INTERNATIONAL COURSE FROM THE PASTEUR NETWORK

Viruses, Chronic Inflammation and human cancers

Rome, Italy, July 24-27, 2023

Topics:
- Human retroviruses and mechanisms of integration
- HIV infection and persistence
- HIV pathogenesis, diagnosis and treatment.
- Endogenous DNA mutator enzymes and cancers
- Viruses and host innate immune responses
- Epstein-Barr Virus and Natural Killer cells
- Viral stress, chronic inflammation and cancers
- Viral infections, immunopathology and cancers.
- Persistence of Hepatitis B Viruses and hepatocellular carcinoma
- Round tables

Co-directors and contacts:
Jean-Pierre Vartanian
Institut Pasteur, Paris
Angela Santoni
Institut Pasteur in Italy-Cenci Bolognetti Foundation

Lecturers and round tables:
Guido Antonelli
Sapienza University, Rome
Vincenzo Barnaba
Sapienza University, Rome
Francesca Di Nunzio
Institut Pasteur, Paris
Margherita Doria
Bambino Gesù Children’s Hospital, Rome
Angela Santoni
Institut Pasteur in Italy-Cenci Bolognetti Foundation
Pankaj Trivedi
Sapienza University, Rome
Jean-Pierre Vartanian
Institut Pasteur, Paris

Please return your CV and letter of motivation to
jean-pierre.vartanian@pasteur.fr
angela.santoni@uniroma1.it
Title of the course
Virology, Chronic Inflammation and Human Cancers

Directors
• Jean-Pierre Vartanian
Department of Virology, Institut Pasteur, Paris
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• Angela Santoni
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Aim and objectives.
This course is located at the intersection between virology, immunology and cancer. The aim of the course is to educate graduates and post-graduates with understanding and expertise in virology, with a particular focus on viruses and human cancers. Mechanisms by which viruses escape from the immune system will be discussed. This specific theoretical knowledge will provide students with the critical judgement and skills to pursue a career in virology, immunology or oncology.

The program has a significant theoretical teaching component to ensure that the students gain maximal exposure to a wide range of clinically relevant viruses associated with human cancers. To ensure interactivity between students and lecturers, round tables will be organized to discuss the lectures of each day. The round tables will be conducted in a question-and-answer format and will provide an opportunity to acquire more in-depth knowledge on the topic. It will be a great opportunity to allow students to discuss with experts, ask questions, and participate in a global exchange, paving the way for future collaborations.

This course will cover infections in which the virus is not cleared, but remains in specific cells of infected individuals. Persistent infections may involve successive stages of silent and productive infection without rapidly killing or even producing excessive damage to the host cells.

This topic is of significant importance for public health, as currently the measures that have successfully eradicated persistent viruses are slim to none. Vaccination, interferons, and antiviral drugs can reduce the frequency of clinical recurrence and limit clinical symptoms, but viruses remain associated with specific host tissues.

Through state-of-the-art lectures, the course will highlight the different mechanisms of persistence selected by the various viruses. Students will be prompted to examine various
situations and discuss fundamental questions. The focus of this course will be to strengthen the knowledge and competence of applicants in this field.

**Practical information**

**Location**
Institut Pasteur in Italy- Cenci Bolognetti Foundation
Viale Regina Elena 291, 00161 Roma, Italia

Sapienza University
Piazzale Aldo Moro, 5, 00185 Roma, Italie

**Dates of the course**
Monday 24 July to Thursday 27 July 2023

**Language**
English

**Lecturers**
Guido Antonelli  
Sapienza University, Rome
Vincenzo Barnaba  
Sapienza University, Rome
Francesca Di Nunzio  
Institut Pasteur, Paris
Margherita Doria  
Bambino Gesù Children's Hospital, Rome
Angela Santoni  
Institut Pasteur, Rome
Pankaj Trivedi  
Sapienza University, Rome
Jean-Pierre Vartanian  
Institut Pasteur, Paris

**Attendees**
30

**Duration**
4 days

**Application deadline**
Friday 2nd June 2023

**Documents available**
WEB diffusion template, Flyer, program, application form
The call is open to scientific and medical students, Master, PhD, MD and Postdoctoral researchers.

