



HIGHLIGHTS OF THE CALL FOR RESEARCH INTERNSHIPS Plantlab – Institute of Life Sciences a.y. 2019/2020

OBJECT

Attribution of non-curricular training and orientation internship at the Plantlab of the Institute of Life Sciences, to be conducted during the period January 2020-April 2020, academic year 2019/2020:

DESCRIPTION OF INTERNSHIP ACTIVITIES, SKILLS TO BE ACQUIRED AND TECHNICAL DETAILS

Through this selection, the Institute of Life Sciences intends to identify the candidates to whom **three non-curricular training and orientation internships** will be awarded, on the subject "Molecular adaptation mechanisms to the environment in plants".

Description: the trainees will be involved in the research activities at the Plantlab laboratory of the Institute of Life Sciences. Research topics will be concerning the understanding and exploitation of the molecular mechanisms responsible for plant adaptation to variable environmental conditions, including biotic and abiotic stress. The trainees will be guided through the main molecular methods of protein and nucleic acid manipulation, engineering of transgenic plants and microorganisms, fluorescence microscopy, and strategies for manual and automated phenotyping of plants and statistical analysis of the data.

Skills expected to be developed during the internship:

- molecular design techniques;
- analysis of gene expression by real-time qPCR and in promoter fusion transgenic lines characterized by fusion of promoters;
- analysis of gene expression databases (RNA-seq and microarray);
- analysis of protein-protein and protein-DNA interactions;
- basic statistical analysis;
- confocal microscopy;
- consolidation of the ability to work in an international scientific research environment

APPLICANTS' REQUIREMENTS

The call is addressed to students of Italian or Foreign Universities who have already obtained a Bachelor Degree in in the biological, biotechnological or environmental fields achieved **within 12 months before the application deadline**.

DEADLINE

The application and related documentation shall be received no later than **October, 31st 2019, at 12.00 pm** (Italian time zone).

SUBMISSION OF THE APPLICATION

Applicants can submit their application and related documents online through the dedicated webpage reachable via: Home Page →Concorsi, Selezioni e Gare →Incarichi esterni



APPLICATION DOCUMENTS

- 1) a CV of the applicant, including information on education, academic activities considered as relevant for the purpose of the present call (extra-accademic activities);
- 2) list of all the classes attended and passed;
- 3) contact of at least one professor or researcher who has previously interacted with the candidate and is willing to provide a letter of recommendation;
- 4) a copy of a valid identity document.

SELECTION PROCEDURE

Admissible and assessable applications in accordance with the requirements listed above will be examined by a Commission appointed by the Director of the Institute of Life Sciences, which will assign, out of maximum total score of 100 points, maximum 30 points to the evaluation of the documents provided by the candidate, considering:

- university studies with particular attention to the course taken and passed in the experimental disciplines in relation to the research topics;
- extra-accademic activities as specified in the CV.

Candidates obtaining at least 21 points in the curriculum evaluation phase will be considered eligible for the oral interview. Based on the ranking drawn up in the first phase, up to a maximum of 8 people will be admitted to the online interview through VoiP technology, whose names will be published in the page of the School's web site dedicated to the selection. The date of the interview will also be communicated to the eligible candidates by e-mail. The interview will be held in English and will contribute a maximum of 70 points to the total score of the assessment.

In case of interruption of an active internship, the School will evaluate the opportunity to grant a new internship position covering the remaining period, based on the same ranking. The School assumes no responsibility for any lack of information due to the erroneous communication of the e-mail address by the candidates.

ALLOWANCES

We offer a lump-sum refund expenses of € 450,00 (gross amount) per month plus a free meal for each working day, to be spent in the Scuola Sant'Anna canteens or other providers partnered.

MANAGEMENT OF THE NON-CURRICULAR TRAINING RELATIONSHIP

The internship will be activated following the activation of an agreement between the School and the University of origin, as the promoting body. Subsequently, a training project will be drafted and signed by all the subjects involved, identified as the candidate, an internal tutor from the promoting body and an internal tutor from inside the School (hosting body).

CONTACT PERSON

For any changes related to the application and questions, please contact Simona Cetti –Institute of Life Sciences, e-mail: simona.cetti@santannapisa.it