

Transdisciplinary program in Computational Biology

Description

The program aims at training Ph.Ds with complementary competences in Computational Biology. The rationale is that deep biological knowledge is required in order to craft innovative systems and to offer research contributions relevant to the field. The Ph.D. candidate enrolled in the ICT course joining the transdisciplinary program receives specific education and guidance to develop relevant research in Computational Biology. The transdisciplinary program offers elements of cellular biology, biotechnology and bioinformatics. Specific attention is devoted to foster interactions and communication across the disciplines.

This transdisciplinary program is complementary to the transdisciplinary program in Computational Biology of the International PhD Program in Biomolecular Sciences. The panel we refer to in this document will include seven members and is joined between the two transdisciplinary programs. External scientific advisers will support the panel and monitor the program activities in order to guarantee its quality.

Criteria for accessing the program and achieving the secondary title

Enrollment

An ICT PhD student interested in joining the program has to present an application to the panel consisting of:

- registration number of application to ICT school
- curriculum vitae
- motivation letter specific to the transdisciplinary program

Applications are examined by the panel in order to evaluate the motivation of the candidate and his/her attitude for transdisciplinary research. Biotechnological skills are mandatory for acceptance. Candidates lacking these skills are required to acquire additional credits in life science disciplines during the program.

Co-advisor

The transdisciplinary program student consulting with his/her advisor proposes a co-advisor for the secondary program to be ratified by the panel and the doctoral course.

Qualifying

The qualifying proposal of the transdisciplinary program student should contain research aspects which are relevant for the secondary program and a feasible plan for their achievement. The panel appoints a referee for evaluating the secondary program, among the members of the qualifying committee or as an external additional member. The referee should evaluate the relevance, coherence and feasibility of the qualifying proposal, according to the up mentioned criteria.

Credits

The transdisciplinary program student is required to acquire six of the fifteen credits of the ICT doctoral course within those characterizing the secondary program.

Work in progress

At the end of the second and third years, the transdisciplinary program student presents his/her work in front of a commission appointed by the panel.

Exclusion

The panel may decide to exclude PhD students from the transdisciplinary program in the following cases:

- a) failure to achieve the credits required for the secondary program;

- b) negative evaluation of the qualifying by the referee of the secondary program at the end of the first year;
- c) negative evaluation of the work in progress at the end of the second year. .

The exclusion from the transdisciplinary program does not imply exclusion from the ICT Doctoral Program.

Defense

The Ph.D. thesis of the candidate must show the scientific relevance of the research done with respect to the secondary program as well as the capacity to interpret and frame the results in the context of the secondary discipline. To this aim at least one paper published in a biological or biotechnological venue is required. The panel appoints a referee for the secondary program among the referees for the primary program or as an additional referee. The referee is responsible for evaluation of the scientific relevance of the Ph.D. thesis for the secondary discipline and submits a recommendation to the Final Examination Committee. The panel designates a commissioner for the secondary program among the members of the Final Examination Committee. The commissioner is responsible for the final evaluation of the secondary aspects of the Ph.D. work of the candidate and decides on the attribution of the secondary title.

Title

The transcript of records and the Diploma supplement of the University of Trento will mention that the Ph.D. "fulfilled the requirements of the transdisciplinary program in Computational Biology and the thesis had been judged to be an ...(excellent/good/relevant)... contribution to the field of Computational Biology and consequently he/she is "Expertus" in Computational Biology". Consequently, he/she can mention the primary title in the following way: "Ph.D. in Information and Communication Technologies, Expertus in Computational Biology"

First Panel

Enrico Blanzieri (ICT)
Francesca Demichelis (BS)
Andrea Passerini (ICT)
Alberto Inga (BS)
Claudio Moser (FEM)
Gabriella Viero (CNR)
Nicola Segata (CIBIO)

Referent for the ICT committee

Andrea Passerini