Job announcements

Postdoc position

University Toulouse 3, France

A 2-yr postdoc position is available in the Evolution and Biological Diversity group (http://www.edb.ups-tlse.fr). The postdoc will work on 'Predicting future patterns of freshwater fish extinctions' within the project FISHLOSS.

The aim of the project FISHLOSS (ANR "Sixth Extinction") is twofold. First, to draw an ecological and evolutionary framework for both natural and human driven freshwater fish extinctions at several spatial scales (from the site to the globe) by using a multidisciplinary approach combining ecology, biogeography, phylogenetics, paleontology, and biometry. Second, to use this framework as an explanatory and predictive tool to identify species that are extinction-prone and to provide expected extinction rates under different scenarios of future climate change. As available evidence suggests that area of occupancy is a good predictor of background extinction rate, the FISHLOSS consortium intends to establish a general relationship between background extinction rate and area of occupancy (EAR, extinction-area relationship). EAR could then be used to predict how much the extinction probability of a population will increase if its area of occupancy decreases.

The successful applicant will apply a range of species distribution models, General Circulation Models (GCM) and greenhouse Gas Emissions Scenarios (GES) to a set of stream fish species occurrences. Then he will produce fish species distribution forecasts and will combine these forecasts (i.e., ensemble forecasting) with previously defined extinction-area relationships. The final outputs of this work will be to identify/cartography the combination basin-species having the highest predicted extinction probability (France), and the basins having the highest predicted extinction probability of endemic species (Africa).

The applicant should hold a PhD in quantitative ecology or biostatistics, and knowledge on species distribution modeling and working with large databases. Please send a CV (no more than 5 pages) outlining research experience and interests, publications, a list of skills and other relevant professional information to gael.grenouillet@cict.fr. Closing date for application: 1st April 2011.

Assistant professorship

University of Hawai'i at Mânoa

Assistant Professor in Marine Geography at the Department of Geography, College of Social Sciences (http://www.geography.hawaii.edu). 9-month full-time appointment, possibility of tenure track, to begin August 1, 2011, subject to position clearance and availability of funds.

Duties: Teach undergraduate and graduate classes; advise students; conduct an active research program and publish results; seek extramural funding; collaborate on interdisciplinary research and field courses in marine geography; engage in departmental governance and service activities.

Minimum Qualifications: Earned Ph.D. in Geography or a closely related field from an accredited college, university or foreign equivalent. Demonstrated ability as a teacher; record of scholarly achievement or promise of future achievement in chosen area of research. Desirable Qualifications: Teaching and research interests in spatial analysis of marine environmental systems, anthropogenic impacts, and conservation of marine species and habitats; ability to teach statistics and research methods. Secondary interests in applying GIS to integrate human and environmental systems and analysis.

Applications will be accepted online at http://surveys.socialsciences.hawaii.edu/ework/. Application shall include a current curriculum vitae, cover letter stating your teaching and research interests and indicate how you satisfy the minimum and desirable qualifications and expected fit within the department, the College of Social Sciences and University of Hawai'i at Mânoa; contact information for three references; evidence of teaching effectiveness; and three representative publications (pdfs). Any other correspondence about the position should be addressed to Professor Alison Rieser, Chair of Search Committee, Department of Geography, 440 Saunders Hall, Honolulu, HI 96822; e-mail: rieser@hawaii.edu. Review of applications will begin on April 1, 2011 and will continue until the position is filled. Applications received by that date will be given priority.

Postdoctoral position

University of Zürich

A postdoctoral position is available in the group of Owen Petchey, beginning in the spring / early summer of 2011. Research in Petchey's group addresses the causes and consequences of extinctions, taking an integrative approach across multiple levels of ecological organisation: individual, population, community, and ecosystem. Extinctions occur in changing environments, so research addresses the ecological consequences of environmental change, such as changes in individual behaviour and interspecific interactions caused by temperature variation. Other projects include measurement of functional components of biodiversity and exploration of the determinants of food web structure. Empirical research in the group mainly involves experiments with laboratory-based microbial communities, but also includes analyses of existing large-scale datasets. These analyses often include the development of new theoretical models of ecological communities. The successful applicant will combine his or her own interests with these research themes and methods.

The postdoc will be held in the Institute of Evolutionary Biology and Environmental Studies at the University of Zürich, Switzerland (http://www.ieu.uzh.ch). Funding is available for at least two years. Applicants must have a PhD in Ecology or a closely related subject. Informal enquiries can be made to o.petchey@ieu.uzh.ch. Applications should be emailed, as a single PDF document to Sabine Marty (sabine.marty@ieu.uzh.ch). Applications should include a CV, including the names and contact details of three academic referees, a one-page research proposal, and a brief statement of plans for career progression. Review of applications will be from 1st April and continue until the position is filled.

Postdoctoral positions

Three postdoctoral research positions are available with the PalEON project (A PaleoEcological Observatory Network to Assess Terrestrial Ecosystem Models), an interdisciplinary research group of paleoecologists, ecological statisticians, and ecosystems modelers working together to study how climate variations shape forest dynamics across a range of timescales (http://www.paleonproject.org). All postdoctoral positions have a desired start date of May, 2011.

