



PROGRAM

Thursday, December 9

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

9h10 – 11h50 **Session 1 | Plant toxins, algal toxins, mycotoxins** *Chairpersons: Julien BARBIER & Sébastien DUTERTRE*

9h10 – 9h40: **Irina VETTER** (Inst. for Molecular Bioscience, Univ. of Queensland, Centre for Pain Research, Brisbane, Australia)
The plant with the scorpion sting: novel pain-causing toxins from the Australian giant stinging tree

9h40 – 10h10: **Denis SERVENT** (Service d'Ingénierie Moléculaire pour la Santé, CEA de Saclay, Gif-sur-Yvette, France)
Evidences that pinnatoxin-G crosses intestinal, hematoencephalic and maternofetal barriers to reach central and peripheral nicotinic acetylcholine receptors

10h10 – 10h40: **Etienne BILGO** (Research Inst. of Health Sciences/Centre Muraz, Bobo-Dioulasso, Burkina Faso)
A Blue Mountains funnel-web spider toxin expressed under control of a hemolymph-specific promoter increases fungal lethality against insecticide-resistant malaria-vector mosquitoes

10h40 – 11h10: **e-Break / Posters & Sponsors**

11h10 – 11h30: **Claire LEGENDRE** (MITOVASC, Univ. d'Angers, Angers, France)
Screening an in-house library of isoquinoline alkaloids with fluorescent probes for discovering new ligands of voltage-gated Na⁺ and Ca²⁺ channels

11h30 – 11h50: **Rómulo ARÁOZ** (Service d'Ingénierie Moléculaire pour la Santé, CEA de Saclay, Gif-sur-Yvette, France)
Bioaccumulation of cyclic imine toxins in shellfish intended for human consumption

11h50 – 12h40: **Posters as 3-min highlights**

12h40 – 13h10: **e-Break / Posters & Sponsors**

13h10 – 14h10: **Posters & Sponsors**

14h10 – 17h40 **Session 2 | Animal toxins** *Chairpersons: Sylvie DIOCHOT & Loïc QUINTON*

14h10 – 14h40: **Marianne AMALRIC** (Laboratory of Cognitive Neurosciences, Aix-Marseille Univ., CNRS, Marseille, France)
Bee venom and its component apamin have anti-parkinsonian properties in animal models of Parkinson's disease

14h40 – 15h10: **Jens PUSCHHOF** (Hubrecht Inst., Utrecht, the Netherlands)
Slithering stem cells - Understanding snake venom production using organoids

15h10 – 15h40: **Karla DE CASTRO FIGUEIREDO BORDON** (Dept. of BioMolecular Sciences, School of Pharmaceutical Sciences of Ribeirão Preto, Univ. of São Paulo, Ribeirão Preto, Brazil)
Prospection of animal toxins in drug discovery - Challenges and perspectives

15h40 – 16h10: **e-Break / Posters & Sponsors**

16h10 – 16h40: **Shoji MAEDA** (Univ. of Michigan, Ann Arbor, MI, USA)
Redirection of the mAChR subtype selectivity of the muscarinic toxin

16h40 – 17h00: **Jacinthe FRANGIEH** (Laboratory of Applied Biotechnology, Lebanese Univ., Tripoli, Lebanon)
The venom of the Lebanese viper, Montivipera bornmuelleri, contains vasoactive compounds

17h00 – 17h20: Steven ASCOËT (Univ. de Toulouse, Institut National Universitaire Jean-François Champollion, Albi, France)
Comparative investigation of the mechanisms of two cytotoxic venom peptides from the ant Tetramorium bicarinatum

17h20 – 17h40: Maria P. IKONOMOPOULOU (Madrid Institute for Advanced Studies in Food, Madrid, Spain)
Lipids and cholesterol mediate the cytotoxicity of spider peptides

17h45 – 19h00: General Assembly of the SFET (2021 SFET members only)

