

## Postdoctoral position

### Modelling biodiversity-ecosystem services relationship under climate change University of Montpellier (France)

#### Description:

The development of dynamical "biodiversity & ecosystem services" models is central to address environmental challenges and articulate effective natural resource management and policy solutions. The aim of this project is to model spatial and temporal relationships between biodiversity and ecosystem services in socio-ecological systems and to deepen the understanding of the functional role of biodiversity for ecosystem services and health in one or more natural resource issues in the tropical Andes (e.g., crop-disease system dynamics, sustainable use of high altitude wetlands, palm pollination- seed production trade-off) in a context of changing climate and land use. The portfolio of work can adapt to the successful candidate's interests and skills but could involve cross-system network analysis, biodiversity-function modeling, socio-ecological modeling and/or agent-based modeling.

Based in Montpellier, in the Center of Functional Ecology and Evolution (the largest French research center in Ecology and Evolutionary Ecology), the candidate will be part of the International Joint Laboratory BIO\_INCA, sponsored by IRD, Uniandes (Colombia) and PUCE (Ecuador), which develops knowledge, technologies, and methods in support of science-based solutions for socio-economically and ecologically sound uses of natural resources in the tropical Andes. The research team at CEFE and University of Montpellier offers an outstanding environment for publications and communication of research to academic and policy audiences.

#### Profile

We particularly seek applicants with skill in quantitative modeling of, for example, agro-ecological systems, bio-economic relationships, or land cover changes. Candidates should have (1) a PhD, (2) facility in assembling, manipulating, and analyzing datasets (3) excellent communication skills in English (skills in Spanish would also be appreciated), (5) the ability and desire to collaborate with fellows from other research fields, in both France and South America.

**Starting date:** September-December 2018

**Duration:** 2 years

**Monthly salary:** 2150-2500 euros depending on experience

**Send your CV and 2 recommendation letters to: [olivier.dangles@ird.fr](mailto:olivier.dangles@ird.fr)**