Fundación Biofisica Bizkaia
Biofisika Bizkaia Fundazioa

FUNDACIÓN BIOFÍSICA BIZKAIA / BIOFISIKA BIZKAIA FUNDAZIOA

OFFER – PhD Student position (3-4 years Fellowship)
Publication date: September 30, 2020

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
The successful candidate will be joining next research laboratories.
The hosting labs
The lab of Jerome Solon (Instituto Biofisika, in Bilbao) is interested in understanding biological tissue organization and the self-organization taking place during animal morphogenesis. The lab uses a multidisciplinary approach combining high-resolution microscopy, Drosophila genetics, cell/tissue mechanics and biophysical modeling.
The lab of Ignacio Arganda-Carreras (University of the Basque Country, UPV/EHU, in San Sebastian) is expert in bioimage analysis and computer vision. They have contributed to the development of the world renown platform Fiji and are now focusing on the development of machine/deep learning approaches to image/data analysis.

The project
The project aims to develop novel methods to predict cell behavior in multicellular systems and reveal underlying biophysical principles. The student will work with high-resolution microscopy (3D+t image) data generated by the lab of Jerome Solon with Drosophila Melanogaster embryos and will have to develop analysis methods using novel deep learning approaches to predict different outputs such as protein localization, cell behavior/cell fate, cell mechanics, epithelial tensions, etc. A close collaboration with biologists and experimental physicists will be required to the success of the project.

Education and Experience Required
We are looking for students with expertise in physics, computer science, electrical or biomedical engineering. Good level in programming will be required. Good communication skills in English and previous experience with the biological research environment will be appreciated.

Contact: Applicants are encouraged to send the next documentation through the Biofisika website contact page (http://biofisika.org/contact/), adding the following subject: [***Job Application: 69JSolonPhD***]

1. Curriculum Vitae
2. Reference letters (if possible)

Deadline: November 30, 2020

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.