

PhD position on microclimate ecology and species distributions

The sGlobe lab of the KU Leuven (Belgium) is seeking a highly motivated PhD student to work on the MICROMICS project: *“microclimate- and genomics-informed distribution modelling to improve predictions of species’ range dynamics and extinction risk under environmental change”*.

About the sGlobe lab

The lab is part of the division Forest, Nature and Landscape of the KU Leuven. We aim to improve our understanding of the effects of global change on biodiversity and the functioning of terrestrial ecosystems. We combine big data with state-of-the-art modelling techniques, fieldwork and drone imagery to extract patterns and answer ecological questions on large spatial scales. One of our key research areas is microclimate ecology, as microclimate conditions are key to understanding how organisms respond to warming. More information? See www.sglobelab.com

About MICROMICS

Climate change has been identified as one of the most important human-induced global drivers of biodiversity loss. Understanding and forecasting the effects of climate change on biodiversity are among the major challenges of our time. Microclimate conditions and eco-evolutionary processes manifesting at fine spatial scales are key to understanding how organisms respond to changing environmental conditions, yet, they are frequently neglected when studying biotic responses to global change. The MICROMICS project aims to study the importance of microclimate as a driver of fine-scale adaptive evolution, dispersal, climate change exposure and sensitivity, and, ultimately, range-wide species dynamics.

Position

We will hire two PhD students for the MICROMICS projects. The successful candidate will closely collaborate with the second PhD student at the Division Ecology, Evolution & Biodiversity Conservation. They will use genomics to study the impact of microclimate on adaptability and dispersal dynamics of plant species. **This position, under the supervision of Prof. Koenraad Van Meerbeek and Dr. Hanne De Kort**, will first focus on developing high-resolution microclimate temperature maps based on remote sensing imagery and geodatabases. These maps will then be used to assess the effect of microclimate on climate change sensitivity and exposure of forest plant species. Bringing all information together, the successful candidate will be able to shed new light on climate change impacts on range-wide species dynamics and use this information to delineate conservation networks of connected microrefugia. Fieldwork is planned along a latitudinal gradient across Europe (from France to Norway) and will be in collaboration with the [FLEUR network](#).

General profile of the candidate

- You hold an MSc degree in a relevant field (Bioscience Engineering, Biology, Environmental Sciences, Physical geography or related fields) or you will have obtained it by the time you start working
- You can demonstrate excellent study results

- You have a passion for nature and biodiversity
- You have a background in terrestrial ecology
- You are enthusiastic to carry out fieldwork across Europe
- You have knowledge of programming languages such as R or python. Knowledge of spatial data analyses is a plus
- You are fluent in English, both written and oral
- Having a driving license is a plus
- You are willing to collaborate and be a team player with good communication skills

Our offer

- A full-time PhD fellowship (4 years) following a positive evaluation after one year
- Tentative starting date: November 2022
- The successful candidate will be based at the division Forest, Nature and Landscape in Leuven (Belgium)
- Your monthly scholarship amount is calculated according to the scholarship amounts for doctoral scholarship holders on the [pay scales for assistants](#)
- You will receive ecocheques, a bicycle and a bicycle allowance or a full reimbursement of public transport costs for commuting. See [here](#) for full benefits including holidays and bonuses
- Collaboration in a young and dynamic international scientific team. Life-work balance is important for us

How to apply?

Send your application (CV and application letter) to koenraad.vanmeerbeek@kuleuven.be | Application deadline: 15th of September 2022 | Notification of selection for interview: End of September 2022 | Interviews (online): Mid-October 2022

More information

Prof. Koenraad Van Meerbeek | koenraad.vanmeerbeek@kuleuven.be | www.sglobelab.com