The course will be carried out over 4 days and will be free of charge.

The organizing committee will supply lunches and coffee breaks during all the course.

The flight ticket, accommodation and dinners will be at the expense of the applicant.

Applicants must send the completed application form and a CV by 2nd June 2023 at the latest by e-mail to:

Jean-Pierre Vartanian  
e-mail: jean-pierre.vartanian@pasteur.fr

Angela Santoni  
e-mail: angela.santoni@uniroma1.it
PASTEUR INTERNATIONAL COURSE
VIRUSES, CHRONIC INFLAMMATION AND HUMAN CANCERS

Detailed program
Monday 24 July to Thursday 27 July 2023

Organizers
Angela SANTONI (Institut Pasteur in Italy- Cenci Bolognetti Foundation)
Jean-Pierre VARTANIAN (Institut Pasteur, Paris, France)

Monday, 24 July 2023
09h00-09h30 Welcome and presentation of the course
Angela Santoni and Jean-Pierre Vartanian

09h30-11h00 Endogenous DNA mutator enzymes and human cancers
Jean-Pierre Vartanian (Institut Pasteur, Paris)

11h00-11h15 Break

11h15-12h45 Virus hijacking of host innate immune responses.
Angela Santoni
(Institut Pasteur in Italy- Cenci Bolognetti Foundation)

12h45-14h15 Lunch

14h15-15h30 Round table:
Angela Santoni
(Institut Pasteur in Italy- Cenci Bolognetti Foundation)
Jean-Pierre Vartanian (Institut Pasteur, Paris)

Tuesday, 25 July 2023
09h00-10h30 HIV: Journey to the center of the cell.
Francesca Di Nunzio (Institut Pasteur, Paris)

10h30-10h45 Break

10h45-12h15 HIV infection and persistence: current issues in pathogenesis, diagnosis, and treatment.
Guido Antonelli (Sapienza University, Rome)

12h15-14h00 Lunch

14h00-15h30 Round table:
Francesca Di Nunzio (Institut Pasteur, Paris)
Guido Antonelli (Sapienza University, Rome)
### Wednesday, 26 July 2023

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| 09h00-10h30 | Role of Natural Killer cells in Epstein-Barr Virus infection.  
Margherita Doria (Bambino Gesù Children's Hospital, Rome) |
| 10h30-10h45 | Break                                                                                      |
| 10h45-12h15 | From kisses to cancer: Epstein-Barr virus, an ingenious immune evader as a model for herpesvirus associated diseases.  
Pankaj Trivedi (Sapienza University, Rome) |
| 12h15-14h00 | Lunch                                                                                      |
| 14h00-15h30 | Round table:  
Margherita Doria (Bambino Gesù Children's Hospital, Rome)  
Pankaj Trivedi (La Sapienza University, Rome) |

### Thursday, 27 July 2023

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| 09h00-10h30 | Viral stress, chronic inflammation and cancer  
Jean-Pierre Vartanian (Institut Pasteur, Paris) |
| 10h30-10h45 | Break                                                                                      |
| 10h45-12h15 | Viral infections, immunopathology and cancer.  
Vincenzo Barnaba (Sapienza University, Rome) |
| 12h15-14h00 | Lunch                                                                                      |
| 14h00-15h30 | Round table:  
Vincenzo Barnaba (La Sapienza University, Rome)  
Jean-Pierre Vartanian (Institut Pasteur, Paris) |
# International course
**Viruses, Chronic Inflammation and Human Cancers**
24 July - 27 July 2023
Institut Pasteur in Italy - Cenci Bolognetti Foundation

## APPLICATION FORM

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Application form with a CV and a letter of motivation must be sent by e-mail to:

jean-pierre.vartanian@pasteur.fr
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The deadline for application is 2nd June 2023