

# Introduction to the Immunology Course

IMMUNE REGULATION IN HEALTH AND DISEASE

October 10-13, 2015

Universidad de Antioquia

Medellin, Colombia

Photo from the course: [Immuno-Colombia Photo](#)

This course is one of the satellite events of the 11th Congress of the Latin American Association of Immunology and is supported by the Gates Foundation, the American Association of Immunologists (AAI), the Education and Clinical Immunology Committees of the International Union of Immunology Societies (IUIS), I Care Press Inc and Immunopaedia.

The regulation of the immune response is a complex phenomenon involving multiple genes, molecules and cells that interplay with physiological and environmental signals to assure the homeostasis of the immune system as a whole. In the same context, failure in any of these components may have profound effects leading to abnormal immune responses and tissue damage.

The course is directed to students with a strong background in immunology, and is aimed at an in depth analysis of the normal aspects of immune regulation, and its alterations in both experimental and clinical models. To accomplish these goals, the course includes lectures by recognized experts in each one of the topics and the discussion of classic and recent cutting-edge papers on different aspects of immune regulation. Thanks to the generous commitment of Becton Dickinson, there will be a workshop on multicolor platforms for flow cytometry

that includes lectures and computer design of antibody panels and analysis of regulatory cells.

The material presented here in 14 different sections is a learning tool to refresh your knowledge and prepare you to participate optimally in the course itself. Please study the material, which has been specifically prepared for this course, and test yourself with the Multiple Choice Questions provided by the teachers in some of the sections.

The material in each section has been edited and compiled by IMMUNOPAEDIA (based at the University of Cape Town) and generously contributed by Professor Joseph A. Bellanti from his textbook, "IMMUNOLOGY IV: CLINICAL APPLICATIONS IN HEALTH AND DISEASE" under an agreement between I Care Press Inc, Immunopaedia (University of Cape Town) and the IUIS. The resource materials available for download have been supplied by each lecturer participating in the course.

For those interested in purchasing the printed version of "Bellanti JA (Ed). Immunology IV: Clinical Applications in Health and Disease. I Care Press, Bethesda, MD, 2012", go to: [www.immunologycenter.org](http://www.immunologycenter.org) or [www.amazon.com](http://www.amazon.com).

Table 1 matches each lecturer and title of the lecture with sections in Immunopaedia:

## **Table 1: Lecturer, Topic and Section to be found in the IMMUNOCOLOMBIA section**

<b>Lecturer</b>	<b>Title of lecture</b>	<b>Pre-course section in Immunopaedia</b>
Maria T Rugeles	T cell central and peripheral tolerance	-

Lecturer	Title of lecture	Pre-course section in Immunopaedia
Leopoldo Santos-Argumedo	B cell tolerance and B reg	-
Joseph A Bellanti	<a href="#">Molecular and epigenetic mechanisms regulating the immune response and their clinical applications in allergy, autoimmune disease and cancer</a>	Epigenetics & Modulation of Immunity
Michelle Letarte	MHC regulation of the immune response	-
Narinder K Mehra	<a href="#">MHC in Medicine and Biology</a>	Transplantation
Reinhold Schmidt	<a href="#">Mendelian dysregulation</a>	Primary Immunodeficiencies
Gloria Vasquez	<a href="#">Defects of complement and dysregulation in autoimmune diseases</a>	Overview of Complement
Olivera Finn	<a href="#">Immune Regulation in Cancer</a>	Anti-tumour Immunity and Cancer Immunotherapy
Joaquin Madrenas	<a href="#">Mechanisms of microbiome-induced immune regulation and disease tolerance</a>	Regulation of Immunity & the microbiome
Clive Gray	<a href="#">Immune Regulation in Infectious Disease</a>	Mucosal Immunity & Immunopathology
Marisa Alegre	<a href="#">Regulation of alloresponses</a>	Transplantation
Juan de Sanctis	<a href="#">Immune Regulation in Pregnancy</a>	Immune Regulation in Pregnancy

For further information and feedback, please contact Dr Nyari Chigorimbo-Tsikiwa ([nyari.chigorimbo@hiv-research.org.za](mailto:nyari.chigorimbo@hiv-research.org.za)).