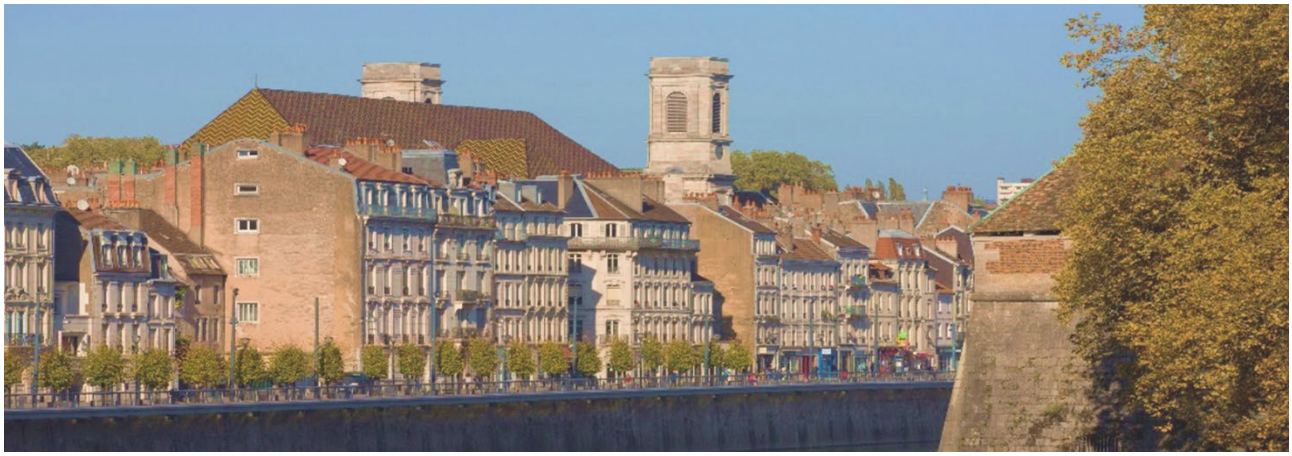
9TH INTERNATIONAL SYMPOSIUM ON ANTIMICROBIAL PEPTIDES

NOVEMBER 18-20, 2026



BESANÇON, FRANCE

Maison des sciences humaines et environnementales

Société Française de Microbiologie

CNR RÉSISTANCE AUX ANTIBIOTIQUES

UNIVERSITÉ MARIE & LOUIS PASTEUR

CHU BESANÇON FRANCHE-COMTÉ

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18 November 2026

08h00 | **REGISTRATION-WELCOMING COFFEE**

09h00 | **OPENING CEREMONY**

Pr Katy JEANNOT (University Hospital of Besançon, CNRS 6249, Marie et Louis Pasteur University, France)

Dr Vincent HUMBLOT (FEMTO-ST Institute, CNRS & Marie et Louis Pasteur University, France)

09h15 | **OPENING LECTURE**

Tiny heroes for immense challenges: the next global challenge

John H REX (Chief Medical Officer of F2G Ltd, Operating Partner, Advent Life Sciences; Adjunct Professor of Medicine, McGovern Medical School, USA)

Chair: Pr Katy JEANNOT

10h15 | **COFFEE BREAK**

SESSION I - ANTIMICROBIAL PEPTIDE RESISTANCE

Chair: Pr Javier PIZARRO (Institut Pasteur, France)
Dr Elizabeth LEDGER (University of Birmingham, UK)

10h45 | **KEYNOTE**

Host defence peptide-induced antimicrobial tolerance in *Staphylococcus aureus*

Dr Elizabeth LEDGER (UK)

SELECTED ORAL PRESENTATIONS

11h25 | **Resistance and tolerance to antimicrobial peptides in Gram-negative bacteria: roles for cell envelope and stress response modulation**

Nicolas JACQUIER (Switzerland)

11h40 | **Limited and delayed adaptation to a proline-rich antimicrobial peptide in *Francisella novicida***

Maxime GACHON* (France)

