



25th Meeting of the French Society of Toxinology (SFET)
“Toxins and health: from molecules to organisms”
November 28th-29th, 2018, Institut Pasteur, Paris, France



Wednesday 28th November

9h00 – 9h10: Welcome. Evelyne BENOIT (SFET President)

9h10 – 11h30

Session 1 | Strategies for screening toxins

Chairpersons: Pascale MARCHOT & Nicolas GILLES

9h10 – 9h40: Jeroen KOOL (Amsterdam Institute for Molecules Medicines and Systems, Amsterdam, The Netherlands)
Analytics for assessing venom coagulopathy and neurotoxicity

9h40 – 10h10: Jean-Marie CHAMBARD (Sanofi R&D, Integrated Drug Discovery – High Content Biology, Vitry-sur-Seine, France)
Venoms in Drug Discovery: A case study on voltage-gated channels

10h10 – 10h40: Coffee break & Posters

10h40 – 11h10: Nicolas GILLES (SIMOPRO, CEA de Saclay, Gif-sur-Yvette, France)
How to turn the complexity of venoms into an HTS-compatible toxin bank

11h10 – 11h30: Kévin PROLA (Université de Strasbourg, Institut de Bactériologie, Strasbourg, France)
Characterization of a potential virulence factor zinc metallopeptidase produced by Staphylococcus lugdunensis

11h30 – 11h40: Sponsor presentation (domiconus: 1st European Conidae venom library for pharmaceutical research)

11h40 – 12h15: Posters as 3-min highlights (*limited to 12 posters*)

12h15 – 12h30: Group photo

12h30 – 14h30: Lunch & Posters

14h30 – 17h00

Session 2 | Toxin-induced pathologies

Chairpersons: Michel POPOFF & Gilles PRÉVOST

14h30 – 15h00: Kim ROELANTS (Amphibian Evolution Lab, Vrije Universiteit Brussel, Elsene, Belgium)
Poison from a frog's perspective: Tracing the evolution and adaptive roles of anuran antimicrobial peptides

15h00 – 15h30: Pal STENMARK (Department of Biochemistry and Biophysics, Stockholm University, Stockholm, Sweden)
The clostridial neurotoxins, a growing family

15h30 – 16h00: Gabriella VIERO (Institute of Biophysics, CNR Unit, Trento, Italy)
A host lncRNAs protects human cells from bacterial infection and aids against infection by associating with polysomes

16h00 – 16h20: Horst POSTHAUS (Institute of Animal Pathology, Department of Infectious Diseases and Pathobiology, Vetsuisse-Faculty, University of Bern, Switzerland)
New insights into the role of beta-toxin in Clostridium perfringens type C enteritis

16h20 – 16h40: Geoffrey MASUYER (Department of Biochemistry and Biophysics, Stockholm University, Stockholm, Sweden)
The structure of the tetanus toxin reveals pH-mediated domain dynamics

16h40 – 17h00: Christian LEGROS (Institut MITOVASC, Université d'Angers, Angers, France)
Activation of Na_v channels with neurotoxins reveals a cross-talk between Na_v1.3, L-type Ca_v channels and Na⁺/Ca²⁺ exchanger in GH3b6 cells

17h00 – 19h00: General Assembly of the SFET (SFET members)

9h00 – 9h30: Christian GRUBER (Center for Physiology and Pharmacology, Medical University of Vienna, Austria)
Plant cystine-knot peptide toxins as pharmacological research tools and therapeutic drug candidates

9h30 – 10h00: Antonio VILLAVERDE (Institut de Biotechnologia i de Biomedicina, Universitat Autònoma de Barcelona, Spain)
Engineering protein toxins as self-assembling, self-delivered antitumoral drugs

10h00 – 10h20: Johannes KRUPP (Ipsen Innovation, Les Ulis, France)
Increased affinity of engineered botulinum neurotoxin B to its human receptors translates into increased clinical potential

10h20 – 10h40: Coffee break & Posters

10h40 – 11h00: Julien GIRIBALDI (Institut des Biomolécules Max Mousseron, Université de Montpellier - CNRS, Montpellier, France)
Backbone cyclization of native α -conotoxin CIA dramatically increases affinity at neuronal nicotinic receptors

11h00 – 11h20: Grazyna FAURE (Unité Récepteurs-Canaux, Institut Pasteur, Paris, France)
Potential applications of snake venom PLA2 toxins for drug design

11h20 – 11h40: Jérôme MONTNACH (Institut du Thorax, Nantes, France)
High-throughput automated patch-clamp: Modulation of α C-conotoxin pharmacology by aptamers

11h40 – 12h00: Sylvie DIOCHOT (Institut de Pharmacologie Moléculaire et Cellulaire, Valbonne, France)
Inhibition of ASIC1 channels in a rat model of migraine induces potent analgesic effects

12h00 – 12h15: Ceremony for best poster and other awards

12h15 – 14h00: Lunch & Posters

14h00 – 14h20: Marie-Yasmine DECHRAOUI BOTTEIN (Environment Laboratories, Department of Nuclear Science and Application, International Atomic Energy Agency, Monaco)
Detection, toxicity and bioaccumulation of ciguatoxins in fish

14h20 – 14h40: Khadija DAOUDI (Pasteur Institute of Morocco, Laboratory of Venoms and Toxins, Casablanca, Morocco)
Exhaustive characterization of Moroccan scorpion venoms by the new proteomic approach "Mass spectrometry"

14h40 – 15h00: Alexandre CHENAL (Structural Biology and Chemistry Department, Institut Pasteur, Paris, France)
Structural flexibility of CyaA is crucial for its secretion, folding and host cell hijacking

15h00 – 15h20: Laure GUENIN-MACÉ (Unité d'Immunobiologie de l'Infection, Institut Pasteur, Paris, France)
Mycolactone-mediated SEC61 blockade prevents inflammatory responses in the nervous system

15h20 – 15h40: Christine RASETTI-ESCARGUEIL (Microbiology Department, Institut Pasteur, Paris, France)
Development of innovative BoNT antibodies and progress toward harmonization of the detection of BoNT toxins

15h40 – 16h00: Fanny NOIRMAIN (SIMOPRO, CEA de Saclay, Gif-sur-Yvette, France)
Fast and early warning lateral flow test for the detection of neurotoxins targeting nicotinic acetylcholine receptors

16h00 – 16h20: Salma CHAKIR (Pasteur Institute of Morocco, Laboratory of Venoms and Toxins, Casablanca, Morocco)
Comparative study of the histological changes induced by the venoms of Cerastes cerastes and Naja haje legionis

16h20 – 16h30: Closure. Evelyne BENOIT (SFET President)