

OFFER - PhD candidate in the Molecular Chaperones and Protein Folding Lab

Description of the position offered

We look for a highly motivated PhD candidate to join the "Molecular Chaperones and Protein Folding Lab" (Dr. Fernando Moro and Dr. Arturo Muga lab) in Instituto Biofisika (UPV/EHU, CSIC) <http://biofisika.org/>

RESEARCH TOPIC

Remodeling of protein aggregates by molecular chaperones

Molecular chaperones play an essential role in the cell protein homeostasis system, a complex network of cellular components dedicated to ensure that proteins acquire and retain their native structure and function. Acute and prolonged stress situations, mutation and aging can overcome the buffering effect of the proteostasis network, resulting in the increase of unfolded protein concentration, which in turn derives in aggregation. Protein aggregation represents a major problem for the cell due to the toxicity associated with the oligomers and aggregates formed during this process, which are involved in various pathologies such as neurodegenerative disorders (Parkinson, Alzheimer, dementia, etc.). An essential route for the elimination of protein aggregates in human cells is their solubilization and reactivation by molecular chaperones belonging to the Hsp70, Hsp40 and Hsp110 families. The aim of the "Molecular Chaperones and Protein Folding Lab" is to understand how these chaperones work and build a functional complex to eliminate protein aggregates. Gaining a greater knowledge of how these complex folding machines function at both structural and mechanistic levels is of substantial importance in the Biotechnology and Biomedicine fields.

Requirements of the candidate:

A Master's degree in Biochemistry, Molecular Biology, Biotechnology, Chemistry, Biomedicine or related disciplines is required. Individuals with a background in protein function and protein-protein interactions are particularly encouraged to apply. Graduate students are also offered to join the lab and could sign up for the Master in Molecular Biology and Biomedicine (<https://www.ehu.eus/en/web/master/master-molecular-biology-biomedicine> Biomedicine).

Offer description:

The main aim of our offer is to first train the candidate with the research project and the different techniques used in the lab, and second, adequately prepare the application for national and regional PhD fellowships. Additionally, the candidate might have the opportunity to apply for a one-year contract funded by research projects in an open call.

Starting date: April - June 2020

Contact

Applicants are encouraged to send cover letter, CV, academic qualifications and 3 references through the Biofisika website contact page (<http://biofisika.org/contact/>), adding the following subject: [Job Application: MolChapPhDCandidate]

Deadline

April 30, 2020

Please note that due to the large number of applicants expected, it will not be possible to communicate the evaluation results to all the candidates.