11h55 | **SMALTIS company, Industrial communication**

Cédric MULLER (Co-founder and Chairman, France)

12h00 | **LUNCH TIME**
Espace Grammont

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18 November 2026

SESSION II - DISCOVERY AND BIOSYNTHESIS OF ANTIMICROBIAL PEPTIDES

Chair: Pr Michaël LAFOND (Aix-Marseille University – INRAE-BBF, France)
Pr Mohammad R. SEYEDSAYAMDOST (Princeton University, USA)

13h45 | **KEYNOTE**
Pr Mohammad R. SEYEDSAYAMDOST (USA)

SELECTED ORAL PRESENTATIONS

14h25 | Biosynthesis and functional characterization of novel type ii sactipeptides from the human gut microbiome
Wajdi JAOUAD* (France)

14h40 | Optimization and functional characterization of clec3a-derived antimicrobial peptides
Katinka MIES (Germany)

14h55 | A cell-free DNA-to-bioactive platform for rapid discovery of natural peptide lantibiotics enables gut eradication of vancomycin-resistant *Enterococci*
Longcheng GUO (China)

15h10 | Heterologous expression as a powerful tool for the production and discovery of antipseudomonal and antimycobacterial peptide natural products
Silja MORDHORST (Germany)

15h25 |  **COFFEE BREAK**

SESSION III - INNOVATION, ARTIFICIAL INTELLIGENCE, MACHINE LEARNING IN ANTIMICROBIAL PEPTIDES

Chair: Pr Sylvie REBUFFAT (National Museum of Natural History, France)
Pr Philip YONGXIN LI (University of Hong Kong, RP China)

16h00 | **KEYNOTE**
AI-Driven Discovery of Cryptic Antimicrobials from the Human Microbiota
Pr Philip YONGXIN LI

SELECTED ORAL PRESENTATIONS

16h40 | AI-Guided Discovery and Probiotic Delivery of *Enterococcus*-Targeting Bacteriocins for Pathogen Control and Intestinal Barrier Repair
Xiuqi JIANG* (China)

16h55 | Uncovering Antimicrobial and Immunomodulatory Effects of Natural and Encrypted Peptides from the Mexican Axolotl using Machine Learning and AI
Constance AUVYNET (Mexico)

17h10 | Discovering novel antimicrobial peptides in the Animal Kingdom
Nikos PYRGELIS (Greece)

17h35 | **POSTER SESSION | WINE AND CHEESE TASTING**
Espace Grammont



19 November 2026

08h00 | **MEET THE EXPERT** (Dedicated to students, Salle 3)

Dr Yijie LI (Spartha Medical, France)

Chair: Dr Hélène BOURAS (Department of Estuarine & Delta Systems, Royal Netherlands Institute for Sea Research, The Netherlands)

SESSION IV - MICROBIAL ECOLOGY, MICROBES AND INTERACTIONS WITH THEIR HOSTS

Chair: Pr Séverine ZIRAH (National Museum of Natural History, Paris, France)
Dr Alyssa CARRE MLOUKA (Montpellier University, France)

08h45 | **KEYNOTE**

Beyond Antimicrobial Activity: PAX Cyclolipopeptides Have Multifaceted Roles in Xenorhabdus–Nematode–Insect Interactions

Dr Alyssa CARRE MLOUKA (France)

SELECTED ORAL PRESENTATIONS

09h25 | **Two antimicrobial peptides in host-symbiont interactions: functional analysis in the rice weevil *Sitophilus oryzae*, a major insect pest of stored cereals, and the bacterium *Sodalis pierantonius***

Marie TILLET* (France)

09h40 | **Antimicrobial peptides as signaling molecules in gut bacteria**

Carla MAGGIO* (France)

09h55 | **Candidalysin targets bacteria: a possible role in fungal-bacterial competition**

Ons KHARRAT* (France)

10h10 | **COFFEE BREAK**

SESSION V - PEPTIDE DESIGN AND BIOENGINEERING

Chair: Pr Gilles SUBRA (University of Montpellier, France)
Pr Jean-Louis REYMOND (University of Bern, Switzerland)

