Ph.D. program in "Systems Biology in Immunity and Infectious Pathologies"

Course of Advanced Immunology

Goal: This course aims at further extending participants' knowledge of recent developments in immunology and improving the understanding of key scientific questions and approaches in immunological research.

Content: In a temporal frame of 5 months, we will be covering Innate and Adaptive Immune Systems, Traffic & Communication and immune cell development. Lectures will be implemented with discussions on immunological topics and master classes.

Date	Lectures	Room & Time
16th April 2020	Introduction to Inflammation	Microsoft Teams, 15:00-17:00
23rd March 2020	Innate Cytokines-IL-1, TNFα, Type I IFN	Microsoft Teams, 15:00-17:00
30th April 2020	Macrophage and Dendritic Cell Development	Microsoft Teams, 15:00-17:00
7th May 2020	NK Cells – Definitions and Functions	Microsoft Teams, 15:00-17:00
14th May 2020	Basic Concepts of Histocompatibility	Microsoft Teams, 15:00-17:00
21st May 2020	Innate Lymphoid Cells	Microsoft Teams, 15:00-17:00
28th May 2020	Overview of T Cell Biology	Microsoft Teams, 15:00-17:00
11th June 2020	Th1, Th2, Th17 Development	Pharmacology Room, 9:00-11:00
25th June 2020	Mucosal Immunity	Pharmacology Room, 9:00-11:00
9th July 2020	Laboratory of Basic Flow Cytometry	Pharmacology Room, 9:00-11:00
16th July 2020	Introduction to Single-Cell RNA Sequencing	Pharmacology Room, 9:00-11:00
23th July 2020	Verification Test	Pharmacology Room, 9:00-11:00

Immunology class- 12 lessons (24 hours total)

Target audience: The course is mainly meant for PhD students in Systems Biology in Immunity and Infectious Pathologies PhD programme. However, the course is open to all scientists with an interest in Immunology.

Lecturer: Marco Gargaro, PhD