

Transdisciplinary program in Computational Biology

International PhD Program in Biomolecular Sciences

University of Trento

Description

The Transdisciplinary Program in Computational Biology aims at training Biomolecular Sciences Ph.Ds with complementary competences in Computational Biology to enhance their ability to work in the transdisciplinary research field. The program offers training in multiple areas of bioinformatics and computational biology and enhances interactions and communication across the disciplines.

This program is complementary to the Transdisciplinary Program in Computational Biology at the International PhD program in Information and Communication Technology (ICT) of the University of Trento.

A joined panel (see **Executive Regulations for Transdisciplinary Programs**), here referred to as *Panel*, includes seven members representative of multiple disciplines. External scientific advisers (Advisory Board) will monitor the program activities in order to guarantee its quality.

Criteria for entering the program and obtaining the secondary title

Enrollment

Bioinformatics and/or informatics skills are mandatory for enrollment in the Transdisciplinary Program in Computational Biology. As part of the Biomolecular Sciences application, interested candidates need to present the following additional documentation:

- motivation letter that is specific to the transdisciplinary program;

Applications are examined by the Admission Committee of the International PhD Program in Biomolecular Sciences that will include one or more member(s) of the Panel. The motivation letter and the candidate interest in transdisciplinary research will be evaluated.

Co-tutor

Upon consultation with her/his tutor, each Transdisciplinary Program student selects a co-tutor for the secondary program that can be ratified by the Panel and the PhD Committee.

Credits

Each Transdisciplinary Program student is required to acquire 40% of the educational ECTS credits of the Biomolecular Sciences PhD program within those characterizing the secondary program.

Work in progress

At the end of year one, two and three, each Transdisciplinary Program student presents her/his work in front of a commission appointed by the PhD Program in Biomolecular Sciences that will include a representative member of the Panel.

Requirements to continue the Transdisciplinary Program throughout the PhD

In order to continue the Transdisciplinary Program throughout the PhD program the student needs:

- a) to obtain the credits required for the secondary program;
- b) to obtain positive evaluation at times of work in progress sessions by the representative member of the panel also with respect to the secondary program.

Failure to fulfill those criteria might turn into exclusion from the Transdisciplinary Program, but would not imply exclusion from the International PhD Program in Biomolecular Sciences.

Defense

As part of her/his Ph.D. thesis, the candidate must demonstrate:

- a) originality and scientific relevance of the work with respect to the secondary program;

- b) ability to interpret and frame the results in the context of the secondary discipline; and
- c) at least one paper that includes a solid computational component and/or published in a computational journal.

The Panel appoints a referee for the secondary program among the referees for the primary program or as 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 appoints a referee for the secondary program among the members of the defense committee. The member 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 transcripts of the University of Trento will mention that the Ph.D. student "fulfilled the requirements of the transdisciplinary program in Computational Biology and consequently she/he is "Expertus in Computational Biology". She/he can refer to the primary title in the following way: "Ph.D. in Biomolecular Sciences, Expertus in Computational Biology"

Panel

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

Referent for the ICT committee

Andrea Passerini

Referent for the BS committee

Francesca Demichelis