Funded Postdoctoral Position

Climate Change, Biodiversity Loss and Disease Emergence

University of British Columbia

Applications are invited for a fully funded one-year postdoctoral position, starting September 2021 with possibility of extension, on modelling the interactions between climate change, biodiversity loss and disease emergence.

Project Description

Climate change, infectious disease, and biodiversity loss represent the most pressing ecological challenges of our time. They are also intimately interrelated. For example, biodiversity loss is both caused by and accelerates climate change, and each of these factors in turn drives the increasing emergence of pest and pathogen outbreaks. Whereas the pairwise interlinkages between climate, biodiversity and disease have been well documented, we lack a framework that integrates all three and that recognizes the powerful positive and negative feedbacks between them.

The successful candidate will be expected to: (1) coordinate a working group and associated workshop on the construction of a conceptual framework that describes the casual pathways linking biodiversity, climate, and disease, and (2) assist in the development of statistical and computational methods to parameterize these relationships using empirical data on the intensity of major drivers of global change (i.e. pollution, habitat transformation, over-exploitation and invasive species) and direct human pressures.

Location

The position will be in the Davies lab (https://phyloecology.wordpress.com/) within the Biodiversity Research Centre at the University of British Columbia (https://biodiversity.ubc.ca/), with strong ties to the Departments of Botany, and Forest and Conservation Sciences.

Requirements

Key requirements include an understanding of macroecology/macroevolution and global change biology or disease ecology, a strong conceptual and quantitative background, proficiency in programming (preferably in R), and excellent organizational skills. Candidates with experience facilitating working groups and/or in analyzing big data will be given preference.

Application

Please send a current CV, a letter of interest and the name and emails of two references to Jonathan Davies, UBC (j.davies@ubc.ca). Candidates from underrepresented groups are especially encouraged to apply. Informal enquires welcome.