ADVANCED IMMUNOLOGY COURSE
2018 - 2019

Masters (M2) Universités Paris Descartes, Paris Diderot et Sorbonne Université

PROGRAM
FROM NOVEMBER 19TH 2018 TO JANUARY 11TH 2019
ADVANCED IMMUNOLOGY COURSE
2018 - 2019

MASTERS (M2) des UNIVERSITES PARIS DESCARTES, PARIS DIDEROT ET SORBONNE UNIVERSITE

THEMES

- Development of the immune system.
- Molecular basis for antigen recognition by B and T lymphocytes.
- Repertoire selection and auto-immunity.
  - Lymphocyte interactions
- Immune responses and immunotherapy
  - Innate immune system

The course will take place at

Education Center - Pavillon Louis MARTIN (09 PLM) and Social Building (06)
CBUTechS – Metchnikoff building and François Jacob Building

PRACTICAL COURSES (NOVEMBER 19- DECEMBER 7, 2018): PLM (09): 2nd floor and classrooms 4 and 5 (06)
LECTURES (DECEMBER 10-21, 2018) : Social building (06), classroom 4
SEMINARS (JANUARY 9-11, 2019) : classroom 6, 23 rue du dr Roux
Exam (January 8, 2019): classroom 6, 23 rue du dr Roux

28, rue du Docteur Roux, 75015 Paris

DIRECTORS OF THE COURSE

Andrès ALCOVER
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HEAD OF STUDIES

Milena HASAN
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Tel +33(0)1 40 61 30 27
Portable : +33(0)6 84 39 43 52
E.mail : milena.hasan@pasteur.fr
Monday 19 November – Classroom 5

8:30 - 10:00 Presentation Ana CUMANO, Milena HASAN, Andrés ALCOVER,
(Institut Pasteur - Paris)

November 19 to December 7, 2018
Week 1-3
Practical Courses
*************

December 10 to December 21, 2018
Week 3-4
Conferences
*************

January 8, 2019
Exam
*************

January 9 to January 11, 2019
Bibliography Seminars
*************
Application of cutting edge technologies in the characterization of age-dependent differences in the immune response of healthy individuals (supported in part by “Milieu Intérieur” LabEx project)

Director: Milena Hasan

Conferences associated to the Practical Courses:

**THURSDAY 29 NOVEMBER**

9:00 - 10:00  From Translational Research to Personalized Medicine  Stanislas POL
(Institut Pasteur/Hôpital Cochin - Paris)

**TUESDAY 4 DECEMBER**

9:00 - 10:00  Genetic determinants of the Immune response  Lluis QUINTANA-MURCI
(Institut Pasteur - Paris)

Designed and organized by
Murielle ALMOUSSA, Bernd JAGLA, Bruno CHARBIT Milena HASAN,
Isabelle LEQUEUTRE, Valentina LIBRI, Sophie NOVAULT, Céline POSSEME, Sandrine SCHMUTZ,
Tharshana STEPHEN
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
<th>Institution</th>
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<tbody>
<tr>
<td>MONDAY 10 DECEMBER</td>
<td>9:00 - 12:00</td>
<td>Phylogeny of the Immune System</td>
<td>Louis du PASQUIER</td>
<td>University of Basel, Switzerland</td>
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<td></td>
<td>13:30 - 16:30</td>
<td>Stem cells, hematopoiesis and lymphopoiesis</td>
<td>Ana CUMANO</td>
<td>Institut Pasteur - Paris</td>
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<tr>
<td>TUESDAY 11 DECEMBER</td>
<td>9:00 - 12:00</td>
<td>Lymphoid tissue development</td>
<td>Tom CUPEDO</td>
<td>Erasmus University, Rotterdam, The Netherlands</td>
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<tr>
<td></td>
<td>13:30 - 16:30</td>
<td>Thymus development</td>
<td>Nuno ALVES</td>
<td>IBMC-Porto - Portugal</td>
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<tr>
<td>WEDNESDAY 12 DECEMBER</td>
<td>9:00 - 12:00</td>
<td>Antigen receptor diversity and recombination</td>
<td>Ludovic DERIANO</td>
<td>Institut Pasteur - Paris</td>
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<td></td>
<td>13:30 - 16:30</td>
<td>Lymphocyte dynamics</td>
<td>Philippe BOUSSO</td>
<td>Institut Pasteur - Paris</td>
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<tr>
<td>THURSDAY 13 DECEMBER</td>
<td>9:00 - 12:00</td>
<td>Lymphocyte activation and Immunological Synapses</td>
<td>Andrés ALCOVER</td>
<td>Institut Pasteur-Paris</td>
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<td></td>
<td>13:30 - 16:30</td>
<td>Peripheral tolerance and autoimmunity.</td>
<td>Burkhard BECHER</td>
<td>University of Zurich - Switzerland</td>
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<tr>
<td>FRIDAY 14 DECEMBER</td>
<td>9:00 - 12:00</td>
<td>Heterogeneity of T helper cell subsets</td>
<td>Marc VELDHOEN</td>
<td>Institute of Molecular Medicine, Lisbon, Portugal</td>
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<td></td>
<td>13:30 - 16:30</td>
<td>$\alpha/\beta$ T cell development and selection</td>
<td>Ludger KLEIN</td>
<td>Institute for Immunology – Munich, Germany</td>
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Week 5