Friday, December 10

9h00 – 12h20 Session 3 | Bacterial toxins

Chairpersons: Daniel LADANT & Michel R. POPOFF

9h00 – 9h30: Holger BARTH (Inst. of Pharmacology and Toxicology, Ulm Univ., Germany)
Synthetic AB-toxins for targeted pharmacological modulation of cancer and immune cells

9h30 – 10h00: Daniel GILLET (Molecular Engineering for Health Unit, CEA of Saclay, Gif-sur-Yvette, France)
Phenotypic screening for anti-toxin molecules selects inhibitors of intracellular trafficking with broad-spectrum anti-infectious properties

10h00 – 10h30: Laurent BOYER (Mediterranean Centre for Molecular Medicine, Univ. Côte d'Azur, Nice, France)
NLRP3 inflammasome sensing of RhoGTPase-activating toxins during bacteremia

10h30 – 11h00: e-Break / Posters & Sponsors

11h00 – 11h20: Vincent DERUELLE (Unité de Biochimie des Interactions Macromoléculaires, Institut Pasteur, Paris, France)
ExoU and ExoY, two toxins from Pseudomonas aeruginosa with different mechanisms of action and biological effects

11h20 – 11h40: Marco PIRAZZINI (Dept. of Biomedical Sciences, Univ. of Padova, Padova, Italy)
Moving forward tetanus therapy: two exceptionally potent humAbs are effective for prophylaxis and treatment in mice

11h40 – 12h00: Alexandre CHENAL (Unité de Biochimie des Interactions Macromoléculaires, Institut Pasteur, Paris, France)
CyaA toxin cell invasion involves membrane-active and calmodulin-binding properties of its translocation domain

12h00 – 12h20: Michel R. POPOFF (Unité des Toxines Bactériennes, Institut Pasteur, Paris, France)
Is the regulation of toxinogenesis the same in Clostridium botulinum and Clostridium tetani?

12h20 – 12h50: e-Break / Posters & Sponsors

12h50 – 14h30: Posters & Sponsors

14h30 – 16h30 Session 4 | Miscellaneous

Chairpersons: Alexandre CHENAL & Christian LEGROS

14h30 – 14h50: Landry TSOUMTSA (Unité des Toxines Bactériennes, Institut Pasteur, Paris, France)
The cnf1 gene is associated to an expanding Escherichia coli ST131 H30Rx/C2 sublineage and confers a competitive advantage for host colonization

14h50 – 15h10: Michel DE WAARD (Institut du thorax, Univ. de Nantes, Nantes, France)
In vivo spatiotemporal control of voltage-gated ion channels by engineered photoactivatable peptidic toxins

15h10 – 15h30: Barbara RIBEIRO (Institut du thorax, Univ. de Nantes, Nantes, France)
Functional impact of BeKm-1, a high-affinity hERG blocker, on cardiomyocytes derived from human-induced pluripotent stem cells

15h30 – 15h50: Marco STAZI (Dept. of Biomedical Sciences, Univ. of Padova, Padova, Italy)
An agonist of the CXCR4 receptor is therapeutic for the neuroparalysis induced by Bungarus snake envenoming

15h50 – 16h10: Roberto PONCE-LOPEZ (Univ. Nacional Autónoma de México, Cuernavaca, Morelos, México)
Neutralization of crotamine by polyclonal antibodies against two rattlesnake venoms and a novel recombinant fusion protein

16h10 – 16h30: Ayoub LAFNOUNE (Laboratoire des Venins et Toxines, Institut Pasteur du Maroc, Casablanca, Morocco)
Anti-cancer effect of the Moroccan cobra (Naja haje) venom and its fractions against hepatocellular carcinoma in 3D cell culture

16h30 – 16h45: Participant votes for “best poster” and “best oral communication” awards

16h45 – 16h55: Ceremony for “best poster” and “best oral communication” awards

16h55 – 17h00: Closure by Evelyne BENOIT (SFET President)