

PhD Student in Computational Systems Biology at CIC bioGUNE

The Computational Biology Group at CIC bioGUNE seeks a highly skilled and motivated PhD student to work on an exciting project that aims at developing a computational framework for modeling stem cell-niche interactions to understand the mechanisms of tissue homeostasis and regeneration. In particular, the selected candidate shall develop a cell-cell interaction network-based computational approach, using single-cell transcriptomics data, to model cell populations dynamics and design strategies for cell rejuvenation. Research will be focused on the liver with the principal aim of designing strategies for enhancing regeneration in the aging liver tissue. The project is conducted in collaboration with Dr Martinez-Chantar at CIC bioGUNE, who will conduct the experimental validation of the computational predictions.

The Computational Biology Group aims to establish a solid infrastructure in developing theoretical frameworks for computational modeling of biomedical problems, especially in the area of network biology. The group closely collaborates with leading national and international experimental labs with a particular interest in stem cell research and regenerative medicine.

Requirements of the ideal candidate:

- Msc degree in bioinformatics, computer science, engineering, physics or a related discipline
- Strong computational skills
- Prior experience in mathematical modelling of biological networks is an asset
- Excellent working knowledge in English.

We offer:

- Opportunity to do research into biomedical problems within a highly dynamic research institution (CIC bioGUNE) and in collaboration with an internationally recognized partner
- An exciting international environment

Applications should contain the following documents:

- A detailed curriculum vitae
- A Cover letter
- Names and addresses of two or three referees.

For further information, please contact:

Prof. Dr. Antonio del Sol

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