



ibidi Practical Course

Chemotaxis Assays and Video Microscopy

Topics:

The aim of the course is to learn the experimental setup and analysis of chemotaxis assays, by means of video microscopy. The focus is on analysis of chemotaxis on 2D surfaces and in 3D gel matrices. Experiments are performed and analyzed using HT-1080 cancer cells. Main topics are: sample preparation, video microscopy of migrating cells, cell tracking, data analysis, and presentation of the results. Finally, characteristic parameters for the description of directed and / or undirected cell migration are evaluated.

Target Group:

The course is intended for scientists and technical associates with profound experiences in cell culture and sterile working techniques who want to establish chemotaxis experiments in their lab.

Schedule Day 1

Start at 10 am

- Welcome and introduction
- Hands-on: Pipetting methods – properly filling micro channels

Lunch

- Hands-on: Cell preparation and cell seeding with HT-1080 cells in 2D and 3D
- Talk: Physics of chemotaxis
- Hands-on: Preparation and set-up of an overnight experiment using video microscopy

Summary day 1 (around 6 pm)

Schedule Day 2

Start at 9 am

- Talk: Overview of video, tracking, and analysis software
- Hands-on: Tracking and analysis software

Lunch

- Talk: Chemotaxis assays and applications
- Discussion and conclusion

End of training at around 4 pm

*Participation is free of charge.
The number of participants is limited to 8. For registration and further questions, please contact us at: info@ibidi.de.*