PhD CANDIDATE INTERESTED IN APPLYING FOR A FELLOWSHIP IN NEUROSCIENCES

Molecular alterations of genetic Parkinson’s disease

Group and project information
Applicants will be integrated into the research group “Applicants will be integrated into the research group Lab of Parkinson disease and Other Neurodegenerative Movement Disorders: Clinical and Experimental Research, Department of Neurology, Hospital Clinic of Barcelona, Institut d’Investigacions Biomèdiques August Pi i Sunyer. Our group is part of the Institute of Neuroscience of UB and we belong and are financed by the excellence groups of “recerca de la Generalitat de Catalunya” (SGR), Maria de Maeztu, and CIBERNED. Our group is focused in studying LRRK2 mutation carriers to assess the influence of factors determining the factors before the manifestation of the motor symptoms of Parkinson disease (PD). We combine studies using clinical, genetic, transcriptomic, epigenomic, and phosphoproteome data using cell models and patient’s tissues. In this project we will use a PD fibroblast cell model to study the phosphoproteome changes occurring in sporadic PD, LRRK2-associated PD and asymptomatic LRRK2 mutation carriers. We expect to use these data, combined with the phosphoproteome data obtained from blood cells (PBMCs) to find direct or downstream targets of the LRRK2 kinase, that could have clinical implications in the knowledge of LRRK2-associated PD pathogenic cascade and potential consequences in clinical treatments.

Functions and tasks
We are looking for a highly motivated and enthusiastic candidate with interest in neurosciences, OMICS biochemical techniques and research with potential clinical impact, in order to apply for different competitive Grants. The successful candidate will carry out tasks and responsibilities associated with carrying out a PhD. This will involve carrying out critical surveys of the existing literature in the field, forming hypotheses for study, analyze results of phosphoproteome (SWATH-MS) and transcriptomic data and related experiments, and writing up results for publication in scientific journals.

Offer Requirements
Experience: Multidisciplinary experience general laboratory techniques, cell models, or biochemistry, cellular and molecular neuroscience, poster presentation to congress, participation to research projects or authorship in scientific journals will be highly valued.

Studies pursued: At the time of recruitment, candidates must comply with one of the following options (Biology, Chemistry, Pharmacy or Medical career):

- To have completed the studies that lead to an official university degree adapted to the European Higher Education Area awarding 300 ECTS credits, of which at least 60 ECTS credits must correspond to master level.
- To have completed a degree in a university not adapted to the European Higher Education Area that gives access to doctoral studies. The verification
of an equivalent level of studies to the ones mentioned above will be made by the university when the admission procedure starts.

Other skills:

Ability to plan and conduct experiments and to record and analyze data, in an independent, efficient, and organized manner.
- Good teamwork and interpersonal skills.
- Independent, motivated, and collaborative person.
- Fluency in English, Spanish and/or Catalan.

Submission
Please submit your application (CV and letter of interest) to: ezquerra@clinic.cat

Support for applicants
The Institute of Neurosciences, awarded with the seal of excellence Maria de Maeztu, offers support to applicants (eligibility check, info sessions, feedback on the draft proposal) and has recently launched a Mentoring programme (subject to availability).

Further information: Call

Deadline: 1 December 2021