



INTERNATIONAL SOCIETY ON TOXINOLOGY

NEWSLETTER

October 2013

UPCOMING MEETINGS

The 11th Pan-American Section IST Congress will be held at the Grand Casa Hotel, Guarujá, São Paulo State, Brazil, November 3-8, 2013, in conjunction with the 12th Congress of the Brazilian Society of Toxinology.

The next Asia-Pacific Section IST Congress will be held in Changsha, China, June 14-18, 2014.

The next European Section IST Congress will be the IST World Congress, in 2015, at Oxford University, Oxford, UK. Tentative dates are September 25th to 30th, 2015 (to be confirmed).

IST Council has agreed to a changed schedule for IST congresses, commencing in 2015 with the World Congress held every second year, rotating between the 3 regions.

Venomics: Drug Discovery From Nature's Deadliest. New York Academy of Sciences, New York, November 4th, 2013

3rd Toxinology Society of India conference, Goa, India, December 19-21, 2013.

Clinical Toxinology Short Course, Adelaide, Australia, March 31st to April 5th, 2014.

FROM THE IST EXECUTIVE

The main purpose of this edition of the Newsletter is to provide a summary of the recent IST Council meeting (see later in the newsletter).

As you may read in the meeting summary, Council had two bids for the 2015 World Congress to choose between, one from the UK and one from Switzerland. Both were well presented and attractive bids. However, Council decided to accept the UK bid. The congress will be held at Oxford University in historic university buildings and with an opportunity for some lucky members to stay in historic university college student accommodation.

Congress organisers will progressively contact members for ideas and suggestions for the congress scientific program. This congress should be rather special, because of the historic setting, quite different from meetings in modern hotel or convention facilities.

Oxford is a charming town. I recently had the chance to look at likely venues and stay in college accommodation while attending the small Venomics2013 meeting in September and it was a most enjoyable experience. A big thank you to Muhammad Sohail, Eddie Rowan and David Warrell for making this meeting possible.

Don't forget about the upcoming Pan-American IST Congress in Brazil in November and the Toxinology Society of India meeting in December, 2013, in Goa.

Julian White, Secretary/Treasurer, IST

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MEMBERSHIP ANNOUNCEMENTS

The IST Membership Database has been updated, a process that will be ongoing. Please let the IST Secretary know if you change any of your contact details (email, phone, address etc). The Membership Database is available to all IST members via the IST website, with password protection for access. User name and password details have been sent out to all IST members previously. Please keep these details safe. If you cannot find your details then please email Dr. David Bates (Chief Scientist in my Toxicology Dept.) on david.bates@adelaide.edu.au.

Because of file size, the Newsletter is too big to email and so it is more practical to post the

Newsletter on the IST website and just email members advising it is ready to download, via a link.

As discussed in an email to members earlier in 2011, changes at my workplace meant that as of June 2011 I was no longer able to use my hospital to collect IST dues by credit card. We now have an online payment system for all IST dues, on the IST website. This commenced in early January, 2012. The old system, of sending in forms for credit card payments, or cheques, no longer apply. ALL payments must be through the online website system.

Julian White
Secretary/Treasurer IST

IST Council 2012-2016

President: A Harvey
Secretary/Treasurer: J White
President Elect: J Fox
Immediate Past President: P Gopalakrishnakone
Toxicon Editor: A Harvey
President European Section: J Calvete
Secretary European Section: R Harrison
President Pan-American Section: D Tambourgi
Secretary Pan-American Section: Y Cury
President Asia-Pacific Section: E Grishin
Secretary Asia-Pacific Section: vacant
General Councillors
Europe: D Warrell & R Stocklin
Pan-America: JM Gutierrez & L Posani
Asia-Pacific: G King & M Kini



IST STUDENT MEMBERS - THIS IS FOR YOU - The Special Interest Group for Student Toxicologists Establishment of a special wiki site

Students have been an important and valued part of IST since the inception of the Society in 1962. To emphasize the importance of the role of students in the IST, the Society has created a Special Interest Group for Student Toxicologists.

