

Lundi 28 novembre / Monday, November 28

9h00 – 9h10: Welcome to the RT28 – Sylvie DIOCHOT (SFET President)

9h10 – 10h40 **Session 1 | Toxins and Deep Learning**

Chairpersons: Katrina CAMPBELL & Sébastien DUTERTRE

9h10 – 9h40: Philippe MOINGEON (Servier Research and Development, Suresnes, France)

Artificial intelligence and the revolution of the intelligent drug

9h40 – 10h10: Alan HAUSER (Northwestern Univ., Feinberg School of Medicine, Chicago, IL, USA)

Comparative genomic approaches to identify novel virulence determinants

10h10 – 10h40: Ivan KOLUDAROV (Technical Univ. of Munich, Dept of Informatics, Bioinformatics & Computational Biology, Munich, Germany)

Protein Language Models help investigating structure-function relationship and evolution of toxins

10h40 – 11h10: Coffee Break / Posters & Sponsors

11h10 – 11h50 **Session 2 | Toxins and Neuromuscular Junction**

Chairperson: Jordi MOLGÓ

11h10 – 11h30: Marco PIRAZZINI (Dept of Biomedical Sciences, Univ. of Padova, Padova, Italy)

Neuromuscular junction and brainstem nuclei are the target of tetanus neurotoxin in cephalic tetanus

11h30 – 11h50: Mickaël MACHICOANE (Fastox Pharma SA, Lausanne, Switzerland)

Botulinum toxin type A duration enhancement by mu-conotoxin CnIIIC

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

12h40 – 12h50: Group photo

12h50 – 14h50: Lunch / Posters & Sponsors

14h50 – 17h20 **Session 3 | Toxin Tracking**

Chairpersons: Sylvie DIOCHOT & Christian LEGROS

14h50 – 15h20: Doris MARKO (Dept of Food Chemistry and Toxicology, Univ. of Vienna, Austria)

Tracking emerging mycotoxins in food: development of an LC-MS/MS method for free and modified Alternaria toxins

15h20 – 15h50: Monica CAMPAS (Institute of Agrifood Research and Technology, La Rapita, Spain)

Biosensors and other biotechnological tools for tracking marine toxins

15h50 – 16h20: Jean Louis MARTY (Sensbiotech, Ceret, France)

Biosensors for the detection of toxins: a review on selection of bioreceptor

16h20 – 16h40: Goran STANAJIC PETROVIC (CEA of Saclay, SIMoS, Gif-sur-Yvette, France)

Toxins to fight cancers: developing a new radiotracer from snake toxin derivatives, mambaquaretins

16h40 – 17h00: Damien REDUREAU (Mass Spectrometry Lab., University of Liege, Belgium)

Development of an innovative methodology of antivenomics approach, combining the use of magnetic beads and mass spectrometry

17h00 – 17h20: Katrina CAMPBELL (Queen's University Belfast, Northern Ireland)

Toxin tracking – which detection method is the most appropriate?

17h20 – 17h30: Stretch Break

17h30 – 19h00: General Assembly of the SFET (2022 SFET members only)

Mardi 29 novembre / Tuesday, November 29

9h00 – 12h10

Session 4 | *ToxinOmics*

Chairpersons: *Pascale MARCHOT & Loïc QUINTON*

9h00 – 9h30: Eivind UNDHEIM (Centre for Ecological and Evolutionary Synthesis, Dept of Biosciences, Univ. of Oslo, Norway)

Ant venom evolution: insights from the genetically hyper-diverse greenhead ant

9h30 – 10h00: Vitor VASCONCELOS (Interdisciplinary Center of Marine and Environmental Research, Univ. of Porto, Portugal)

Omics approaches on phycotoxins and cyanotoxins

10h00 – 10h30: Sébastien DUTERTRE (Institute of Biomolecules Max Mousseron, Montpellier, France)

Venom gland evolution and conotoxin diversification in cone snails

10h30 – 11h00: Coffee Break / Posters & Sponsors

11h00 – 11h30: Manuel Jimenez TENORIO (Dept of Material Science and Metallurgy Engineering and Inorganic Chemistry, Univ. of Cadiz, Spain)

Adventures in West Africa: venomics of Eastern Atlantic cone snails

11h30 – 11h50: Anne-Cécile VAN BAELEN (CEA of Saclay, SIMoS, Gif-sur-Yvette, France)

Characterization of the first animal toxin acting as an antagonist on AT1 receptor

11h50 – 12h10: Lou FREUVILLE (Mass Spectrometry Lab., University of Liege, Belgium)

Towards a high-throughput mass spectrometry methodology to fish peptide toxins from crude venoms by affinity capture on cell membrane receptors

12h10 – 14h30: Lunch / Posters & Sponsors

14h30 – 15h50

Session 5 | *Miscellaneous*

Chairpersons: *Evelyne BENOIT & Michel R. POPOFF*

14h30 – 14h50: Richard STENNER (School of Biochemistry, Univ. of Bristol, Bristol, United Kingdom)

Snake venom proteins vs ADDobodies - Antigen production for ribosome display

14h50 – 15h10: Christina SAHYOUN (Univ. of Angers, MITOVASC, Angers, France)

*The venom of the Lebanese viper *Montivipera bornmuelleri* exhibits neuro- and cardiovascular toxicity on zebrafish*

15h10 – 15h30: Mounira ALKASSAR (Institute of Agrifood Research and Technology, La Ràpita, Spain)

Immobilisation of Neuro-2a cells on electrodes and electrochemical detection of MTT formazan crystals to assess their viability

15h30 – 15h50: Alexandre CHENAL (Biochemistry of Macromolecular Interactions, Institut Pasteur, Paris, France)

Structural diversity and dynamics of the complex formed by calmodulin with the CyaA regions translocated into host cells

15h50 – 16h10: Ceremony for the "best poster" and "best oral communication" awards

16h10 – 16h15: Closure of the RT28 – Sylvie DIOCHOT (SFET President)