



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

Jeudi 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