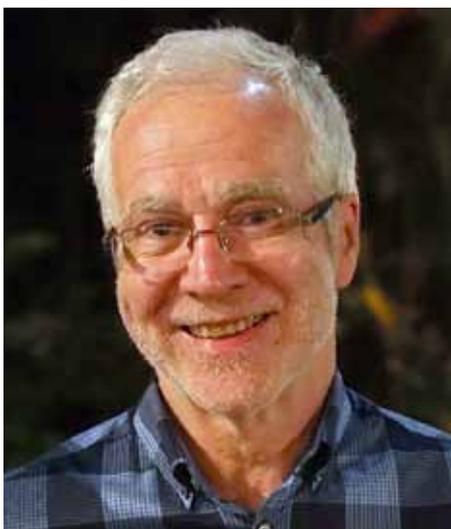
The aims of the Special Interest Group for Student Toxicologists include: to increase opportunities for students to network with possible collaborators and employers; to work with the Executive and Council, IST to ensure students are included and supported in future decisions of the IST; and to train students to become contributing members to the IST and other professional societies.

As part of the process of developing the student group, we have established a special wiki site which will allow student members to interact directly with fellow students. Student members will soon receive an email giving them details on how to access this site. We are also investigating a way of interfacing student members with established members prepared to answer questions on methodology. Established members prepared to engage in such a process should let the IST Secretary know of their interest.

A number of student members have expressed interest in being a part of such a network, but we continue to encourage other students to become involved. Any students interested in participating in such a network should contact the following by email (please send your email to the Secretary, IST, with cc to the President, IST and to student member Maggie Gentz):

julian.white@adelaide.edu.au
a.l.harvey@strath.ac.uk
m.gentz@uq.edu.au

MESSAGE FROM THE PRESIDENT (I.S.T)



an early sample of the unique atmosphere of this location. York, but I will look forward to meeting many of you in Guarujá.

It is now less than one month until the 11th Congress of the Pan-American Section of the IST, which will be held jointly with the 12th Congress of the Brazilian Society of Toxinology. I am sure that this will be a highly productive opportunity for a wide spectrum of the venom and toxin community to get together to share ideas.

With best wishes

Alan Harvey
President, IST

Email: A.L.Harvey@strath.ac.uk

Dear IST members,

Last month saw another successful meeting on venoms and toxins: Venoms 2013: making sense of venoms in health and disease. This was held in Oxford and was organised by Eddie Rowan and David Warrell. Many IST members participated, and I am sure that all appreciated the friendly atmosphere that encouraged much discussion between toxinologists. Oxford, of course, will be the venue for the IST's next international Congress in 2015, and it was good to have

Unfortunately, the official IST meeting in Brazil overlaps with an interesting symposium that is being hosted by the New York Academy of Sciences - Venomics: Drug Discovery from Nature's Deadliest

on November 4th. While it is encouraging to see more interest in venoms and toxins among the wider community, it is disappointing the organisers of specialist conferences do not check for possible conflicts before they set their dates.

I won't be seeing people in New

THE FUTURE OF THE IST NEWSLETTER

The IST Newsletter needs input from IST members to make it a more effective communication tool within the Society. The move to electronic format may open up opportunities for new sections. For instance, it might be possible to have annotated bibliographies of recent toxinology publications from other journals, or reports of other meetings with toxinology content. Available toxinology-related jobs and student postings could be listed. There are doubtless many other possibilities members may think of.

So I ask all IST members to consider what they want from the Newsletter and let me know by email. I also want to hear from IST members prepared to contribute regular sections to the Newsletter. To be vibrant and relevant the Newsletter must become more than just a brief report on IST business by myself and our President, but that requires your input.

Julian White
Secretary/Treasurer IST
julian.white@adelaide.edu.au

IST Council Minutes March/April 2013

IST COUNCIL MEETING SUMMARY

The IST Council now meets regularly via email, to discuss, decide and act on matters pursuant to Society affairs.

Council has decided to trial release of a summary of minutes of Council meetings, via the Society newsletter, to keep members informed about Society business. The full minutes may, from time to time, contain matters of a sensitive or contractual nature, such as finances and agreements pertaining to Society congresses, which cannot be given unrestricted release. Council has yet to determine if and how full minutes might be made available to members.

