

OFFER – Postdoctoral position. Bioorthogonal Chemistry.

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The IBF is a joint research centre of the University of the Basque Country (UPV/EHU) and the Spanish National Research Council (CSIC). In partnership with Fundación Biofísica Bizkaia (FBB), the centre focuses on advancing knowledge about the physical and chemical processes underlying biology and disease. With the FBB accredited as a Basque Excellence Research Centre (BERC) by the Basque Government, the IBF and FBB partnership enjoys a strong national and international reputation, and provides outstanding shared facilities for advanced biophysical and structural biology approaches in a new research building in the main Leioa campus of the UPV/EHU.

Offer and description of the project

We offer a postdoctoral position at the FluoroNanoTools lab (<https://www.biofisika.org/en/research/fluoronanotools-laboratory>) at Instituto Biofisika (Leioa) under the supervision of Dr. Mónica Carril.

The research will focus on the development of bioorthogonal strategies to label membrane receptors in vivo. We aim to use ligand directed receptor covalent labelling, followed by biorthogonal binding with suitably modified probes. Target receptors will be located at the neural membrane and could be AMPAR or TRP type, among others. We look for the combination of different strategies particularly those based on SuFEx reactions and those based on the reaction of tetrazines with trans-cyclooctene. The researcher will have to develop novel molecules to achieve the successful receptor labelling and the bioorthogonal binding with the selected probe, hence a deep knowledge of organic chemistry and/or medicinal chemistry is required. Background in bioorthogonal reactions will also be valued. The research is part of a collaborative interdisciplinary project that aims to neuromodulate the neuronal response.

The maximum duration of the contract will be until December 2025 and the gross annual salary will be adjusted to the experience of the candidate, starting at a minimum of 31,250 euros.

Required background

We seek highly qualified applicants with a PhD in organic, medicinal or pharmaceutical chemistry. Good written and oral communication in English is required.

We are an equal opportunity employer committed to diversity. Applications should be addressed through the Biofisika website contact page (<http://biofisika.org/contact/>), adding the following subject: [Job Application: *120_MCarril*]. It is recommended that applications are made as soon as possible as they will be considered upon arrival. Applications in a single pdf file must include:

- Curriculum Vitae.
- A motivation letter.
- The contact of 2 referees

Deadline: April 30, 2024