Biometrician / Quantitative Ecologist

**Summary:**

Panthera is a not-for-profit wildlife conservation organization focused on preserving the world’s 40 wild cat species and the landscapes they inhabit. Based in Missoula MT, the applied science program provides support to Panthera staff and collaborators around the globe in modeling, spatial analysis, remote sensing, and conservation genetics. Panthera is currently seeking a research scientist with a strong background in statistical modeling, who as part of the applied science program will provide quantitative and statistical consulting on a number of research programs.

**Duties:**

The successful candidate will work under the direct supervision of, and in cooperation with, Panthera’s directors of Applied Science and Data Science. A large component of the position will be collaboration with Panthera biologists and research partners in the development and implementation of innovative monitoring and analysis methods. The duties and responsibilities of this position include:

1. Provide comprehensive quantitative and analytical support for the statistical design, implementation, analyses, and interpretation of biological, ecological, and sociological investigations of wildlife populations in support of global conservation.

2. Use a variety of programs and platforms including but not limited to R, Python, STAN, Linux, SQL/RDBUS and TensorFlow to conduct statistical analyses of short- and long-term datasets. Preference will be given to candidates with expert skills in the use of R and development of novel R packages/modules.

3. Work closely with the director of data science to develop novel analysis modules in R for incorporation in Panthera’s cloud based analysis platform, Panthera IDS.

3. Author, coauthor, or review statistical content in technical reports and scientific papers in cooperation with Panthera biologists, collaborators and others.

4. Develop, evaluate, and implement research and monitoring protocols and programs and make recommendations to more efficiently achieve conservation objectives.

6. Examine datasets to identify patterns and establish relationships to solve problems through analyses (i.e. data mining).

7. Contribute to development of grant proposals that will enhance management of endangered and endemic species and habitats.
8. Perform travel as required. Present results of research at scientific conferences and meetings as requested.

9. Follow Panthera data storage and sharing protocols.

10. Stay abreast of developments in statistics and quantitative analysis pertaining to wildlife ecology, management and conservation and incorporate new knowledge, skills, and tools into conservation programs.

11. Other duties as assigned.

Qualifications:

Candidates will possess a PhD in statistics, wildlife biology, or a related field. Candidates should possess 5 to 10 years experience programming in R and in R development. The successful candidate will have a broad knowledge and experience in modeling disparate wildlife data including remote camera, spoor survey, and collar data using spatial mark recapture (SECR), mark-resight, survival analysis, resource selection functions (RSFs), time to event abundance estimation, space to event abundance estimation, and occupancy models. Preference may be given to candidates with experience creating hierarchical and integrated population models (IPMs) at large spatial scales. Preference may also be given to candidates with experience developing cloud and web-based analytical tools for general practitioners. The successful candidate will have a proven record of easy collaboration with their peers.

Location: Missoula, MT

Anticipated Start Date: 02/01/2021

How to apply: Send the following to recruitment@panthera.org with “Quantitative Ecologist” in the subject line: Cover letter, CV, and 3 references in a single Word or PDF document. Successful candidates may be asked to perform a sample analysis on a provided data set. The closing date is Dec 15th 2020 but may be extended until a highly qualified candidate is identified.

Contact: Human Resources, Panthera. recruitment@panthera.org

EOE/M/F/D/V