

## **Postgraduate course**

### **Advanced applications of Flow Cytometry on the study of biological systems**

**Date:** March 5-8, 2018

**Place.** Auditorium. CCT CONICET. La Plata

#### **Confirmed speakers**

- Andrew Filby. International Society for Advancement of Cytometry (ISAC) SRL Emerging Leader. Director of Flow Cytometry Core Facility. Faculty of Medical Sciences. Newcastle University. United Kingdom
- Gustavo A. Folle. Department of Genetics. Unit of Flow Cytometry. Montevideo, Uruguay
- Mariela Bollati. Institute Pasteur. Montevideo. Uruguay
- Florencia Quiroga. Instituto de Investigaciones Biomédicas en Retrovirus y SIDA (INBIRS-CONICET). Argentina.
- Fernando Unrein. Instituto de Investigaciones Biotecnológicas. Instituto Tecnológico de Chascomús (IIB-INTECH), UNSAM-CONICET. Buenos Aires. Argentina
- Gabriel Morón. Centro de Investigaciones en Bioquímica Clínica e Inmunología (CIBICI-CONICET). Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina.
- Guillermo Blanco. Instituto de Estudios de la Inmunidad Humoral (IDEHU)(UBA-CONICET)
- Mónica Balzarini. Universidad Nacional de Córdoba, Córdoba, Argentina.
- Augusto Sorrequieta (Life Technologies). Argentina

#### **Program (preliminary version)**

##### **Monday 5th**

Class 1. Basics. In-depth principles of Flow Cytometry.  
Filby, Andrew

Class 2. Do's and Dont's in Flow Cytometry.  
Sorrequieta, Augusto

Class 3. Applications in aquatic ecobiology.  
Unrein, Fernando

Class 4. Assessing cell nuclear DNA content by Flow Cytometry: principles and practice.  
Folle, Gustavo.

Class 5. CyTOF: Mass-spectrometry detection in Flow Cytometry.  
Filby, Andrew

##### **Tuesday 6th**

Class 6. DNA content analysis of plant and animal cells by Flow Cytometry. Detection of proteins in plant cells.  
Folle, Gustavo

Class 7. Multiparameter analysis.

Moron, Gabriel

Class 8. Cell sorting strategies.  
Bollati, Mariela

Class 9. Analyzing Stem Cell Populations using Flow Cytometry.  
Sorrequieta, Augusto

Class 10. Statistics tools in Flow Cytometry analysis. Multivariate analysis. Part I.  
Balzarini, Monica

Class 11. Statistics tools in Flow Cytometry analysis. Multivariate analysis. Part II.  
Balzarini, Monica

Class 12. Workshop: Statistics tools.  
Quiroga, Florencia

### **Wednesday 7th**

Class 13. Imaging Flow Cytometry.  
Filby, Andrew

Class 14. Handling massive data.  
Filby, Andrew

Class 15. Quality control in flow cytometry.  
Bollati, Mariela.

Class 16. Combining strategies to evaluate cell function by fluorescence techniques (Part I).  
Blanco, Guillermo

Class 17. Combining strategies to evaluate cell function by fluorescence techniques (Part II).  
Blanco, Guillermo

Class 18. Integration of results of mass cytometry/cell imaging/ single cell RNA seq. The Biology behind massive data.  
Filby, Andrew

### **Thursday 8th**

Workshop: Data analysis (optional).  
Morón, Gabriel