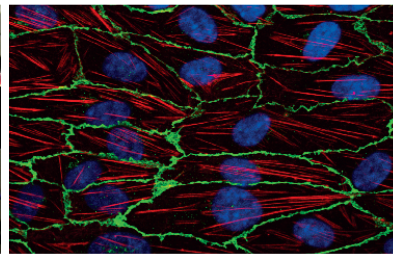
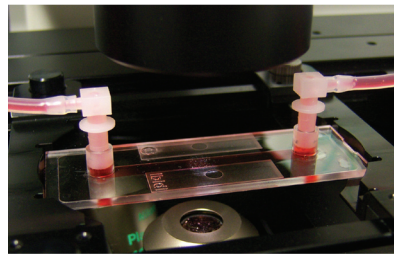
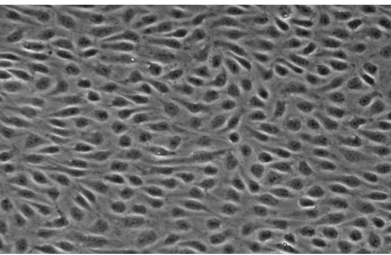


Cell Cultivation under Perfusion and Live Cell Imaging



Topics:

Several adherent cell types are exposed to shear stress conditions *in vivo*, e.g. endothelial cells in a blood vessel. Culturing cells *in vitro* under perfusion conditions simulates this mechanical stimulus and induces a more physiological behavior. The objective of the course is to give scientists a profound background in cell culture biology and physical basics of perfusion based assays. In the practical part endothelial cells (HUVEC) are cultured under physiological flow conditions.

Target Group:

The course is intended for scientists and technical associates with a profound experience in cell culture and sterile working techniques who want to establish perfusion based assays in their lab.

Schedule Day 1

Start at 10 am

- Welcome and introduction
- Talk 1: Physical basics 1 (shear stress, flow rates)
- Hands-on Part 1: Cell seeding in channel slides

Lunch

- Hands-on Part 2: Technical setup of components
- Talk 2: Cell based perfusion assays
- Hands-on Part 3: Exposing cells to flow

Summary day 1 (around 5 pm)

Schedule Day 2

Start at 9 am

- Hands-on Part 4: Microscopy, fixation and staining of cells
- Talk 3: Physical basics 2 (flow profile, setups, trouble shooting)

Lunch

- Hands-on Part 5: Fluorescence Microscopy, flow calibration, special setups

End of training at around 4 pm

Participation is free of charge.

The number of participants is limited to 8. For registrations and further questions please contact us at info@ibidi.de