

2nd ANNOUNCEMENT AND PRELIMINARY PROGRAM



International Summer School on Cytometry



VALENCIA (SPAIN), 7-11 and 14-18 JULY 2014

In collaboration with:

The University of Valencia, Principe Felipe Research Center,
Iberian Society for Cytometry (SIC) and ESCCA Industrial Partners

VNIVERSITAT
D VALÈNCIA



PRINCIPE FELIPE
CENTRO DE INVESTIGACION



Local organiser: José-Enrique O'Connor (jose.e.oconnor@uv.es)

ESCCA Coordinator: Claude Lambert (claudelambert@chu-st-etienne.fr)



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www.escca.eu/meetings/summer-school

THE SECOND ESCCA SUMMER SCHOOL ON CYTOMETRY

ESCCA Educational Committee created a program of courses that will lead to a future European Cytometry Certification. The first edition of ISSC was held successfully in Valencia, Spain on July 2013, bringing together 57 students (from 22 countries) and 33 teachers (from 16 countries).

The second edition of ISSC will be held on the weeks 7-11 and 14-18 July 2014, and will consist of two series of two parallel 5-day courses starting from Monday morning to Friday afternoon and limited to 30 students per course. The courses will approach methods and applications of Cytometry and Cytoomics in basic, clinical and translational fields, and will include practical aspects of assay design and performance, data analysis and interpretation, using commercially available cytometers, reagents and software.

Theoretical and technical lectures delivered by international experts will alternate with extensive practical exercises in wet labs and computer rooms. The ISSC courses, taught in English, are informal, open and convivial, and include social activities.

The Courses will be held in the facilities of the Faculty of Medicine, the University of Valencia, and the Principe Felipe Research Center, Valencia, Spain. The theoretical lectures and technical seminars of the Courses will be held in classrooms. Hands-on exercises will be scheduled in wet laboratories, using several models of cytometers and reagents from different commercial companies. Computer rooms will be available for real data analysis using different commercial and public-domain software packages.

WHO SHOULD ATTEND THE SUMMER SCHOOL ON CYTOMETRY?

All the ISSC courses are open to people active in Cytometry, but 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.

REGISTRATION FEES (EARLY REGISTRATION UNTIL MAY 31, 2014)

	ESCCA MEMBERS*	NON ESCCA MEMBERS**
COURSE(S) ONLY		
Before May 31, 2014	550 €	650 €
Late registration (Until June 30, 2014)	650 €	750 €
Attendees registering for two courses in separate weeks will benefit of 20% discount in the total registration fee!		
ACCOMMODATION#		
Before May 31, 2014	350 €	350 €
Late reservation (Until June 15, 2014)	450 €	450 €
*) Includes Course materials, lunches and coffees, Welcome and Gala Dinners and Social activities.		
**) Includes Course materials, lunches and coffee, Welcome and Gala Dinners and Social activities plus one-year full membership in ESCCA.		
#) Includes 6-night lodging (Sunday-Friday) at bed & breakfast rate in a University Residence, at 15 min walking distance from venue. Additional nights may be requested to the organization.		

On-line registration is already open at:

<http://esccasummerschool2014.m-anage.com>

TRAVEL AND ACCOMODATION

ISSC may provide accommodation in a University Residence located at walking distance (about 15 min) of Course Facilities. The on-line reservation fee provided by ISSC organization Includes 6-night lodging (Sunday-Friday) at bed & breakfast rate in a University Residence, at 15 min walking distance from venue. Additional nights may be requested to the organization.

For those attendants willing to manage their own accommodation, travel agency Levante Tours (empresas@viajeslevante.com) can arrange standard hotel rooms (3-4 stars) at reduced University rate (around 70 €/night, on bed and breakfast fare). Please quote "ESCCA Valencia 2014" to benefit from these reduced rates when contacting Ms. Leonor Soriano.

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

SUMMER SCHOOL TRAVEL FELLOWSHIPS

ISSC will offer a limited number of Travel Fellowships (150 €) to participants from developing countries or from countries not having a local cytometry society. To this purpose, a motivation letter should accompany the Registration form (see Registration Section) or e-mailed to José-Enrique O'Connor (jose.e.oconnor@uv.es) and Claude Lambert (claude.lambert@chu-st-etienne.fr)



PRELIMINARY PROGRAMS AND SCHEDULES

FUNCTIONAL CYTOMETRY: UNDERSTANDING AND APPLYING CYTOMIC ASSAYS
(30 Attendees; Level: Basic) 7-11 July 2014

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	07/07/2014	08/07/2014	09/07/2014	10/07/2014	11/07/2014
09-10	Registration	Imaging Flow Cytometry in functional studies	Functional analysis of cell activation	Analysis of mitochondrial function	Phagocytosis and Oxidative responses
10-11	Course Opening	Cell cycle	Extracellular signaling	Cell death: Mechanisms and Significance	Analysis of microorganisms
11-11.30	PAUSE				
11.30-12.30	Good Cytometry Practices	Cell proliferation	Intracellular signaling	Analyzing cell death	PRACTICALS
12.30-13.30	Data Generation and Interpretation	Real-Time Cytometry and Cytoenzymology	Analyzing drug-cell interactions	Analysis of oxidative stress by flow and image cytometry	PRACTICALS
13.30-15.00	LUNCH				
15-16	Overview of Single-cell technologies	PRACTICALS	PRACTICALS	PRACTICALS	Standardization and Quality control
16-17	Functional Cytometry and Cytomics	PRACTICALS	PRACTICALS	PRACTICALS	Critical review of the Courses by attendees
17-17.30	PAUSE				
17.30-18.30	Sample collection and preparation procedures	PRACTICALS	PRACTICALS	PRACTICALS	Web-based resources in Cytomics
18.30-19.30	Optimizing Polychromatic cytometry	PRACTICALS	PRACTICALS	PRACTICALS	Final Remarks and Perspectives
	WELCOME PARTY		COURSE DINNER		FAREWELL