INTERNATIONAL SOCIETY ON TOXINOLOGY COUNCIL MEETING

September, 2013

Meeting held via email

SUMMARY OF MINUTES

1. ***Those participating:*** J White, G King, J Fox, J Calvete, D Warrell, J Gutierrez, P Gopalakrishnakone, L Possani, A Harvey, M Kini, D Tambourgi, Y Cury, R Harrison, R Stocklin, E Grishin
2. ***President's report:*** A Harvey did not have any major news to discuss.
3. ***Secretary/Treasurer's report:*** J White outlined the current state of IST finances. At this stage the Society has sufficient income to cover expected expenses. A reserve of funds is being built up to help support future congresses.
4. ***Toxicology Editor's report:*** A Harvey noted the journal continues to grow in stature, with a steady rise in manuscript submissions. Several special issues are in preparation. He also noted changes in the way papers may be submitted, in line with the "your paper, your way" initiative.
5. ***Clinical toxicology initiative/ Board of Clinical Toxicology:*** Following Council's adoption of a constitution to cover a Board of Clinical Toxicology and establishment of the inaugural Board of Clinical Toxicology at the March Council meeting, the Board has met (by email) and has commenced the tasks before it. It is too early in this process to report major progress, but an initial diploma-level course structure has been developed for further consideration.
6. ***GSI report:*** No further update at this time (recent update at July meeting).
7. ***Snake Taxonomy Advisory Committee report:*** Council decided, on advice from J White, to invite W Wuster to take over as chair of the committee, with a view to organising regular updates for members. W Wuster has agreed to take on this role.
8. ***IST Pan-American Congress 2013:*** The meeting organisers on Council (D Tambourgi & Y Cury) reported further progress with this meeting. There will be a busy program with 74 invited speakers and 3 satellite meetings and courses.
9. ***IST Asia-Pacific Congress 2014:*** A second announcement update was provided (see elsewhere in this newsletter).
10. ***IST European Congress/World Congress 2015:*** Council considered the rival bids from the UK and Switzerland. Both bids were strong. Council voted to accept the UK bid, for the congress to be held at Oxford University. Council also agreed to develop a guideline document for congress organisers.

IST Nomenclature Committee

At the last IST World Congress held in Recife, Brazil in March 2009, a symposium devoted to the topic of toxin nomenclature received significant interest from IST members. The IST Council subsequently decided to form a nomenclature committee to examine the issue of toxin naming standards and recommend possible solutions. The mandate of this committee was to propose a nomenclature system, with interim reports to IST Council and a "final" report to be delivered at the IST World Congress in 2012. This deadline was not met, but it is hoped progress will be made in the following triennium. If you have any comments or suggestions on toxin nomenclature, could you please send them to a member of the nomenclature committee, which is currently comprised of the following members:

Dr Gerardo Corzo, Mexico (Email: corzo@ibt.unam.mx)

Dr Florence Jungo, Switzerland (Email: Florence.Jungo@isb-sib.ch)

Dr Evanguedes Kalapothakis, Brazil (Email: ekalapo@icb.ufmg.br)

Prof. Glenn King, Australia (Chairman; Email: glenn.king@imb.uq.edu.au)

Prof. Manjunatha Kini, Singapore (Email: dbskinim@nus.edu.sg)

Prof. Graham Nicholson, Australia (Email: graham.nicholson@uts.edu.au)

Prof. Toto Olivera, USA (Email: olivera@biology.utah.edu)

Prof. Jan Tytgat, Belgium (Email: jan.tytgat@pharm.kuleuven.be)

ArachnoServer spider toxin database

ArachnoServer is a manually curated database that provides detailed information about proteinaceous toxins from spiders. Key features of ArachnoServer include a new molecular target ontology designed especially for venom toxins, the most up-to-date taxonomic information available, and a powerful advanced search interface. Toxin information can be browsed through dynamic trees, and each toxin has a dedicated page summarising all available information about its sequence, structure, and biological activity. ArachnoServer currently manages 567 protein sequences, 334 nucleic acid sequences, and 51 protein structures. ArachnoServer is available online at www.arachnoserver.org.

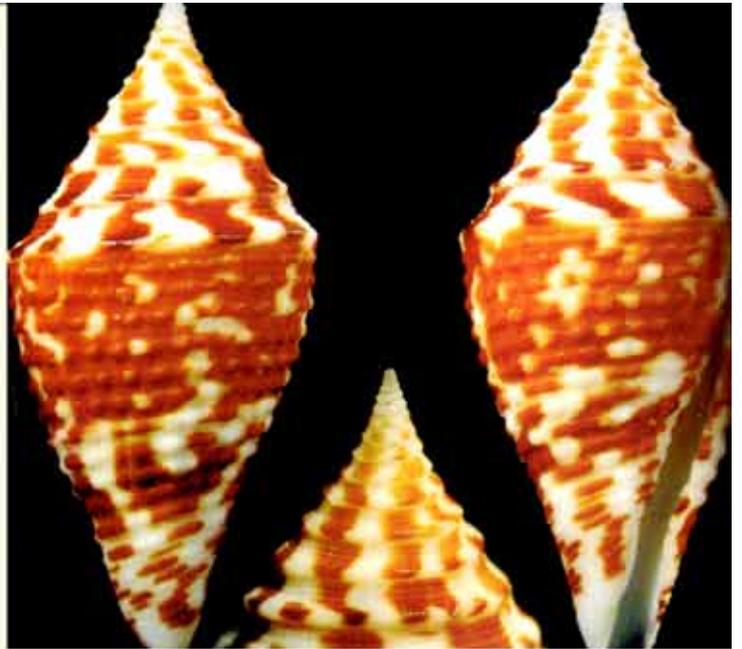
The IST has established a special wiki site for members of this Nomenclature Committee to use to both communicate and develop information and recommendations. Members of the committee will soon receive an email detailing how they may access this site.

