

Andrea Hernandez

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Education

New Mexico State University
BS, Biology

Expected: May 2027

El Paso Community College
Associates, Multidisciplinary Studies

May 2024

Research Experience

Summer 2026

Project: New Mexico Tick-borne Infections Consortium (NM-TIC). Determine the prevalence of *Rickettsia rickettsii* and *R. parkeri* in *R. sanguineus* in southern and western NM, and screen for *Ehrlichia chaffeensis* and *E. ewingi*. New Mexico State University, Dept. of Biology.

- Advisor: Dr. Kathryn Hanley

Research Skills

Field

Drag-netting for ticks
CO2 trapping for ticks
Species identification of ticks

Laboratory

DNA extraction
PCR and Gel Electrophoresis
Quantitative PCR (qPCR)

Work Experience

Undergrad research assistant

Summer 2026

Dept. Biology, New Mexico State University

- Solicit and facilitate donation of ticks removed in the course of veterinary care as well as metadata associated with ticks from veterinarians and shelters in specified region
- Identify and pool ticks
- Homogenize ticks
- Extract DNA from homogenates
- Assay for bacterial pathogens using qPCR