

## **Practical Course in Quantitative Mass Spectrometry-based Proteomics**

Course program November 19-23, 2012

Venue: Department of Biochemistry and Molecular Biology, University of Southern Denmark, Campusvej 55, 5230 Odense M.

### **Sunday 18th** - Arrival and check-in at the Hotel Dormir Odense

### **Monday 19<sup>th</sup>** – Quantitative proteomics and protein-protein interaction analysis

09:00-09:30	Introduction to the course by Jens S. Andersen, SDU
09:30-10:30	Quantitative proteomics by Blagoy Blagoev, SDU
10:30-11:00	Coffee break
11:00-11:45	Practical: stable isotope labelling of cells
11:45-12:30	Proteomics technology by Jakob Bunkenborg, SDU
12:30-13:15	Lunch
13:15-14:15	Proteomics strategies for protein-protein interaction analysis by Leonard Foster, University of British Columbia, Vancouver, BC
14:15-17:30	Practical: protein-protein interaction analysis
17:30-18:15	Introduction to sample preparation for LC-MS analysis by Anna Nordborg, SDU
20:00-	Dinner at restaurant in Odense city

### **Tuesday 20<sup>th</sup>** - Proteomics applications in cell biology

09:00-10:30	Practical: sample preparation for protein-protein interaction analysis by LC-MS
10:30-11:00	Coffee
11:00-11:40	Mass cytometry in studies of single cell signaling in biology and disease by Bernd Bodenmiller, Institute of Molecular Life Sciences, University of Zürich
11:40-12:00	Young Speaker: TBA
12:00-13:30	Posters, Exhibitions, Sandwiches, Soft drinks, Coffee
13:30-14:15	High-resolution native mass spectrometry; single ion detection of megaDa complexes by Albert Heck, Utrecht University
14:15 -14:35	Proteomic characterization of the molecular switch underlying FGFR2b recycling and cellular output by Chiara Francavilla, NNF-CPR, University of Copenhagen
14:35-14:55	Young Speaker: TBA
14:55-15:15	Protection of Labile Phosphate Ester Groups by Novel Metal Complex Chemistry by Frank Kjeldsen, SDU
15:15-15:45	Coffee break, Posters and Exhibition
15:45-16:25	Molecular Genetics and Quantitative Proteomics to Identify Novel Regulatory Mechanisms of Energy Metabolism in Eukaryotes by Nils Færgeman, SDU
16:25-17:15	Monitoring infection-induced changes in the interactome using PCP-SILAC by Leonard Foster, University of British Columbia, Vancouver, BC
17:15-18:00	Reception, SDU Restaurant
18:00-	Dinner at SDU Restaurant



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### Wednesday 21th –Data analysis, post translational modifications and organelle proteomics

09:00-09:30	Introduction to Andromeda and MaxQuant by Marie-Catherine Le Bihan, SDU
09:30-10:30	Practical: database searching using Andromeda and MaxQuant
10:30-10:45	Coffee
10:45-13:00	Practical: protein phosphorylation experiment
13:00-13:45	Lunch
13:45-14:15	Proteomics analysis of cell organelles by Jens Andersen, SDU
14:15-15:00	Presentation TBA
15:00-15:30	Coffee
15:30-18:00	Practical: computational analysis of protein-protein interaction data using MaxQuant and Perseus
18:00-19:00	Dinner at SDU
19:00-20:00	Practical: enrichment and LC-MS analysis of phosphopeptides

### Thursday 22nd –Analysis of posttranslational modifications

09:00-09:30	Introduction to proteomics analysis of posttranslational modifications
09:30-11:45	Practical: computational analysis of phosphoproteomics data
11:45-12:00	Closing remarks
12:00-13:00	Lunch
13:00-	Departure



## Practical information

### Course fee:

The course is supported by the Nordic Cilia and Centrosome Network (<http://nordiccilia.org/>). All expenses will be covered for members of the Network. For other participants the course is free but travel and accommodation is not included.

### Instructors:

Jakob Bunkenborg ([bunkenborg@bmb.sdu.dk](mailto:bunkenborg@bmb.sdu.dk))  
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### The Danish Society for Proteomics

The course coincides with the DAPSOC meeting November 20, 2012 (<http://www.dapsoc.org/>)  
Please feel free to bring a poster for presentation.

### Accommodation and breakfast

Hotel Dormir Odense (<http://domir.dk/>)  
Hans Tausensgade 19  
5000 Odense C  
Danmark  
Telefon: (+45) 66 12 14 27  
The hotel is located close to the railway station

### Registration and contact person:

Registration by e-mail before October 20, 2012 to:  
Jens S. Andersen, E-mail: [jens.andersen@bmb.sdu.dk](mailto:jens.andersen@bmb.sdu.dk), Tel. +45 6550 2365  
Please indicate your group affiliation and include your CV.  
Number of participants: 12

### ECTS points

For PhD students the course corresponds to 2.5 ECTS points