

JOB OFFER

Date: 19/02/2025

PRINCIPAL INVESTIGATOR: Beatriz López Corcuera/Francisco Zafra

SCIENTIFIC PROGRAM: Neuropatología molecular/ Molecular Neuropathology

JOB OFFER: Investigador predoctoral /Predoctoral Researcher

PROJECT TITLE:

Structure, function and regulation of GlyT2 variants associated to hyperekplexia.

PROJECT DESCRIPTION:

Hyperekplexia (OMIM 149400) is a rare sensorimotor syndrome potentially lethal in newborns. It is caused by defects in the inhibitory glycinergic neurotransmission due to mutations in some human genes such as the neuronal glycine transporter GlyT2 (SLC6A5), responsible for supplying glycine to the presynaptic terminal. In this project, the pathogenic mechanisms of GlyT2 mutations found in hyperekplexia patients will be analyzed in terms of the structure of the transporter, function, intracellular trafficking, interactome, regulation, as well as the consequences in embryonic or adult life. This study can guide future therapeutic approaches we wish to develop. <https://www.cbm.uam.es/blopez>

LOCATION:

El Centro de Biología Molecular Severo Ochoa (CBM) en Madrid, es un centro internacional de excelencia que reúne a equipos de alto perfil con áreas de especialización complementarias e intereses comunes en traducir la investigación básica en conocimiento para la clínica/ Centro de Biología Molecular Severo Ochoa (CBM), Madrid, Spain is an international excellence research center that brings together high-profile teams with complementary areas of expertise and with a common interest in translating basic research into knowledge for the clinic.

REQUIREMENTS, EXPERIENCE AND ACADEMIC QUALIFICATIONS:

Grado en Medicina, Biología, Biotecnología, Farmacia, o relacionado. Máster finalizado en el área de Biomedicina. Candidatos altamente motivados y con un buen expediente académico ($\geq 8,0$) para la realización del doctorado. /Degree in Medicine, Biology, Biochemistry, Biotechnology, Pharmacy or similar. Master completed in the area of Biomedicine. Highly motivated candidates with a good academic record ($\geq 8,0$) for the completion of the doctorate.

CONTACT:

Enviar CV y expediente académico a: blopez@cbm.csic.es antes de fin de marzo de 2025. Send CV and academic records to: blopez@cbm.csic.es, before end of March, 2025.

DURATION:

4 años / 4 years

OTHER INFORMATION:

Se ofrece formación multidisciplinar en ambiente dinámico y colaborativo utilizando sistemas de expresión de mutantes en células y cultivos primarios de neuronas para ensayos funcionales de transporte, tráfico intracelular, actividad eléctrica, así como estudios in vivo en ratones y pez cebra. / We offer multidisciplinary training in a dynamic and collaborative environment using mutant expression in cells and primary neuronal cultures for functional assays of transport, intracellular trafficking, electrical activity, as well as in vivo studies in mice and zebrafish.