

MicròbiOccitanie 2022

4 juillet après-midi – 6 juillet matin
Centre de Biologie Intégrative (Toulouse)

Lundi 4 juillet

13:00 Accueil

Biotechnologies & Biotherapy (Chair Fayza Daboussi)

13:30	Gabriele Potocki-Veronese	TBI-INSA	Microfluidics for microbiomics: how to boost enzyme discovery from microbial ecosystems
13:50	Stéphanie Heux	TBI-INSA	Encapsulation of a synthetic methylotrophic pathway in a bacterial microcompartment
14:10	Kevin Debatisse	TBI-INSA	Reprogramming the recombination specificity of a phage integrase: a new tool for genome engineering ?
14:30	Aude Ferran	InTheRes	Combination of bacteriophages and ciprofloxacin to prevent the selection of resistant <i>Pseudomonas aeruginosa</i>
14:50	Catherine Turlan	LMGM-CBI	The Genetic Engineering Department of LMGM-CBI: a resource center in microbiology and bacterial genetics

15:10 Pause

15:40	Christophe Lacroix	ETH-Zurich	Novel technologies can accelerate the development of live biotherapeutic products
16:20	Anne Boyeldieu	LMGM-CBI	Deciphering the mode of action of the RumC bacteriocins in <i>Streptococcus pneumoniae</i>
16:40	Bernard Dumas	LRSV	Identification and characterization of new microbial strains for plant protection and nutrition: The BioPlantProducts project

Environment/One health (Chair Guillaume Charrière)

17:00	Pauline Sorlin	Hydro Sciences	<i>Achromobacter xylosoxidans</i> , an emerging pathogen with specific pathophysiological traits in cystic fibrosis
17:20	Ginaini Grazielli Doin de Moura	LIPME	Experimental evolution-driven emergence of legume symbionts: insights into the genetic bases and selective forces
17:40	Frédérique Le Roux	Station Biologique de Roscoff	Explaining the previously enigmatic bacterial pangenome

MicròbiOccitanie 2022

4 juillet après-midi – 6 juillet matin
Centre de Biologie Intégrative (Toulouse)

Mardi 5 juillet

Microbiology (Chair Matteo Bonazzi)

09:00	Hugo Lebrette	LMGM-CBI	Metal utilization in genome-reduced bacteria: Do mycoplasmas rely on iron?
09:20	Mattheo Alcaraz	IRIM	Efficacy and mode of action of a direct inhibitor of <i>Mycobacterium abscessus</i> InhA
09:40	Célia Bernard	IPBS	Antibiotic tolerance in <i>Mycobacterium abscessus</i>

10:00 Pause

10:30	Isabelle Oswald	Toxalim	Food contaminants exacerbate the effect of bacterial toxins
10:50	Alessandra Occhialini	IRIM	Antibacterial activity and mechanism of action of Mediterranean fungal extracts against pathogenic Gram+ bacteria

11:10 **Sandrine Bourdoulous** **Institut Cochin** **New strategies to combat pathogenic bacteria: the example of *Neisseria meningitidis***

Host-pathogen interactions (Chair Christine Citti)

11:50	Stéphane Pont	LPHI	Zebrafish embryo infection model to investigate pathogenesis of clinical <i>Pseudomonas aeruginosa</i> isolates and assess the efficiency of therapeutics
12:10	Karim Majzoub	IGMM	Hepatitis Delta Virus (HDV) and HDV-like agents in human and animal hosts
12:30	Caroline Goujon	IRIM	Intrinsic and innate immune defenses against RNA viruses

12:50 Lunch

14:20	Maryse Lebrun	LPHI	Evolution-based approaches to decipher the mechanism of secretion of virulence factors in apicomplexan parasites
14:40	Céline Cosseau	IHPE	Early life microbial exposures shape the <i>Crassostrea gigas</i> immune system for lifelong and intergenerational disease protection

Host-pathogen interactions (Chair Olivier Neyrolles)

15:00	Rémi Mascarau	IPBS	A novel mechanism for productive HIV-1 infection of tissue macrophages
15:20	Etienne Meunier	IPBS	World War Z: From unrelated diseases to host immune protection against infections
15:40	Nicolas Cenac	IRSD	Lipopeptides produced by the microbiota: from hypersensitivity to therapy in visceral pain

16:00 Pause

16:30	Laure David	IRSD	New mechanisms of action of bacterial outer membrane vesicles contributing to the virulence of pathogenic <i>Escherichia coli</i>
16:50	Raphaël Boursereau	INFINITY	Impact of chronic <i>Toxoplasma gondii</i> infection on cognitive decline and frailty in a mouse model of Alzheimer's Disease
17:10	Chloé Dimeglio	INFINITY	Immune response to SARS-CoV-2: lessons from the SEROCOV study

17:30 **Maximiliano Gutierrez** **Francis Crick Institute** **Intracellular environments and antibiotic efficacy in tuberculosis**

MicròbiOccitanie 2022

4 juillet après-midi – 6 juillet matin
Centre de Biologie Intégrative (Toulouse)

Mercredi 6 juillet

Ecology/Evolution (Chair Claude Bruand)

- 09:00 Xavier Nouvel IHAP Exploration of pathogenic hemoplasmas in wild and domestic ruminants
- 09:20 Jean-Baptiste Ferdy EDB Pathogen within-host dynamics: a modeling approach
- 09:40 Caroline Baroukh LIPME Plant physiology, microbiology and mathematical modeling to assess the growth potential of plant pathogens on xylem sap

10:00 **Laure Weisskopf** **University of Fribourg** **Plant-associated bacteria and their impact on plant health**

10:40 Pause

11:10 Table ronde Financement régional et national de la recherche