



Dates

From Monday to Friday October 2nd-6th 2017

Place

Institut Pasteur of Morocco, Casablanca

TOPICS

- Biology & Systematics
- Epidemiological Aspects & Management of Envenomation
- Venoms, Composition and Mode of Action
- Immunotherapy (Classic and Innovative)
- Venomics & Antivenomics
- Therapeutic Potential of Venom Bioactive Peptides

LIST OF SPEAKERS

Name	Email	Institute	Country
Balkiss BOUHOUALA	balkiss.bouhaouala@gmail.com	Institut Pasteur of Tunis	Tunisia
Dominique KOUA	dominique.koua@atheris.com	National Polytechnical Institute of Yamoussoukro and University of Bern	Ivory Coast and Switzerland
Fabien TAEIB	fabien.taieb@pasteur.fr	Institut Pasteur of Paris	France
Fatima LARABA-DJEBARI	flaraba@hotmail.com	University of Science and Technology, Houari Boumédiène Algiers, Algeria	Algeria
Rym BEN KHALIFA	rym.benKhalifa@pasteur.tn	Institut Pasteur of Tunis	Tunisia
Jorge Fernando PANIAGUA-SOLÍS	jpaniagua@bluewin.ch	International consultant, expert in biological products development, Lausanne, Switzerland	Switzerland
Julia CHAMOT-ROOKE	julia.chamot-rooke@pasteur.fr	Institut Pasteur of Paris	France
Mohammed FEKHAOUI	fekhaoui@israbat.ac.ma	Scientific Institute of Rabat	Morocco
Juan J. CALVETE	jcalvete@ibv.csic.es	Laboratorio de Venómica Estructural y Funcional, Instituto de Biomedicina de Valencia	Spain
Walter GARCIA UBBELOHDE	wgarcia@silanes.com.mx	Deputy Director Medical Research Laboratorios Silane, Mexico city	Mexico
Naoual OUKKACHE	Oukkache.naoual@gmail.com	Institut Pasteur of Morocco, Casablanca	Morocco
Oulaid TOULOUN	o_touloun@yahoo.fr	University of Science, Marrakech	Morocco
Fatima CHGOURY	fchgoury@gmail.com	Institut Pasteur of Morocco, Casablanca	Morocco
Rachid ELJAOUDI	eljaoudi_rachid@yahoo.fr	Faculty of Medicine and Pharmacy of Rabat	Morocco
Rachida SOULAYMANI-BENCHEINCH	rsoulaymani@gmail.com	Centre Anti-Poison et de Pharmacovigilance du Maroc	Morocco
Reto STÖCKLIN	reto.stocklin@atheris.com	Atheris SA, Geneva	Switzerland
Roland STOCKMANN	roland.stockmann@wanadoo.fr	Paris VI University	France
Vincent VAGNIERE	vva1@rocketmail.com	Independent consultant, expert in breeding and milking, Lausanne	Switzerland

TENTATIVE DETAILED PROGRAM

DAY 1

- 9h00 Registration & Welcome
- 9h15 Opening Ceremony & Course Intro
- 9h35 Oral presentation of one-minute of the Research Projects by each student
- 10h00 **COFFEE BREAK**

Session 1: Biology & Systematics

- 10h30 Biology & systematics of the snake
Pr Mohammed FEKHAOU
Scientific Institute of Rabat
- 11h00 Geographical distribution of snakes in Morocco
Pr Mohammed FEKHAOU
Scientific Institute of Rabat
- 11h30 The reproduction of the scorpion - Climate change impact
Pr Roland STOCKMANN
PARIS VI University
- 12h30 Biology & systematics of the scorpion
Geographical distribution of scorpions in Morocco
Dr Oulaid TOULOUN
University of Science, Marrakech
- 13h30 **LUNCH BREAK**

Session 2: Epidemiological Aspects & Management of Envenomation

- 14h00 Epidemiological and management of scorpion and snake envenomations
Pr Rachida SOULAYMANI-BENCHEINKH
Centre Anti-Poison et de Pharmacovigilance, Morocco
- 15h00 Clinical management of scorpion and snake envenomations
Pr Said YOUNOUS
CHU Marrakech

