ERASMUS+ TRAINEESHIP / PLACEMENT OFFER

Project title: Protein Misfolding in Metabolic Disorders

Project description:
Inborn errors of metabolism, although individually rare, are collectively quite numerous, and comprise a class of genetic diseases which affect genes coding for enzymes involved in different cellular pathways. For most of these disorders a clear relation between genotype and phenotype is still poorly understood, and most interesting is the fact that a modification in a single protein residue results in rather diverse cellular and clinical effects.

Our research aims to investigate pathological mechanisms underlying metabolic disorders such as Glutaric Acidurias type I and II. In particular, ongoing projects propose to clarify on the relation between the type of protein folding defect in disease-related variants and symptoms onset and progression.

The student will be integrated in the ongoing projects that combine different approaches from in-vitro studies on enzyme folding and function along with cellular studies and metabolomics analysis in patient-derived cells. Specifically, the student will have the opportunity to: i) perform heterologous expression and purification of human mitochondrial proteins; ii) use biophysical and biochemical methods to characterize protein structure, folding and function (CD, Fluorescence); iii) use patient-derived cells and isolated mitochondria for functional and viability assays.

Group webpage: http://folding.campus.ciencias.ulisboa.pt/

Department: Chemistry and Biochemistry
R&D Unit: BioSystems and Integrative Sciences Institute
Field of study: Biochemistry and Biophysics

Supervisor: Bárbara J. Henriques
Personal webpage: https://ciencias.ulisboa.pt/pt/perfil/bjhenriques

Number of weeks offered: 4-16
Within the months: from January to December

Number of working hours per week: 35

Publication date: 28/10/2019
Closing date: 31/12/2020

Requirements

General:
- A very good academic record;
- Good writing and presentation skills;
- Good social and organisational skills;
- Very good proficiency in spoken and written English; knowledge of Portuguese language is an asset.

Specific:
- Bachelor's or Master's degree in Biochemistry, Biology, Biotechnology, Biomedicine or
- Level of education: ____________________________ in ____________________________:
- ____________________________
- ____________________________

Applications

Applications should include the following information:
- a cover letter, including a description of your research interests and an explanation for why you are applying for this project;
- a curriculum vitae (CV);
- an official transcript of grades issued by your home institution;

and be submitted no later than 31/12/2020 via email to internacional@ciencias.ulisboa.pt.

Contacts

For inquiries regarding this project you are welcome to contact: ____________________________ bjhenriques@ciencias.ulisboa.pt.

For inquiries regarding the application procedure you are welcome to contact: internacional@ciencias.ulisboa.pt.