

Job Offer Announcement	Vacancy Code 151_CRI_IVAD
Job title	Post Doc in “Evolutionary Genomics of insect vectors of apple disease”
Job description	<p>A postdoc 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 Scopazzi funded by the Autonomous Province of Trento (Accordo di Programma) and the Association of Fruit and Vegetable Producers in Trentino (APOT) and aimed at providing new insights into the biology and ecology of the insects vectors of apple proliferation for the development of sustainable control strategies.</p> <p>The successful candidate will work on genomics and evolution of two insects (<i>hemipterans C. melanoneura and C. picta</i>) which are the main vectors of the “apple proliferation”, phytoplasma causing illness in the apple trees. Successful candidate will apply bioinformatics tools to get new insights in the biology and ecology of these insect vectors.</p>
Duties / Tasks	<p>Initial tasks will be to assemble and analyse the draft genomes and transcriptomes of <i>C. melanoneura</i> and <i>C. picta</i> the two putative psyllid vectors of the apple proliferation <i>Candidatus Phytoplasma mali</i>. Sequencing will be done on individuals sampled from Trentino populations, and may be extended to other unknown hosts of the phytoplasma. The draft genome of the carried phytoplasmas, and those of likely endosymbionts such as <i>Wolbachia</i>, will be extracted and compared to available ones. The main duty will be to undertake comparative genomic studies (between the two psyllids and against other hemipterans) aimed at highlighting some of the differences between the two hosts focusing on: their evolutionary history, their evolutionary genetics, and their repertoire of chemosensory genes used to sense apple trees.</p> <p>The postdoc will join a large interdepartmental project involving various researchers and students (including entomologists, molecular evolutionists, bioinformaticians, microbiologists) whose final goal is to disentangle the biology of the vector-phytoplasma-host biology. One of the objective is to find which are the phytoplasma host (vectors and plants) during the winter cycle, characterise their biology and eventually defining species specific field trapping. The successful candidate is expected to actively interact with the other members of the hosting lab (Chemical Ecology) as well as other member of project, help planning research, propose his/her idea, and help (or guide, depending on his/her attitude) in article preparation.</p> <p>Applicants must be an enthusiast postdoc with previous expertise in comparative genomics/transcriptomics using next-generation sequencing data and bioinformatics tools. Unix environment and some programming is required. The position is available for two years.</p>
Keywords	Bioinformatics, Genomics, Evolution, <i>C. melanoneura and C. picta</i> , <i>Candidatus Phytoplasma mali</i>

Contract type and length, Level	Project collaboration contract, 24 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)
IT knowledge	Unix/Linux environment, Python Perl or other programming, analysis of next-generation sequencing data.
Required title to join the selection	PhD in Bioinformatics, Plant Science, Agricultural Sciences, Genomics, Evolution, Biology, Entomology, Zoology
Required experience	Experience in the scientific themes of the project
Psychosocial skills	<ul style="list-style-type: none"> • Independent and self-motivated attitude • Strong teamwork ability • Capable to interact in a multinational setting
Supervisor	Anfora Gianfranco
Summary of entry requirements	1. PhD in in Bioinformatics, Plant Science, Agricultural Sciences, Genomics, Evolution, Biology, Entomology, Zoology;
Hiring conditions	<p>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.</p> <p>We invite candidates with the rights of Law 68/99 to notify it in the curriculum vitae for the application.</p>

Application

To apply for the position the applicants should send a message mentioning in the subject the recruiting code (**151_CRI_IVAD**) 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 *151_CRI_IVAD_Application*. **Save your file in this way: Surname Name_af.doc;**

Deadline

The deadline for the submission of the applications is **June 22, 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.