# Amphibian pathogens and their impact on biodiversity

Duration: 18 months, depending on funding up to 24 months

Type: PostDoc

Supervisor: Dirk S. Schmeller, Adeline Loyau

### **General Framework:**

Pathogens are everywhere. However, still little is known on the impact of infectious diseases on wildlife, on communities, and on ecosystems. We know also little on impacts of climate change, land use changes, invasive species and ecosystems on wildlife diseases. The currently limited knowledge on emerging diseases does neither allow management and conservation of wildlife, nor does it allow forecasts of possible outbreaks, threatened habitats and species. The predominant goal of the PostDoc project is to improve the current knowledge on several amphibian pathogens (*Bd*, Amphibiocystidium, Ranavirus) and determine the impact of human-mediated global change on the spread and virulence of these diseases. The research will feed into management recommendations and improvements for the single most important reserve site network Natura 2000 by close collaboration with local, regional and international conservation authorities. We follow two main objectives; (1) development of a spatio-temporal disease surveillance framework, including training and public perception of diseases, and (2) contribution to the understanding of environmental impact on and from the pathogen on the community and ecosystem. The candidate will be part of the Biodiversa-project RACE (Risk Assessment of Chytridiomycosis to European amphibians), an international project aiming to develop a threat abatement plan for European amphibians (www.bd-maps.eu).

### **Profile:**

- 1. Basic knowledge of ArcView/ArcGIS, WinBUGs
- 2. Applicant must be fluent in English, written and spoken
- 3. Knowledge or willingness to learn some French
- 4. Good knowledge in Conservation biology, Ecology and Population dynamics,
- 5. Good experience of genetic methods (especially q-PCR)
- 6. The successful candidate is required to hold a PhD in biology or related fields and should have at least two years of postdoctoral experience
- 7. The candidate must be in good physical condition and able to conduct field work under difficult mountain conditions

## Place of work:

The Station d'Ecologie Experimentale in Moulis (SEEM) is a recently founded research and service unit of the Centre Nationale de la Recherche Scientifique (CNRS). SEEM, where the candidate will be working, is an interdisciplinary research group that combines the skills of population ecologists, behavioural ecologists, evolutionary biologists, and geneticists to study animal dispersal and any aspect of it. SEEM has a strong international flavour due its international staff and cooperation with institutes in the US and several European countries. SEEM is located in the foothills of the Pyrenean region Ariége (France). The station is currently undergoing extensive renovation and hosts well equipped laboratories, comprising physiologic, genetic, and ecologic lab facilities as well as experimental sites (Aviaries, a green house, metapopulation cages among others). See our webpage at http://www.ecoex-moulis.cnrs.fr for more details. The working group the candidate will join comprises another PostDoc, 3 PhD students, several master students, and a technician.

## Application:

Applicants should submit a letter of application describing their experience and interests in the position, curriculum vitae, list of publications, and copies of certificates. Applicants may be called for an interview. We accept applications in pdf format sent to the address below. We will accept applications until the 30<sup>th</sup> of April 2011. Feel free to contact us beforehand to answer any question you might have.

## **Contact details:**

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