PhD position in the CANOPI project – Seasonality in functioning work package

Employer: Liege University  
Location: Gembloux, Belgium  
Closing date: 01/09/2022  

Given the rapid changes in climate, immense shifts in forest composition, functioning and carbon balance are expected in tropical forests in central Africa. However, no studies have confirmed this worrisome trend using ground-based data, keeping central Africa a particularly understudied region despite its overwhelming size. Whether tropical forests in central Africa will be sensitive to drier conditions – because they are already limited by water availability – or resistant – because they are adapted to seasonal drought – is the ambitious challenge CANOPI aims to tackle (https://www.canopi.uliege.be/).

Your position
The CANOPI project is transdisciplinary and divided in five complementary work packages, each supported by one doctoral work. This position is relative to the third work package addressing the following question. “How does seasonal drought affect the functioning of trees and forests in central Africa?”

Using existing data from ongoing phenology surveys (tree crown observations) and in agreement/collaboration with the data owners, the selected candidate will determine the diversity of phenological strategies among tropical tree species in central Africa and identify the environmental drivers and long-term changes in phenology. The latter analyses will be based on the longer phenology records available. She/he will also develop innovative methodologies to monitor leaf loss in the canopy (through the implementation of phenological cameras) and relate canopy phenology to stem growth (using electronic dendrometers) in two key sites, Lope NP in Gabon and Luki Man and Biosphere Reserve in the Democratic Republic of Congo.

Your profile
We are looking for a highly motivated candidate with a self-organized and solution-oriented work attitude. Applicants should hold a MSc degree in bio-engineering, geography, biology, environmental science, computational biology or related fields. The candidate should have strong affinities with data management and analysis, as well as innovative near-surface remote sensing technologies but should also be willing to conduct fieldwork under harsh logistic and climatic conditions. The candidate should be able to independently conduct time-series and spatial analyses (in R or other programming language). The candidate should also be able to speak properly in French for the field and to speak and write properly in English for interactions with colleagues and for scientific communication.

We offer you
A fully-funded PhD position for four years (as of 01/10/2022) in a dynamic research group including professors and other colleagues from Liège and Ghent Universities in Belgium, from Stirling University in UK, and from CENAREST in Gabon and from INERA in the Democratic Republic of Congo. You will join a supportive, collaborative and cooperative working environment. You will have the opportunity to be integrated in established (inter)national research networks. Salary and social benefits are provided according to the rules of Liege University.

How to apply
Prepare a 1-page CV and a 1-page motivation letter and send this to adeline.fayolle@uliege.be & k.a.abernethy@stir.ac.uk