PhD Position in Modeling of Telemetry Data

The Freshwater Fish Ecology Laboratory (www.ffishlab.ca) at the University of Northern British Columbia (UNBC) and the Statistical Ecology Research Group (statisticalecology.weebly.com) at the University of British Columbia (UBC) are looking for a PhD student to develop statistical models to analyze telemetry data collected from riverine organisms.

The successful candidate will conduct a review of current methods to analyze spatio-temporal movement data in linear systems and develop new models for the analysis of such data sets and their integration with environmental data. We see this as a unique opportunity for the student to also explore how receiver placement and array design may affect the capacity of researchers to answer ecological questions and develop sound design recommendations for telemetry arrays. The methodology developed in the project has the potential to be useful for the study of riverine species across the globe.

Part of the work will be motivated by an ongoing research program on the spatial ecology of Arctic grayling and their interactions with bull trout in the Parsnip watershed in northern British Columbia (funded by the Fish and Wildlife Compensation Program: www.fwcp.ca). Thus, the student will have the opportunity to combine field work with the development of advanced analytical and computational skills.

The position will be based at UNBC and the student will be co-supervised by Dr. Eduardo Martins (UNBC) and Dr. Marie-Auger Methé (UBC).

The ideal candidate should have:
- A MSc in ecology, fisheries, statistics or related field
- A strong academic record
- Exceptional quantitative skills
- High proficiency in statistical computing software such as R
- Experience with spatial data
- Experience with telemetry data
- Experience developing peer-reviewed publications
- Fieldwork experience in aquatic environments

The successful candidate is expected to start the position on September 1, 2019. The successful candidate is also expected to apply for admission to UNBC’s Natural Resources and Environmental Studies Graduate Program by June 15, 2019 to be able to officially start in the graduate program in the fall 2019 semester.

A graduate assistantship of CAD 22,000 per year is available.

To apply, please email your (i) CV, (ii) transcripts, (iii) sample of work related to the position description and qualification requirements (e.g. publications, computer codes for statistical models), (iv) a cover-letter highlighting your skills, research experience and interests, and (v) contact information for three references to Dr. Eduardo Martins (emartins@unbc.ca).

Application deadline: April 30, 2019.