16h00 COFFEE BREAK

16h30 Management of snakebite envenomation: clinical investigation
and Impact of the antivenom
Dr Fabien TAEIB
Institut Pasteur of Morocco

DAY 2

Session 3: Venoms, Composition & Mode of Action

9h00 Scorpion and snakes venoms: Composition, mode of action,
pharmacological and physiopathology
Dr Naoual OUKKACHE
Pasteur Institute of Morocco

10h00 Structural & functional diversities of bioactive scorpion & snake
venom compounds
Pr Balkiss BOUHAOUALA
Institut Pasteur of Tunis

10h00 COFFEE BREAK

10h30 Involvement of inflammatory response and oxidative stress in
pathogenesis of scorpion envenomation: role of neurotoxins
Pr Fatima LARABA- DJEBARI
University of Science and Technology, Algiers

11h00 Scorpion toxins to understand neuropathologies/ Interaction of
scorpion toxins with the nervous system
Pr Rym Ben Khalifa
Pasteur Institute of Tunis

13h30 LUNCH BREAK

Session 4: Immunotherapy (Classic and Innovative Approaches)

14h00 Challenges in the development of antivenoms, past and future
Dr Jorge Fernando PANIAGUA-SOLIS
International consultant, expert in biological products
development, Lausanne - Switzerland

16h00 COFFEE BREAK

16h30 Advances in specific treatment against scorpion
envenomation: from immunotherapy towards vaccine
Pr Fatima LARABA- DJEBARI
University of Science and Technology, Algiers

DAY 3

Session 4: Immunotherapy (Classic and Innovative Approaches)

09h00 Strategies for antivenom efficacy improvement: Nanobody
generation and engineering
Pr Balkiss BOUHAOUALA
Institut Pasteur of Tunis

10h00 COFFEE BREAK

10h30 The clinical validation and standardization of the antivenom
Pr Walter GARCIA UBBELOHDE
Laboratorios Silanes, Mexico

Session 5: Venomics & Antivenomics

11h00 Structural & proteomic mass spectrometry
Pr Juan J. CALVETE
Instituto de Biomedicina de Valencia

13h30 LUNCH BREAK

14h00 New approaches for venomics and antivenomics investigations
Pr Juan J. CALVETE
Instituto de Biomedicina de Valencia

16h00 COFFEE BREAK

16h30 An introduction to venomics: combining genomics, proteomics
and bioinformatics
Dr Reto STÖCKLIN
Atheris SA, Geneva

DAY 4

Session 5: Therapeutic potential of scorpion & snakes venom peptides

09h00 Integrative bioinformatic approach for venom gland transcriptome annotation
Dr Dominique KOUA
National Polytechnical Institute of Yamoussoukro

10h30 COFFEE BREAK

11h00 Natural peptides to drugs: venomous animals as drug discoverers
Dr Reto STÖCKLIN
Atheris SA, Geneva

13h00 LUNCH BREAK

PRACTICE 1:

13h30 Breeding and milking of venomous animals
Mr Vincent VAGNIERE
Expert in breeding and milking, Lausanne

14h30 Protein concentration, Venom activity, Gel Electrophoresis, Chromatographic techniques, Antivenom production, antivenoms titration, affinity determination, cross-recognition assays, ELISA test for the clinical validation
Salma CHAKIR (ph.D); Myriam REZZAK (ph.D), Dr Fatima CHGOURY and Dr Naoual OUKKACHE
Institut Pasteur of Morocco

16h30 SOCIAL ACTIVITIES

DAY 5

PRACTICE 2:

- 9h00: Strategies for the discovery of novel bioactive drug candidates in animal venoms
Dr Reto STÖCKLIN & Dr Dominique KOUA
- 11h00 **ROUND TABLE:** "Building capacities in translational venomics medicine", Major challenges and fund raising opportunities
- 12h00 CLOSING CEREMONY & CERTIFICATE'S DISTRIBUTION**
- 14h00 **LUNCH BREAK**

ORGANISING COMMITTEE

Dr Naoual OUKKACHE
Dr Balkiss BOUHAOUALA
Dr Reto STÖCKLIN