

# EU-project Postdoc Bioinformatics position in Systems Biology.



**WORKPLACE:** Dep. of Molecular Biology and Biochemistry.  
Universidad de Málaga (Spain).

**EU PROJECT:** The Systems Microscopy Network of Excellence (NoE)

**DURATION:** 5 years.

**STARTING DATE:** January 2011.

**BACKGROUND:** The Systems Microscopy Network of Excellence (NoE) is a EU- financed project with eight partner institutes all over Europe. This NoE will be coordinated by Karolinska Institutet, and amongst other partners, participate the EMBL (European Molecular Biology Laboratory), and the Weizmann Institute of Science (Israel).

Next-generation systems biology requires methods that can capture data and build models in four dimensions, three-dimensional space and time, and needs to address dynamic events in single living cells. Imaging technologies, here referred to as “Systems microscopy”, will be a cornerstone for next-generation systems biology to elucidate and understand complex and dynamic molecular, sub-cellular and cellular networks.

This NoE will have as its core biological theme two basic but complex cellular processes that are highly relevant to human cancer: cell division and cell migration. Methods, strategies and tools established here will be applicable to many disease-associated processes and will be instrumental for obtaining a systems level understanding of the molecular mechanisms underlying human diseases as manifested at the living cell level.

**DESCRIPTION OF THE WORK GROUP:** The PROCEL group, founded in 1995, is a multidisciplinary and fast growing team of about 27 researchers, producing over 190 research articles since its foundation. Several main research areas organize the activities of the group, such as: protein function prediction, metabolic systems modelling, angiogenesis and signal transduction, and cancer. (for references and more information: [www.bmbq.uma.es/procel/](http://www.bmbq.uma.es/procel/))

**RESPONSIBILITIES:** Through close multidisciplinary collaborations with joint activities in this NoE, candidate will contribute to develop a powerful enabling platform for next-generation systems biology and will apply these tools to understand cellular systems underlying human cancer. Candidate will work on function prediction and data analysis of mitotic and cell migration genes, with the development and application of methods and integrative bioinformatics tools for predicting protein function and protein-protein interactions, and for protein network modelling.

**REQUIREMENTS:** Successful candidates will have a strong research interest in bioinformatics or computational biology. The ideal candidate holds a PhD degree in Bioinformatics-Systems Biology with experience of Computational Biology, Statistics, and Biological Sciences. Programming and (statistical) data analysis experience will be preferred.

**COMPENSATION:** We offer a 30,000-35,000 euros annual salary (depend on candidate experience) and a pleasant, dynamic environment to work. Candidate had the opportunity to develop research closely collaborating with excellent institutions and leading scientists in Europe, and taking profit of the extense and well finaced training program through the Systems Microscopy Network. The University of Malaga with 36.400 students is one of the most dynamic and fast growing research & education institutions in Spain, offering many amenities and facilities to their fellows. Malaga is a lively and cosmopolitan city on the Mediterranean sea protected by the mountains, with half million population enjoys over 300 days of sunlight per year and mild temperatures. The city is well conected by high speed train (Ave), seaport, highways and an International airport (the fourth biggest in Spain). Cost of living in Málaga is low.

**TERMS:** Start date is estimated about January 2011.

**HOW TO APPLY:** Please send in PDF: (1) a CV including education (with Grade Point Average, class rank, honors, etc.), research experience, and bibliography, (2) a one-page research personal letter, and (3) two letters of recommendation (with phone and email) to **Dr Juan Ranea** ([ranca@uma.es](mailto:ranca@uma.es)).

**LAST DATE FOR APPLICATIONS:** 15th October.