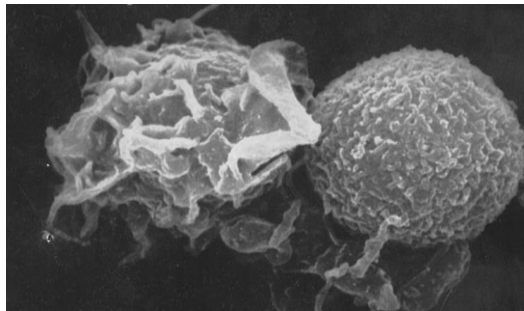


INNATE IMMUNITY and INFECTIOUS DISEASES



April 10-25, 2017

**PRELIMINARY
PROGRAM 2016-2017**

INNATE IMMUNITY AND INFECTIOUS DISEASES

COURSE

(from April 10 to April 25, 2017)

This two and half week long course offers lectures on the players and on the mechanisms of the innate immune system and inflammation involved in the defense of the host against pathogens. It also offers lectures on the new tools allowing to study of the immune system.

After the discovery of phagocytosis, 135 years ago by Elie Metchnikoff, innate immunity underwent a rebirth following the discovery of the “pattern recognition receptors” awarded by the Nobel Prize in 2011.

The understanding of the mechanisms that control infectious insults have been deciphered these last years, and a precise role of each of the players is now better understood.

Not only innate immunity is common to all animal species, but for those which also have at their disposal an adaptive immunity, the contribution of innate immunity is a prerequisite for its involvement.

Most recently, a memory in innate immune system has been described and contributes to better innate and adaptive responses.

This course is aimed to offer the most up-dated information on the cellular and molecular players of innate immunity, and on the mechanisms that lead to the elimination of the pathogens, either of bacterial, viral, fungal or parasitic origin.

Because innate immunity is closely intricated with inflammation, the involvement of innate immunity with diseases will also be addressed.

Finally, up-to date tools to study the innate immune system will be presented

Co-directors

Jean-Marc CAVAILLON
Cytokines & Inflammation Unit
Institut Pasteur, Paris

Daniel SCOTT-ALGARA
Cytokines & Inflammation Unit
Institut Pasteur, Paris

Monday, 10 April

9:00 - 9:45	Welcome	Registrar's office
	General Introduction	Jean-Marc Cavaillon & Daniel Scott-Algara (Institut Pasteur, Paris)

Historical Background

9:45 - 10:30	From miasma to bacteria & Once upon a time inflammation	Jean-Marc Cavaillon (Institut Pasteur, Paris)
--------------	---	---

CELLULAR PLAYERS

10:45 - 12:00	Macrophages	Jean-Louis Mège (Faculté de médecine Aix-Marseille)
13:45 - 15:00	Neutrophils	Maria-Margarita Hurtado-Nedelec (Inserm, Faculté de Médecine, Bichat, Paris)
15:15 - 16:30	NK cells	Daniel Scott-Algara (Institut Pasteur, Paris)
16:45 - 18:00	NKT cells	Maria Leite de Moraes (Univ. Paris-Descartes, Paris)

Tuesday, 11 April

9:00 - 10:15	Innate lymphoid cells	Gérald Eberl (Institut Pasteur, Paris)
10:30 - 11:45	T γ/δ cells	Julie Dechanet-Merville (CNRS, Université de Bordeaux, Bordeaux)
13:45 - 15:00	Th17 cells	Jagadeesh Bayry (Centre de Recherche des Cordeliers, Paris)
15:15 - 16:30	Treg cells	Laurence Weiss (AP-HP, Hôpital Pitié-Salpêtrière, Paris)
16:45 - 18:00	Dendritic cells	Anne Hosmalin (Institut Cochin, Paris)

Wednesday, 12 April

9:00 - 10:15	Mast cells	Salah Mecheri (Institut Pasteur, Paris)
--------------	------------	---

MOLECULAR PLAYERS

10:30 - 12:00	PAMPs	Jean-Marc Cavaillon (Institut Pasteur, Paris)
14:00 - 15:30	DAMPs (alarmins)	Lionel Apetoh (Inserm, UMR, Dijon)
15:45 - 17:15	Innate Immunity in insects	Bruno Lemaître (Ecole polytechnique fédérale de Lausanne)