FLOW CYTOMETRY IN HEMATOLOGY: A TECHNICAL APPROACH

(30 Attendees; Level: Basic) 7-11 July 2014

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	07/07/2014	08/07/2014	09/07/2014	10/07/2014	11/07/2014
09-10	Registration	Chronic lymphoid leukemias	PRACTICALS	PRACTICALS	Platelets
10-11	Course Opening	Lymphomas	PRACTICALS	PRACTICALS	Microvesicles
11-11.30	PAUSE				
11.30-12.30	Good Cytometry Practices	PRACTICALS	PRACTICALS	PRACTICALS	PRACTICALS
12.30-13.30	Data Generation and Interpretation	PRACTICALS	PRACTICALS	PRACTICALS	PRACTICALS
13.30-15.00	LUNCH				
15-16	Overview of applications of cytometry in Hematology	Myelomas	Normal Hematopoiesis	Stem Cells	Standardization and Quality control
16-17	Multiparametric immunophenotype of normal blood leukocytes	Acute lymphoid leukemias	Myelodysplastic syndromes	Cytometry in the Blood bank	Critical review of the Courses by attendees
17-17.30	PAUSE				
17.30-18.30	Sample collection and preparation procedures	Acute myeloblastic leukemias	Drug resistance	Special samples	Web-based resources in Cytomics
18.30-19.30	Optimizing Polychromatic cytometry	Detection of MRD	Paroxysmal Nocturnal Hemoglobinuria	Erythrocytes and erythroid cells	Final Remarks and Perspectives
	WELCOME PARTY		COURSE DINNER		FAREWELL

CYTOMICS IN DRUG RESEARCH AND TOXICOLOGY: A FUNCTIONAL APPROACH
(30 Attendees; Level: Specialized) 14-18 July 2014

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	14/07/2014	15/07/2014	16/07/2014	17/07/2014	18/07/2014
09-10	Registration	Cytomic analysis of drug-induced effects (on-target and off-target)	Predictive Toxicology in preclinical strategies	Cytomic analysis of drug-receptor interaction and endocrine disruption	Ecotoxicity
10-11	The relevance of cellular methods	Cytomics in antitumoral drug discovery	Hepatotoxicity	Biotherapy	Cytomics with bacterial models in Drug Research and Toxicology
11-11.30	PAUSE				
11.30-12.30	Overview of cytomic technologies	High-Content Screening for Cytomics in Drug Research and Toxicology	Hematotoxicity	Genotoxicity	PRACTICALS
12.30-13.30	Functional Cytomics in Drug Development and Stem Cell Research	High-Troughput Cytomics Cytomics in Drug Research and Toxicology	Immunotoxicity	Standardization and Quality control	Exvivo Cytomics (Humanized animals, human samples)
13.30-15.00	LUNCH				
15-16	Overview of applications of Cytomics in Drug Research and Toxicology	PRACTICALS	PRACTICALS	PRACTICALS	From preclinical strategies to clinical assays
16-17	Cytomic analysis of drug transport and metabolism	PRACTICALS	PRACTICALS	PRACTICALS	Critical review of the Courses by attendees
17-17.30	PAUSE				
17.30-18.30	High-Content Cytomics in Drug development and Stem Cell research	PRACTICALS	PRACTICALS	PRACTICALS	Stem cells in Drug Research and Toxicology
18.30-19.30	Web-based resources in Cytomics	PRACTICALS	PRACTICALS	PRACTICALS	Final Remarks and Perspectives
	WELCOME PARTY		COURSE DINNER		FAREWELL

CYTOMETRY AND STEM CELLS: TRANSLATIONAL RESEARCH AND THERAPY
(30 Attendees; Level: Specialized) 14-18 July 2014

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	14/07/2014	15/07/2014	16/07/2014	17/07/2014	18/07/2014
09-10	Registration	Working with Stem Cells	PRACTICALS	PRACTICALS	PRACTICALS
10-11	The relevance of cellular methods	Phenotypic characterization of Stem Cells	PRACTICALS	PRACTICALS	PRACTICALS
11-11.30	PAUSE				
11.30-12.30	Overview of cytomic technologies	PRACTICALS	PRACTICALS	PRACTICALS	Overview of the clinical relevance of Stem cells
12.30-13.30	Functional Cytomics in Drug Development and Stem Cell Research	PRACTICALS	PRACTICALS	PRACTICALS	Cytometry for assessment of cell therapeutic products
13.30-15.00	LUNCH				
15-16	Overview of basic biology of Stem Cells	Detection and Characterization of Circulating Stem Cells	Cytometry of Hematopoietic stem cells	Cytometry of Cancer Stem Cells	From preclinical strategies to clinical assays
16-17	In vivo and in vitro sources of Stem Cells	Purification of Stem Cell subpopulations	Cytometric Monitoring of Stem Cell therapy	Intervention on Cancer Stem Cells	Critical review of the Courses by attendees
17-17.30	PAUSE				
17.30-18.30	High-Content Cytomics in Drug development and Stem Cell research	Functional characterization of Stem Cells	Cytometry of mesenchymal stem cells	Cytometry of neural Stem Cells	Stem cells in Drug Research and Toxicology
18.30-19.30	Web-based resources in Cytomics	Cytometry of Embryonic and induced pluripotent Stem Cells	Cytometry of endothelial stem cells	Cytometry of In Vitro differentiation of Stem Cells and Biotherapy	Final Remarks and Perspectives
	WELCOME PARTY		COURSE DINNER		FAREWELL