



Millennium Institute
**IMMUNOLOGY &
IMMUNOTHERAPY**



PONTIFICIA
UNIVERSIDAD
CATÓLICA
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Universidad
Andrés Bello

FOCiS
Federation of Clinical
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**Millennium Institute on Immunology and Immunotherapy
FOCiS Center of Excellence,
The Federation of Clinical Immunology Societies, FOCIS, &
The International Centre for Genetic Engineering and Biotechnology, ICGEB.**



“Advanced course on molecular and cellular translational immunology”

November 15th-18th 2021

ONLINE

Organizing Scientific Committee:

Dr. Alexis Kalergis, Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile

Dr. Pablo González, Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile

Scientific Committee:

Dr. Yvonne Rosenstein, Universidad Nacional Autónoma de Mexico, Cuernavaca.

Dr. Jorge Kalil, Universidade de São Paulo

Dr. Marcelo Hill, Institut Pasteur of Montevideo

Dr. Guillermo Docena, Universidad de La Plata

Dr. Ignacio Anegón, INSERM UMR 1064

Organizing Staff:

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Registration and Contact:

Registration: www.focisgoessouth2021.cl

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PROGRAM

All times are listed in Chile Time Zone (UTC -3).

November 15

09:30-10:30	Welcome words from Academic Authorities of the Pontificia Universidad Católica de Chile, the Millennium Institute on Immunology and Immunotherapy, Government Authorities, FOCIS Directors, and Organizers of the Course. Dr. Pablo González, Millennium Institute on Immunology and Immunotherapy Dr. Yvonne Rosenstein, Universidad Nacional Autónoma de Mexico Dr. Guillermo Docena, Universidad de La Plata Dr. Ignacio Anegón, INSERM UMR 1064 Dr. Alexis Kalergis, Millennium Institute on Immunology and Immunotherapy Dr. Andrés Couve, Minister of Science, Technology, Knowledge, and Innovation of Chile
Advanced course on molecular and cellular translational immunology – Dr. Yvonne Rosenstein, and Dr. Alexis Kalergis	
10:30-11:00	Dr. Yvonne Rosenstein: Introduction to the Immune System
11:00-11:45	Dr. Alexis Kalergis: Innate Immunity
11:45-12:30	Dr. Yvonne Rosenstein: Antigen Presentation, T Cell Activation, and Co-stimulation
12:30-13:15	Dr. Alexis Kalergis: CD4 T Cell Subsets, Cytokines
13:15-14:30	Lunch Break
14:30-15:15	Dr. Alexis Kalergis: B Cells and Antibodies
15:15-16:00	Dr. Yvonne Rosenstein: T Cell Regulation and Tolerance. Central and Peripheral Tolerance, Failure of Tolerance
16:00-16:45	Dr. Alexis Kalergis: Infectious Diseases
16:45-17:15	Break
17:15-18:00	Dr. Yvonne Rosenstein: Tumor Immunology
18:00-18:45	Dr. Yvonne Rosenstein: Q & A and general discussion
18:45-19:00	Dr. Alexis Kalergis: Final words
19:00	Adjourn for the day

November 16

Becton Dickinson Multicolor Flow Cytometry Workshop (course held in Spanish)	
09:00-10:00	<p>Introduction and welcome</p> <p>Flow Cytometry brief history: A multiparametric techniques cell analysis. Rodrigo Pestana (Medical and Scientific Affair Manager BD LATAM)</p> <p>Flow Cytometry Core Facility at the Pontificia Universidad Católica: Present and prospects (Alex Cabrera Nuñez, Flow Cytometry Core, School of Biological Sciences, Pontificia Universidad Católica de Chile)</p>
10:00-10:45	Novel fluorochromes and panel assembly in conventional and spectral flow cytometry (María Bernarda Ganem, Medical and Scientific Affairs Specialist BD Argentina)
10:45-11:30	Reading optimization and compensation in High Parameter devices (María Bernarda Ganem)
11:30-12:15	Single Cell Multiomics: fundamentals and applications for immunology assays (Cynthia Safofsky, Sr. Scientist at BD San José-USA)
12:15-13:15	Spectral Flow Cytometry: new technologies to enhance High Parameter assays. (Robert "Bob" Balderas, Vice-President at BD-Biological Sciences- San José-USA)
13:15-14:15	Lunch Break
Sessions from 14:15 to 17:45 involve a practical Workshop for registered participants (limited slots available), who receive a specific Zoom link for the activity. General registrants will still have the ability to attend the activities through the Workshop streaming	
14:15-15:45	Multicolor flow cytometry case analysis workshop: basis for an orderly and efficacious analysis (Ariel Podhorzer, Field Application Specialist BD Argentina)
15:45-16:30	Break
16:30-17:45	Case analysis in multicolor flow cytometry workshop: automatic off-line compensation. Workshop conclusions (Ariel Podhorzer)
17:45	Adjourn for the day

