# Kristina Leilani Black

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## **Education**

2019 – current

Ph.D. Candidate, University of Texas at Austin in Integrative Biology Supervised by Dr. Mikhail Matz.

Thesis topic: Population genomics for coral reef conservation

2015 - 2018

M.Sc., University of Wisconsin-Madison in Wildlife Ecology Supervised by Dr. Jonathan Pauli and Dr. Volker Radeloff.

Thesis title: The Great Lakes Region is a melting pot for vicariant red fox (Vulpes vulpes) populations.

2010 - 2014

B.S., University of Oklahoma in Zoology, graduated magna cum laude Minor: Philosophy

Theorem title Mayor ald inventor across an unban gradient in Ohlahoma

Thesis title: Mammal diversity across an urban gradient in Oklahoma.

## **Research Publications**

#### **Peer-reviewed Articles**

- **Black**, **K. L.**, Rippe, J., & Matz, M. (2022). Major environmental drivers of local adaptation in florida corals do not include elevated temperature. *In progress*.
- Macdonald, C., Jerome, J., Pankow, C., Perni, N., **Black**, **K. L.**, Shiffman, D., & Wester, J. (2021). Identification of a probable nursery area for great hammerhead sharks on the u.s. atlantic coast. *Conservation Science and Practice*, e418. https://doi.org/10.1111/csp2.418
- Black, K. L., Manlick, P. J., Romanski, M. C., & Pauli, J. N. (2020). Exploring the origins of red foxes (Vulpes vulpes) on isle royale. American Midland Naturalist, 185(2), 260–266.

   https://doi.org/10.1674/0003-0031-185.2.260
- Pauli, J. N., Manlick, P. J., Dharampal, P. S., Chikaraishi, Y., Niccolai, L., Grauer, J., **Black**, **K. L.**, Restrepo, M. G., Perrig, P. L., Wilson, E., Martin, M. E., Curras, M. R., Bougie, T., Thompson, K. L., Smith, M., & Steffan, S. A. (2019). Quantifying niche partitioning and multichannel feeding among tree squirrels. *Food Webs*, *21*, e00124. https://doi.org/10.1016/j.fooweb.2019.e00124
- Black, K. L., Petty, S. K., Radeloff, V. C., & Pauli, J. N. (2018). The great lakes region is a melting pot for vicariant red fox (*Vulpes vulpes*) populations. *Journal of Mammalogy*, 99(5), e2205v1.

  Phttps://doi.org/10.1093/jmammal/gyy096

## Certifications

## **SCUBA**

2021 Scientific Diver, AAUS.

2019 **Rescue Diver.** PADI.

Advanced Open Water Diver, PADI.

2015 **Qpen Water Diver**, PADI.

## **Certifications (continued)**

### Miscellaneous

Strike Team. Certified for treatment of Stony Coral Tissue Loss Disease by The Virgin Islands Coral Reef Advisory Group.

**Group Fitness Instructor**. Athletics and Fitness Association of America.

since 2020 Healthcare Provider (BLS) Adult, Child, and Infant CPR/AED. ProCPR Protrainings.

since 2019 **Emergency O2 Provider**. PADI.

# **Grants and Fellowships**

## **Fellowships**

NatureNet Science Fellowship- \$74,000. Awarded by the The Nature Conservancy to fund coral restoration research at the Coral Innovation Hub in St. Croix, VI.

Bridge to the Doctorate Fellowship- \$30,000/yr for 2 yrs. Awarded by the Louis Stokes Alliances for Minority Participation (LSAMP) at the University of Wisconsin-Madison.

## **Research Grants**

PADI Research Grant- \$10,000, Awarded by the PADI Foundation for studying epigenetics in sharks.

Integrative Biology Research Grant- \$6,000, Awarded by the Integrative Biology department at UT-Austin for studying coral genomics in the Florida Keys.

Grant-in-Aid- \$1,000, Awarded by NSF IGERT (DGE-1144752) at the University of Wisconsin-Madison for studying phylogenetics of red foxes on Isle Royale National Park.

LSAMP Undergraduate Research Scholarship - \$6,000, Awarded by the Louis Stokes Alliances for Minority Participation (LSAMP) at the University of Oklahoma for studying urban mammal diversity.

## **Scholarships**

International Coral Reef Society (ICRS) Student Travel Award- \$1,000 to attend the 15th ICRS conference in Bremen, Germany.

Young Professional Recruitment Fund Scholar, Awarded by The American Elasmobranch Society.

Segal Americorps Education Award- \$1,500, Awarded by the U.S. Forest Service for studying the potential impacts of climate change on fecundity in native Hawaiian shrimp.

