18 months Postdoctoral Research Position

CASEST - Anthropogenic constraints to Tropical Savanna Social-ecological systems: a spatially explicit landscape and land-use dynamics modelling approach.

Contact persons:
Renaud Pierre-Cyril (UMR 6554 CNRS - LETG-Angers): pierre-cyril.renaud@univ-angers.fr
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Topic:

The CASEST project (French acronym for "*Anthropogenic constraints to Tropical Savanna Social-ecological systems*") aims to investigate the interfaces between nature and society particularly between wildlife and agricultural practices around protected areas (PAs). Biodiversity conservation has become a prominent human-ecological community issue at regional, state or worldwide scales. While countries have implemented many rules and laws, biodiversity erosion has accelerated in recent decades. Agricultural practices and land use changes dynamics have been pointed out by worldwide experts as major causes of biodiversity erosion (cf. IPBES 2018).

The CASEST project will gather regional and international research units studying interplays between nature and human activities involving production landscapes around protected areas (PAs). Although PAs are supposed to protect natural habitats within their boundaries, peripheral zones around PAs became so anthropogenic that they seem to fail to maintain their buffer roles. Savannas are one of the most threatened areas in the tropics because of the high dynamics of land use and agricultural expansion in the last decades. In this context, a worldwide, integrative and sustainable network between all stakeholders of the savanna Social-Ecological System (SES) aims to include researchers with diverse and complementary skills at the interplay between social, ecological, agricultural and economic sciences. This project aims to build a conceptual framework for the management of interfaces between protected areas and production landscapes in savannas, using social-ecological systems (SES) perspectives. This project will improve the worldwide knowledge of regional research for biodiversity conservation and forging international research partnerships through a valuable and active research network.

The project is hosted by three LTSER (Long Term Social-Ecological Research) labeled site:

- PELD Planalto da Serra da Bodoquena (Mato-Grosso do Sul, Brazil) (http://peldbodoquena.wixsite.com/home)
- Zone Atelier CNRS Hwange (Zimbabwe) (http://www.za-hwange.cnrs.fr/?page_id=130&lang=fr)
- Garden Route (South Africa) (http://sru.mandela.ac.za/)

Field work will be done in those three sites.

Job details:
The post is available from 1st July 2018
Contract duration is 18 months
The applicant will be based in University of Angers, but is expected to spend a very significant amount of time in Brazil, South Africa and Zimbabwe.

Information enquiries should be sent to:
Renaud Pierre-Cyril (pierre-cyril.renaud@univ-angers.fr)
UMR 6554 CNRS - LETG-Angers
Université d'Angers - UFR Sciences
Campus de Belle-Beille
2 Bd Lavoisier
F-49045 Angers France

Salary:
Average monthly net salary: 2100 € (net salary means that all taxes, including insurance and health care, are already payed). Field expenses will be covered by the project.

Job purpose:

Landscape and land use dynamic: remote sensing analysis and field data collection to produce a diachronic analysis of land use and landscape structure changes within the three sites.
Data analysis to investigate and model the drivers of landscape and land use dynamics
Supervision of Master students
Writing of scientific papers (several per year are expected)
To integrate the landscape and land use model into the global Social-Ecological framework.

Main responsibilities:

Collect, analyse data and write articles related to landscape and land use dynamics

Build spatially explicit models to have a better understanding of the impacts of land use changes dynamics in the landscape structure.

To integrate and help animating an international consortium (preparing workshops …).

Coordinate and conduct fieldwork.

Present work at meeting and conferences when possible.

Knowledge, skills and experience needed for this job:

Qualifications/Training
Mandatory: A PhD either in conservation science, applied ecology, ecology, landscape ecology, geography, remote sensing or spatially explicit models.

Essential: Publication in peer reviewed journals in relation with the topic of the Post Doc.

Skills in computer programs and software's (R, GIS, spatial models, etc.)

Experience
Essential: Remote sensing, landscape and land use dynamics modelling and fieldwork experience

Desirable: Good knowledge in the dynamics of agricultural landscape around protected areas in tropical areas.

Fluent in English, French and Portuguese knowledge will add value but are not mandatory.

Knowledge, skills and competencies
Essential: Spatial analyses (SIG) and statistical analyses (R), landscape modelling

Mandatory: Driving license

Desirable: Some experience using spatial statistics

Personal attributes
Essential: Ability to work alone as well as part of an international team: facilities to work in multicultural group. To be open to work in interdisciplinary approaches. A close link with a second post-doc working on stakeholder and mental maps analysis is crucial

Essential: Willing to leave overseas in tropical areas for long periods.

Accommodation
Accommodation is easy to find in Angers. Accommodation in the field will be facilitated by LTSER holders.

Application procedure
All applicants should send a detailed CV and a letter of motivation to Pierre-Cyril Renaud (pierre-cyril.renaud@univ-angers.fr) and Marie-Caroline Schbath (marie-caroline.schbath@univ-angers.fr) before the 10th of June 2018. We will contact you to plan an interview if you have been shortlisted.

There is no closing date, but we will select the first candidate fulfilling the job attributes and would like to start the Post Doc contract by the 1st of July 2018.