IST Snake Taxonomy Advisory Group

Keeping up with changes in taxonomy for venomous animals is always a challenge for toxinologists, but it is important to do so, if published research is to maintain viability longer term, as taxonomy evolves. To improve dissemination of information on taxonomic changes the IST has invited Dr. Wolfgang Wuster (UK) to chair the snake taxonomy committee with a view to generation of regular taxonomy updates which can be made available to members.

We will consider making these updates available through the newsletter and, possibly, the IST website.

Julian White, Secretary IST



Andre Menez's Cone Snail

CONE OF (DEADLY) SILENCE

Between 2000 and 2010, approximately eighty new living species of cone snails were described, including *Conus andremenezi*, which was collected in the nets of trawl fishermen near Aliguay Island, Philippines. With more than six hundred species, cone snails are both diverse and one of the most venomous marine groups. In nature, cone snails use their teeth like harpoons to paralyze prey with a battery of toxins. The geographic cone snail (*C. geographus*) has such a fast-acting and powerful toxin that it has earned the nickname "cigarette snail"—after being stung by *C. geographus*, a human would have only enough time to smoke a cigarette before dying. Although the venom of cone snails—conotoxins—can be strong enough to kill a human, pharmaceutical research is continuing to find medical uses for them, such as nonaddictive painkillers and treatments for epilepsy and other neurological diseases.



BALDOMERO M. OLIVERA

DISCOVERED	Aliguay Island, Philippines
SCIENTIFIC NAME	<i>Conus andremenezi</i> Biggs, Watkins, Corneli, & Olivera 2010
ETYMOLOGY	<i>Conus</i> is a genus of mollusks named by Linnaeus in 1758; <i>andremenezi</i> is in honor of Andre Menez, for his contributions to the field of toxicology.
CLASSIFICATION	Animalia • Mollusca • Gastropoda • Neogastropoda • Conidae



XI Congress of the Pan-American Section of the International Society on Toxinology

XII Congress of the Brazilian Society of Toxinology

Envenomation by poisonous animals: a neglected disease

November 3-8, 2013
Casa Grande Hotel
Guarujá - SP - Brazil



The city of Guarujá, State of Sao Paulo, will host the XI Congress of the Pan American Section of the International Society on Toxinology and the XII Congress of the Brazilian Society of Toxinology. The theme of the meeting is "Envenomation by poisonous animals: a neglected disease".

Important names of the Toxinology field will be present in this multidisciplinary event. It aims to serve as a platform for the discussion of results and promotion of collaboration networks.

The goal is to deepen the understanding of the structural, molecular and clinical aspects associated with toxins and venoms. The results will be presented in the form of plenary sessions, symposia and poster sessions, and the event will feature national and international speakers.

We are certain that we will have an event of high scientific level in an environment of friendliness, since we will be celebrating the 25th anniversary of the founding of the Brazilian Society of Toxinology.

From 3 to 8 November 2013, come and enjoy with us a carefully elaborated scientific program and the beauty of one of the most delightful beaches in São Paulo, Brazil. We count on your presence!

