University of Zurich[UZH]
ETH Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

PhD Program Biomedicine (BioMed)

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Course advertisement

Molecular Biology Methods

This course is intended to provide a comprehensive overview and in-depth exploration of key molecular biology methods for gene and protein expression profiling, promoter regulation analysis, gene silencing, and genome editing. The course covers a range of experimental techniques, including real-time quantitative PCR, chromatin immunoprecipitation, transfection strategies, siRNA-mediated gene silencing, CRISPR-Cas genome editing, Western blotting, and co-immunoprecipitation. Designed for direct practical application, the course addresses the fundamental principles underlying each method, as well as experimental design, protocols, method limitations, troubleshooting strategies, and data presentation. Real-life case scenarios and practical issues will be also discussed.

The course is open to all PhD students.

Date / time	**September 6+7, 2027** (2 full days)
Room	University of Zurich, Irchel Campus, room to be announced
Type	Lecture
Preparation	Students are encouraged to bring real case scenarios or issues from their own research for discussion.
Lecturer	PD Dr. Pedro A. Ruiz-Castro (pa.ruizcastro@gmail.com)
Maximum participants	25
Recommendation	To be taken during the first year of the PhD
Further information	BioMed Coordination Office: Adriana Rüegger (adriana.rueegger@uzh.ch)
Credit points	1 ECTS credit
Registration	By email to Adriana Rüegger (adriana.rueegger@uzh.ch)
	Deadline for registration: August 23, 2027