Postdoc U.Zurich Modelling species response to environmental change

Postdoctoral position in modelling species' response to environmental change

University of Zurich, Switzerland
2-year SNSF-funded position starting January 2018

Deadline for application: 15 October 2017

We seek a strong candidate to model the demographic and evolutionary responses (eco-evo responses) of (plant) species to environmental changes at large geographical scales. The candidate will investigate the ecological and evolutionary conditions leading to species persistence when facing rapid climate/environmental changes. The project will be a mix of evolutionary modelling with the software Nemo (http://nemo2.sourceforge.net/), ecological niche modelling, and population dynamics modelling. Strong and documented expertise in one of those fields is required. Preference will go to candidates that have developed strong computational skills and/or a deep understanding of eco-evolutionary processes. With this project, we seek to improve on our current individual-based modelling approach (http://rdcu.be/rOCD) by developing new approaches, for e.g.
population-based or multi-species approaches, depending on the candidate's background and motivations. Partners and potential collaborators on this project include Prof Arpat Ozgul (population ecology, UZH), Prof Nick Zimmermann (niche & climate modelling, ETH-WSL), and Drs. Felix Gugerli and Christian Rellstab (tree genetics/genomics, ETH-WSL).

The position is available in Prof Frederic Guillaume's lab at the Department of Evolutionary Biology and Environmental Studies, University of Zurich (http://www.ieu.uzh.ch/en/research/evolbiol/ecoevo.html). We offer a competitive working environment in the beautiful international city of Zurich, one hour from the closest mountains. The work-related activities are conducted in English.

Please send your application package as a *single* PDF to frederic.guillaume@ieu.uzh.ch with your CV, publication list, a one-page summary of research interests explaining why you want to join our group, and the contact information of min. two references. Application review will begin October 15th 2017, and continue until the position is filled. Direct inquiries are welcome.

Frédéric Guillaume (frederic.guillaume@ieu.uzh.ch)

refs:
Cotto O., Wessely J., Georges D., Klonner G., Schmid M., Dullinger S., Thuiller W., Guillaume F. (2017) A dynamic eco-evolutionary model predicts slow response of alpine plants to climate warming. Nature Communications, 8, 15399. DOI: 10.1038/ncomms15399

Schmid M., Guillaume F. (2017) The role of phenotypic plasticity on population differentiation. Heredity DOI: 10.1038/hdy.2017.36

Guillaume F., Rougemont J. (2006) Nemo: an evolutionary and population genetics programming framework. Bioinformatics 22 (20), 2556-2557