

David L Nieland

Subject: Postdoctoral Researcher In Wildlife Genomics And Disease Ecology

A post-doctoral position is available to study wildlife population genomics and disease ecology at the University of Wyoming (UW) in Laramie. The position will be based within the Ernest Laboratory in the Department of Veterinary Sciences which has affiliations with the UW Program in Ecology and the University of California, Davis Wildlife Health Center. Research will use genomic and genetic DNA analysis to examine population health and ecology of wildlife species in the Rocky Mountain West and California.

Species of focus will involve one or more of large mammals (such as mountain lion, pronghorn antelope, bighorn sheep, and others) and birds (hummingbirds and other groups).

(For graduate student position in our lab see October 14, 2014 posting # 054527)

The Ernest Wildlife Genomics and Disease Ecology Laboratory is a new exciting lab at UW, and the postdoc will gain experience and knowledge in setting up a vibrant dynamic wildlife ecology and genomic research lab.

There will be opportunities to gain experience in teaching and mentoring undergraduate and graduate students. Quality mentorship of trainees of all educational levels, including this postdoctoral position, is a priority for the laboratory director.

Qualifications: The successful candidate will have:

- 1) a Ph.D. within the past five years in genomics (of any organism type including humans, animals, plants or microbes), ecology, epidemiology, bioinformatics, animal biology, or related field;
- 2) knowledge, skills, and abilities in the following areas: laboratory and computational analysis of next generation sequencing (NGS) data (Illumina or similar), NGS library construction techniques and equipment (such as sonicator, DNA fragment analyzer, etc.), DNA extraction, gel electrophoresis, and PCR;
- 3) quantitative skills as demonstrated through documented knowledge, skills, and abilities with statistics and software that are used in next generation sequencing data;
- 4) demonstrated track record of collegiality, interpersonal skills, communication, creative leadership and problem-solving abilities that promote a positive team work atmosphere. Documented ability to work both independently and in teams, and ability to respond and adjust to difficult situations. Demonstrated ability to work with and communicate with wide diversity of stakeholders, staff, students, field biologists, and members of the public;
- 5) documented evidence of conference research presentations and peer-review science publication in genomics or genetics;
- 6) ability to conduct occasional wildlife field work that may involve harsh environmental conditions (cold, hot, windy, steep, rocky, etc.), sampling wildlife (blood, tissues, feces, etc.), and hiking with heavy gear.
- 7) ability to travel; a valid driver's license

Additional preferred skills, knowledge, and abilities include any of the following:

1. a programming language used in genomic data analysis; 2. population genetics 3. program R; 4. Bayesian statistics;
5. laboratory and analysis of traditional Sanger DNA sequence, mitochondrial DNA, microsatellite DNA, and/or immunogenetics;
6. documented excellent communication and public speaking abilities and abilities to translate complex genomic concepts to every day understandable language;
7. keen interests in research in population genomics and ecology of wildlife and their pathogens;
8. real time PCR;

The position is primarily laboratory based, however the position may involve occasional field work. In addition to the research, the postdoctoral researcher will have duties involving laboratory and equipment set up (this is a new lab), lab management tasks, and assisting in supervision and mentoring of a small number of students.

University of Wyoming hosts excellent wildlife and ecology science. Laramie offers easy access to the Rocky Mountains and outdoor activities including skiing and hiking. The University of Wyoming is an Equal Employment Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability or protected veteran status or any other characteristic protected by law and University policy. Please see www.uwyo.edu/diversity/fairness We conduct background investigations for all final

candidates being considered for employment. Offers of employment are contingent upon the completion of the background check.

To apply for this position please submit an electronic application via email in PDF format to hernest@uwyo.edu including a cover letter stating research interests, C.V., PDFs of pertinent publications, and contact information (name, position, email, phone, institutional affiliation, and research area) for at least three references to Dr. Holly Ernest, Professor and Wyoming Excellence Chair in Disease Ecology, Department of Veterinary Sciences, 1174 Snowy Range Road, Laramie, WY 82070. Applications will be reviewed immediately and the position will remain open until filled.