

Expert Cytometry and the Core Facility for Flow Cytometry at the University of Bergen

Presents

Advanced Concepts in Flow Cytometry

Two Day Advanced Course:

Day 1: Advanced Multicolor Design

Day 2: Advanced Data Analysis

*a laptop, with at least a trial license of FlowJo, is recommended for the courses

Thursday and Friday
June 11th and 12th, 2015

For Full Course Details, and to register, please visit:
<http://expertcytometry.com/courses/bergen-2015>

Questions? email: expert@expertcytometry.org

Course Cost

Academic Registration €400

Standard Registration €500

Sponsors:



Experience Cytometry - Time to ExCyte

Advanced Multicolor Design

Educational Objectives: At the end of this course, participants will be able to understand the key components to rational multicolor panel design. This will include the key theoretical principles of panel design, experiment optimization and validation.

Target Audience: Those researchers seeking to move from 3-4 color experimental panels to 8+ fluorescent panels. A working understanding of the principles of flow cytometry are necessary.

Agenda

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| 09:00-09:30 | Welcome and Introduction to the course |
| 09:30-10:30 | Starting with Why – Multicolor Panel Design (MPD) starts and ends with the biological hypothesis |
| 10:30-10:45 | Coffee break |
| 10:45-11:30 | Theory of Panel Design – understanding the key theory of panel design |
| 11:30-12:00 | Introducing Automation – tools to help speed up panel design |
| 12:00-13:00 | Lunch |
| 13:00-14:00 | Practical Panel Design – class project to build multicolor panel |
| 14:00-15:00 | Optimization of MPD – theoretical foundations of optimizing a panel |
| 15:00-15:15 | Coffee Break |
| 15:15-16:00 | Practical optimization – use real data to learn how to optimize a panel |
| 16:00-16:45 | Troubleshooting – identifying problems and understanding solutions |
| 16:45-17:00 | Quiz and concluding questions |

Advanced Data Analysis

Educational Objectives: At the end of this course, participants will be able to understand the key components of flow cytometry data analysis. This includes proper compensation, identifying and utilizing the best controls, developing an analysis workflow and extracting data for statistical hypothesis testing.

Target Audience: Those researchers with experience in flow cytometry seeking to improve their data analysis technique, while gaining a better understanding of statistical hypothesis testing with flow cytometry data.

Agenda

09:00-10:30 **Controls and Compensation** – the lifeblood of flow cytometry analysis

10:30-10:45 Coffee Break

10:45-12:00 **Practical multicolor analysis I** - Five color compensation and data analysis

12:00-13:00 Lunch

13:00-14:00 **Statistical Analysis of Flow Data** - applying statistics for flow based questions

14:00-15:15 **Practical multicolor analysis II** – 11 color compensation and data analysis

15:15-15:30 Coffee Break

15:30-16:15 **Rare Event Analysis** – overcoming difficulties of small target events

16:15-17:00 **Practical multicolor analysis III** – identifying experimental problems with data