2016

**Supervisors:** Lily Johnson-Ulrich and Zoe Johnson-Ulrich

Tested problem-solving abilities of several species of captive

carnivores.

**Wise Communication Lab,** *Michigan State University* Sep. 2016 – Jan. 2017

**Supervisor:** Kristen Lynch

Compiled data from physical documents to assess the

productivity of newspaper ads.

Teaching                                                                                                                                                  \_\_\_\_

**MSU Statistics Department**, *Michigan State University* Sep. 2018 – Apr. 2019

**Supervisors:** Dr. John Keane and Dr. Camille Fairbourn

Author statistics questions for undergraduate classes using

RStudio and Webwork. Identify scientific examples from

literature. Proctor exams.

Relevant Skills

Programming in R, C++, Python, MATLAB, LATEX, and some SAS

Raven: Interactive Sound Analysis Software and Syrinx

BORIS: Behavioral Observation Research Interactive Software

BORIS App

Zoomonitor

Densiometers to measure canopy cover

Microsoft Excel

Microsoft Access

CPR Certified

Data Management

Data Analysis

Service/Outreach

Integrative Biology Department Student Newsletter, Michigan State University

*Student Feature*, November 2017, November 2018

Alumni Distinguished Scholarship, Michigan State University

*IBIO Student Representative*, January-February 2019

Darwin Discovery Day, Michigan State University Museum

*Volunteer*, February 2017, February 2018

Wonderland of Lights, Potter Park Zoo

*Volunteer*, December 2017

Natural Science Colloquium, Michigan State University

*Volunteer*, August 2018