

Biotechnology in Health and Disease (BTEK1034)

March 26.–28. 2012

Diagnostic technologies – reporters, platforms and reagents

Mon	26.3.	10–16.00	Dentalia, Arje-Scheinin-auditorium, Lemminkäisenkatu 2, 2 nd floor
Tue	27.3.	10–15.15	Medisiina, Exterum-auditorium, Kiinanmyllynkatu 10, 1 st floor
Wed	28.3.	10–16.00	Mikro- auditorium, Kiinamyllynkatu 13, 1 st floor

Target audience: Advanced stage biotechnology students, PhD students, DIA-NET National Doctoral Programme

Credits: Mandatory presence (1 credit) and/or participation in the examination (a total of 2 credits)

Description: This year's Biotechnology in Health and Disease aims to present diagnostic technologies that bring the traditional diagnostics closer to the end-user, both physically and time-wise. This can be achieved by developing novel technologies that can be built into simple, inexpensive and high-performing test platforms. This development will be critically dependent on new reporter technologies, new materials and liquid handling, novel test principles and inexpensive, compact instrumental solutions. Still one critical aspect is the availability of specifically tailored reagents of superior performance both for traditional proven markers as well as for novel analytes of interest.

Monday March 26

Auditorium *Arje-Scheinin*
Lemminkäisenkatu 2, 2nd floor

10.15 Introduction [Kim Pettersson](#), Department of Biotechnology, University of Turku

10.30 [Harri Siitari](#), Principal Scientist, Programme Manager, VTT
“Integrated technology solutions for adding value in diagnostics”

11.15 [Kristiina Takkinen](#), Research Professor, VTT
“Printed Microfluidic Solutions for Diagnostics”

12-13 LUNCH BREAK

13.00 [Terhi Riuttamäki](#), Department of Biotechnology, University of Turku
“Reporter technology based on photon upconversion”

13.45 [Harri Takalo](#), Department of Biotechnology, University of Turku
“Fluorescent lanthanide chelate reporters and their applications”

14.30 [Ove Öhman](#), CEO, Fiom Diagnostics
“Polymer based microfluidics for POC applications”

15.15 [Johan Lundin](#), Research Director, FIMM
“Diagnostic platforms for personalized medicine - from deep molecular profiling to compute cloud microscopy”

Tuesday March 27

Auditorium *Externum*
Kiinanmyllynkatu 10, 1st floor

10.15 Aleksi Soini, Advisor, MobiDiag Oy

"MobiDiag's approach for multiplexed molecular diagnostic testing of infectious diseases"

11.00 Olli Mikkonen, Abacus Diagnostica Oy

"Rapid DNA testing using GenomEra™-technology"

12-13 LUNCH BREAK

13.00 Matti Höyhtyä, Director, Research and Development, Medix Biochemica

"Monoclonal antibodies for IVD industry and diagnostic rapid tests for human healthcare"

13.45 Sheik Mohammad Talha, Department of Biotechnology, University of Turku

"Designer Antigens in Serology"

14.30 Tuomas Huovinen, Department of Biotechnology, University of Turku

"The synthetic antibody generation platform at UTU/BT"

Wednesday March 28

Auditorium *Mikro*
Kiinanmyllynkatu 13, 1st floor

10.15 Janne Koskinen, Director, R&D, ArcDia International Oy Ltd

"mariPOC® - a novel tool for rapid multianalyte testing of respiratory infections"

11-12.30 LUNCH BREAK

12.30 Jukka Lekkala, Magnasense Technologies Oy

"Magnasense - technology for diagnostics at point of care"

13.15 Jan Østrup, CEO, TeleChemistry Oy

"TeleChemistry - decentralized clinical chemistry system"

14.00 Kristian Ranta, CEO, Mendor Oy

"Mendor - the new diabetes movement"

15.00-16.00 EXAMINATION

(multiple-choice questions)