

## PhD course MF9135 - Biomarkers in clinical research

Content: 45 min lectures - group work

### **Monday October 24<sup>th</sup> Rikshospitalet B: Seminarrom 2 B2.U002**

- 09.00 Introduction. Course presentation, sign-up, group organization
- 10.00 Analysis on "main instrument". Research use of diagnostic instrument, methods, possibilities & limitations. Editorial view: how to describe these methods in publications  
Olav Klingenberg
- 11.00 Extracellular vesicles: cargos of biomarkers  
Reidun Øvstebø
- 12.00 Lunch break
- 13.00 Mitochondria-derived biomarkers  
Lars Eide
- 14.00 New epigenetic biomarkers: Detection and implications  
Arne Klungland
- 15.00 Group work

### **Tuesday October 25<sup>th</sup> Rikshospitalet B: Seminarrom 2 B2.U002**

- 09.00 Mass spectrometry in Tear fluid proteomic analyses- technical considerations  
Milaim Pepaj
- 10.00 Use of flow cytometric techniques for biomarker analysis  
Even Fossum
- 11.00 Antibody production and use in clinical research  
Marianne Nordlund Broughton
- 12.00 Lunch break
- 13.00 EM imaging: Tissue preparation, immunogold techniques  
Finn Reinholt
- 14.00 Group work
- 15.00 Attention to covariables: when is a biomarker out of range?  
Lars Mørkrid

**Wednesday October 26<sup>th</sup>**

**Rikshospitalet B: Seminarrom 2 B2.U002**

09.00 Brain imaging: biomarkers in psychosis research  
Ingrid Agartz

10.00 Lipid profiling  
Stine Ulven

11.00 Molecular biomarkers for drug effects  
Nils Tore Vetthe

12.00 Lunch break

13.00 Lipid biomarkers and lipidomics  
Christian A. Drevon

14.00 Group work

15.00 Biomarkers in virology  
Andreas Lind

**Thursday October 27<sup>th</sup> Rikshospitalet B: Seminarrom 2 B2.U002**

09.00 Serum tumor markers: Clinical and analytical challenges  
Nils Bolstad

10.00 CSF biomarkers & neurological disease  
Tormod Fladby

11.00 Neurophysiological biomarkers  
Kristian Bernhard Nilsen

12.00 Lunch break

13.00 Prostate cancer biomarkers  
Kristin Taskén

14.00 Group work

15.00 Urine analyses. Metabolomics, sample handling & preparation  
Jens Petter Berg

**Friday October 28<sup>th</sup>      Rikshospitalet B: Seminarrom 2 B2.U002**

- 09.00 Cardiovascular biomarkers  
Torbjørn Omland
- 10.00 Biomarkers for dementia  
Jens Pahnke
- 11.00 Biomarkers for allergy and asthma  
Karin Lødrup Carlsen
- 12.00 Lunch break
- 13.00 Biomarkers for Autoimmune disease  
Peter Szodoray
- 14.00 Group work
- 15.00 Summary. Evaluation. Exam orientation.