PROGRAM

- Antivenoms
- Biology of venomous/poisonous animals
- Caterpillar toxins and envenomation
- Clinical aspects of scorpion envenomation
- Clinical aspects of snake envenomation
- Clinical aspects of spider envenomation
- Drug design based on venom components
- Education and diffusion in Toxinology
- Marine toxins
- Mechanism of action of toxins
- Others
- Plant toxins
- Scorpion toxins
- Spider toxins
- Structure and function of toxins
- Toxin genomics
- Toxin proteomics
- Toxins and evolution
- Toxins and haemostasis
- Toxins and inflammation
- Toxins and ion channels
- Toxins and pain
- Toxins from microbes

SCIENTIFIC COMMITTEE

- Alan Harvey - University of Strathclyde, Glasgow, UK
- Carl W. Vogel - University of Hawaii Cancer Center, Honolulu, USA
- Carlos Alvarez-Valcárcel - Universidad de la Habana, Cuba
- Consuelo Latorre Fortes Dias - Fundação Ezequiel Dias, MG, Brazil
- Denise V. Tambourgi - Instituto Butantan, SP, Brazil
- Frank Mari - Florida Atlantic University, FL, USA
- Gilberto B. Domont - Universidade Federal do Rio de Janeiro, RJ, Brazil
- Jay W. Fox - University of Virginia, VA, USA
- Jorge Kallil - Instituto Butantan, SP, Brazil
- Jose Maria Gutierrez - Instituto Clodomiro Picado Institute, San Jose, Costa Rica
- Lourival D. Possani - Universidad Nacional Autonoma de Mexico, Cuernavaca, Mexico
- Marcos R.M. Fontes - Universidade Estadual Paulista, SP, Brazil
- Yara Cury - Instituto Butantan, SP, Brazil

REGISTRATIONS

Category - values in Reals (R\$)	Until 05/23/2013	Until 07/26/2013	Until 10/18/2013	At venue
Undergraduate student - Member* from SBTx	R\$ 150,00	R\$ 180,00	R\$ 200,00	R\$ 225,00
Undergraduate student - Non-member	R\$ 230,00	R\$ 270,00	R\$ 300,00	R\$ 340,00
Graduate Students (MsC/PhD) - Members* from SBTx** or IST***	R\$ 340,00	R\$ 410,00	R\$ 480,00	R\$ 510,00
Graduate Students (MsC/PhD) - Non members	R\$ 420,00	R\$ 490,00	R\$ 550,00	R\$ 590,00
Members * from SBTx or IST	R\$ 520,00	R\$ 600,00	R\$ 660,00	R\$ 700,00
Nonmembers	R\$ 700,00	R\$ 840,00	R\$ 880,00	R\$ 920,00
Accompanying person	R\$ 220,00	R\$ 280,00	R\$ 290,00	R\$ 300,00

*up to date with the annual fees till 2012 | ** SBTx- Sociedade Brasileira de Toxinologia | *** IST- International Society on Toxinology

www.jzbrasil.com/congressos/toxinologia

Executive Secretariat:

JZBRASIL

toxinology2013@jzbrasil.com
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Organized by:



Supported by:



**XIth Congress of the Pan-American Section of IST
and
XIIth Congress of the Brazilian Society on Toxinology**

PRELIMINARY PROGRAM

**November, 3rd 2013 - Sunday
AFTERNOON**

14h00 - 17h00

Satellite meeting

Meeting from the Iberoamerican network Biotox-CYTED - "Toxins of interest for Biomedicine"

14h00 - 17h00

Meeting registration

18h30 - 20h30

OPENING CEREMONY

OPENING CONFERENCE: To be announced

20h30 –Cocktail

**November, 4th 2013 - Monday
MORNING**

07h30 – 8h10: Course # 1 Ferramentas ômicas aplicadas ao estudo de venenos (course will be presented in portuguese)

07h30 – 8h10: Course # 2 A Citometria de Fluxo e sua aplicabilidade na Toxinologia (course will be presented in portuguese)

08h30 - 09h30

**CONFERENCE #1: OVERVIEW OF CLINICAL FEATURES AND THERAPY OF SNAKE-BITE
ENVENOMING IN THE AMERICAS**

Chair: Julia Prado Franceschi (Brazil)

Speaker: David Warrell (UK)

10h00 - 12h00

SESSION # 1: INTEGRATIVE TOXINOLOGY

Chairs:

1- Jay Fox (USA)

2- Carlos Sevcik (Venezuela)

Speakers:

1- Stephen Mackessy (USA) "Effects of positive selection on structure/function evolution of colubrid three-finger toxins: coevolutionary adjustments?"

