PhD COURSE

BASIC TECHNIQUES IN FLOW CYTOMETRY (69/19)

**07.10 - 11.10 2013**

**Aarhus University**

## Course leaders: Marianne Hokland, Mikkel Steen Petersen and Charlotte Christie Petersen

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Literature:

http://flowbook.denovosoftware.com/

PROGRAM

Monday 7 October 2013 (INTRODUCTION TO FLOW CYTOMETRY)

**“The Blue Auditorium”, Victor Albeck Building**

09:15 - 09:30 Welcome and introduction to Flow cytometry MH

09:30 - 10:15 Introduction to Basic Flow Cytometry I (methodological principles) MH

COFFEE and TEA break

10:35 – 11:30 Basic Flow Cytometry II (hardware) CCP

11:30 - 12:00 Fluorochromes ML

12:00-12:45 LUNCH – together in the Bartholin Building, 6th floor,

sponsored by BD Biosciences

**Parallel demonstrations and workshops at various locations in the Bartholin Building –**

**See separate group plan**

12:45 – 15:30 FC500 analyzer (room 536) AS

LSRFortessa analyzer (room 440) MNA

FACSAriaIII sorter (room 135) AT

FACSAriaIII sorter (room 448) CCP

Flow Workshop (room 447) MSP

Flow Workshop (room 441) MH

Tuesday 8 October 2013 (BASIC ANALYSIS and CELL SORTING)

**“The Blue Auditorium”, Victor Albeck building**

09:15 – 10:00 Practical FCM CCP

COFFEE and TEA break

10:15 – 11:00 Cell sorting - theory CCP

11;15 - 11:45 Cell sorting - examples from a clinical project setting UBJ

11:45 – 12:00 Bone marrow sorting to slides (FISH) and Methocult CCP

12:00-13:00 LUNCH

**"Small IT lab", Victor Albeck Building**

13:00 – 14:00 Data analysis - Introduction to FlowJo - tutorial MH/CCP/MNA

14:15 - 15:00 Data analysis - Exercise I MH/CCP/MNA

15:15 - 16:00 Data analysis - Exercise I cont MH/CCP/MNA

Wednesday 9 October 2013 (MULTICOLOR FCM/COMPENSATION)

**“The Blue Auditorium”, Victor Albeck building**

09:15 – 10:00 Light, spectra and fluorescence I MSP

COFFEE and TEA break

10:15 - 11:15 Light, spectra and fluorescence II MSP

11:30 – 12:00 Light, spectra and fluorescence III MSP

12:00 – 13:00 LUNCH

13:00 – 13:30 Designing clinical panels LN

**Small IT-lab, Victor Albeck Building**

13:45 - 14:30 Data analysis (compensation) – Introduction and ExerciseII MSP/CCP

14:45 – 15:15 Data analysis – advanced features of FlowJo MSP/CCP

15:15 – 16:00 Data analysis – Exercise II continued MSP/CCP

##### Thursday 10 October 2013 (FCM based techniques and applications)

**“The Blue Auditorium”, Victor Albeck Building**

09:15 – 10:00 Flow Cytometry in Hematology PH

COFFEE and TEA break

10:15 – 10:45 Paper discussion PH/MH

10:50 – 11:35 Various applications of flow cytometry MH/CCP

11:40 - 12:00 How to design multicolor panels CCP/MH

12:00 – 13:00 LUNCH

13:00 – 13:45 Flow Cytometry in Clinical Immunology BM

14:00 – 14:30 How to handle large datasets CT

14:45 – 15:00 Tips and tricks in flow cytometry CCP

15:15 – 15:45 Exotic flow cytometry MSP

15:45 - 16:00 Discussion and evaluation MH/CCP

##### Friday 11 October 2013 (**Parallel demonstrations and workshops – See separate group plan**)

09:00 – 11:45 FC500 (room 536) AS

FACSAriaIII sorter (room 448) CCP

Flow Workshop (room 441) MH