

Looking for excellent PhD candidates to work in cryo Electron and Soft X-rays Microscopies in Madrid.

In the context of the Spanish Network of Centers of Excellence “Severo Ochoa”, the BioComputing Unit of the Spanish National Center for Biotechnology, together with the cryoEM Image Processing Center of the European Research Infrastructure for Structural Biology –collectively referred to as the Instruct Image Processing Center (I2PC)- are looking for excellent PhD candidates to be incorporated under the prestigious and competitive “La Caixa” Fellowship program. La Caixa is one of the largest banks in Europe, with one of the top cultural and social Foundations worldwide. The bases of the call can be found at: <https://obrasociallacaixa.org/en/educacion-becas/becas-de-posgrado/inphinit/programme-description>

Research at the I2PC is known for its sustained impact in the field of cryoEM image processing, a leading technique in structural biology, having started some of the most popular approaches to statistical image analysis, like Maximum Likelihood or artificial neural networks, in the context of software suites such as XMIPP and Scipion. These novel approaches are currently being applied to many key biological systems, both within the group and by many other laboratories. Additionally, in recent years we have entered the new field of whole cell cryo tomography, using Soft X-rays at the Spanish synchrotron ALBA, one of the four microscopes of its kind worldwide, opening fascinating new venues on how to extract accurate structural information from many microns thick specimens exquisitely preserved under cryogenic conditions.

Currently opened positions are in the previously referred two areas: CryoEM analysis of flexible macromolecules and CryoEM Tomography in Soft X-rays. Details can be found at <http://i2pc.cnb.csic.es/download/la-caixa-inphinit-2016-cryoem-analisis.pdf> and <http://i2pc.cnb.csic.es/download/la-caixa-inphinit-2016-xray.pdf>