2- Carlos Sevcik (Venezuela) - Title to be announced

3- Inácio Junqueira de Azevedo (Brazil) "Combining transcriptomics, proteomics and

functional characterization to a better knowledge of colubrid venoms”

- 4- André Pereira P. Zelanis (Brazil) “Systemic approaches in Toxinology: perspectives and implications of omics methodologies on the study of snake venom toxins”
- 5- To be selected from the abstracts

10h00 - 12h00

SESSION # 2: CLINICAL ASPECTS OF SNAKE ENVENOMATION

Chairs:

- 1- Fan Hui Wen (Brazil)
- 2- Abdulrazaq G. Habiib (Nigeria)

Speakers:

- 1- Fan Hui Wen (Brazil) “Clinical Toxinology in a globalized world”
- 2- Abdulrazaq G. Habiib (Nigeria) “Overview of clinical features and therapy of snakebite envenoming”
- 3- Marcos Lacerda (Brazil) “Snakebites in the State of Amazonas: a preliminary analysis of a largely neglected problem”
- 4- Steven Seifert (USA) “A new dosing regimen for a Fab antivenom in rattlesnake bite with recurrent venom effects”
- 5- To be selected from the abstracts

10h00 - 12h00

SESSION # 3: MARINE TOXINS

Chairs:

- 1- Frank Mari (USA)
- 2- P. Gopalakrishnakone (Singapore)

Speakers:

1. Frank Mari (USA) “Adventures with marine toxins from the Americas: the discovery of Conotoxin structures and their functional implications”
2. María E. Lanio (Cuba) “Novel approaches for nanobiotech applications of Sticholysins, two pore-forming toxins”
3. Kathleen Rein (USA) - Title to be announced
4. To be selected from the abstracts
5. To be selected from the abstracts

AFTERNOON

13h30 - 14h30

CONFERENCE #2: VENOMICS OF SNAKES FROM THE AMERICAS

Chair: Jonas Peralez (Brazil)

Speaker: Juan Calvete (Spain)

15h00 - 17h00

SESSION # 4: TOXIN PROTEOMICS

Chairs:

- 1- Gilberto Domont (Brazil)
- 2- Bruno Lomonte (Costa Rica)

Speakers:

- 1- Gilberto Domont (Brazil) “Discovery driven-venomics: poisons of Brazilian rattle and coral snakes”
- 2- Bruno Lomonte (Costa Rica) “Venomous snakes of Costa Rica: taxonomical, biological, and clinical implications of their proteomic profiling through the strategy of “snake venomomics”

- 3- Mario Sérgio Palma (Brazil) “Proteomics as experimental strategy for proofing the functional targets of mastoparan peptides”
- 4- Alexandre K. Tashima (Brazil) “Venom peptidomics of the Brazilian spider *Acanthoscurria gomesiana*”
- 5- To be selected from the abstracts

15h00 - 17h00

SESSION # 5: TOXINS AND ION CHANNELS

Chairs:

- 1- Paulo Sérgio Beirão (Brazil)
- 2- Jan Tytgat (Belgium)

Speakers:

- 1- Jan Tytgat (Belgium) “Cone snail venom peptides: an inexhaustible treasury for drug leads”
- 2- Paulo Sérgio Beirão (Brazil) - To be announced
- 3- Frank Bosmans (USA) “ μ -Diguetoxin-Dc1a promotes BgNav1 opening by influencing the domain II voltage sensor”
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

15h00 - 17h00

SESSION # 6: TOXINS FROM MICROBES

Chairs:

- 1- Wilmar Dias da Silva (Brazil)
- 2- Celia Carlini (Brazil)

Speakers:

- 1- Wilmar Dias da Silva (Brazil) - To be announced
- 2- Jorge Kalil (Brazil) “How M Protein from *Streptococcus* causes Human Diseases”
- 3- Celia Carlini (Brazil) “Ureases are multifunctional toxins”
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

17h00 - 19h00 Poster Session 1

18h30 - 20h00 General Meeting - IST

20h00 SBTx Jovem – Happy hour

November, 5th 2013 - Tuesday MORNING

07h30 – 8h10: Course # 1 Ferramentas Ômicas aplicadas ao estudo de venenos (course will be presented in portuguese)

07h30 – 8h10: Course # 2 A Citometria de Fluxo e sua aplicabilidade na Toxinologia (course will be presented in portuguese)

07h30 – 8h10: Course # 3 Bioinformática estrutural aplicada ao estudo de toxinas (course will be presented in portuguese)

08h30 - 09h30

CONFERENCE #3: SNAKE VENOM PROTEINASES DEGRADOMICS: TOWARDS UNDERSTANDING THEIR EFFECTS UPON HUMAN PLATELETS AND PLASMA, AND MOUSE SKIN

Chair: Gilberto Domont (Brazil)
Speaker: Solange Serrano (Brazil)