#### **Presentations**

#### Scientific Talks

Environmental drivers of genetic adaptation in two coral species from the Florida Keys, International Coral Reef Symposium in Bremen, Germany.

**Seascape genomics of two coral species in the Florida Keys**, POSea Conference (virtual).

The Great Lakes Region is a melting pot for vicariant red fox (Vulpes vulpes) populations through natural expansion and fur-farm translocations, Public exit seminar at the University of Wisconsin-Madison.

The colonization and genetic structure of synanthropes in urban areas, Public entrance seminar at the University of Wisconsin-Madison.

## Presentations (continued)

Effect of varying streamflow on shrimp reproduction in Pacific Island streams, PIPES (Pacific Internship Programs for Exploring Science) research symposium at the University of Hawaii-Hilo.

#### **Posters**

- Red fox (*Vulpes vulpes*) colonization in Wisconsin. The 97th Annual Meeting of American Society of Mammalogists at the University of Idaho, and the Sci-Med GRS symposium at the University of Wisconsin-Madison.
- The colonization and genetic structure of synanthropes in urban areas. Sci-Med GRS symposium at the University of Wisconsin-Madison.
- 2014 Mammal diversity across an urban gradient. The University of Oklahoma undergraduate research symposium.

#### **Outreach**

- Diversity, equity, and inclusion in coral science, Speaker at a workshop for students and early-career researchers at the International Coral Reef Symposium in Bremen, Germany.
  - Navigating life in grad school, Speaker at a workshop for undergraduates hosted by Minorities in Biological Research at UT.
- **Coral biology and reef restoration**, Speaker at a workshop for native Alaskan high schoolers hosted by the Orutsararmiut Native Council.

# Diversity, Equity, and Inclusion

2022 – current

■ Integrative Biology DEI committee- Graduate student representative at UT-Austin. Reforming the graduate school admissions process to be more holistic and inclusive of applicant's diverse experiences.

2021 - current

- International Coral Reef Society DEI committee- Student and Early Career Chapter liason. Co-founded this committee made up of graduate students researching coral across the globe. Developed original purpose and philosophy statements that constitute the chapter's stance on DEI issues. Also developing workshops and informative materials to disseminate opportunities and resources for underrepresented minorities in our field.
- Research mentor for underrepresented minorities in STEM at the University of the U.S. Virgin Islands. Mentored two undergraduates through their individual research projects to support coral restoration.

2020 – current

Minorities in Biological Research- *Graduate student representative* at UT-Austin. Supports undergraduates that are underrepresented in STEM to prepare for a biological research career by developing and hosting workshops around the following topics: Applying for grad school, research careers in biology, and getting involved in research at UT.

## **Teaching Experience**

2022-current

**Teaching Assistant** (*Evolution*) for one semester at UT-Austin. Led discussions about research articles and taught evolutionary theory and population genetics in an upper-level undergraduate course.

2019-2022

- **Teaching Assistant** (*Genetics Lab*) for four semesters at UT-Austin. Taught laboratory procedures such as *drosophila* crosses, DNA and protein extraction, bacterial transformation, gel electrophoresis, PCR, and western blot in a senior-level undergraduate course
- **Research mentor** for undergraduates at UT-Austin. I mentored four undergraduates through learning genetics lab techniques and data analysis.

07/2021

Science and Culture Camp Instructor for Orutsararmiut Native Council. Taught an introductory workshop on coral biology to native Alaskan high school students in Bethel, AK.

## Laboratory mentoring

2019 - current

- Genetics Lab. Trained 9 undergraduates in genetics lab techniques, including DNA extraction, PCR, gel electrophoresis, and 2bRAD library prep at the University of Texas-Austin.
- **eDNA Lab Methods**. Trained interns in DNA extraction, qPCR, and gel electrophoresis at The Wilds/Columbus Zoo.
- Genetics Lab. Trained undergraduate in DNA extractions at the University of Wisconsin-Madison.

## Field mentoring

2016-2017

- **Predator Surveys**. Trained a technician in predator surveys at Isle Royale National Park.
- **Small-mammal Surveys**. Trained undergraduates in small-mammal trapping with anesthesia at the University of Wisconsin-Madison.

# **Employment History**

01/2019 - 07/2019

**Wildlife (Genetics) Technician,** The Wilds/ Columbus Zoo.

09/2018 - 10/2018

**Wildlife Field technician (seasonal)** Isle Royale National Park.

09/2014 - 12/2014

Manatee Research Intern Mote Marine Laboratory.

05/2014 - 8/2014

Marine Mammal Husbandry and Interpretation Intern Alaska SeaLife Center.

05/2013 - 8/2013

**REU and Americorps** Institute of Pacific Islands Forestry (U.S. Forest Service).

## References

Available on Request