

Einladung zum V O R T R A G

Prof. Dr. Andries van der Meer

University of Twente – Netherlands



Organs-on-Chips: From Platform Technology to Applications in Drug Development

- **Datum: Donnerstag, 19.10.2023**
- **Zeit: ab 17.00 Uhr**
- **Ort: HS E3.1, Petersgasse 10–12, EG**

Organs-on-chips are advanced tissue culture models that can mimic organ-level functionality in a controlled, dynamic microsystem. They differ from other cell culture models in that they use microenvironment engineering to capture increasingly complex physiological functions. In the past years it has been shown that organs-on-chips can provide accurate and relevant data for preclinical studies, thereby potentially reducing the time and cost of drug development and clinical trials. Moreover, with their unique combination of person-specific human cells and high-level tissue function, organs-on-chips challenge the strong reliance on animal models in life sciences.

In this talk, Prof. Van der Meer of the University of Twente will provide examples of how organs-on-chips can be used to study drugs, taken from his group's work on vessels-on-chips, heart-on-chip and retina-on-chip. Moreover, he will address the central challenge in the field: how can we upscale, standardize and miniaturize organ-on-chip models in the near future?