

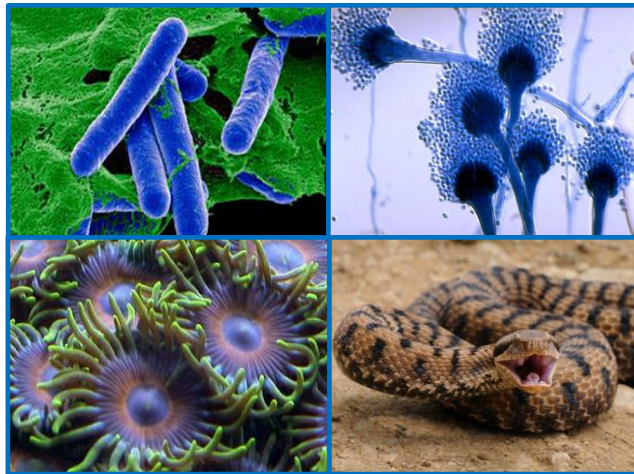


UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA



**1<sup>ST</sup> MEETING ON “NATURAL TOXINS”  
IN HONOR OF CESARE MONTECUCCO**

**September 6-7, 2018  
AULA MAGNA, Vallisneri Building  
Via Ugo Bassi 58/B, Padova**



Thousands of living organisms, ranging from bacteria to fungi, insects, vertebrates, and plants, produce toxins of different chemical nature. These toxins are collectively called natural toxins to distinguish them from the toxins and poisons synthesized by humans.

The natural toxins act via different mechanisms; however, all of them result from their co-evolution with their target or the physiological function they affect. Therefore, the study of their structures and mechanisms of action has multiple values: a) to identify their presence in food or other biological products, b) to shed light on the pathogenesis of the possible diseases caused by these toxins, and, at the same time, c) to shed light on the physiological process that they alter; d) to identify antidotes/drugs/antibodies/vaccines and/or therapeutic protocols designed to prevent or neutralize the action of natural toxins.

**SCIENTIFIC COMMITTEE**

Chiara Dall’Asta, Carmela Dell’Aversano, Corrado L. Galli, Carlo A. Locatelli, Antonella Penna,  
Ornella Rossetto, Silvio Sosa, Emanuela Testai, Aurelia Tubaro

**ORGANIZING COMMITTEE**

Ornella Rossetto, Marco Pirazzini, Michela Rigoni (Università di Padova)  
Silvio Sosa, Marco Pelin, Laura Fusco (Università di Trieste)

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Genetics of Toxin Production and Prediction



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## PROGRAMME

September 6, 2018

AULA MAGNA, Vallisneri building, Via Ugo Bassi 58/B, Padova

14.00 Introduction: Corrado L. Galli – SITOX President  
Aurelia Tubaro

## MYCOTOXINS

**Chairpersons: Chiara Dall'Asta, Patrizia Hrelia**

14.15-14.45

**Opening Lecture: From MycoRed to MycoKey: key EU projects for the mycotoxin management in food and feed chains - Antonio MORETTI and Antonio F. LOGRIECO**

14.45-15.00 Chiara Dall'Asta – Mycotoxins in food: new integrated approaches for the analysis and the mechanism of action

15.00-15.15 Luca Dellafiora – Computational toxicodynamics & *in vitro* toxicology: application and perspectives in the risk assessment on mycotoxins

15.15-15.30 General Discussion

*Coffee Break and Poster Session: 15.30-16.00*

## MARINE & FRESHWATER TOXINS

**Chairpersons: Emanuela Testai, Carmela Dell'Aversano**

16.00-16.20

**Plenary Lecture: Tetrodotoxins in Europe – what is going on? – Andrew D. TURNER**

16.20-16.35 Carmela Dell'Aversano – LC-HRMS studies on *Ostreopsis*-related toxins in algae, seafood and aerosols. What's left?