10h45 | **KEYNOTE**

Chemical Space Guided Design of Antimicrobial Peptides

Pr Jean-Louis REYMOND (Switzerland)

SELECTED ORAL PRESENTATIONS

11h25 | **Multidomain engineering of bovine host defense peptides for broad-spectrum antimicrobial applications**

Sergi TRAVÉ-ASENSIO (Spain)

11h40 | **Omp38 inclusion bodies for engineering long-lasting antibiofilm surfaces**

Diana OLIMPO* (Italy)

11h55 | **Strategic Residue Substitution in Tolaasin for the Synthesis of New Bioactive Derivatives**

Matthias VANHEEDE* (Belgium)

19 November 2026

SOCIAL EVENT

12h45 | **BUS DEPARTURE**

14h00 | **SOCIAL ACTIVITY AT ARBOIS**

Visit of Pasteur's birthplace | Degustation of wines (Fruitière Vinicole)





17h30 | **BUS DEPARTURE TO BESANCON**

20h00 | **GALA AT VAUBAN'S CITADEL**



20 November 2026

08h00 | **MEET THE EXPERT** (Dedicated to students, Salle 3)

Antimicrobial peptides in mussels and beyond: host defense, microbial competition and database-driven discovery

Dr Hélène BOURAS (France)

SESSION VI - MECHANISM OF ACTION OF ANTIMICROBIAL PEPTIDES

Chair: Dr Céline LANDON (CNRS, Orléans, France)
Pr Markus WEINGARTH (Utrecht University, The Netherlands)

08h45 | **KEYNOTE**

On the mechanisms of Cell-envelope targeting antibiotics invited speaker

Pr Markus WEINGARTH (The Netherlands)

SELECTED ORAL PRESENTATIONS

09h25 | **Mechanism of action of non-lytic antimicrobial peptides studied by in vivo solid-state NMR and fluorescence microscopy**

Hugo LEGRAS-HEMONNOT* (France)

09h40 | **Metabolomic and proteomic analysis reveals the differential cellular responses of Bacillus subtilis to cationic antimicrobial peptides**

Arunima SANDEEP (Canada)

09h55 | **Affecting membrane organization to resensitize resistant bacteria to common antibiotics**

Adéla MELCROVÁ (The Netherlands)

10h10 | **COFFEE BREAK**

SESSION VII - VECTORIZATION/CLINICAL, ENVIRONMENTAL APPLICATIONS

Chair: Dr Vincent HUMBLOT (FEMTO-ST Institute, CNRS & Marie et Louis Pasteur University, France)
Pr Olivier LESHOUHAITIER (University of Bern, Switzerland)

10h45 | **KEYNOTE**

Development of the Atrial Natriuretic Peptide as new powerful drug against Pseudomonas aeruginosa biofilms: its mechanism of action and therapeutic potential

Pr Olivier LESHOUHAITIER (Switzerland)

SELECTED ORAL PRESENTATIONS

11h25 | **Modulation of bacteriocin-secreting activity through synthetic peptide signaling in *Streptococcus salivarius***

Julie GEORTAY (Belgium)

11h40 | **Antimicrobial peptide biosensor for rapid bacterial identification: deciphering complex data using linear discriminant analysis**

Lucie BASTIEN (France)

11h55 | **Covalent immobilization of Ruminococcin C antimicrobial peptide on silicon surfaces for antibacterial application**

Chloé RICHET (France)

20 November 2026

12h10 | **CLOSING LECTURE**

Pr Marilyn ANDERSON (Trobe University, co-founded HEXIMA, Member of the Australia Academy of Science, Australia)

Chair: *Dr Vincent Humblot*

13h10 | **AWARDS**

Oral & Poster Prizes (Scientific Committee)
Oral & Poster Prizes (Attendees)

CONCLUSION

Dr Vincent HUMBLOT

13h30 | **DEPARTURE**

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