	<b>REGISTRATION FEES</b>	
	Members of ESCCA, ESCCA-	OTHER ATTENDANTS <del>I</del>
	Affiliated Societies and	
	Sponsoring Institutions	
	FULL COU	RSE°
EARLY REGISTRATION	400 €	500€
(Before 30 June, 2019)		
LATE REGISTRATION	500€	600€
(Until July 8, 2019)		
<ul> <li>Includes Course materia</li> </ul>	ls, lunches and coffees, Welcome	e Party and Course Dinner
plus one-year full memb	ership in ESCCA.	
°) Attendants of previous	ESCCA Summer Schools in Valenc	ia will have 20% reduction
in course fees.		
Students from emerging	countries and from countries wi	th no national Cytometry
Society may apply for an	n ESCCA Travel Fellowship cover	ing the registration fees.
Contact: jose.e.oconnor@	uv.es	
<b>Course Information and</b>	Registration:	
https://escca.eu/educat	ion/international-course	
http://www.cipf.es/web	p/portada/summer-school	
Confirmation and Addit	ional Information: jose.e.ocon	nor@uv.es



## ESCCAINTERNATIONAL SCHOOL ON CYTOMETRY



# CYTOMETRY OF STEM CELLS: A PRACTICAL APPROACH (6<sup>th</sup> EDITION)

8-12 July 2019

Cytometry Laboratories Valencia University and Principe Felipe Research Center VALENCIA (SPAIN)

#### BACKGROUND

- Flow cytometry and related Cytomic technologies have become a complex and powerful tool for cell analysis, essential in many aspects of interest for basic and applied research in Cellular and Molecular Biology, Biotechnology, Drug Discovery and Toxicology, among other.
- For many years now, flow cytometry has been successfully used in the study of Hematopoietic Stem Cells and their pathologies. Nowadays, the new challenges of Regenerative Medicine and Cell Therapy have extended the applications of flow cytometry and cytomics to many other Stem Cell types and lineages.
- Knowledge of the principles of Flow Cytometry and Cytomics and the critical points of their practical use are essential for laboratories performing basic or clinical studies related to stem cell biology and application.

#### **ESCCA INTERNATIONAL SCHOOL ON CYTOMETRY (EISC)**

EISC is a program of integrated educational and training initiatives oriented to confer to new skills and tools to design and optimize and manage cytometric experiments and interpret the results obtained. EISC consists of a series of parallel 5-day courses <u>limited to 20 students per course</u>. Previous editions of EISC have brought together each year more than 50 students from 25 world countries, and more than 30 teachers from 16 countries.

### CYTOMETRY OF STEM CELLS: A PRACTICAL APPROACH

- The course will approach methods and applications of Cytometry and Cytomics in basic, translational and clinical fields of Stem Cell research, and will include practical aspects of assay design and performance, data analysis and interpretation. Theoretical and technical lectures delivered by international experts will alternate with practical exercises in wet labs and computer rooms.
- Emphasis will be placed on the technical principles of flow cytometry and management tools, the fundamentals of the applications, the essential aspects of data analysis and interpretation of the results and the procedures of quality control. Different brands of cytometers, reagents and third-part software will be available for wet-lab practicals and computer-based exercices.

#### THE ESCCA CYTOMETRY SCHOOLS AND ACREDITATION

 This course is part of the ESCCA Program for Continuous Education (CE) in Cytometry. At the end of this Course, students may take the examination for the ESCCA <u>European Certification in Cytometry</u>. For more details, please visit WWW.escca.eu

### **COURSE CONTENTS**

#### LECTURES AND TECHNICAL SEMINARS ON:

- Overview of the basic aspects of Stem Cells.
- Overview of the clinical relevance of Stem Cells.
- Working with Stem Cells in Basic and Clinical Settings.
- Technical aspects of Cytometry and Cytomics.
- Data analysis and interpretation.
- Basic applications of Cytometry in Stem Cell Research
- Clinical applications of Cytometry in Cell Therapy.

#### WET LAB AND COMPUTER PRACTICALS ON:

- Basics of cytometer operation, sample preparation and data acquisition.
- Identification and functional characterization of human and murine Stem Cells.
- Isolation of Stem Cells by FACS and MACS.
- Absolute count and isolation of hematopoetic and endothelial precursors.
- Assessment of cell therapeutic products.

#### **ALREADY CONFIRMED TEACHERS**

Deborah J. Burks (Valencia, ES), Paolo Cappella (Milano, IT), Irene Cervelló (Valencia, ES), Silvia Della Bella (Milano, ES), Akaitz Dorronsoro (Valencia, ES), Guadalupe Herrera (Valencia, ES), Alicia Martínez-Romero (Valencia, ES), José-Luis Mateos (Madrid, ES), Inmaculada Moreno (Valencia, ES), Luke Noon (Valencia, ES), José-Enrique O'Connor (Valencia, ES), Jordi Pétriz (Barcelona, ES), Frank Preijers (Nijmegen, NL), Francisco Sala (Lausanne, CH), José-Carlos Segovia (Madrid, ES)