

PhD position (UNIVERSITÄT RENNES)

Bewerbungsfrist: 03.06.2018

PhD project on "Microevolution on macroevolution islands: Does phylogenetic isolation of trees from neighbors trigger rapid phenotypic responses in phytophages?".

The project is one out of 5 for in our research unit competing for 3 fundings.

The PROJECT: Evolution may operate very rapidly, in particular on oceanic islands where colonizers are released from natural enemies and competitors and face genetic drift. However, islands are only a small part of the earth's surface. Individual plants, in particular mature trees, are distinct host patches for phytophages. Plants of different species often grow in close spatial proximity but may nevertheless belong to lineages separated by many million years of macroevolutionary history. Just like oceanic islands, such "macroevolutionary island trees" might hence be characterized by fast trait evolution of their insect phytophages. Macroevolutionary islandness of host trees might trigger macroevolutionary responses in phytophages. In short, in this we try to understand whether a small event in tree macroevolution – a tree converges and coexists with distantly related neighbors – changes the phenotypes of its insect colonizers, including their capacity to respond to climate change.

The host lab here is the UNITE MIXTE DE RECHERCHE (UMR) ECOBIO - ECOSYSTEMES, BIODIVERSITE, EVOLUTION, co-funded by University of Rennes 1 and Centre National de la Recherche Scientifique, with particular expertise in mechanisms of speciation, life history evolution, and adaptation, expertise at the interface between macroevolution and macroecology, expertise in ecophysiology, landscape ecology and behavioral ecology, environmental genomics (very strong), community assembly and plant/herbivore interactions. It is a large institution with several dozen CNRS-researchers, docents and professors, plus (some) technical staff. See <http://ecobio.univ-rennes1.fr/> . It was ranked A in the national evaluation of research institutions. Several further research institutions in ecology and evolutionary biology exist at Rennes.

RENNES has approximately 200 000 inhabitants and is the capitol of the Bretagne region with exceptional coastal and mainland landscapes, and a french-celtic heritage (http://www.bretagne.fr/internet/jcms/TF071112_5061/tourisme). It is situated some 1.5 hours by train from Paris. English is spoken everywhere in Academia, but not necessarily outside, and French should be learned. Like in any French city, child care is excellent (almost for free, no waiting list, nearby). Several bilingual French-English schools are available at all levels of education, as well as one French-German grammar school.

Formal deadline is June/3 at <https://theses.u-bretagne-ouest.fr/egaal/theses-2018>.

If interested, please directly contact andreas.prinzing@univ-rennes1.fr at least a week before deadline.