

## Workshop 11 MAY 2022

### Non-human primate models to study infectious diseases and vaccines development

Venue: Instituto de Ciências Biomédicas de Abel Salazar, Universidade do Porto

### Programme

(All times are in WET)

14h30 - 14h45 | Open Remarks

14h45 - 15h30 | **Studying host-pathogen interactions and developing preventive and therapeutic strategies against infectious diseases using non-human primate models**

Anne-Sophie Beignon (IDMIT, CEA, INSERM, Université Paris Saclay)

Chair : Joana Tavares

15h45 - 16h30 | **Systems vaccinology**

Anne-Sophie Beignon (IDMIT, CEA, INSERM, Université Paris Saclay)

Chair: Joana Tavares

16h30 - 17h00 | Break

17h00 - 18h00 | **Innate and adaptive immune memories induced by vaccines: insights from NHP studies**

Anne-Sophie Beignon (IDMIT, CEA, INSERM, Université Paris Saclay)

Chair: Manuel Vilanova

### Description

This workshop will be given by Dr. Anne Sophie **Beignon** from IDMIT, CEA, INSERM, Université Paris-Saclay, Fontenay-aux-Roses, France.

Participants will get familiarized with the dynamics of vaccine-induced innate and adaptive memory responses and their interactions in the context of prime/boost immunizations. Principles behind state-of-the-art technologies for the study of immune responses, such as mass cytometry, will be also covered

Dr. Anne Sophie **Beignon** is a vaccine immunologist. She studied Biology at the University of Nantes, in France. She was trained in Immunology by a tumor immunologist, Francine

Jotereau. Then she moved to Paris and enrolled into a Master 2 program on the biology of blood cells from the University of Paris with a one-year internship at La Pitié-Salpêtrière hospital in 1997 in the team of Bruno Canque and Jean Claude Gluckman to study the susceptibility of dendritic cells to HIV infection. For her thesis, she worked on non-invasive administration routes of vaccines, and more particularly on transcutaneous vaccination under the supervision of Sylviane Müller and Charalambos Partidos at the University of Strasbourg, France. For her first postdoc, at NYU, in NYC with Nina Bhardwaj in 2002, she studied the activation of plasmacytoid dendritic cells by HIV and she evaluated the use of TLR7/8 agonists as adjuvants for dendritic cell-based vaccines. For her second postdoc in 2005, back in France, she developed vaccine candidates against HIV/AIDS and against malaria, which were based on lentiviral vectors derived from HIV with Pierre Charneau at Institut Pasteur in Paris. In 2012, she joined the lab of Roger Le Grand at IDMIT and she switched from the preclinical development of vaccines to more basic research to understand the immunological mechanisms of vaccines in non-human primate models. She currently studies the mechanisms of long-term innate immunological imprinting induced by vaccines and adjuvants. She also explores a new field of research to develop mathematical models of inflammatory/innate responses to vaccines.

#### **Scientific Committee**

##### **Joana Tavares, PhD**

Group leader i3S  
Research Associate IBMC/i3S, UP  
Invited Assistant FFUP  
Collaborator MCBiology PhD Programme, ICBAS

##### **Manuel Vilanova, PhD**

Associate Professor ICBAS, UP  
Group leader i3S/IBMC, UP  
Member of Executive Council ICBAS, UP

##### **Alexandra Moreira, PhD**

Lecturer/Principal Investigator ICBAS, UP  
Group leader i3S/IBMC, UP  
Vice-director, IBMC

#### **Organizing Committee**