

Lecture schedule - Lab-on-a-chip in biomedical applications 2020 - EEMN26

v.13 23/3 10-12 Thomas Laurell Introduction to Lab-on-a-chip, microfluidics and scaling laws

v.14 30/3 10-12 Andreas Lenshof Flow cytometry
Mats Ehinger Clinical applications of flow cytometry

v.15 6/4 10-12 Sabeth Verpoorte Paper microfluidics

Johan Malm Diagnostic test strips in clinical use

v.19 4/5 10-12 Johan Nilsson Droplet microfluidics
Håkan Jönsson Bioanalytical applications of droplet microfluidics

v.20 11/5 10-12 Axel Broman Cell och particle trapping; Cell and particle

v.21 18/5 10-12 Thomas Laurell Microarray and microbead based assays

v.22 25/5 10-12 Marc Isaksson In chip cell culturing and organs on-a-chip
Trygve Sjöberg Organ conditioning for transplantation

26/3 10-12 Thomas Laurell Chip based cell separation I: Acoustic

2/4 10-12 Simon Ekström DNA analysis on chip
Markus Heidenblad DNA analysis methods in the clinic

9/4 10-12 Thomas Laurell Chip based cell separation II: Inertia, Deterministic Lateral Displacement, Dielectrophoresis, Magnetic

7/5 10-12 Andreas Lenshof Coulter counter principle & Imaging Cytometry
Adam Morell Automated clinical cell analysis - Cellavision AB

14/5 10-12 Jörg Kutter Molecular separation - Fundamental CE, LC
Molecular separation - LOC applications

20/5 13-15 Thomas Laurell Lab-on-a-chip based point of care diagnostics
Mirjam Andreasson Point-of-care diagnostics - HemoCue AB

28/5 10-12 Stefan Scheduling Cell separation in clinical hematopoietic stem cell transplantation