



ROMANIAN SCHOOL ON FLOW CYTOMETRY, 4TH EDITION

PRACTICAL AND INTERACTIVE **VIRTUAL** COURSES ON BASIC CONCEPTS AND RESEARCH APPLICATIONS OF FLOW CYTOMETRY

14 – 15 DECEMBER 2020

Organizer	Romanian Association of Flow Cytometry
Partners	Faculty of Biology, University of Bucharest
	Research Institute of University of Bucharest
	Institute of Biochemistry, Romanian Academy, Bucharest
	Laboratory of Immunology, CHU Saint Etienne
	Emergency University Hospital, Bucharest
	University of Medicine and Pharmacy "Carol Davila" Bucharest

SHORT DESCRIPTION

- The school is a basic to intermediate-level online certificate program
- The aim of the school is to provide participants with essential knowledge about the use of flow cytometry as a research tool for analysis of cell functions. It is intended for **young research scientists** who are using flow cytometry in their research. Participants will learn the basics of flow cytometry and how it can be used in research applications.
- 2 days – about 8 hours /day (December)
- The program is composed of **four theoretical courses** and **six practical sessions**. Each course contains a lecture, slides and transcripts and a quiz. Some include recommended readings. Enrolees can communicate questions or comments.
- The practical sessions will include video materials, protocol presentations and data analysis using fcs files distributed before the practical sessions.
- The school will connect scientists (whether new or experienced) in learning about flow cytometry applications, techniques and basic principles.

Monday 14 th December		Tuesday 15 th December	
9.30 – 9.45	Welcome Addresses Introduction to the Virtual School on Flow cytometry	9.30 – 11.30	ONLINE PRACTICAL SESSION Quantifying cancer cells drug response: cell viability and inflammation profile Bianca GALATEANU
9.45 – 10.30	BASIC THEORY IN FLOW CYTOMETRY FCM principles, fluidics, optics, electronics, types of instruments, Sorting Luminita MARUTESCU		
10.30 – 10.40	Break	11.30 – 11.45	Online Coffee Break
10.40 – 11.10	BASIC THEORY IN FLOW CYTOMETRY Principle of fluorescence, fluorochromes, tandem dyes, interference, filter selection, optical bench Claude LAMBERT	11.45– 12.30	ONLINE PRACTICAL SESSION Tools for Data analysis, gating, hierarchy, statistics Claude LAMBERT
11.10 – 11.20	Online Coffee Break		
11.20 – 12.00	SETTING UP A FLOW CYTOMETRY PROTOCOL Instrument settings, compensations, data interpretation, positivity Claude LAMBERT		
12.00 – 12.10	Break	12.30 -12.40	Break
12.10 – 12.50	SETTING UP A FLOW CYTOMETRY EXPERIMENT Sample preparation, acquisition and data analysis Livia SIMA	12.40 – 13.45	ONLINE PRACTICAL SESSION Exploration of Granulocytes functions Fouad SEGHTROUCHNI Miruna STAN
12.50 – 13.00	Online Coffee Break		
13.00 – 14.00	ONLINE PRACTICAL SESSION Instrument settings, compensation Claude LAMBERT		
14.00 – 15.00	LUNCH	13.45 – 14.30	LUNCH
15.00 – 17.00	ONLINE PRACTICAL SESSION Quantifying cancer cells drug response: apoptosis and cell cycle Livia SIMA	14.30– 16.30	ONLINE PRACTICAL SESSION Immunophenotyping Ion DUMITRU Luminita MARUTESCU
		16.30 – 17.00	ONLINE PRACTICAL SESSION Sponsors Live Demo: Run Simple Cell-Based Assays on a Cell Counter Suzanne Riches, PhD Nexcelom
		17.00 – 17.15	Conclusions of the School - Closing -