10h00 - 12h00

SESSION # 7: STRUCTURE AND FUNCTION OF TOXINS

Chairs:

- 1- Marcos Fontes (Brazil)
- 2- Carlos Alvarez (Cuba)

Speakers:

- 1- Marcos Fontes (Brazil) "Proposition of novel comprehensive model for myotoxic activity on bothropic phospholipases A2"
- 2- Carlos Alvarez (Cuba) - To be announced
- 3- To be announced
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

10h00 - 12h00

SESSION # 8: ANTIVENOMS

Chairs:

- 1- Jorge Kalil (Brazil)
- 2- José María Gutiérrez (Costa Rica)

Speakers:

- 1- José María Gutiérrez (Costa Rica) "New antivenoms for sub-Saharan Africa: Key issues related to their design and evaluation"
- 2- Carlos Sevcik (Venezuela) - To be announced
- 3- Carla Cristina Squaiella Baptista (Brazil) "Anticomplementary activity of horse IgG and F(ab')₂ antivenoms"
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

10h00 - 12h00

SESSION # 9: TOXINS AND INHIBITORS

Chairs:

- 1- Consuelo Latorre Fortes Dias (Brazil)
- 2- Jonas Perales (Brazil)

Speakers:

- 1- Consuelo Latorre Fortes Dias (Brazil) "Inhibitors of Phospholipases A2 in the blood plasma of Brazilian snakes"
- 2- Jonas Perales (Brazil) "Inhibitors of snake venom metalloproteinases: state of the art and perspectives"
- 3- Paulo Melo (Brazil) "Ability of some natural and synthetic substances to antagonize toxins"
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

AFTERNOON

13h30 - 14h30

CONFERENCE #7: SNAKE VENOM PROTEINS AFFECTING PLATELET RECEPTOR FUNCTION

Chair: Ana Marisa Chudzinski Tavassi (Brazil)
Speaker: Kenneth J. Clemetson (Switzerland)

15h00 - 17h00

SESSION # 10: TOXINS AND HAEMOSTASIS

Chairs:

- 1- Russolina B. Zingali (Brazil)
- 2- R. Manjunatha Kini (Singapore)

Speakers:

- 1- R. Manjunatha Kini (Singapore) "Toxins in thrombosis and hemostasis"
- 2- Russolina B. Zingali (Brazil) "Antithrombotic agents isolated from venoms and bacteria"
- 3- Ivo Francischetti (USA) "Antihemostatics from Blood-Sucking Arthropods"
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

15h00 - 17h00

SESSION # 11: CLINICAL ASPECTS OF ARTHROPODS ENVENOMATION AND THERAPEUTICS

Chairs:

- 1- Mario Sérgio Palma (Brazil)
- 2- Julian White (Australia)

Speakers:

- 1- Fábio Bucarechi (Brazil) - To be announced
- 2- Julian White (Australia) - "Treating arthropod envenoming; do we have a clearly appropriate management strategy?"
- 3- Ceila Malaque Sant'Ana (Brazil) "Loxoscelism: how to evaluate the safety and efficacy of antivenom in clinical practice?"
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

15h00 - 17h00

SESSION # 12: TOXINS AND EVOLUTION

Chairs:

- 1- Inácio Junqueira (Brazil)
- 2- Lisle Gibbs (USA)

Speakers:

- 1- Lisle Gibbs (USA) "Phylogeny-based comparative analysis of venom proteome variation in a clade of rattlesnakes (*Sistrurus* sp.)"
- 2- Inácio Junqueira (Brazil) "Snake toxin genes origins and evolution in the light of toxin-related genes background"
- 3- To be announced
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

17h00 - 19h00 Poster session 2

18h30 - 20h00 General Meeting - SBTx

20h00 SBTx jovem – Happy hour

November, 6th 2013 - Wednesday
MORNING

07h30 – 8h10: Course # 1 Ferramentas Ômicas aplicadas ao estudo de venenos (course will be

presented in portuguese)

07h30 – 8h10: Course # 2 A Citometria de Fluxo e sua aplicabilidade na Toxinologia (course will be presented in portuguese)

07h30 – 8h10: Course # 3 Bioinformática estrutural aplicada ao estudo de toxinas (course will be presented in portuguese)

08h30 - 09h30

CONFERENCE #5: To be announced

Chair: Solange Serrano (Brazil)

Speaker: Jay Fox (USA)

10h00 - 12h00

SESSION # 13: TOXINS AND INFLAMMATION

Chairs:

