

Postdoctoral Position: Population and Landscape Genomics to Inform Host-Pathogen Co-evolution and Conservation Management

A postdoctoral position focused on population and landscape genomics to inform host-pathogen co-evolution of wild cervids and chronic wasting disease (CWD) is available in the [Funk Lab of Conservation Genomics and Evolutionary Ecology](#) at [Colorado State University](#). Funded by the USDA National Wildlife Research Center, the postdoctoral scientist will harness whole-genome sequence (WGS) data collected from mule deer to test the landscape factors that influence connectivity and CWD transmission, understand the roles of gene flow and pathogen-mediated selection in the ecology and epidemiology of CWD, and investigate fitness consequences of polymorphisms in the prion protein gene that influence the incubation period of CWD, among other research questions. In addition to publishing their results in peer-reviewed scientific journals, the postdoctoral scientist will communicate their results at scientific conferences and with federal and state scientists and decision makers to improve conservation management of wild cervid populations. The postdoctoral scientist will be part of a collaborative team from the USDA NWRC (Dr. Jenn Malmberg) and Utah State University (Dr. Kezia Manlove).

Required qualifications:

- Ph.D. by the time of start date in evolutionary biology, population genetics, integrative biology, disease ecology and evolution, or some equivalent.
- Excellent communication (verbal and written) and organizational skills.
- Positive attitude and desire to work as part of a dynamic, multi-disciplinary team.
- Strong expertise in bioinformatics, genomics, and the application of genomics to evolutionary and conservation questions.
- Experience generating, analyzing, and/or integrating large datasets – whole genome sequencing, RAD sequencing, and/or transcriptome sequencing.

Preferred qualifications:

- Fluency in Python or Perl, and R.
- Expertise in disease ecology.

The successful candidate will work under the supervision of Professor Dr. Chris Funk at Colorado State University, and in collaboration with other team members.

The appointment can be extended up to three years, pending satisfactory performance. The salary will be commensurate with experience. Preferred start date is approximately March 1, 2025.

To apply: E-mail a single PDF including a cover letter, a CV, and the names and contact information of three references to the Funk Laboratory Manager, Mackenzie Woods (Mackenzie.Woods@colostate.edu), with the subject line as "Postdoctoral application <your name>". Review of applications will begin December 30, 2024, and continue until a suitable candidate is identified. Informal inquiries prior to application are welcome and can be directed to Chris Funk (Chris.Funk@colostate.edu).

W. Chris Funk (he/him)

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