

Post-doctoral Research Opportunity: Integrated land use and ecosystem modeling in the Amazon at the landscape scale, Stanford University, California

We seek a post-doctoral associate for an 18-month appointment to analyze and model land use change impacts on biodiversity, biomass, soil nutrients and socioeconomic variables in landscapes inhabited by indigenous peoples. The work would use existing field data from the Amazon region. The model should represent in a spatially explicit way the impact of land use on forest cover, the impact of forest-cover change on biodiversity and carbon storage in terrestrial ecosystems, and feedbacks from changes in ecosystem services to patterns of land use. The model should represent fine-grained, landscape scale processes.

The researcher should be able to combine multiple data sources in analyses and models. This position requires very strong skills in multivariate statistical analyses, simulation modeling of ecosystem processes, and spatial analysis (GIS/remote sensing). The successful applicant will be part of a team of researchers that is using a suite of remotely sensed and field data to evaluate coupled human-natural systems.

The interdisciplinary nature of this research will provide opportunities for the post-doc to interact with project collaborators (Eric Lambin and Jose Fragoso, Stanford University; Jane Read, Syracuse University; L. Flamarion de Oliveira, National Museum of Brazil, James Gibbs; ESF-State University of New York), as well as with other postdoctoral researchers, and during one field site visit, with local leaders and field technicians. Responsibilities include model development and analysis, publishing in peer-reviewed journals and possibly one trip to the northeastern Amazon.

The successful candidate will be based at the Stanford University, in Palo Alto, California, and will be jointly supervised by Drs. Eric Lambin and Jose Fragoso. Applicants must have a Ph.D. from an accredited university, and must demonstrate expertise in integrated land use change and ecosystem modeling. A publishing record in peer-reviewed journals is required.

This is an 18-month appointment, with a competitive salary and benefit package and the possibility of a six-month extension. Applicants should send a letter of interest, curriculum vitae and the names and full contact information (email and phone numbers) of three potential references to Jose Manuel Fragoso (fragoso@stanford.edu) as a PDF file attached to an email no later than July 10th, 2011.