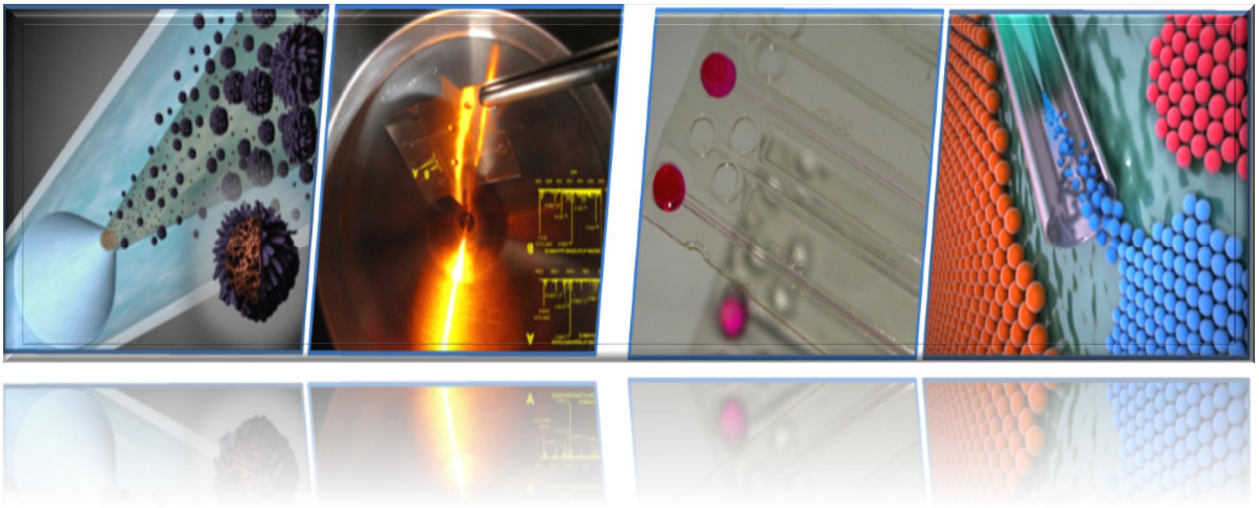

# PROV-607 MiNaPharmA (5 ECTS): Microfluidics and Nanotechnology in Pharmaceutical Applications

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doctoral programme in drug research

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## International guest lecturers' seminars

Thu 7 June (Infocenter Corona, 1st floor, lecture hall 2)

Theme of the day: Preclinical drug discovery and clinical diagnostics

9:00-9:15 Welcome address
*Dr. Hélder Santos and Dr. Tiina Sikanen, University of Helsinki*

9:15-10:30 Approaches to pathogen analysis with lab-on-a-chip devices
*Prof. Nicole Pamme, University of Hull*

*coffee break*

10:45-12:00 Small Volume Detection in Microfluidics
*Prof. Andrew de Mello, ETH Zürich*

*lunch break*

13:15-14:15 Microfluidics in drug metabolism research
*Dr. Tiina Sikanen, University of Helsinki*

14:15-14:45 Microfluidic-based chip to accelerate tumor antigen discovery and enhance cancer immunotherapy
*Prof. Vincenzo Cerullo, University of Helsinki*

*coffee break*

15:00-15:30 Single cell transcriptomics sequencing
*Dr. Päivi Saavalainen, University of Helsinki*

15:30-16:00 Digital microfluidics for clinical analysis
*Mr Christopher Dixon, University of Toronto*

16:00-16:30 Snap on Chip: 3D cell culture chips for testing nanoparticle drug delivery
*Dr. Anand Tatikonda, Aalto University School of Chemical Engineering*

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18:45 Get-together for the evening event & boarding (Kauppatori, Royal Line)

19-22 Dinner cruise (m/s Katarina)

Fri 8 June (Infocenter Corona, 1st floor, lecture hall 2)

Theme of the day: Drug delivery

9:00-10:00 High-throughput experimentation drop by drop
*Prof. Andrew de Mello, ETH Zürich*

10:00-11:00 Dose-on-demand production of radio-pharmaceuticals and assembly of drug delivery vesicles via droplet microfluidics
*Prof. Nicole Pamme, University of Hull*

*coffee break*

11:15-12:15 Microfluidic synthesis of engineered nanomaterials and their biomedical applications
*Prof. Manuel Arruebo, University of Zaragosa*

*lunch break*

13:30-14:30 Fabrication of multifunctional nanoparticles by microfluidics for drug delivery and biomedical applications
*Prof. Hélder Santos, University of Helsinki*

*coffee break*

14:45-15:45 Microphysiological systems for emulating human tissues and diseases
*Prof. Shrike Zhang, Harvard Medical School*

15:45-16:15 Single cell analysis
*Prof. Hongbo Zhang, Åbo Akademi University*

16:15-16:30 Wrap-up and closing remarks