



FOUNDATION FOR RESEARCH AND TECHNOLOGY - HELLAS

INSTITUTE OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

2 PhD Positions Available on Chromatin Dynamics

Project 1: "Role of SATB1 in gene networks that define CD4⁺ cell plasticity"

Project 2: "Defining the SATB1-dependent three dimensional chromatin structure in CD4⁺ cells"

The project

The objective of PhD research is the study the SATB1-mediated interactome of mouse CD4⁺ T cells based upon cytokine and transcription factor gene networks in development and disease. Adaptive immune responses rely upon the differentiation of naïve CD4⁺ cells into different T helper cell lineages. The different CD4⁺ T cell fates are determined via complex and cross-interactive networks consisted by cytokines and transcription factors. The co-expression of the latter affects the functional capabilities and the flexibility of the different CD4⁺ T cell subsets. Moreover, the three dimensional organization of the eukaryotic genome and the interplay of specific protein factors in regulating long range interactions between diverse regulatory elements is becoming appreciated as a possible epigenetic mechanism of cell memory and cell lineage specification. The apparent question is how the protein partners regulate the shaping of the genome.

Who we are

The candidate will be enrolled in the University of Crete Biology PhD programme and supervised by Professor Charalampos Spilianakis (www.SpilianakisLab.gr) who is an affiliated professor with the Institute of Molecular Biology and Biotechnology (www.imbb.forth.gr) of the Foundation for Research and Technology (www.forth.gr) and the Department of Biology of the University of Crete (www.uoc.gr) in Heraklion, Crete, Greece. More information about the programme (www.Chromatin3D.eu).

Who we look for

A highly motivated student with a background in molecular biology, biochemistry and/or immunology or other relevant field with excellent analytical, communication and interpersonal skills. A team player. Applicants should have an excellent proficiency in written and spoken English and should hold a Diploma or Master's degree in Biology or Biochemistry. Experience in biocomputing analysis will be positively considered. Extensive practical experience through lab rotations and internships are of advantage.

Eligibility criteria

According to the requirements of the prestigious Marie Skłodowska Curie Training Programme, Early Stage Researcher (ESR) positions allow the researcher to work towards a PhD, for a duration of 36 months. ESRs of any nationality should be within four years of the diploma granting them access to doctorate studies at the time of recruitment, and must not have resided or have carried out their main activity (work, study, etc.) for more than 12 months in the last 3 years in Greece. Marie Skłodowska Curie fellows receive a competitive salary and mobility allowance and a family allowance (where applicable) are part of the employment package. (Living allowance: $2883 \in x$ 36months, Mobility allowance: $0-500 \in x$ 36months). Expected start date June 1st.

How to apply

Applications should be submitted to Prof. Charalampos Spilianakis (spiliana@imbb.forth.gr) as well as the Chromatin3D project manager (manager@chromatin3d.eu) by March 31st 2015. Please indicate "Chromatin3D-ITN PhD application" in the subject line of your e-mail. Applications should consist of an updated comprehensive CV, a cover letter including the applicants' motives to apply and the names and contact details of at least two referees. All requested information should be submitted as a compiled single .pdf document with a size less than 2Mb. Only complete applications will be considered.