



Fundación Biofísica Bizkaia
Biofisika Bizkaia Fundazioa

FUNDACIÓN BIOFÍSICA BIZKAIA / BIOFISIKA BIZKAIA FUNDAZIOA

OFFER – Pre-graduate Position in “Neutron Scattering & HDL remodeling by SARS CoV 2 Spike protein”

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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 close partnership with the Fundación Biofísica Bizkaia (FBB), the centre focuses on fundamental and translational biophysics research and offers a highly collaborative culture. Accredited as a Basque Excellence Research Centre (BERC), the institute provides outstanding shared facilities for advanced biophysical and structural biology approaches in a new research building in the main Leioa campus of the University of the Basque Country.

Description of the project and position offered

A predoctoral position to do the PhD thesis is available at Instituto Biofísica Basque Centre for Biophysics under the supervision of Prof. Marité Cárdenas and Cesar Martin (<https://biofisika.org>). The position is fully funded and has a duration of 3 years.

Applicants must have a bachelor in **nanoscience or nanotechnology** and a **master’s degree in Biochemistry, Biotechnology or Biophysics**. Background in colloidal chemistry, protein chemistry and analytical characterization techniques will be valued. Applicants should have a good academic record, good communication skills, a strong passion and commitment to science, and work well within a group. Knowledge of written and spoken English is also needed.

Neutron scattering is a technique that seeks to understand the properties of matter at a structural and dynamic level. Neutron scattering techniques are only available in large facilities, as they can only be produced in nuclear reactors or spallation sources. The European Spallation Source (ESS) is currently being built in Lund, Sweden, and the Basque country has contributed significantly by building key components. At the end of the construction phase, it is very important that there are trained users capable of using the full potential of the ESS to advance in science and technology in the Basque country. Are you ready to help expand neutron scattering in the Basque country?

The open PhD position will focus on studying **HDL remodeling by SARS-CoV-2 Spike (S) protein**. This includes unravelling HDL structure and S structure upon interaction with each other, as a function of S protein variant and the blood serum profile for the donor of HDL. This is relevant for understanding why some individuals get sicker than others since there is an inverse correlation between the severity of Covid19 infection and HDL levels, as well as cholesterol content.

Applications should send all the documentation as soon as possible. The position will be filled as soon as a suitable candidate is found. Applications must include:

1. a cover letter highlighting their interest in the position and the main research achievements.
2. curriculum vitae clearly stating the PhD degree and master final qualifications.



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3. Copies of bachelor and master diploma
4. A list of publications and participation at international conferences
5. the name and contact address (e-mail) of at least one academic referee.

Incomplete applications will not be considered.

Contact: We are an equal opportunity employer committed to diversity. Please submit all the documentation through the Biofisika website contact page (<http://biofisika.org/contact/>), adding the following subject: [*Job Application: 93_MC_HDL*].

Deadline: 29 July, 2022