



Direzione Ricerca,
Innovazione e
Internazionalizzazione

**UNIVERSITÀ
DI TORINO**

ID

VP_015_BIOTEC

Visiting Professor Program Academic Year 2025/2026

TEACHING COMMITMENT: 16 hours

COURSE TITLE

Genetic Models of Human Pathology

TEACHING PERIOD

II semester

SCIENTIFIC AREA

Biology

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The general aim of the course is to illustrate the use of animal models for studying human diseases.

LEARNING OBJECTIVES

Students will gain a comprehensive understanding of the primary techniques used to create mouse models, including classical transgenesis, gene targeting, and CRISPR/Cas9. Additionally, they will explore the application of these animal models in studying the mechanisms underlying human disease and evaluating potential therapeutic interventions. The course will focus on diseases such as cardiovascular disorders, diabetes, iron metabolism disorders, and cancer.

OTHER ACTIVITIES BESIDE THE COURSE

The visiting professor will deliver a seminar for the Department and engage in scientific discussions with PhD students and research fellows.

VISITING PROFESSOR PROFILE

The Visiting Professor candidate for this course should meet the following requirements:

- solid scientific background in the use of animal models for studying physiological and pathologic conditions, demonstrated by high-impact scientific publications, participation at international meetings and coordination of research projects.
- Scientific interests in the field of iron metabolism and related disorders
- Teaching experience

CONTACT REFERENT

Emanuela Tolosano

emanuela.tolosano@unito.it