



**A doctoral researcher position
on ticks as a feature of socio-ecological systems**

The researcher will contribute to the project “**Climat, habitat et tiques: une approche multisectorielle Une Seule Santé pour prioriser les interventions environnementales**” funded by the FNRS (Fonds National de la Recherche Scientifique) and FRQ (Fonds de recherche du Québec) and carried out in collaboration between UCLouvain and Université de Montréal. Contracts will be split between Belgium and Québec and based on local respective regulations, depending on prior research experience. This offer is also published on [Euraxess](#).

Objectives:

- To monitor ticks along ecological gradients in recreational forests in the region of Montréal and Brussels
- To analyse tick abundance data
- To collect and analyse tick abundance data in relation to forest management in the context of climate change
- To apply an existing population dynamic model to our study cases

Project summary:

Ticks of the genus *Ixodes* are the main vectors of pathogens on both sides of the North Atlantic, transmitting *Borrelia* spp. among others in zoonotic cycles. Many similarities exist between the Quebec and European (including Belgian) transmission systems, not only in the biology of the species concerned, but also in the ecological and anthropogenic dynamics that have determined the strength of the transmission cycles and the dynamics of the distribution area. The role of climate change on the distribution and abundance of ticks has generated much research, but many questions remain about the interactions between climate and tick habitat, making the evaluation of environmental control strategies complex. The links between vegetation and habitat must be reexamined in the context of climate change in view of the incidence of tick bites outside forests, often considered the primary habitat of ticks. Furthermore, as management methods for forest environments and other environments such as parks and gardens evolve within the framework of resilience to climate change and the conservation of biodiversity, it is appropriate to question the effect of these practices on the abundance of ticks. Our project will therefore focus on the interaction between climate and vegetation, a fundamental question linked to tick ecology and the evolution of landscapes, but also on the question of reconciling management objectives with prevention needs. In order to achieve our objectives, we will mobilize quantitative modelling of field data as well as methods of evaluation and ranking of priorities by managers, in a multidisciplinary approach based on the One Health framework.

Profile required:

A researcher holding a MSc degree in a field relevant to the project objectives (e.g. geography, biology, epidemiology and public health). The person recruited will have competence in statistical analysis and GIS, experience or at least interest in carrying out field work and interacting with forest managers at various levels. The position will require the candidate to spend time both in UCLouvain and in UdeM. The candidate should demonstrate a good command of English, and knowledge of French will be considered a plus, and the ability to work in a collaborative environment. Interest in disease ecology/epidemiology and the One Health approach is a must.

Work environment:

The researcher will work partly in UCLouvain, in a team working on the geography of health using a range of modelling tools and on a diversity of systems, and partly in UdeM in a team focused on disease ecology, in particular of tick-borne disease, in the context of One Health and public health. The hiring teams are respectively part of the Earth & Climate research centre, Earth & Life Institute (UCLouvain, Louvain-la-Neuve, Belgium), and Faculté de médecine vétérinaire, Université de Montréal.

Candidates should submit **a cover letter detailing motivation to pursue a PhD, qualifications and research interests, detailed CV, and names and contacts of two referees** to:

Prof. Sophie Vanwambeke – sophie.vanwambeke@uclouvain.be

Review of applications will start on November 15, 2025.

Starting date: As soon as possible.