



CHAIRE MICROBIOLOGIE ET MALADIES INFECTIEUSES

Année académique 2014-2015

Pr Philippe SANSONETTI

Seeing is believing 3 From ultra small images to ultra big data

Scientific Committee : Ellen T. Arena, Jean-Christophe Olivo-Marin,
Philippe Sansonetti et Guy Tran van Nhieu

Lundi 15 juin 2015

08h45 - 09h00 : Introduction

Philippe Sansonetti, Collège de France

09h00 - 10h30 : First session

Guy Tran Van Nhieu, chair

09h00 - 09h30 : A virus eye view of the cell: using super-resolution microscopy to study virus entry and immune evasion

Joe Grove, University College, London

09h30 - 10h00 : Ultrafast imaging : a change of paradigm in ultrasound

Mickaël Tanter, E.S.P.C.I.ParisTech, Paris

10h00 - 10h30 : Metabolic imaging of intracellular chlamydial infection

Jan Rupp, University of Lübeck

10h30 - 11h00 : Coffee/tea break

11h00 - 12h30 : Second session

Chair Philippe Sansonetti

11h00 - 11h30 : Bioimage analysis of the progression of Shigella infection

Ellen T. Arena, Institut Pasteur, Paris

11h30 - 12h00 : TIRF microscopy of receptor interactions and signaling in model immunological synapse

Michael Dustin, University of Oxford

12h00 - 12h30 : Imaging the life and death of malaria parasites in the skin

Rogiero Amino, Institut Pasteur, Paris

12h30 - 13h00 : Probing cell organization and functions with single molecule imaging and manipulation

Maxime Dahan, Institut Curie, Paris

13h00 - 14h30 : Lunch break

14h30 - 15h15 : Keynote lecture, Imaging Life at High Spatiotemporal Resolution

*Eric Betzig, HHMI, Janelia Research Campus
(Presentation : Philippe Sansonetti)*

15h15 - 16h15 : Third session

Jean-Christophe Olivo-Marin, chair

15h15 - 15h45 : Lessons learned from luminescence 2D imaging and monitoring of oxygen in infected skin and gut tissue

Jonathan Jantsch, University of Regensburg

15h45 - 16h15 : Image analysis for High-throughput screening

Priscille Brodin, Institut Pasteur, Lille

16h15 - 16h45 : Coffee/tea break

16h45 - 18h15 : Fourth session

Ellen T Arena, chair

16h45 - 17h15 : Imaging the microscopic architecture of the cellular cortex: understanding cell mechanics across scales

Ewa Paluch, LMCB UCL, London

17h15 - 17h45 : Diversion and role of Ca²⁺ signals by Shigella during invasion of epithelial cells

Guy Tran Van Nhieu, CIRB Collège de France, Paris

17h45 - 18h15 : Statistical analysis of the spatial distribution of molecules: making sense of position and distance

Jean-Christophe Olivo-Marin, Institut Pasteur, Paris

18h15 - 18h30 : Conclusion/adjourment

Philippe Sansonetti, Collège de France