16.35-16.50 Marco Pelin – Dermotoxicity of palytoxins, an emerging problem for human health

16.50-17.05 Emanuela Testai – Human health risk associated with cyanotoxin exposure

17.05-17.20 Anastasia Hiskia - Transformation products of cyanotoxins

17.20-17.35 Luciana Tartaglione - LC-High resolution MSn and LC-Tandem mass spectrometry for a data merging of a Greek cyanobacteria biomass from Lake Kastoria

17.35-18.00 General Discussion

18.00-19.30 SITOX Working Group on Natural Toxins meeting (Meeting Room, 1<sup>st</sup> floor)

**September 7, 2018**  
**AULA MAGNA, Vallisneri Building, Via Ugo Bassi 58/B, Padova**

### **MISCELLANEOUS TOXINS**

**Chairpersons: Corrado L. Galli, Mark Poli**

9.00-9.20

**Opening Lecture: Structures and chemistry of the azaspiracids, and their consequences for azaspiracid toxicity** - Christopher O. Miles

9.20-9.35 Aurelia Tubaro – Emerging marine toxins in temperate waters

9.35-9.50 Luc de Haro - Marine Toxicology: New challenges for Poison Control Centers

9.50-10.05 Antonella Penna – Molecular tools and approaches for the monitoring of harmful algal blooms

10.05-10.20 Mark Van Asten - Interpreting data from the use of the Phytoxigene QPCR assays in screening and monitoring for harmful algal blooms

10.20-10.35 Maura Manganelli – Are cyanotoxins in food an emerging risk? The results of an EFSA Project

10.35-10.50 Alessandra Ieri - Loxoscelism: presentation of a case series observed from the Medical Toxicology Unit and Poison Centre of Florence Careggi University Hospital

10.50-11.10 General Discussion

*Coffee Break and Poster Session: 11.10-11.30*

### **PROTEIN TOXINS**

**Chairpersons: Cesare Montecucco, Carlo A. Locatelli**

11.30-11.45 Ornella Rossetto – Many novel botulinum neurotoxins and botulinum-like toxins

11.45-12.00 Luca Bano – Non-neurotoxic clostridial toxins causing animal diseases

12.00-12.15 Davide Lonati – Molecular and toxicological study of *Viper* venoms neurotoxicity

12.15-12.30 Giulia Zanetti – Inhibitors of botulinum neurotoxins

12.30-12.45 Mauro Dalla Serra – Pore-forming toxins

12.45-13.10 General Discussion

13.10-13.30 Concluding Remarks (C. L. Galli and C. Montecucco)

13.30-15.30 Mark Van Asten – Demonstration of the Phytoxigene QPCR assay (Room at the 2<sup>nd</sup> floor, South-Sud side)

#### **LIST OF CHAIRPERSONS AND SPEAKERS**

Luca Bano - Istituto Zooprofilattico Sperimentale delle Venezie (Italy)  
Mauro Dalla Serra - Istituto di Biofisica, Consiglio Nazionale delle Ricerche (Italy)  
Chiara Dall'Asta – Università di Parma (Italy)  
Luc de Haro - Marseille Poison Centre (France)  
Carmela Dell'Aversano – Università Federico II di Napoli (Italy)  
Luca Dellafiora – Università di Parma (Italy)  
Corrado L. Galli – Università di Milano (Italy)  
Anastasia Hiskia - Institute of Nanoscience and Nanotechnology (Greece)  
Patrizia Hrelia – Università di Bologna (Italy)  
Alessandra Ieri - AOUC Hospital (Italy)  
Carlo A. Locatelli - Centro Antiveleni di Pavia (Italy)  
Antonio F. Logrieco - Consiglio Nazionale delle Ricerche (Italy)  
Davide Lonati – Centro Antiveleni di Pavia (Italy)  
Christopher O. Miles - National Research Council (Canada)  
Maura Manganeli – Istituto Superiore di Sanità (Italy)  
Cesare Montecucco – Università di Padova (Italy)  
Antonio Moretti – Consiglio Nazionale delle Ricerche (Italy)  
Marco Pelin - Università di Trieste (Italy)  
Mark Poli - U.S. Army Medical Research Institute of Infectious Diseases (USA)  
Antonella Penna – Università di Urbino Carlo Bo (Italy)  
Ornella Rossetto – Università di Padova (Italy)  
Luciana Tartaglione - Università Federico II di Napoli (Italy)  
Emanuela Testai – Istituto Superiore di Sanità (Italy)  
Aurelia Tubaro – Università di Trieste (Italy)  
Andrew D. Turner - Centre for Environment Fisheries and Aquaculture Science (UK)  
Mark Van Asten - University of New South Wales (Australia)  
Giulia Zanetti – Università di Padova (Italy)