cnïo
AD HOC
SEMINAR

"MULTICOLOR FLOW CYTOMETRY COURSE"

Venue: *Online via zoom*

Speakers: *Andrea Valle, European Application Specialist. DeNovo Software.*

Laura Ferrer, High Dimensional Spectral Cytometry Specialist. Malaghan Institute. Wellington, NZ

Lola Martinez, Head of the Flow Cytometry Unit. CNIO. Madrid. Spain

Ana Ilie, Flow Cytometry Unit Staff. CNIO. Madrid. Spain

PROGRAMME

Multicolor Flow: fundamentals and rules.
Monday 3rd October 2022   *(Online)*

* Intro to Multicolor Flow! (L. Martínez)   **10:00-11:45**

How to Design a Multicolour Experiment: we will go through what you need to know and all aspects you should take into consideration when planning a multicolour flow experiment. Sample prep tips, how best acquire your data, the rules of compensation, controls you need to consider.

* Intro to Multicolor Spectral Flow! (L. Ferrer)   **12:00-13.00**

What are the differences between conventional and spectral flow cytometry?: what are the rules and tools you need to follow to succeed in designing and running a multicolor spectral panel.

* Multicolor Flow panel design and instrument set up (CNIO FCCU staff)   **14:30-16.30**

From a practical perspective we will put in practise all the learned rules to design together a multicolor panel to identify T cell subsets in mouse spleen. We will go through the different steps of the experimental design (assigning the markers to use, choosing the best antibody-fluorochrome combinations, defining controls and using different tools to succeed on panel design (spreading error matrices) and how to standardize your assays.

Multicolor Flow: panel design, instrument set up and analysis.

* Analysing a multicolor flow experiment *(A. Valle)*   **10:00-12:30**

We will carry on together an analysis of a multicolor flow experiment using FCS Express v7. We will cover how to clean your data files, how to do automated compensation, check the compensation matrix and how to critically investigate our data. Getting stats and reporting data, plus a brief introduction to the high dimensional analysis tools available within the software.

* Analysing a multicolor flow experiment *(L. Martínez)*   **14:00-16:00**

We will carry on together an analysis of a multicolor flow experiment using FlowJo v10. We will cover how to clean your data files, how to do automated compensation and how to critically investigate our data using NxN plots, FMO controls. Getting your SME to assess your panel design and answer many other questions such why my data appears wrongly compensated and what could I do? Getting stats and reporting data.

* The Multicolor course is highly recommended if you are doing or planning to use the analytical flow cytometers to run immunophenotyping panels. Some knowledge of how cytometers work is required and aims to users with some flow experience that are now or will run in the future multicolor immunophenotyping flow experiments.

Registration is need it through the link below, and the cost of the course is 50 Euros (CNIO Members), 75 Euros (Non CNIO Members) and 125 Euros (Industry):

https://www.cnio.es/eventos/multicolor-immunophenotyping-course-3rd-4th-october-2022/

It includes theoretical and practical sessions in panel design, data acquisition and data analysis using some of the common analysis software in the market. Due to the actual pandemic situation and to comply with the social distancing requirements, the course will be online via remote connection, close to the sessions you will receive the links for the different sessions.