Specific PalEON goals include developing a coherent inferential framework with rigorous estimates of uncertainty for paleoecological data, applying these techniques to reconstruct variations in forested ecosystems for the last 2000 years from the Great Lakes to New England, and then assimilating these datasets into a suite of regional-scale ecosystem models to infer presettlement biogeochemical cycles. PalEON has recently received funding from NSF-Macrosystems to begin a two-year effort towards these goals, with an emphasis on initial development of methods and datasets, community-building, and interdisciplinary training in paleoecology, statistical ecology, and ecosystem modeling.

Position 1: Paleoecological and Paleoclimatic Data Synthesis and Analysis. The primary responsibilities of this position are to coordinate the assembly of the witness tree, fossil pollen, charcoal, and paleohydrological datasets and analyze these datasets for intra- to interregional patterns of variance and synchrony. The postdoc will work closely with the other postdocs and the rest of the PalEON team towards the objective of fitting a full space-time statistical model to the paleoecological data and assimilating these reconstructions into the ecosystem model experiments.

Minimum qualifications are a doctoral degree in a relevant ecological or environmental science. The ideal candidate would have a strong familiarity with Quaternary paleoecological and paleoclimatic data, skills in paleoecoinformatics, knowledge of scripting languages such as Matlab and R, and experience with multivariate statistical methods. Experience with Bayesian hierarchical models, spatial models, and/or ecosystem models is also desirable.

This position will be based at the Department of Geography at the University of Wisconsin and will be jointly supervised by Drs. Jack Williams (University of Wisconsin) and Steve Jackson

One of the benefits open to IBS members is the opportunity to have job openings posted on the biogeography.org website. If you have a position you would like to have advertised, please contact Karen Faller (faller@wisc.edu) or Michael Dawson (mdawson@ucmerced.edu) for details.

(University of Wyoming). This position is up to two years with a preferred start in early May 2011. Interested applicants are encouraged to email a CV and cover letter with the names and contact information of three references to Alice Halfen (ahalfen@wisc.edu) with the subject line: PalEON Postdoctoral Application. For more information contact Dr. Jack Williams (jww@geography.wisc.edu) or Dr. Steve Jackson (jackson@uwyo.edu). Evaluation of applications will begin April 4 and continue until the position is filled.

Position 2: Ecological Statistics. This researcher will lead the development of statistical models, based on spatial statistics, state space, and data assimilation methods for the PalEON initiative, interacting with statisticians, paleoecologists, paleoclimatologists, and ecosystem modelers. Specific modeling challenges may include spatio-temporal modeling of paleoecological data, state-space modeling informed by ecological models, modeling uncertainty in radiocarbon dating, and spatial modeling of vegetation based on colonial settlement-era historical records. Strong applicants will possess a background in Bayesian statistical modeling, especially spatial modeling, state space modeling, or data assimilation. Applicants must be interested in working at the interface of statistics and ecology.

The postdoctoral researcher will be based at the University of Notre Dame's new Department of Applied and Comutational Mathematics and Statistics and is supported in part by the Notre Dame Environmental Change Initiative (ND-ECI). This position will be supervised by Dr. Jason McLachlan at Notre Dame, with extensive input from Dr. Chris Paciorek at UC Berkeley, and interaction with other PALEON team members. The position is available for a two-year period, subject to annual performance review. We will consider applications on a rolling deadline. Funding is available for an immediate start, but we will consider start dates as late as summer 2011. Please email your CV and a cover letter with the names and contact information of three references to Jason McLachlan (jmclachl@nd.edu).

Position 3: Ecosystem Modeling and Model-Data Synthesis. The primary responsibility of this position is to coordinate the model-data inter-comparison activities and shared data among the modeling teams, to analyze model dynamics to make inferences about presettlement biogeochemical cycles, and to assess model-data fidelity across multiple models. The secondary responsibility is to help complete the Ecosystem Demography model runs for the model-data inter-comparison. Research questions focus on validating ecosystem models at centennial timescales, making inference about pre-settlement ecosystem dynamics and biogeochemical cycles, and exploring the sensitivity of models to historical vegetation. Position will be supervised by Dr. Michael Dietze at the University of Illinois.

Minimum qualifications are a doctoral degree in a relevant ecological or environmental science. The ideal candidate would have experience with more than one of the following areas: ecosystem models, paleoecological data, Bayesian statistics, R, linux, computer programming, data assimilation, and climate downscaling techniques. Salary is commensurate with experience and qualifications with to two years of funding available. Evaluation of applications is rolling with a preferred start May 2011. Interested applicants are encouraged to send a CV and cover letter with the names and contact information of three references to Melinda LaBorg (laborg@igb.uiuc.edu). For more information contact Dr. Michael Dietze (mdietze@illinois.edu).

If you want to announce a meeting, event or job offer that could be of interest for (some) biogeographers, or you want to make a call for manuscripts or talks, please contact us at ibs@mncn.csic.es and frontiersofbiogeography@gmail.com.