ADVANCED IMMUNOLOGY CONFERENCES

Module d’Ecole Doctorale - Advanced Immunology - 2

MONDAY 17 DECEMBER

9:00 - 12:00 B cell memory

13:30 - 16:30 γ/δ T cells: development and function

Thierry DEFRANCE
(CIRI, Lyon)

Adrian HAYDAY
(Francis Crick Institute- London, UK)

TUESDAY 18 DECEMBER

9:00 - 12:00 Innate lymphoid cells

13:30 - 16:30 Dendritic cells

James DI SANTO
(Institut Pasteur - Paris)

Philippe PIERRE
(Centre d’Immunologie Marseille-Luminy)

WEDNESDAY 19 DECEMBER

9:00 - 12:00 Commensals, the Immune System and the Brain

13:30 - 16:30 Leukemia pathogenesis

Gerard EBERL
(Institut Pasteur - Paris)

Ralf KÜPPERS
(University of Duisburg - Essen - Germany)

THURSDAY 20 DECEMBER

9:00 - 12:00 Molecular Basis of Immune-deficient diseases

13:30 - 16:30 Control of Disease Susceptibility

Alain FISCHER
(Institut Imagine - Paris)

Miguel SOARES
(Gulbenkian Institute, Oeiras, Portugal)

FRIDAY 21 DECEMBER

9:00 - 12:00 Vaccine development in the 21st century

13:30 - 16:30 Fc receptors and allergy

Philippe SANSONETTI
(Institut Pasteur - Paris)

Marc DAERON
(Centre d’Immunologie Marseille-Luminy)
### TUESDAY 8 JANUARY 2019 - CLASSROOM 6

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>9:00 - 13:00</td>
<td>EXAM</td>
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<tr>
<td>14:30 - 17:30</td>
<td>Answers to the exam’s questions. Interactive feedback session</td>
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ADVANCED IMMUNOLOGY BIBLIOGRAPHY SEMINARS – Classroom 6

WEDNESDAY 9 JANUARY

9:30 - 12:30
SEMINAR 1
Antibodies in health and disease
Organizers:
Friederique JÖNSSON (Institut Pasteur - Paris)
Hugo MOUQUET (Institut Pasteur - Paris)

14:00 - 17:00
SEMINAR 2
Lymphocyte Trafficking
Organizers:
Idan MILO (Institut Pasteur - Paris)
Emmanuel DONNADIEU (Institut Cochin - Paris)

THURSDAY 10 JANUARY

9:30 - 12:30
SEMINAR 3
Lymphocyte activation and transcriptional regulation
Organizers:
Elisabetta BIANCHI (Institut Pasteur - Paris)
Jérôme DELON (Institut Cochin - Paris)

14:00 - 17:00
SEMINAR 4
T cell responses
Organizers:
Corinne TANCHOT (Hôpital Européen Georges Pompidou - Paris)
Christine BOURGEOIS (Faculté de Médecine - Université Paris Sud)

FRIDAY 11 JANUARY

9:30 - 12:30
SEMINAR 5
Innate immunity
Organizers:
Florence NIEDERGANG (Institut Cochin - Paris)
Molly INGERSOLL (Institut Pasteur - Paris)

14:00 - 17:00
SEMINAR 6
Molecular basis of B cell differentiation.
Organizers:
Paulo VIEIRA (Institut Pasteur - Paris)
Isabelle ANDRÉ-SCHMUTZ (Institut Imagine - Paris)

17:30
PARTY