Reference: GRISOLIAP/2017/001

Position title: Predoctoral contract, programa Santiago Grisolía de la Generalitat Valenciana

Group: Laboratory of Neurobiology

Job description (function and tasks):

The candidate will join to the Laboratory of Neurobiology to develop a research project, leading to the doctoral thesis, focusing on: The role of peripheral inflammation and neuroinflammation in cognitive and motor impairment in hepatic encephalopathy.

The main objectives of the research are to:
1. Characterize the alterations in peripheral inflammation associated to the onset of cognitive and motor impairment in hyperammonemia and hepatic failure.
2. Analyze the mechanisms by which peripheral inflammation leads to neuroinflammation, alterations in neurotransmission and cognitive and motor impairment in hyperammonemia and hepatic failure.
3. Identify therapeutic targets and design and test new treatments to prevent or reverse alterations in neuroinflammation, neurotransmission and cognitive and motor function in animal models of hyperammonemia and hepatic encephalopathy.

Some techniques and methodologies to be used in this project are:

- Characterization of neuroinflammation in cerebellum and hippocampus by immunohistochemistry and fluorescent in situ hybridization.
- Characterization of the alterations in peripheral inflammation associated with the onset of cognitive and motor impairment: Characterization of leukocyte populations in blood by flow cytometry, determination of serum cytokine levels, analysis of transcription factors by PCR; Determination of plasma IgG levels by western blot.
- Behavioural tests: cognitive function, motor activity and coordination.
- Analysis of GABAergic neurotransmission by cerebral microdialysis in vivo. Levels of extracellular GABA by HPLC.
- Analysis of content and phosphorylation of proteins by western blot with specific antibodies.
- Membrane expression of receptors, transporters and other proteins with the BS3 crosslinker.

Research Center description:

The Prince Felipe Research Centre, CIPF, was created to develop first-rate, competitive and internationally relevant research in the fields of Neurobiology, Advanced Therapies, Rare & Genetic Diseases, Molecular Mechanisms of Disease and Computational Genomics. The research centre, located in Valencia, occupies an area of 32,000 m2 and it is equipped with the most advanced infrastructures, facilities and technological equipment.
Basic requirements of the position:

- To have a degree from a non-Spanish university in biomedical sciences or related fields, completed in the last 3 years prior to the application date
- To meet the requirements to be admitted to a PhD program. To be admitted in a doctoral program at the time of recruitment.
- Spanish or English language level adequate for the development of the tasks involved in the project.
- Do not have a PhD.
- Not have been granted with a fellowship from the Santiago Grisolia Program

Merits:

It will be specially evaluated the experience in the laboratory techniques indicated in “Job description (function and tasks)” as well as other related techniques and methodologies. It will be also evaluated:

- Experience in clinical or basic research laboratories
- Formation received
- Ability to work in multidisciplinary temas
- Knowledge on informatics: (use of databases, SPSS, GraphPad, Prism, Word, Excel, Adobe, PowerPoint....)

Contract

- Professional category: Personal Investigador
- Salary Level: As described in the call of the Generalitat Valenciana: DOCV de 30 de enero de 2017. (Anexo III: Subvenciones del programa Santiago Grisolía)
- Funding Source/Project: Generalitat Valenciana Subvenciones del programa Santiago Grisolia expediente: GRISOLIAP/2017/001
- Duration: 3 years
- Starting date: October 1st, 2017
- Working day: complete
- The deadline for receipt of resumes will be open until August 30, 2017

How to present your candidacy?

Interested candidates should send their CV, cover letter and references only by email to the following address: selection@cipf.es.

In order to comply with Law 15 /1999 of December 13, for The Protection of Personal Data, we inform you that the personal data contained in your resume will be included in a personal data file owned by the Foundation Prince Felipe Research Centre, CIPF, to enable you to participate in our recruitment process, and if appropriate, it may be used for processing appropriate aid, grants and funding to enable this recruitment.

By submitting your resume, you agree to your personal data to be treated in the commented terms, allowing CIPF to share this data with other public and private institutions with the exclusive aim of applying for grants for the financial funding of this institution and its research projects linked to your data.

You may exercise your rights of access, rectification, cancellation and opposition by writing to CIPF, Calle Eduardo Primo Yúfera, 3, CP 46012 Valencia and attaching your ID.
Please indicate the offer reference number in the subject field. If you have any questions about this offer, please contact the Human Resources Department by email to: recursoshumanos@cipf.es