

## Post-doctoral Fellow Position in Spatial Modeling of CWD

We are offering a 2-year Post-doctoral Fellow position (PDF) in disease ecology. We are seeking candidates with a background in animal population modeling and spatial epidemiology. The PDF will adopt a spatially explicit modeling framework currently used by Alberta Environment and Parks (AEP) for evaluating harvest strategies within the context of landscape change to include the effect of chronic wasting disease (CWD) on deer populations. The effort is supported by pre-existing software, AEP demographic and harvest data, data from a continuous 20-year CWD surveillance program, previously published epidemiological models, and detailed information from field projects on seasonal deer movements and home ranges, habitat selection, grouping patterns, and space and sex-specific contact rates. Evidence of good writing and presentation skills is required to be successful. Preference will be given to persons with GIS, R statistical software, and programming skills. Applicants must be self-motivated with a strong work ethic and be able to work independently, have demonstrated skills in leading a project effort, and effectively working with managers, stakeholders, and academics.



Within the framework of the project, the PDF is expected to remain current on the evolving literature on CWD; substantiate demographic, population and harvest data relevant to the project; derive routines for direct and indirect CWD transmission, latency in disease progression, and force of infection; incorporate CWD effects on vital rates; derive relevant spatial layers from field data; and integrate the new aspects for CWD into the existing model working with software developers. The PDF will also work with wildlife managers to conceptualize a set group of harvest scenarios to evaluate outcomes with the model. The PDF will be responsible for all stages of the project including model conceptualization and development, beta testing and model sensitivity analysis, comparing outcomes of harvest scenarios, writing reports and publications, and providing presentations on project results at diverse outlets.

An annual salary will be \$62,000-\$64,000 CAD depending on qualifications, with benefits. There is flexibility in working remotely during the first portion of the project. Preference will be given to Canadian citizens but Canadian citizenship is not a requirement.

Please email to Dr. Evelyn Merrill ([emerrill@ualberta.ca](mailto:emerrill@ualberta.ca)) the following items in one Acrobat PDF document combined in the order listed below by **10 September 2021**, or until a suitable candidate is found.

- 1) Cover letter outlining specifically your how your background, experience, and technical skills meet the requirements of the project including project leadership, effectively working with managers and stakeholders, and adept writing/presentation.
- 2) For three references provide position and affiliation, contact information (email & phone) and nature of working relationship.
- 3) CV and any other supporting materials.