

Two post-doctoral researchers in belowground Amazonian forest research

Full-time, three year position (Nov.2014 – Oct.2017)

Net Salary US\$1,950 per month (US\$ 23,395 per year) for scientists with PhD degree obtained after 2004; and US\$ 2,668 per month (US\$ 32,014 per year) for scientists with PhD degree obtained before 2004 (no taxes applicable to salaries).

The Amazonas State Research Foundation (FAPEAM) and Brazil's National Institute for Amazonia Research (INPA) in Manaus, Brazil wish to recruit two post-doctoral researchers in belowground forest science to participate in the AmazonFACE project. The extent to which increasing atmospheric concentrations will increase the productivity of Amazon forest and reduce its vulnerability to the potential negative impacts of climate change, is one of the greatest unanswered questions in ecosystem and global change science. The aim of this project is to determine how free air CO₂ enrichment (FACE) affects Amazon forest function. It will be the first FACE experiment ever carried out in mature tropical forest. The appointee will join a team of five post-docs that will initiate and deliver the experiment and its findings.

The post will include extended periods of work at the ZF2 fieldsite, ~70km north of Manaus, and will involve monitoring the responses of key below-ground processes to the FACE treatment. The successful applicant will help with the establishment of the experimental plots, monitor root growth rates, soil water dynamics, aqueous nutrient fluxes, soil respiration, and litter decomposition and nutrient mineralisation rates, as well as collecting and analysing litter, root and soil samples for carbon and nutrient concentrations. The work will be carried out in close association with the other post docs working on aboveground and modelling processes, also employed on this project.

The applicants shall have considerable expertise in terrestrial ecology, especially the interactions of carbon, water and nutrient cycles, ideally with past experience of working in tropical forests. They shall be able to work effectively both in remote field locations and in the laboratory, and need to be comfortable working both independently and as part of a large networked and international consortium. The applicant will join a team, and will need to work closely with other researchers, and also be able to visit collaborating laboratories as required, within Brazil and internationally. Key attributes beyond expertise in the specific scientific area include the abilities to identify new scientific challenges, work fairly, collaboratively and sensitively within a team, to be able to supervise a small field team as required, to analyse data and write scientific publications, and to both understand and develop bridges between the experimental data and their use in ecosystem models.

The position will also involve presenting information on research progress and outcomes, and communicating the science orally, in writing and electronically to the Amazon-FACE team and to external audiences, at meetings, workshops or conferences. The ability to communicate clearly in Portuguese and English, or a demonstrated ability and willingness to learn either language, is essential. The applicants should also be able to lead and co-author high-quality scientific publications within relatively short time periods.

The posts offer substantial potential as part of this project but also through links with the lead scientists with related on-going projects in Amazonia. Successful applicants will join a world class group of scientists at INPA and other Brazilian and international scientific institutions, r The work will be carried out under the supervision of Carlos (Beto) Quesada (INPA, Brazil), but closed linked to the Amazon-FACE Scientific Steering Committee, which includes Iain Hartley (University of Exeter, UK), David Lapola (UNESP, Brazil), Rich Norby (ORNL, USA), Jean Ometto (INPE, Brazil), Tomas Domingues (USP, Brazil), Patrick Meir (University of Edinburgh) and other international leading scientists in the field.

Applicants should apply by sending an email to contato.labterra@gmail.com before **October 3rd, 23:59 CET**, with subject line reading: "Post-doc application: AmazonFACE-

belowground". This email should contain: a **1-page letter of interest** (indicating research interests related to the position), and a **biographical sketch (maximum of 3 pages)**, including education and professional career, list of 10 main scientific publications, and indication of the quantity of scientific papers, participation in research projects, conference presentations and students supervised if applicable). Selected applicants will be invited for an interview with project coordinators.

For further information please contact: contato.labterra@gmail.com.