Meilahti Clinical Proteomics Core Facility

Proteomics for Clinical Applications - Glycoproteomics – MS-Tissue Imaging – HTP-Arrays

Introduction to Basic Protein Chemistry and Proteomics 2011

Biomedicum Helsinki (Haartmaninkatu 8), 00290 Helsinki, Finland

10 -14.10.2011

Program (Please check for possible late minute updates!!)

Monday 10.10 (Introduction, Mass-spectrometry in Protein analysis and Proteomics)

Seminar Room 3, Biomedicum Helsinki (Haartmaninkatu 8)

09.15 – 09.30	Introduction to the course (MB)
09.30 – 10.15	Mass-spectrometry in basic protein analysis I (NK)
10.15 – 11.00	Mass-spectrometry in basic protein analysis II (NK)
11.00 – 11.15	Coffee break
11.15 – 11.45	Quantitative Mass spectrometry in Proteomics (TN)
11.45 – 12.00	Questions and answers

Tuesday 11.10 (Electrophoretic Methods, 2DE analysis, DIGE technology)

Seminar Room 3, Biomedicum Helsinki (Haartmaninkatu 8)

09.15 – 10.00	Electrophoretic methods in basic protein chemistry, magic tricks (MB)
10.00 – 10.45	2-D Electrophoresis in proteomics (MB)
10.45 – 11.00	Coffee break
11.00 – 11.45	Differential Fluorescence Gel Electrophoresis Proteome profiling (JJ)
11.45 – 12.00	Questions and answers

Wednesday 12.10 (Advanced methods in electrophoresis, Edman degradation, High-throughput techniques in protein chemistry, clinical proteomics)

Seminar Room 3, Biomedicum Helsinki (Haartmaninkatu 8)

09.15 – 10.00	Advanced use of electrophoretic techniques in protein chemistry (MB)
10.00 – 10.45	Sequence analysis by Edman degradation (MB)

10.45 – 11.00	Coffee break
11.00 – 11.45	High-throughput techniques in proteomics, aspects of clinical proteomics (MB)
11.45 – 12.00	Questions and answers

Thursday 13.10 (Glycoproteomics, protein chromatography, Protein quantification methods)

Lecture Room 2, Biomedicum Helsinki (Haartmaninkatu 8)

09.15 – 10.15	Protein carbohydrate analysis, clinical glycoproteomics (RR)
10.15 – 10.45	Ion exchange and affinity chromatography (JT)
10.45 – 11.00	Coffee break
11.00 – 11.45	Protein quantification and detection (JT)
11.45 – 12.00	Questions and answers, magic tricks

Hands-on part I (First Group) (Computer Room CP28b)

13.00 – 16.00	Databases and other analytical tools

Friday 14.10 (Protein detection methods, Mass-spectrometry Imaging, site-visit to the laboratory)

Lecture Room 2, Biomedicum Helsinki (Haartmaninkatu 8)

09.15 – 10.00	Infra-red detection in protein chemistry (IJ)
10.00 – 10.45	Tissue Profiling and Imaging by Mass-spectrometry (ML, RS)
10.45 – 11.00	Coffee break
11.00 – 11.15	Questions and answers, magic tricks
11.15 – 12.00	Site-Visit to the Biomedicum Proteomics facilities

Hands-on part II (Second Group) (Computer Room CP28b)

13.00 – 16.00	Databases and other analytical tools

The Course is sponsored by:

The Finnish Graduate School Network in Life Sciences and especially FGSN, GPBM, HBGS and VGSB

And organized by: Protein Chemistry/Proteomics Unit at the Biomedicum Helsinki with the help of Nisse Kalkkinen (NK, HY), Risto Renkonen (RR, HY), Tuula Nyman (TN, HY), Jussi Junkkarinen (JJ,

GE), Isto Jänönen (IJ, Fischer Scientific), Jaana Vesterinen (JT, FIMEA, HY) and the Finnish Proteomics Society (FinnProt) and many others.

Registration for the Course: https://elomake.helsinki.fi/lomakkeet/23407/lomake.html

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