SEVENTH ESCCA INTERNATIONAL SUMMER SCHOOL ON CYTOMETRY
22-26 June and 29 June-3 July 2020
Valencia, Spain

ANNOUNCEMENT AND PRELIMINARY PROGRAMS

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Fondo Europeo de Desarrollo Regional
“Una manera de hacer Europa”

Instituto de Investigación Sanitaria
The ESCCA INTERNATIONAL SUMMER SCHOOL ON CYTOMETRY (ISSC) is a part of the ESCCA Program for Continuous Education (CE) in Cytometry that leads to European Certification in Cytometry. ESCCA is also an approved CE provider of the International Cytometry Certification Examination (ICCE). For more details, please visit www.escca.eu.

The Seventh edition of ISSC will be held on 22-26 June and 29 June-3 July 2020 and will consist of three parallel 5-day courses starting from Monday morning to Friday afternoon and limited to 15 students per course.

The ISSC is organized by European Society for Clinical Cell Analysis (ESCCA), the University of Valencia and the Principe Felipe Research Center, with the collaboration of the Oceanogràfic (City of Sciences and Arts, Valencia). Course registration is already open.

Members of ESCCA and other ESCCA-affiliated societies, as well as members of the organizing institutions will have reduced registration fee. Also, the Summer School offers a limited number of Fellowships covering registration to participants from developing countries or from countries not having a local cytometry society.

The courses FUNCTIONAL CYTOMETRY AND NANOCYTOMETRY: A PRACTICAL APPROACH; FLOW CYTOMETRY IN HEMATOLOGY: A TECHNICAL APPROACH and CYTOMETRY OF STEM CELLS: A PRACTICAL APPROACH will present methods and applications of Cytometry and Cytomics in basic, clinical and translational fields, and will approach practical aspects of assay design and performance, data analysis and interpretation, using commercially available cytometers, reagents and software. Theoretical lectures and technical seminars delivered by international experts will alternate with extensive practical exercises in wet labs and computer rooms.

The previous editions of ISSC have brought together up to now more than 200 students from 25 countries all around the world, and more than 30 teachers from 16 European countries. ISSC has been sponsored by 22 companies, including many ESCCA Industrial Partners.
WHO SHOULD ATTEND THE SUMMER SCHOOL ON CYTOMETRY?

The ISSC courses, taught in English, are informal, open and convivial, and include social activities. Although all the ISSC courses are open to people active in Cytometry, experienced or specialized cytometrists will benefit better from the specialized courses.

All the Courses cover data analysis, use and comparison of cytometry software, and real data review, being thus suitable also for those responsible for final results. The registration fee for participants who are not members of ESCCA, includes a one-year membership in ESCCA.

SUMMER SCHOOL FELLOWSHIPS

Registrants in two courses (week 1 and week 2) and previous students of the Summer School will have 20% reduction in course fees. Members of ESCCA and other ESCCA-affiliated societies, as well as members of the organizing institutions will have reduced registration fee. Also, the Summer School offers a limited number of Fellowships covering registration to participants from developing countries or from countries not having a local cytometry society. To this purpose, a motivation letter should be addressed to José-Enrique O’Connor (jose.e.oconnor@uv.es).

COURSE 1
FUNCTIONAL CYTOMETRY AND NANOCYTOMETRY: A PRACTICAL APPROACH
Lectures and Seminars: Bases of flow Cytometry and Cytomic technologies; Web-based resources for education and networking in Cytometry; Preanalytical phase: Sample preparation, reagent selection and panel design; Analytical phase: Instrument standardization, operation and quality control; Post-Analytical phase: Basic and advanced data analysis and management; Guidelines for functional Cytometry: Cell-based assays; Guidelines for Nanocytometry: Working with subcellular elements; Guidelines for Reporting and Publishing Cytometric results; Relevant applications of functional Cytometry and Nanocytometry; The future of Cytometry in Single-cell multi-Omic strategies.

Practicals in wet lab and computer room: Cell proliferation, cell death and autophagy; Polychromatic surface- and intracellular immunophenotype; Real-Time Cytometry; Cell communication, cell signaling and cell activation; Cell metabolism and bioenergetics; Drug metabolism and toxicity; Exosomes and extracellular microvesicles; Microorganisms; Basic and advanced software for data analysis and data mining.

Case-oriented immunophenotypic studies in wet lab and computer room: Normal Hematopoiesis; Erythrocytes and erythroid cells; Acute and chronic leukemias; Lymphomas; Myelodysplastic syndromes; Analysis of rare cells and clones; Detection of minimal residual disease. Case-oriented functional studies in wet lab and computer room: Paroxysmal Nocturnal Haemoglobinuria; Drug resistance; Stem cells; Platelets and microvesicles.
COURSE 3
CYTOMETRY AND STEM CELLS: A PRACTICAL APPROACH
(29 JUNE-3 JULY 2020; Level: Specialized)

Lectures and Seminars: Overview of the basic biology of Stem cells. Overview of the clinical relevance of Stem cells. Overview of Cytometry applications in Stem Cell Research and therapy. Cytometric methods for Stem Cell study: Identification and phenotypic characterization; Functional characterization; Purification of Stem Cell subpopulations. Cytometry in basic and translational studies of Stem Cells: Embryonic and induced pluripotent stem cells; Hematopoietic stem cells; Mesenchymal stem cells; Cancer stem cells. Cytometry in clinical studies of Stem Cells: Enumeration and isolation of circulating Stem Cells; Assessment of cell therapeutic products; Monitoring of Stem Cell therapy and Tissue Regeneration.

Practicals in wet lab and computer room: 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 hematopoietic and endothelial precursors; Assessment of cell therapeutic products.
TRAVEL AND ACCOMODATION

Valencia is a tourist destination and, thus, displays a wide offer of convenient accommodation places, from hotels to B&B, youth hostels and private apartments. The period of the ISSC is a peak in the tourist season, and we recommend to proceed to find and book accommodation as soon as possible.

The ISSC venue is the Centro de Investigación Príncipe Felipe (Calle Eduardo Primo Yúfera, 3, 46012 Valencia), next to the Oceanographic, in the spectacular area of City of Arts and Sciences.

Link to venue location: https://goo.gl/maps/47CCqDvdUzKeGKaP9

Valencia international airport is connected directly by regular and low cost airlines to Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Italy, Morocco, Netherlands, Portugal, United Kingdom, Romania, Russia, Switzerland, Turkey and Ukraine. Valencia is also connected by plane and by high-speed trains to Madrid (1h 30 min) and Barcelona (3 hours).

For more information on Valencia, please visit www.turisvalencia.es
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<tr>
<th>REGISTRATION FEES</th>
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<tr>
<td><strong>Members of ESCCA, ESCCA-Affiliated Societies and Sponsoring Institutions</strong></td>
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<tr>
<td><strong>EARLY REGISTRATION</strong></td>
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<td>(Before 30 May 2020)</td>
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<td><strong>LATE REGISTRATION</strong></td>
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Includes Course materials, lunches and coffees, Welcome Party and Course Dinner.

†) Includes also one-year full membership in ESCCA.

‡) Registrants in two courses (week 1 and week 2) and previous students of the Summer School will have 20% reduction in course fees.

Students from emerging countries and from countries without local Cytometry society may apply for an ESCCA Travel Fellowship covering the cost of registration.

Contact: jose.e.oconnor@uv.es

Course Information and Registration:

http://www.cipf.es/web/portada/summer-school

https://escca.eu/education/international-course (Until March 15)

https://escca.eu/education/escca-schools-affiliated-events (From March 15)

Confirmation and Additional Information: jose.e.oconnor@uv.es