Thursday, 13 April

9:00 - 10:30	PPRs: TLR	Jean-Marc Cavaillon (Institut Pasteur, Paris)
10:45 - 12:15	PPRs: NLR	Catherine Werts (Institut Pasteur, Paris)
14:00 - 15:30	PPRs: RLR	Eliane Meurs (Institut Pasteur, Paris)

15:45 - 17:15	Scavenger receptors	Francisco Lozano (Hospital Clinic de Barcelona, Barcelone)
---------------	---------------------	--

Friday, 14 April

9:00 - 10:30	Anti-microbial peptides	Jean-Michel Sallenave (Inserm, Hôpital Bichat, Paris)
10:45 - 12:15	Cytokines	Jean-Marc Cavaillon (Institut Pasteur, Paris)
14:00 - 15:30	Chemokines	Sofie Struyf (University of Leuven, Leuven)
15:45 - 17:15	Complement system	Lubka Roumenina (Inserm, Centre de recherche des Cordeliers, Paris)

Tuesday, 18 April

INTERACTIONS HOST - PATHOGENS

9:00 - 10:30	Anti-infectious role of cytokines	Jean-Marc Cavaillon (Institut Pasteur, Paris)
10:45 - 12:15	Mucosal innate immunity	Nadine Cerf-Bensussan (Inserm, Institut Imagine, Paris)
14:00 - 15:30	Innate immunity and viral infections	Daniel Scott-Algara (Institut Pasteur, Paris)
15:45 - 17:15	Innate immunity and fungal infections	Oumaima Granet (Institut Pasteur, Paris)

Wednesday, 19 April

9:00 - 10:30	Innate immunity and parasitic infections	Gerald Spaeth (Institut Pasteur, Paris)
10:45 - 12:15	Microbial strategies against the immune system	Geoffrey L. Smith (University of Cambridge, Cambridge)
14:00 - 15:30	Innate immunity and bacterial infections	Philippe Sansonetti (Institut Pasteur, Paris)

REGULATION OF THE INNATE IMMUNE RESPONSE

15:45 - 17:15	Epigenetic	XXXXXX (xxxxxxxxxx)
---------------	------------	-------------------------------

Thursday, 20 April

9:00 - 10:30	Nervous system regulation of immune response	Monique Lafon (Institut Pasteur, Paris)
10:45 - 12:15	Links between innate and adaptive immunity	Matthew Albert (Genentech / Institut Pasteur, Paris)
14:00 - 15:30	Microbiota and immune system	Ivo Boneca (Institut Pasteur, Paris)
15:45 - 17:15	Resolution of inflammation by lipid mediators	Mauro Perretti (Queen Mary University, London)

Friday, 21 April

9:00 - 10:30	Evolutionary genetics of the human innate immune system	Lluís Quintana-Murci (Institut Pasteur, Paris)
10:45 - 12:15	Innate immunity memory	Jessica Quintin

INNATE IMMUNITY, INFLAMMATION and DISEASES

14:00 - 15:30	Sepsis & Inflammation	Jean-Marc Cavaillon (Institut Pasteur, Paris)
15:45 - 17:15	Understanding the cause of inflammatory bowel diseases	Mathias Chamaillard (Institut Pasteur, Lille)

Monday, 24 April

9:00 - 10:30	Lung inflammatory disorders	Lhousseine Touqui (Institut Pasteur, Paris)
10:45 - 12:15	Cancer: NK cells: from receptors to the cure of high risk leukemias	Lorenzo Moretta (Pediatric Hospital Bambino Gesù, Rome)

STUDYING INNATE IMMUNE SYSTEM

14:00 - 15:30	Parameters influencing the immune response and its study	Jean-Marc Cavaillon (Institut Pasteur, Paris)
15:45 - 17:15	Visit of the Museum	

Tuesday, 25 April

9:00 - 10:00	Decoding immune responses using intravital imaging	Philippe Bousso (Institut Pasteur, Paris)
10:15 - 11:15	Organs-on-chips	Samy Gobaa (Institut Pasteur, Paris)
11:30 - 12:30	Single cell technology and High-throughput analysis	Fabrice Porcheray and Christophe Vedrine (Bioaster, Paris)
14:00 - 15:30	EXAM	
15:45 - 17:15	EXAM	
