

MACKENZIE L. CROSS

Graduate Student
Department of Anthropology
College of Liberal Arts and Sciences
University of Iowa

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RESEARCH INTERESTS

I use computational methods to investigate macroevolutionary trends across primate evolution with a particular interest on the evolution of primate brain and sensory systems. While this research predominately considers genetic data, I am deeply interested in projects that integrate different types of data for a more robust research design and analysis.

EDUCATIONAL HISTORY

- 2024 **M.A. Biological Anthropology**. University of Iowa, Iowa City, IA.
2020 **B.S. Anthropology** with an honors thesis, University Honors and With Distinction.
University of Iowa, Iowa City, IA.
2020 **B.A. Interdepartmental Major (Human Biology)** with University Honors and With Distinction. University of Iowa, Iowa City, IA.

RESEARCH EXPERIENCE

- 2022-CUR **Computational Anthropology Lab**, University of Iowa. PI: Andrew Kitchen, Ph.D.
2019-2020 **Computational Anthropology Lab**, University of Iowa. Investigated Umami taste receptor gene evolution in primates using MEGA. PI: Andrew Kitchen, Ph.D.
2018-2020 **Biological Anthropology Lab**, University of Iowa. Conducted paleoprimatology literature reviews. PI: Russell Ciochon, Ph.D.
2018 **SMARTA Project**, Duke Lemur Center. Prepared SMARTA technology and assisted in lemur sessions with the technology. PI: Raymond Vagell, M.A.
2018 **Duke Lemur Center**, Duke University. Collected data on free ranging lemurs for an independent research project on lemur locomotive energetics. PI: Erin Ehmke, Ph.D.
2017-2019 **Zooarchaeology Lab**, University of Iowa. Identified and analyzed faunal assemblage from Woodpecker Cave excavations. PI: James Enloe, Ph.D.
2017 **Woodpecker Cave**, Coralville, IA. Excavated the site and documented artifacts. PI: James Enloe, Ph.D.

TEACHING EXPERIENCE

- 2022-CUR **Teaching Assistant**, Human Origins, University of Iowa. Leads three discussion sections (~25 students per section; ~75 total students) to reinforce lecture content and introduce key science writing skills. Supervisors: Andrew Kitchen, Ph.D. and

- 2018 Robert Fransiscus, Ph.D.
Course Assistant, Human Osteology, University of Iowa. Prepared osteological materials for class labs and supervised study hours. Supervisor: Robert Fransiscus, Ph.D.

SERVICE and OUTREACH

- 2019-2020 **“Build Your Own Superhero” Project** with Latham Scholar Science Outreach Initiative. Based on current human adaptation research, I created and developed a children’s game where children select an environment card and build a human, or “superhero,” who has adaptations for that environment.
- 2019-2020 **“Addressing Medical Biases” Project** with Latham Scholar Science Outreach Initiative. This project addressed health disparities in women, POC, and LGBTQ individuals by developing materials which provided accessible information on medical biases and contained advice from impacted peoples on how to protect oneself in these systems.
- 2018 **“Science: From Bill Nye to Beyond”** at Adair-Casey-Guthrie Center (ACGC) High School. Tatiana Kinzie (Ecology, Iowa State University) and I spent a day talking with students at a rural high school about our science experiences and why they should consider science (12/21/18).

WORK EXPERIENCE

- 2020-2022 **Medicolegal Death Investigator**, Rock County Medical Examiner’s Office, Janesville, WI. Evaluated body exam findings, medical history, social history and circumstances to determine probable cause/manner of death. Supervisors: Agnieszka Rolgalska, M.D., Dr. Vincent Tranchida, M.D., and Lisa Wallenkamp.
- 2017-2020 **Student Technician**, Decedent Care Center, University of Iowa Hospitals & Clinics, Iowa City, IA. Collected autopsy specimens and toxicology samples during autopsy process. Supervisor: Marcus Nashelsky, M.D.

PRESENTATIONS

Poster Presentations

- 2019 “Throw Your Hands Up: The Impact of *Propithecus coquereli*’s Locomotive Style on Behavior.” Spring Undergraduate Research Festival, University of Iowa
- 2019 “Throw Your Hands Up: The Impact of *Propithecus coquereli*’s Locomotive Style on Behavior.” Research at the Capital, Iowa State Capital in Des Moines
- 2018 “All Dogs Go to Woodpecker: Analyzing the Faunal Assemblage Produced by Woodland Hunters.” Spring Undergraduate Research Festival, University of Iowa
- 2017 “Dirty Pictures: Photogrammetry and Spatial Analysis of Woodpecker Cave.” Fall Undergraduate Research Festival, University of Iowa.

Oral Presentations

- 2018 “I Like to Move It, Move It: The Influence of Locomotive Style on Daily Energetic Budget.” Duke Lemur Center Intern Symposium, Duke Lemur Center.
- 2018 “Dogs for Dinner?: Butchering of Faunal Materials at Woodpecker Cave.” 3 Minute Research Story Competition, University of Iowa. **Won “Top Presenter”
- 2018 “All Dogs Go to Woodpecker: Analyzing the Faunal Assemblage Produced by Woodland Hunters.” A.C.O.R.N. Anthropology Club Presentation, University of Iowa

FELLOWSHIPS, SCHOLARSHIPS & GRANTS

- 2022 Graduate College Iowa Recruitment Fellowship, University of Iowa; \$5000
- 2019 Latham Scholar Fellowship, University of Iowa; \$500
- 2019 James D. Robertson Award for Excellence in the Social Sciences, Honors Program, University of Iowa; \$3,000
- 2019 Alexander Kern Liberal Arts & Sciences Scholarship, College of Liberal Arts and Sciences, University of Iowa; \$4,000
- 2019 Excellence in Undergraduate Research Award: Research Fellowship, College of Liberal Arts and Sciences, University of Iowa; \$2,500
- 2019 Excellence in Undergraduate Research Award: Travel Grant, College of Liberal Arts and Sciences, University of Iowa; \$1,000
- 2018 Manuel Paul and Abraham Chinitz Scholarship, College of Liberal Arts and Sciences, University of Iowa; \$3,000
- 2018 Dewey Stuit Award for Excellence in the Second Year, Honors Program, University of Iowa; \$3,000
- 2017 Iowa Center for Research by Undergraduates Award, Honors Program, University of Iowa; \$1,000
- 2016 Iowa Scholars Award, University of Iowa; \$10,000

INVITED TALKS

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| Honors Scholarship Awards Ceremony, University of Iowa | October 10, 2019 |
| Junior Sciences and Humanities Symposium, University of Iowa | March 5, 2019 |

HONORS

- 2020 Spotlighted Researcher in “Dare to Discover” Campaign
- 2019 Latham Fellow
- 2019 ICRU Fellow
- 2018 Phi Beta Kappa Member
- 2018 ICRU Fellow
- 2017 Phi Eta Sigma Member

SKILLS

Programming Languages: R (beginner), python (beginner)

Genetics Programs: PAML (beginner), MEGA (beginner)