

Course for Ph.D. students

Alternative methods in preclinical drug testing
(1 ECTS)

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Course language: English

The lessons will be given in room C in the following dates:

21 March: 10.30 - 12.30

28 March: 10.30 - 12.30

4 April: 10.30 - 12.30

Course description

The course focuses on the current *in vitro* cell-based methods and their most recent advances as alternative approaches to animal testing in drug discovery/development and in toxicology. In particular, 3D cell cultures, comprising spheroids, organoids and organ-on-chip technology, will be described and critically discussed, highlighting challenges and limitations.

Examples of applications will be presented as preclinical models to evaluate drugs safety/efficacy in various target organs and in different patho-physiological conditions (e.g. monogenic disorders, cancer, pregnancy).