

ASHBi

DISTINGUISHED SEMINAR

Engineering Organoid Development

Lecturer: **Matthias Lutolf PhD**

Director Roche Institute for Translational Bioengineering
Professor EPFL Lausanne, Switzerland



Date: **Monday, 11 July 2022**

Time: **17:00 - 18:00**

Venue: **Zoom Online** Register via the right QR code



Eligibility: **Researchers and Students in Kyoto University**

Most organoids form through poorly understood morphogenetic processes in which initially homogeneous ensembles of stem cells spontaneously self-organize in suspension or within permissive three-dimensional extracellular matrices. Yet, the absence of virtually any predefined patterning influences such as morphogen gradients or mechanical cues results in an extensive heterogeneity. Moreover, the current mismatch in shape, size and lifespan between native organs and their in vitro counterparts hinders their even wider applicability. In this talk I will discuss some of our ongoing efforts in developing next-generation organoids that are assembled by guiding cell-intrinsic self-patterning through engineered stem cell microenvironments.

Organizer : Institute for the Advanced Study of Human Biology (WPI-ASHBi)

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