

## **Postdoctoral Fellow in Computational Systems Biology at the Luxembourg Centre for Systems Biomedicine**

The Luxembourg Centre for Systems Biomedicine (LCSB) was created within the Health Technologies Initiative from the Government of Luxembourg as one of the research priorities of the University of Luxembourg. The LCSB is an Interdisciplinary Centre of the University, independent of the faculties and it combines experimental and computational approaches to analyze complex biological systems and disease processes from a systems biology perspective. The Computational Biology Group (CBG) provides the LCSB with a solid infrastructure in developing theoretical framework for computational modeling on biomedical problems, especially in the area of network biology. The CBG group includes researchers with theoretical, computational and wet lab backgrounds, thereby providing an unusual interdisciplinary environment.

The Computational Biology Group seeks a highly skilled and motivated Postdoctoral fellow to work on an exciting project that aims at developing a computational framework to design cellular conversion strategies for Regenerative Medicine purposes. This framework will be applied to obtain in vitro limbal stem cells, which will be later used for clinical transplantation to treat patients who have lost their vision. In particular, the selected candidate shall develop a computational methodology based on information and graph theories, using single-cell transcriptomics data, to model cell populations dynamics and design strategies for cellular conversion. In addition, he/she will participate in the project management and planning, including the supervision of one Ph.D. student. This is a collaborative project with Professor Michele de Luca's group at the Center for Regenerative Medicine "Stefano Ferrari", University of Modena, where the experimental validation of the computational predictions will be conducted.

Requirements of the ideal candidate:

- Ph.D. degree in bioinformatics, computer science, engineering, physics or a related discipline
- Strong computational skills
- Prior experience in mathematical modelling of biological networks is strongly desired
- A strong first-author publication record in the fields of Bioinformatics and Computational Biology
- Excellent working knowledge in English.

We offer:

- Opportunity to do research into biomedical problems within a highly dynamic research institutions (LCSB) and in collaboration with an internationally recognized partner (Center for Regenerative Medicine "Stefano Ferrari", University of Modena)
- An exciting international environment
- A very competitive salary

For further information, please contact:

Prof. Dr. Antonio del Sol

E-mail: [antonio.delsol@uni.lu](mailto:antonio.delsol@uni.lu)

**Applications** should contain the following documents:

- A detailed curriculum vitae
- Cover letter mentioning the reference number
- Description of past research experience and future interests
- Name and addresses of two or three referees

All applications should be sent preferably in electronic version before February 28<sup>th</sup>, 2020 to the following address:

Luxembourg Centre for Systems Biomedicine (LCSB)

University of Luxembourg

6, avenue du Swing

L-4367 Belvaux

Tel: +352-466644-6982 (Office)

Email: [antonio.delsol@uni.lu](mailto:antonio.delsol@uni.lu)

[www.lcsb.lu](http://www.lcsb.lu)