November 17

09:00-09:30	Welcome words and Presentation of the Workshop. Dr. Ignacio Sánchez, President of the Pontificia Universidad Católica de Chile
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	Dr. Alexis Kalergis, Millennium Institute on Immunology and Immunotherapy Dr. Pablo González, Millennium Institute on Immunology and Immunotherapy
	Session 1: Autoimmune Diseases. (09:30-11:00)
09:30-10:15	Prof. Leonie Taams (King's College London): Phenotypic and functional analysis of CD4+ and CD8+ T cells from the inflamed joints of patients with rheumatoid arthritis or psoriatic arthritis (focusing on IL-17 producing T cells)
10:15-11:00	Dr. Kristine Kuhn (University of Colorado Health University of Colorado Hospital): Mucosal mechanisms in the development of inflammatory arthritis
	Session 2: Translational Medicine. (11:00-12:30)
11:00-11:30	Dr. Susan Bueno (Pontificia Universidad Católica de Chile): Immune Response Induced by an Inactivated Vaccine for COVID-19 in Humans
11:30-12:00	Dr. Maria-Grazia Roncarolo (Stanford University): Regulatory T cells and Immune Tolerance
From 12:00 to 13:00 a parallel session from the Millennium Institute on Immunology and Immunotherapy will take place. Participants will have the ability to choose which activity they connect to through the virtual platform	
12:00-13:00 (parallel session)	Dr. Michel Neunlist (Institut des Maladies de l' Appareil Digestif, Université de Nantes): The enteric nervous system: an actor of gut and brain disorders
12:00-12:30	Dr. Petra Reinke (Charité – Universitätsmedizin Berlin): Are regulatory T cells a realistic therapeutic option in solid organ transplantation?
12:30-13:00	Dr. Matthias von Herrath (La Jolla Institute for Immunology): Developing novel therapies for type 1 diabetes
13:00-13:30	Lunch Break VIRTUAL POSTER VIEWING.
	Session 3: Cancer. (13:30-17:00)
13:30-14:00	Dr. Olivier Boyer (Pan'ther FCE [Pathophysiology, autoimmunity, neuromuscular diseases, and regenerative therapies], Rouen University Hospital): Cancer immunotherapy: principle and applications of CAR T cells

14:00-14:30	Dr. Marcela Maus (Harvard University): What's new in CAR T cells
14:30-15:00	Dr. Yvonne Rosenstein (Universidad Nacional Autónoma de México): An unsuspected role for CD43, a leukocyte marker, in non-lymphoid tumor cells
15:00-15:30	Dr. Marcelo Hill (Institut Pasteur de Montevideo): ATMEM176B/inflammasome/ exhausted T cells axis as a pharmacological target in cancer immunotherapy and coronavirus disease.
15:30-16:00	Dr. Ana Carrizosa Anderson (Harvard University): Pan-cancer analyses reveal new insights into T cell dysfunction
16:00-16:30	Dr. José Chabalgoity (University of Uruguay): Moving Salmonella-based immunotherapies for cancer closer to the clinical scenario
16:30-17:00	Dr. Flavio Salazar (Universidad de Chile): Advances in tumor cell-based immunotherapy for cancer
17:00-17:30	VIRTUAL POSTER VIEWING.
17:30	Adjourn for the day

November 18

	Session: Infectious Diseases. (9:00-12:00)
09:00-09:30	Dr. Jorge Kalil (Universidade de São Paulo): Development of a vaccine against COVID-19 aiming humoral and cellular immune response to avoid disease and infection
09:30-10:00	Dr. Noah Butler (University of Iowa): The Activation, Programming, and Metabolism of B cells Responding to Malaria
10:00-10:30	Dr. Ignacio Anegón (INSERM UMR 1064, University of Nantes FCE, France): A new anti-CD45RC mAb tolerogenic therapy in organ transplantation, GVHD and autoimmunity
10:30-11:00	Dr. Pablo González (Pontificia Universidad Católica de Chile): Herpes simplex virus, a problem that requires attention: Challenges and Opportunities
11:00-12:00	Lunch Break
12:00-13:30	VIRTUAL POSTER VIEWING
	Session: Tolerance. (13:30-17:00)
13:30-14:00	Dr. Gabriel Rabinovich (Universidad de Buenos Aires): The Sweet

	Revolution: Lectins and Glycans in Immune and Vascular Programs
14:00-14:30	Dr. Guillermo Docena (Universidad Nacional de la Plata): Human colonic IgE synthesis and implications for food allergies
14:30-15:00	Dr. Mark Anderson (University of California, San Francisco): Unlocking autoimmunity through outliers
15:00-15:30	Dr. Magnus Fontes (Institut Roche, France) : Systems Immunology and the Immunity State Space- A computational Invitation to Immunology
15:30-16:00	Dr. David Klatzmann (Sorbonne University): Polyreactive T cells and the antiviral adaptive immune response
16:00-16:30	Dr. Hans-Dieter Volk (Charité Universitätsmedizin Berlin): Impact of Immuneaging on Intratissue homeostasis
16:30-17:00	Dr. Alessandro Marcello (International Centre for Genetic Engineering and Biotechnology): The ICGEB role in infectious diseases: science and international cooperation
17:00-17:30	Closing words. Director of the Millennium Institute on Immunology and Immunotherapy. Pontificia Universidad Católica de Chile.
17:30	Course Adjourned