



Five research positions available in international project on plant range expansions in mountains

A global consortium of mountain researchers is offering five research positions to work within the international project "*Mechanisms underlying the success and impacts on biodiversity and ecosystem functioning of range-expanding species under climate change (RangeX)*", funded by the BiodivERsA COFUND Call on "Biodiversity and Climate Change". The project consortium involves partners from Chile, Denmark, France, Germany, Norway, South Africa, Sweden and Switzerland, and will work closely with collaborators from across the global Mountain Invasion Research Network (MIREN; www.mountaininvasions.org/).

Native as well as exotic species are shifting their distributions in response to global warming, many expanding their ranges across elevation gradients. But they are doing so at widely different rates, leading to a reassembly of ecological communities that could have even more profound impacts on the future of biodiversity, ecosystem functioning, and nature's benefits to people. In particular, changes to species interactions in novel communities could mediate effects of climate warming on biodiversity, and on key ecosystem functions like carbon cycling and pollination, which could in turn feedback to climate warming. RangeX seeks to better understand the processes and impacts of plants that are expanding their ranges following climate warming, and to use this knowledge to inform the development of policy regarding range-expanding plant species. The project asks the following overarching questions:

1. What processes explain variation in species' range expansion with climate warming?
2. How do range-expanding species impact biodiversity and key ecosystem functions, and how will these impacts feed back to the changing climate?
3. Can we predict which species are most/least able to expand their ranges with climate warming, and their impact on ecosystem processes?
4. Can better ecological understanding of range expansions be synthesised with stakeholder knowledge to improve policy and management of range expansions and biodiversity?

We are recruiting **one doctoral** and **four postdoctoral candidates** to join the team **from April 2021**. Candidates are expected to interact closely with partners across the project and to engage with relevant stakeholders to co-develop synthesis and policy-relevant information about plant range expansions. We therefore seek candidates with a background in ecology (or related subjects) who are enthusiastic and highly motivated, with excellent communication skills in written and spoken English, strong quantitative skills, and experience or a keen interest in working within an interdisciplinary team. See individual positions for specific skills and competence requirements. Postdoctoral candidates must also have proven proficiency in writing and publishing peer-reviewed scientific papers.

Interested candidates may apply for multiple positions but must do so via the submission systems of the relevant institutions. Please note that submission deadlines for each position

differ slightly, with the earliest being 4th January 2021. Please also check carefully the submission documents required for each position:

- [Post-doc position on the role of soil biota in range shifts of mountain plant species under climate change](#) [Swedish University of Agricultural Sciences (SLU), Sweden. Contact: [Paul Kardol](mailto:paul.kardol@slu.se) (paul.kardol@slu.se)]
- [Doctoral researcher on impacts of range-expanding species on plant biodiversity](#) [Martin Luther University Halle-Wittenberg, Germany. Contact: [Sylvia Haider](mailto:sylvia.haider@botanik.uni-halle.de) (sylvia.haider@botanik.uni-halle.de)]
- [Post-doc position on the processes controlling the establishment of range-expanding species and their impacts on biodiversity and ecosystems](#) [University of Bergen, Norway. Contact: [Vigdis Vandvik](mailto:Vigdis.Vandvik@uib.no) (Vigdis.Vandvik@uib.no)]
- Post-doctoral Research Fellow position on elevational change in woody species and management efficacy, in the Maloti-Drakensberg [Afromontane Research Unit (ARU), University of the Free State, South Africa. Applications to: [Ralph Clark](mailto:ClarkVR@ufs.ac.za) (ClarkVR@ufs.ac.za)]
- [Post-doc position on the role of range-expanding plant species in plant-pollinator interactions tracked by using novel computer vision and deep learning tools](#) [Aarhus University (AU), Denmark. Contact: [Toke Høye](mailto:tth@bios.au.dk) (tth@bios.au.dk)]

Further information: please contact the relevant partners using the above links for information about a specific position; for general questions related to RangeX, please visit our website (<https://www.mountaininvasions.org/rangex>) or contact the project coordinator [Jake Alexander](mailto:jake.alexander@usys.ethz.ch) (jake.alexander@usys.ethz.ch).

