



Course advertisement

Introduction to human physiology: Endocytosis in kidney homeostasis and disease

Day one will feature an overview of endocytosis, focusing on its role in processing or trafficking proteins across various compartments of the kidney. Emphasis will be placed on its significance for kidney homeostasis and health, as well as the implications of dysfunction. On day two, lectures will delve into the factors and pathway paradigms contributing to endocytosis dysfunction in a broader spectrum of proximal tubulopathies and kidney diseases. Discussions will include preclinical models, cellular systems, and methods for monitoring endocytosis and homeostasis in the proximal tubule. Additionally, attendees will conduct experiments utilizing zebrafish with stable expression of a bona fide biosensor of PT function. These experiments will demonstrate the effects of nephrotoxins on the endocytic activities of epithelial cells in the zebrafish pronephros.

The course is open to all PhD students. Students of the PhD Program Biomedicine (BioMed) and students at the Institute of Physiology have priority.

Date/time	August 27 + 30, 2024 (2 full days)
Room	University of Zurich, Irchel Campus, seminar room to be announced.
Type	Lecture (mornings) and practical work (afternoons)
Preparation	Textbook chapter, to be announced – reviews.
Lecturers	Dr. Alessandro Luciani
Maximum participants	15
Recommendation	To be taken during the first year of the PhD
Further information	BioMed Coordinating Office (andrea.schmitz@uzh.ch)
Credit points	1 ECTS (short MC examination)
Registration	By e-mail to andrea.schmitz@uzh.ch until end of July, 2024