

# **Josie M. Muskrat**

## *Curriculum Vitae*

### ***EDUCATION***

#### **Haskell Indian Nations University**

**Undergraduate:** Bachelors of Science in Environmental Science

**May 2020**

#### **Research Workshops:**

- Responsible Conduct of Research Workshop
  - University of Kansas, Summer 2018
- Bioinformatics Workshop
  - University of Kansas, Summer 2018
- Laboratory Safety Training
  - University of Kansas, Summer 2018
- Human Subjects Training
  - University of Kansas, Summer 2018
- Summer Internship for Indigenous Peoples in Genomics (SING)
  - University of Illinois, Urbana-Champaign, Summer 2019
- Genomic Data Science Workshop
  - SACNAS Annual Conference, 2019

#### **Extracurricular:**

#### **Captain, Haskell Rocketry Team**

**November 2018 – Present**

#### **Tasks/projects:**

- Project management and task designation
- Documentation of materials and protocols
- Mentorship in projects, including:
  - Mainframe design and assembly
  - Safety protocols
  - Flight simulations
  - Report writing and oral presentation

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### ***RESEARCH EXPERIENCE***

#### **University of Kansas - KU-HINU Bridge Program**

**Mar 2018 – Present**

#### **Biological Anthropology Laboratories**

Principle investigators: Dr. Jennifer Raff and Dr. Dennis O'Rourke

Title: **Undergraduate Research Assistant**

#### **Tasks/projects:**

- Analysis of archaic-like variants in contemporary and ancient Unangan
- DNA quantification
- DNA extraction
- DNA amplification using PCR
- Gel electrophoresis

#### **Haskell Tribal ecoAmbassador Organization**

**May 2017 – Feb 2018**

Supervisor: Dr. Daniel Wildcat

Title: **Intern**

#### **Tasks/projects:**

- In Haskell Wetlands:

- Trail maintenance, to increase accessibility for university classes
  - Survey of biodiversity
  - Establishment and maintenance of milkweed monarch waystations
  - Monarch tagging for documenting migration patterns
  - Collection and data documentation of compost from the university cafeteria
  - Landscaping at the Haskell Cultural Center
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### ***TEACHING AND MENTORING EXPERIENCE***

**Haskell Indian Nations University**

**Jan 2018 – Dec 2019**

**Dept. of Natural and Social Sciences**

Supervisor: Julia Goodfox

Title: **Undergraduate Teaching Assistant**

Subjects:

- Organismal biology
- Molecular and cellular biology

Duties performed:

- Co-teaching and lesson planning
- Guided reviews and study sessions
- Lab set-up and cleaning

**Haskell Indian Nations University**

**Aug 2017 – Dec 2017**

**Student Success Center**

Supervisor: Jimmy Beason

Title: **Tutor in Biological Sciences and Academic Writing**

Subjects:

- Academic writing
- Literature review
- Use of university databases and library catalog
- Email etiquette and use of university online resources
- Introductory and organismal biology

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### ***CONFERENCE PRESENTATIONS***

#### **Podium:**

Musktrat, J. *et al.* 2019. Evaluating the presence of previously identified archaic introgressed haplotypes in contemporary Unangan (Aleuts). American Association of Physical Anthropologists Annual Conference, Cleveland, OH.

#### **Posters:**

Musktrat, J. *et al.* 2019. Evaluating the presence of previously identified archaic introgressed haplotypes in contemporary Unangan (Aleuts). Society for the Advancement of Chicanos/Hispanic and Native Americans in Science Annual Conference, Honolulu, HI.

Musktrat, J. *et al.* 2019. Evaluating the presence of previously identified archaic introgressed haplotypes in contemporary Unangan (Aleuts). KU-Haskell Research Symposium.

Musktrat, J. *et al.* 2018. Evaluating the presence of previously identified archaic introgressed haplotypes in contemporary Unangan (Aleuts). University of Kansas Office for Diversity in Science Training Research Symposium.

Musktrat, J. *et al.* 2018. The Role of Archaic Introgression in Shaping the Genetic Landscape of the Americas. Society for the Advancement of Chicanos/Hispanic and Native Americans in Science Annual Conference, San Antonio, TX.