

Job Offer Announcement	Vacancy Code 147_CRI_DVD
Job title	Post Doc in spatial modelling of present and future disease vector distributions
Job description	<p>A Post-doc position is available at the GIS and Remote Sensing Unit, Biodiversity and Molecular Ecology Department of the Research and Innovation Centre. The objective of the position is to perform spatial modelling of present and future disease vector distributions with focus on mosquitoes (esp. <i>Ae. koreicus</i>, but also <i>Culex pipiens</i>, and <i>Aedes albopictus</i>) and the fly <i>Drosophila suzukii</i> in a GIS and remote sensing context. The position is related to the project “Laboratory of Excellence for Epidemiology and Modelling. Facing the introduction and spread of Invasive Alien Species into the territory of the Autonomous Province of Trento” (LExEM) (Grandi Progetti 2012, Provincia Autonoma di Trento) and the project <i>Aedes albopictus</i> in northern Italy: molecular markers and mathematical models to predict its potential future spread and the impact of control strategies (Aedespread) (Min Salute 2012)</p>
Duties / Tasks	<ul style="list-style-type: none"> - Identification of environmental factors influencing winter survival, life cycles, and population growth of <i>Aedes</i> spp. (esp. <i>Ae. koreicus</i>) and <i>Drosophila suzuki</i>; - Autonomous processing of remote sensing time series data to obtain environmental parameters influencing winter survival, life cycles, and population growth of <i>Aedes</i> spp. (esp. <i>Ae. koreicus</i>, but also <i>Culex pipiens</i>, and <i>Aedes albopictus</i>) and <i>Drosophila suzukii</i>; - Estimation of the thresholds for these factors in collaboration with an ongoing PhD study; - Creation of potential distribution maps for current and future conditions; - Validation and quality assessment in collaboration with other LExEM work packages; - Collaboration with other LExEM modelers for the production of the most suitable mitigation scenarios; - Publication of high impact papers; participation in conferences and workshops
Keywords	GIS based data analysis, spatial ecology, distribution modelling, biodiversity, free and open source software, ecological informatics
Contract type and length, Level	Project collaboration contract, 31 months (Contratto di collaborazione coordinata e continuativa a progetto)
Languages knowledge <i>from Common European Framework of Reference for Languages (CEFR)</i>	Fluent in spoken and written English (C1). Knowledge of Italian will be considered a plus (B1)
IT knowledge	GIS software (e.g., GRASS GIS, MapInfo, ESRI), Statistical packages (e.g. R, S-Plus); Programming languages (e.g. C, Python); Linux. Preference will be given to the candidate with experience in massive data processing on HPC and time series processing

Type of title	PhD in Geoinformatics, Biogeosciences, Environmental Science, Natural Science
Required experience	At least one year of Post-doc in the field of remote sensing, GIS, and spatial modelling is required. Good knowledge of the scientific themes being proposed; good publication record on the matter (at least 2 peer reviewed articles with IF). Knowledge of time series analysis will be considered a plus
Psychosocial skills	<ul style="list-style-type: none"> - Independent and self-motivated attitude; - Strong teamwork ability; the candidate is also expected to regularly interact with other LExEM work package members; - Capable to interact in a multinational setting
Supervisor	Markus Neteler
Summary of entry requirements	<ol style="list-style-type: none"> 1. PhD in Geoinformatics, Biogeosciences, Environmental Science, Natural Science; 2. At least one year of Post-doc in the field of remote sensing, GIS, and spatial modelling; 3. 2 peer reviewed articles with IF
Hiring conditions	Please note that Mach Foundation enforces Legislative Decree No. 368/2001, including its Art. 5(4bis) stating that fixed terms-contracts involving equivalent tasks could not be legally extended or renewed beyond 36 months. The Foundation may also take reasonable steps in order to verify whether statements made in applications (and similar documents) as well as in the attached CV are true or not.

Application

To apply for the position the applicants should send a message mentioning in the subject the recruiting code (147_CRI_DVD) to the email account **curricula@fmach.it** including the following items:

1. an up-to-date CV (Please add the following phrase to your CV otherwise your application will not be considered: *I consent to the use of my personal data in accordance with the provisions of decree 196/2003*). Save your file in this way: **Surname Name_cv.doc** or **.pdf**;
2. the filled application form available online *147_CRI_DVD_Application*. Save your file in this way: **Surname Name_af.doc**;

Deadline

The deadline for the submission of the applications is **January 20, 2014**.

Short list candidates

FEM will short-list the applicants. We will notify the short-list candidates for an interview in San Michele or for a phone interview. The other candidates will be notified at the end of the recruiting procedure.

Information about CRI

The Research and Innovation Centre of the foundation (CRI), with more than 300 employees, has a mission to promote and enhance the Trentino land-based economy through studies and innovation that improve agricultural and environment products and enhance the quality and nutritional value of food products. It sustains the region's environmental resources through development and promotion of low-impact agricultural practices, study and preservation of biodiversity, and characterisation of alpine and subalpine ecosystems. The centre operates fully integrated research programs and state-of-the-art platform technologies to deliver innovative solutions and competitive products for our stakeholders and end-user communities.

Equal opportunities

The position is open to both genders, Law n. 903, 9/12/1977, art. 1. The policy and practice of the Edmund Mach Foundation require that all staff are offered equal opportunities within employment.

Data treatment

All data supplied by applicants will be used only for the purposes of determining their suitability for the position and will be held in accordance with the principles of the Personal Data Protection Code, Legislative Decree no. 196 of 30 June 2003. By sending the Cv and application, the candidate consent and authorize the Foundation to the use of his/her personal data.