



PPU-Oxford Bilateral Summit Program
“Chimie Biologique”
Linking Chemistry and Microbiology to fight human Infectious Diseases

London, 27 June 2022
French Institute of the United Kingdom
17 Queensberry Pl, South Kensington, London SW7 2DT, Royaume-Uni

9.30am Welcome coffee and tea

10am **Welcome: Minh-Hà Pham** (*Counsellor for Science and Technology, French Embassy*)
Opening: Stewart Cole (*President of the Institut Pasteur*)

CHAIR - Chris Schofield (Director of Organic Chemistry, University of Oxford)

10.20am - 10.35am - Ben Davis (*University of Oxford, Rosalind Franklin Institute, Science Director for Next Generation Chemistry, [Davis Group](#)*)
→ “Sugars and Proteins”

10.35am - 10.50am - Martin Walsh (*University of Oxford, Deputy Director of Life Sciences at [Diamond Light Source](#)*)
→ “Exploiting light x-rays, electrons in AMR research at Diamond”

10:50am - 11.05am - Mélanie Hamon (*Institut Pasteur, [Chromatin and Infection Unit](#)*)
→ “Bacterial infection induces persistent histone modifications”

11.05am - 11.20am - Laurence Mulard (*Institut Pasteur - CNRS, [Chemistry of Biomolecules Unit](#)*)
→ “Synthetic carbohydrates and peptides as molecular weapons against infectious diseases.”

11.20am - 11.30am - short talk Simon Legood (*Institut Pasteur – CNRS – Inserm – Université Paris Cité, [Biology and Genetics of Bacterial Cell Wall Unit](#), PPU-Oxford, supervisor Nienke Buddelmeijer*)
→ “Genomic, structural and functional conservation of Lgt, an essential enzyme in bacterial lipoprotein maturation”

11.30am - 11.40am - short talk Patrick Rabe (*University of Oxford, Dept of Chemistry, [Schofield Group](#), supervisor Chris Schofield*)
→ “Mechanistic studies on Isopenicillin N synthase reveal importance of protein dynamics for penicillin ring formation”

11.40am - 11.50am - short talk Magdalena Barbachowska (*Institut Pasteur – CNRS – Université Paris Cité, [Epigenetic Chemical Biology Unit](#), PPU-Oxford, supervisor Paola B. Arimondo*)
→ “In search of inhibitors of methyltransferases in infectious diseases”

11.50am - 12.05pm - Akane Kawamura (Newcastle University, Professor of Chemical Biology, [Kawamura Group](#))

→ “Peptide-based discovery platform”

12.05pm - 12.20pm - Philippe Glaser (Institut Pasteur - CNRS, [Ecology and Evolution of Antibiotics Resistance Unit](#))

→ “The colistine resistance landscape in *Klebsiella pneumoniae*.”

Lunch 12:30pm-2:00pm

CHAIR - Paola B. Arimondo (Director of the Department of Structural Biology and Chemistry, Institut Pasteur - CNRS UMR3523)

2.15pm - 2.30pm - Nadia Izadi-Pruneyre (Institut Pasteur – CNRS, [Structural Bioinformatics Unit](#))

→ “Integrative Structural Biology of bacterial nano-machines”

2.30pm - 2.45pm - Syma Khalid (University of Oxford, Professor of Computational Microbiology, [Syma Khalid Research Group](#))

→ “A computational microbiology approach to studying antibacterial behaviour in bacterial cell envelopes”

2.45pm - 3.00pm - Nienke Buddelmeijer (Institut Pasteur – CNRS – Inserm, [Biology and Genetics of Bacterial Cell Wall Unit](#))

→ “Lipoprotein modification in bacteria – useful for antibiotic and vaccine development?”

3.00pm - 3.15pm - Stuart Conway (University of Oxford, Department of Chemistry, [Conway Group](#))

→ “The development of chemical probes to target and image biological redox”

3.15pm - 3.30pm - Monica Rolando (Institut Pasteur - CNRS, [Biology of Intracellular Bacteria Unit](#))

→ “*Legionella pneumophila*: a model to study how intracellular bacteria subvert host functions”

3.30pm - 3.40pm - short talk Mariska de Munnik (University of Oxford, Dept of Chemistry, [Schofield Group](#), PPU-Oxford, supervisor Chris Schofield)

→ “*Mycobacterium tuberculosis* transpeptidase LdtMt2”

3.40pm - 3.50pm - short talk William Henry Bolland (Institut Pasteur – CNRS – Université Paris Cité, [Virus and Immunity Unit](#), PPU-Oxford, supervisor Olivier Schwartz)

→ “An investigation into the enhanced fusogenicity of SARS-CoV-2 variant B.1.640”

3.50pm - 4.05pm - Frank Von Delft (University of Oxford, Nuffield Dept. of Medicine, [Protein Crystallography Group](#))

→ “XChem fragment approaches for rapid chemotype discovery”

4.05pm - 4.20pm - Marco Bellinzoni (Institut Pasteur – CNRS – Université Paris Cité, [Structural Microbiology Unit](#))

→ “Surprising regulatory and structural features of Actinobacterial central metabolic enzymes”

4.20pm - 4.35pm - Chris Schofield (University of Oxford, Department of Chemistry, [Schofield Group](#))

→ “Making antibiotics is easy, making useful ones is difficult”

4.35pm - 4.50pm - Flore Nardella (Institut Pasteur – CNRS - Inserm, [Biology of Host-Parasite Interactions Unit](#))

→ “Targeting malaria epigenetics to fight drug-resistant *Plasmodium*”

Conclusions Paola B. Arimondo (Institut Pasteur) & Chris Schofield (University of Oxford)

5pm – 7pm Cocktail and free discussions

Diner 7:30pm at the **Bluebird Café** (Chelsea)
350 King's Rd, Chelsea, London SW3 5UU