



## CALL FOR APPLICATIONS - February 2023

### PhD Student Position

Donostia International Physics Center (DIPC) is currently accepting applications for PhD Student positions funded by IKUR Strategy. This is a unique opportunity for junior researchers to join one of DIPC's high-profile research teams. A description of each of the available openings, contact information and deadlines can be found on the following pages.

Although candidates are welcome to contact the project supervisors to know further details about the proposed research activity, please be aware that the application will be evaluated only if it is submitted directly to the email address listed as "application email".

Applications received by the deadline will be evaluated by a Committee designed by the DIPC board on the basis of the following criteria:

- CV of the candidate (60%)
- Adequacy of the candidate's scientific background to the project (20%)
- Reference letters (10%)
- Other: Diversity in gender, race, nationality, etc. (10%)

Evaluation results will be communicated to the candidates soon after. Positions will only be filled if qualified candidates are found.

The DIPC may revoke its decision if the candidate fails to join by the appointed time, in which case the position will be awarded to the candidate with the next highest score, provided it is above 50 (out of 100).

However, the selected candidate may keep the position if, in the opinion of the Selection Committee, the candidate duly justifies the reasons why he or she cannot join before the specified deadline, and as long as the project allows it.



Ref. 2023/38

## Deep Self-Supervised Learning methods for Bioimage Analysis

**Supervisor(s):**

*Ignacio Arganda-Carreras (ignacio.arganda@ehu.eus)*

**Duration\*:** 3 years

**Application Deadline:** 23/02/2023

**Application Email:** [jobs.research@dipc.org](mailto:jobs.research@dipc.org)

We are seeking a highly motivated PhD student to join our cutting-edge co-tutoring project in the field of Bioimage Analysis and Machine Learning. This exciting opportunity is co-supervised by Dr Ignacio Arganda-Carreras at DIPC and Dr Estibaliz Gómez de Mariscal at the Optical Cell Biology laboratory at Instituto Gulbenkian de Ciência, Portugal.

The ideal candidate will have a BSc and MSc, or equivalent, in Computational Engineering, Computer Sciences, Informatics, Physics, Applied Mathematics, Computational Biology, or a related area. Previous experience in developing computational bioimage analysis methods and machine learning algorithms is essential, as well as proficiency in Python, including experience with deep learning libraries such as Keras, TensorFlow, and PyTorch.

Our project aims to tackle the challenge of processing and analysing large amounts of biomedical image data generated by advances in microscopy. By exploring and leveraging the fields of self-supervised and semi-supervised learning, our goal is to reduce the need for human expert annotation, thus reducing material, time, and economic costs for both hospitals and research centres. This project is an exciting opportunity to contribute to the advancement of this important field while developing your own expertise and skills.

If you are passionate about Bioimage Analysis and Machine Learning and are eager to contribute to cutting-edge research, we encourage you to apply for this unique PhD opportunity.

**Interested candidates should submit an updated CV and a brief statement of interest to the application email listed above. Reference letters are welcome but not indispensable. The reference of the specific opening to which the candidate is applying should also be stated in the subject line.**

**\*Openings are for a 1-year contract, renewable based on performance.**

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