

Job Offer Announcement		Vacancy Code 137_CRI_FPD
Job title	Technician for the development of models to forecast population dynamics of <i>Drosophila suzukii</i>	
Job description	<p>A technician position is available in the Chemical Ecology unit, Sustainable Agro-Ecosystems and Bioresources department of the Research and Innovation Centre. 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). The general aim of this project is to establish a virtual laboratory of excellence in ecology, epidemiology, risk assessment and mathematical modeling in Trentino. Target species include the tiger mosquito <i>Aedes albopictus</i>, the newly spreading mosquitoes species <i>Aedes koreicus</i> and the crop pest <i>Drosophila suzukii</i>. LExEM will produce new knowledge on their biology, ecology and behavior at regional level other than a set of new advanced biologically consistent mathematical models, distribution maps and cost estimates related to various control options.</p> <p>The specific mission of the position is to provide information on biology, ecology and strategies for the control of <i>D. suzukii</i> spread in the peculiar environment of Trento Province, integrating literature with laboratory and field research.</p> <p>Understanding biological and ecological factors influencing feeding, survival, and reproduction is crucial in order to understand and forecast the current and future distribution and population dynamics of <i>D. suzukii</i>. Attention shall be paid to both the spatial (distribution at large and small scales) and temporal scale (seasonal variation in abundance). Coupling high resolution techniques with basic biological knowledge (e.g. life cycle, life history traits and host preference) will allow the prediction of the fine scale distribution, pest pressure maps and degree day models, allowing reliable estimates of <i>D. suzukii</i> impact and economic losses.</p>	
Duties / Tasks	<p>Main tasks will be the recording and measurement of several basic biological parameters of <i>D. suzukii</i> population in Trentino necessary to model the development of the species.</p> <p>Phenology and generation development of <i>D. suzukii</i> will be estimated for our local habitat on base of locally measured weather parameters. Established information on demographic and ecological parameters of <i>D. suzukii</i> will be collected and analysed. In the laboratory, temperature dependent rate functions of development will be established for all relevant life stages. Different factors influencing the length biological cycles, the reproduction rate and the fitness parameters will be tested under controlled conditions.</p>	
Keywords	<i>Drosophila suzukii</i> , modelling, population dynamics	

Contract type and length, Level	Project collaboration contract, 30 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	Standard word-processing. Preference may be given to candidates with experience in data analysis
Required title to join the selection	M.Sc. in Agricultural Sciences, Biology, Zoology
Required experience (techniques, methodology), years	Experience in insect rearing. Good knowledge of planning of insect bioassays and analysis of experimental data. Experience in insect population modelling will be considered a plus.
Psychosocial skills	<ul style="list-style-type: none"> • Independent and self-motivated attitude • Strong teamwork ability • Capable to interact in a multinational setting
Supervisor	Gianfranco Anfora
Summary of entry requirements	<ol style="list-style-type: none"> 1. M.Sc. in Agricultural Sciences, Biology, Zoology; 2. Experience in entomology
Condizioni per l'assunzione	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 (137_CRI_FPD) to the email account curricula@fmach.it including 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**;

Deadline

The deadline for the submission of the applications is **October 13, 2013**.

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.