PhD scholarship in: Validation of enzyme based methods from European test sites.

Department of Plant, Soil and Environmental Sciences, University of Firenze

ESR 10, 3 years starting 01 June 2012 to 31 May 2015

Deadline for applications 15 May 2012

Soil is characterised by many microbial habitats with hundreds of thousands of different microbial species in a few grams and it is a vital component contributing to Ecosystem services. Microbial functions are at the base of soil functioning and are often determined by enzyme activities. In this project some enzyme activities (urease, alkaline and acid phosphomonoesterase, protease and β-glucosidase activities) will be determined by colorimetric and fluorogenic methods. These enzyme activities will be related to the determination and expression (both transcriptomic and proteomic) of the respective genes encoding enzymes. The project aims to better understand the origin of enzymes in soil and it will involve the use of both molecular and classical techniques.

The selected candidate will carry out colorimetric and fluorogenic assays to determine soil enzyme activities for validating these methods on some European test sites. The selected candidate will also use transcriptomic and proteomic approaches based on protein extraction, purification and protein characterization by Mass Spectrometry for detecting selected enzyme proteins in the studied soils

The position is funded for 3 years through the project approved by the European Commission "Support for training and career development of researchers" TRAINBIODIVERSE - FP7 Marie Curie Initial Training Network. The project will be carried out at Section of Soil Biochemistry, Department of Plant, Soil and Environmental Sciences, University of Florence. For more information please visit: www.unifi.it/dipsa.

We are looking for one expert biochemist or microbiologist with documented experience in enzyme activity determination and proteomics.

M.Sc. in, microbiology, biochemistry, molecular biology or similar relevant discipline.

Fluency in English.

You will be able to engage in teamwork within the group and our collaborators

Recruiting is in accordance with the European rules for Marie Curie Initial Training Networks. Early-stage researchers can be of any nationality. They must be, at the time of recruitment by the host organisation, in the first four years (full-time equivalent) of their research careers and have not yet been awarded a doctoral degree. This is measured from the date when they obtained the degree which would formally entitle them to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the research training is provided, irrespective of whether or not a doctorate is envisaged.
Furthermore, at the time of recruitment by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc) in the country of their host organisation for more than 12 months in the 3 years immediately prior to the reference date. Short stays such as holidays and/or compulsory national service are not taken into account.

An assessment committee will be appointed to evaluate the applications. Applicants will be notified of the composition of the committee and will receive the part of the evaluation that concerns her/him. The final selection of one successful candidate will be made by Professor Paolo

Nannipieri, based on the recommendations of the assessment committee. The selected candidate will then be requested to formally apply for enrolment as a PhD student at the PhD School Environmental and Agricultural Sciences of the University of Florence.

Terms of appointment and payment are in accordance with the European regulations and with the Grant Agreement Number 289949 “Support for training and career development of researchers” TRAINBIODIVERSE.

Salary for the ESR is expected to be about Euro 158.733,12 for three years including Monthly Living allowance and Mobility Allowance. The salary will be specified in the employment contract taking into account the personal status of the selected candidates with reference to his/her family charges and family mobility allowance. Researcher will be appointed under an employment contract with full social security coverage under national applicable legislation.

The University of Florence wishes to reflect the diversity of society and welcomes applications from all qualified candidates regardless of personal background.

The application must contain:

Motivated letter of application

Curriculum vitae

List of publications

Transcript of university examinations (in English)

Contact details of 2 persons for references.

The form, together with appendices requested in that form and above should be e-mailed as a single PDF-file to paolo.nannipieri@unifi.it Please include in the subject field "your name - PhD scholarship in “Validation of enzyme based methods from European test sites ". In addition, a signed hardcopy of the application must be posted to Prof Paolo Nannipieri, DiPSA, P.le delle Cascine 28, 50144 Firenze, Italy. The deadline for applications is May 15, 2012 at 12:00 noon Italian local time.

Eligibility criteria of Marie Curie Initial Training Networks apply. Only applicants who comply with these conditions will be considered. Details can be found on http://www.trainbiodiverse.com/eligibility-criteria

Applications received after the deadline, or with insufficient documentation or otherwise not complying with the above requirements, may not be considered. It is expected that the selected candidate will be enrolled at the PhD School of Environmental and Agricultural Sciences as soon as possible and no later than the 1st June 2012.

For further information please contact Professor Paolo Nannipieri paolo.nannipieri@unif.it