Title: Postdoctoral Research Scientist – Statistical analysis and modeling of wildlife, pastoral livestock and vegetation dynamics in the Serengeti-Mara Ecosystem

Location: Biostatistics Unit, Institute of Crop Science, University of Hohenheim, Stuttgart, Germany (https://www.uni-hohenheim.de/institution/fg-bioinformatik-15)

Position Description: We are seeking a post-doctoral statistician or scientist to develop new or apply existing statistical models to analyse spatio-temporal trends in climatic components, vegetation, wildlife (large mammals) and pastoral livestock and model wildlife population dynamics in relation to climate, land use change and human population growth in the Serengeti-Mara ecosystem of Tanzania and Kenya. The primary focus of the position will be on spatio-temporal modeling of existing time series data on rainfall, temperature, Normalized Difference Vegetation Index (NDVI), wildlife and livestock population abundance data derived from aerial surveys. In addition a population dynamics model incorporating the effects of rainfall, land use change and human population growth will be developed for selected wildlife species. The successful candidate will work closely with statisticians from the University of Hohenheim and will have the opportunity to collaborate with a number of other scientists working on the EU-funded Horizon 2020 project titled: Linking biodiversity, ecosystem functions and services in the Serengeti-Mara Region, East Africa: Drivers of change, causalities and sustainable management strategies (abbreviated as AfricanBioServices). For further details on the project see: http://www.ntnu.edu/biology/african-bio-services, especially Work Package 3.

The statistical methods for modeling spatio-temporal trends will include but are not limited to multivariate semiparametric regression models, generalized additive models for location, scale and shape, mixed models, spectral decomposition of time series and other time series procedures. Population dynamics modeling will require techniques such as Markov Chain Monte Carlo Methods. The team of collaborators at the University of Hohenheim will include: Dr. Joseph O. Ogutu and Professor Hans-Peter Piepho. The postdoctoral statistician or scientist will be expected to participate in relevant national and international workshops, present seminars at various venues, and publish their research findings in peer-reviewed scientific journals. Some travel, including to the Serengeti-Mara ecosystem is anticipated. No field work will be required.

Qualifications: Applicants must hold a Ph.D. in statistics, biometrics, applied mathematics, quantitative ecology, animal population dynamics, ecoinformatics, natural resource management, or related fields. Excellent statistical and programming skills are essential. Experience with programs such as R or SAS is desirable. Outstanding applicants will also have excellent reasoning and analytical skills, some familiarity with ecological systems, excellent communication skills, and the ability to work well independently as well as in
international and multi-cultural teams. The selected candidate must be able to meet eligibility requirements for work in Germany at the time appointment is scheduled to begin and continue working legally for the full term of the appointment.

**Compensation:** This position is a full-time (39 hours per week), fixed-term appointment for up to 36 months (with possible extension for a further 12 months). Annual salary will be at level TVL-13 within the German Civil Service Scale and will depend on experience. Benefits include health insurance for self and family and a paid leave of 30 days per year. A probation period of 6 months is anticipated.

**Enquiries:** Contact Dr. Joseph O. Ogutu at Jogutu2007@gmail.com or at +4971145923022 or Prof. Hans-Peter at Hans-Peter.Piepho@uni-hohenheim.de or at +4971145922386 for more information. Applicants should submit a cover letter, resume (or curriculum vitae), transcripts showing receipt of the doctoral degree, and three letters of professional references. All application documents should be merged into one PDF file. The application deadline is 15 July 2015. The start date for the position is 1 September 2015. The position will remain open until filled.

Applicants may submit an unofficial copy of the transcripts; however, the final candidate will be required to provide official transcripts to the University upon hire. Degrees earned from an education institution outside of Germany are required to be evaluated by a professional credentialing service provider approved by the Central Office for Foreign Education (ZAB), which can be found at http://www.anerkennung-in-deutschland.de/html/en/assessment_of_higher_education_certificates.php

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