FLOWING THROUGH THE NET:
TOP TIER CELLULAR ANALYSES USING NEXT-GENERATION CYTOMETRY

Thursday May 8, 2025
8:30 am - 6:30 pm CLT

https://www.youtube.com/live/NP-PnPn36RE

Organizing Committee:
Dr. Hernán Peñaloza. Assistant professor School of Biological Sciences, Pontificia Universidad Católica de Chile, Young investigator Millennium Institute on Immunology and Immunotherapy
Dr. Robert Balderas. Vice President BD Biological Sciences, San Jose, USA
Dr. Alexis Kalergis. Full professor School of Biological Sciences, Pontificia Universidad Católica de Chile. Millennium Institute on Immunology and Immunotherapy and FOCIS Center of Excellence Director

Program:

08:30 – 09:00 hrs.

- *Opening words from authorities*
  - Dr. Mariane Krause, Provost P. Universidad Católica de Chile
  - Dr. María Fernanda Pérez, Dean School of Biological Sciences, P Universidad Católica de Chile
  - Dr. Felipe Heusser, Dean School of Medicine, P. Universidad Católica de Chile
  - Dr. Sergio Lavandero, President of the Chilean Academy of Science

09:00 – 09:15 hrs.
Opening words from organizers

  - Dr. Hernán Peñaloza. Assistant professor School of Biological Sciences, Pontificia Universidad Católica de Chile, Young investigator Millennium Institute on Immunology and Immunotherapy
  - Dr. Robert Balderas. Vice President BD Biological Sciences, San Jose, USA

- Dr. Alexis Kalergis. Full professor School of Biological Sciences, Pontificia Universidad Católica de Chile. Millennium Institute on Immunology and Immunotherapy and FOCIS Center of Excellence Director

09:15 hrs- 09:45. "Application of Flow Cytometry Combined with Single-Cell Sequencing in Immunology"
Dr. Longyan Wu
Director Core Facility Institute for Immunology Tsinghua University, Beijing, China

09:45- 10:15. "Cell metabolism analyses using flow cytometry"
Dr. Pablo González
Associate Professor. School of Biological Sciences UC. Principal Investigator Millennium Institute on Immunology and Immunotherapy

10:15- 10:45. "Advances in CD8+ Treg biology and clinical applications"
Dr. Ignacio Anegón
FOCIS President. Directeur de Recherche (DRE) INSERM, Emérite. Nantes. France

10:45- 11:00. "Coffee break"

11:00- 11:30. "Improving resolution and unveiling biology with imaging and spectral flow cytometry"
Dr. Robert Balderas
Vice President BD Biological Sciences, San Jose, USA

11:30- 12:00. "Dissecting the Impact of Microbiota-Derived Outer-Membrane Vesicles on Immune Cells: A Flow Cytometry Approach"
Dr. Katina Schinnerling
Assistant Professor. Facultad Ciencias de la Vida, Universidad Andrés Bello

12:00- 13:00. "Break"

13:00- 13:30. "Building a Centralized Flow Cytometry Facility: The Córdoba Experience"
Dr. Eva Acosta
Full Professor. Facultad de Ciencias Químicas Universidad Nacional de Córdova. Argentina

13:30- 14:00. "Leveraging the power of spectral flow cytometry for analysis and sorting of complex leukocyte populations"
Dr. Steven A. Porcelli

Professor and Chair Department of Microbiology and Immunology. Scientific Director, Einstein Flow Cytometry Core Facility, Albert Einstein College of Medicine. USA

14:00- 14:30. "Extracellular Vesicles and Endocrine Pathology"
Dr. Cristian Carvajal
Associate Professor. School of Medicine UC

14:30- 15:00. "Flow Cytometry for Immune Diagnostics: From Primary Immunodeficiency to Post-Transplant Immune Surveillance"
Dr. Arturo Borzutzky
Associate Professor School of Medicine UC

15:00- 15:30. "Exploring innate immune cell modulation by advanced flow cytometry"
Dr. Leandro Carreño
Associate Professor Universidad de Chile. Millennium Institute on Immunology and Immunotherapy Deputy Director

15:30- 15:45. "Break"

15:45- 16:15. **"SARS-COV-2 breakthrough infections enhance T cell responses, magnitude breadth and epitope repertoire"**
Dr. Alba Grifoni
Research Assistant Professor La Jolla Institute for Immunology, USA

16:15- 16:45. "Impact of Lung Microbiota Dysbiosis on Gamma Delta T cell Function and Neutrophilic Inflammation in Response to Ketogenic Diet"
Dr. Denise Morais da Fonseca
Institute of Biomedical Sciences University of Sao Paulo, Brazil

16:45- 17:15. "FCRC at RU: A Journey Through Time — Yesterday, Today, and Tomorrow"
Dr. Svetlana Mazel
Director Flow Cytometry Resource Center Rockefeller University, USA

17:15- 17:45. "The Era of High-Parameter Cytometry"
Cheryl Kim
Flow Cytometry Core Director. La Jolla Institute for Immunology, USA

17:45- 18:15. "Understanding the host protective immune responses against Tuberculosis"
Dr Ved Prakash Dwivedi, Immunobiology Group,
International Centre for Genetic Engineering and Biotechnology (ICGEB),

New Delhi, India

18:15 – 18:30 hrs. Closing remarks.

Dr. Alexis Kalergis. Full professor School of Biological Sciences, Pontificia Universidad Católica de Chile. Millennium Institute on Immunology and Immunotherapy and FOCIS Center of Excellence Director