



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



Wednesday 28<sup>th</sup> 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: 1<sup>st</sup> 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<sub>v</sub> channels with neurotoxins reveals a cross-talk between Na<sub>v</sub>1.3, L-type Ca<sub>v</sub> channels and Na<sup>+</sup>/Ca<sup>2+</sup> 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 Biotecnologia 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  $\alpha$ -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  $\alpha$ 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)**