



Fundación Biofísica Bizkaia  
Biofisika Bizkaia Fundazioa



## FUNDACIÓN BIOFÍSICA BIZKAIA / BIOFISIKA BIZKAIA FUNDAZIOA

OFFER – Postdoc position

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Fundación Biofísica Bizkaia (FBB) is a center of excellence on an international level with the main aim of promoting a multidisciplinary program in the field of Biophysics and its application in the areas of Biotechnology and Health, focusing all its resources in Instituto Biofisika Institutua (UPV/EHU, CSIC).

### Description of the position offered

BIOPHYS.PTML: Perturbation-Theory Machine Learning (PTML) Models for Biophysics is a project to be conducted by a post-doctoral associate supervised by [Prof. Gonzalez-Diaz \(IKERBASQUE Prof. of Dept. or Org. Chem. affiliated to Biophysics center\)](#). The project will focus on the PTML analysis of experimental data produced in different research groups of the CSIC-UPVEHU Biophysics Center. The models developed will be used to predict experimental outcomes towards a more rational design of further experiments. After predictive studies occasional experimental analysis of biological samples, drug candidate pre-clinical assays, and/or synthesis of organic compounds could be required. The candidate will work in-situ both in CSIC-UPVEHU Biophysics center, and Dept. of Org. Chem. of UPVEHU. The BIOPHYS.PTML project is part of the CHEM.PTML research line lead by Prof. González-Díaz. This line focus on the use of computational algorithms from Cheminformatics, Machine Learning, or Complex Networks, for the analysis of experimental outcomes. This group collaborates on basque government projects, national plan projects, one H2020 project on data protection, and one industry project with PETRONOR funded by Elkartek call. Also involves several PhD/MSc students from Basque Country, Spain (Other regions), Mexico, Ecuador, China, etc. enrolled on PhD programs of Chemistry and Pharmacology in UPVEHU or Informatics in University of Coruña (UDC). We also coordinate the MOL2NET Conference series and the CTMC Drug discovery special issues series. The group is headquarter for the USEDAT: USA-Europe Data Analysis Training program attracting several students worldwide each year and Conacyt Delfin program students from Mexico.

### Education and Experience Required

This call requires researchers with a PhD degree or at least PhD official dissertation date before the deadline. In all cases, it is mandatory that the selected candidate present the PhD title or provisional PhD title the date of signature of the contract. The project accepts one of the two following alternative research profiles of candidates. First profile: cheminformatics, bioinformatics, or data analysis researchers. Second profile: experimentalists with experience in Organic Synthesis, Molecular Biology, and/or Pharmacology. Profile (1) requires to hold a PhD in Informatics, Physics, Biophysics, Physical chemistry, Engineering or related areas with previous skills in Programing (Python, C++, etc.) and/or experience in Machine Learning, etc. Profile (2) admits PhD in Organic Chemistry, Molecular Biology, Pharmacology, Biology, or Biotechnology etc. with previous skills in Organic synthesis, experimental Molecular biology, or experimental Pharmacology. Considering that the main focus is on computational work the candidates with experimental profile must be in disposition to be cross-trained on the use of computational data analysis techniques (however previous skills are not mandatory). All candidates will receive specific hand-on training on PTML analysis in the context of the USEDAT training program, despite of their profile.



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Previous publication track in JCR journals of first quartile, Hirsch H-index score adequate to years of experience, participation in congress, and research stays in international centers will be very positively evaluated. Disposition of the candidate to write scientific papers and/or project proposals are mandatory; it must be stated on the cover letter. We will very positively consider candidates with disposition to apply to other calls like UPV/EHU and Basque Government Post-doc, MSCA individual fellowships, Ikerbasque research fellowships, JdC formation of incorporation, RyC, Humboldt foundation, HFSP, FCT, etc., according to their career stage (must be stated on the cover letter). Candidates with certification in English are welcome to apply especially if they can present accreditation for the levels necessary to apply to other post-doctoral grants. Candidates with certification in Basque Language (Euskera) are welcome to apply especially if they can present accreditation for the levels necessary to apply to UPVEHU or Basque government postdoctoral scholarships. Disposition to do research stays in international centers, to complement the CV of the researcher if necessary, will be also a plus (must be stated on the cover letter). Female researchers are encouraged to apply in line with the gender equality policy of the sponsor and host entities.

**Contact:** Applicants are encouraged to send the next documentation through the Biofísica website contact page (<http://biofisika.org/contact/>), adding the following subject: [*Job Application: 53SHGonzalez*]

1. Curriculum Vitae
2. Reference letters
3. Cover letter

**Deadline: February 25, 2020**

SELECTION NOTES: Candidates should sent also a cover later presenting themselves (free style) and declaring their disposition to write project proposals, apply to other grants or postdoctoral fellowships, etc. according to their career stage. Selected candidates will be internally short listed in order 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, ... until 5<sup>th</sup> position. Short listed candidates could be call for an in person or online interview if necessary. Short listed candidates could be call to sign the contract if the corresponding previous candidates decline or fail to sign the contract as per HR department regulation. This procedure is expected to avoid repetition of the selection process. Please note that due to the large number of applicants expected, it will not be possible to communicate the evaluation results to all the candidates.