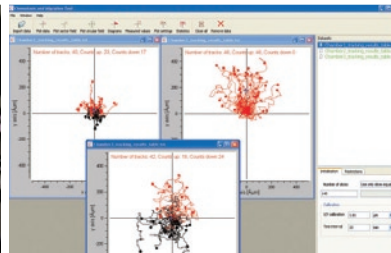
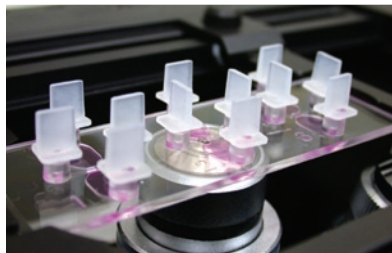
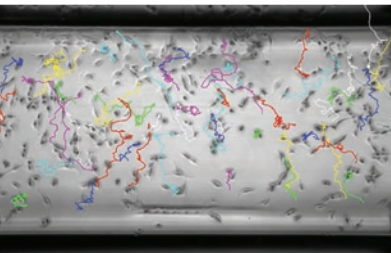


Chemotaxis Assays and Video Microscopy



Topics:

The aim of the course is to learn the experimental setup and analysis of chemotactical assays, by means of video microscopy. The focus is on analysis of chemotaxis of adherent cells in 2D and non-adherent cells in 3D gel matrices. Experiments are performed and analyzed using HT-1080 cancer cells and dendritic 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 Part 1:
Pipetting methods – properly filling
micro channels

Lunch

- Hands-on Part 2:
Cell preparation and cell seeding with
dendritic cells and HT-1080
- Talk 1: Physics of chemotaxis
- Hands-on Part 3:
Preparation and set-up of overnight
experiment using video microscopy

Summary day 1 (around 6 pm)

Schedule Day 2

Start at 9 am

- Talk 2: Overview of video, tracking and analysis
software
- Hands-on Part 4:
Tracking and analysis software

Lunch

- Talk 3: Chemotaxis assays and applications
- Discussion: Questions and answers on theory
and practice

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