1- Catarina Teixeira (Brazil)

2- Thereza Christina Barja Fidalgo (Brazil)

Speakers:

1- Catarina Teixeira (Brazil) - To be announced

2- Thereza Christina Barja Fidalgo (Brazil) “Pro-inflammatory response of vascular cells to toxins: the early beginning of everything”

3- Jay Fox (USA) - to be announced

4- Sandra Coccuzo (Brazil) “Modulatory action of Crotoxin on events involved in the tumour progression. In vitro assay”

5- To be selected from the abstracts

SESSION # 14: DRUG DESIGN BASED ON VENOM COMPONENTS

Chairs:

1- Ana Marisa Chudzinski Tavassi (Brazil)

2- Carl W. Vogel (USA)

Speakers:

1- Ana Marisa Chudzinski Tavassi (Brazil) “Amblyomin-X: development of a factor Xa inhibitor as a new antitumor molecule”

2- Carl W. Vogel (USA) “Intelligent drug design from a venom component: humanized Cobra Venom Factor for immunotherapy of diseases with complement pathogenesis”

3- P. Gopalakrishnakone (Singapore) “Pip Peptides: Novel Leads for Treatment of Inflammation Relating to PLA2”

4- To be selected from the abstracts

5- To be selected from the abstracts

10h00 - 12h00

SESSION # 15: EDUCATION AND SCIENCE DIFFUSION IN TOXINOLOGY

Chairs:

1- Norma Yamanouye (Brazil)

2- Julian White (Australia)

Speakers:

1- Norma Yamanouye (Brazil) “The Post-graduation Program in Toxinology”

2- Julian White (Australia) “New developments in clinical Toxinology education and training”

3- Martha Marandino (Brazil) “Education and Science Diffusion in Toxinology”

4- Rejane Maria Lira da Silva (Brazil) - To be announced

5- To be selected from the abstracts

AFTERNOON

12h00 - 13h00 – Meeting of the SBTx jovem

Free afternoon

14h00 - 17h00 - Satellite meeting

Annual Meeting from the National Institute of Science and Technology on Toxins (INCTTox) - Brazil

November, 7th 2013 - Thursday
MORNING

07h30 – 8h10: Course # 1 Ferramentas Ômicas aplicadas ao estudo de venenos (course will be presented in portuguese)

07h30 – 8h10: Course # 2 A Citometria de Fluxo e sua aplicabilidade na Toxinologia (course will be presented in portuguese)

08h30 - 09h30

CONFERENCE #6: SCORPION VENOM COMPONENTS

Chair: Paulo Sérgio Beirão (Brazil)

Speaker: Lourival Possani (Mexico)

10h00 - 12h00

SESSION # 16: SCORPION TOXINS

Chairs:

1- Lucia Helena Faccioli (Brazil)

2- Lourival Possani (Mexico)

Speakers:

1- Lucia Helena Faccioli (Brazil) “CD14, TLR2 and TLR4 are essential to macrophages recognize Tityus serrulatus venom and its toxin 1 and to release lipid mediators, IL-6 and TNF α ”

2- Gina D’Suze (Venezuela) “Macrophage activation by inflammatory toxins isolated from Tityus discrepans scorpion venom. The role of Na⁺/Ca²⁺exchangers”

3- Fernanda C.V. Portaro (Brazil) “Insights into scorpion venom peptides: A new naturally occurring bioactive pentapeptide has resulted from the alternative processing of β -KTx propeptide from Tityus serrulatus venom”

4- To be selected from the abstracts

5- To be selected from the abstracts

10h00 - 12h00

SESSION # 17: TOXINS AND PAIN

Chairs:

1- Yara Cury (Brazil)

2- Richard J. Lewis (Australia)

Speakers:

1- Richard J. Lewis (Australia) “Analgesic x-conopeptides”

2- Gisele Piccolo (Brazil) “Interaction of the cannabinoid and opioid systems in the modulation of antinociception induced by crotalphine”

3 - To be announced

4 - To be selected from the abstracts

5- To be selected from the abstracts

10h00 - 12h00

SESSION # 18: TOXIN GENOMICS

Chairs:

- 1- Paulo Lee Ho (Brazil)
- 2- Juan Calvete (Spain)

Speakers:

- 1- Juan Calvete (Spain) "Omic and structural studies evidence two clades of independently evolving short-sized disintegrins"
- 2- Matheus F. Fernandes Pedrosa (Brazil) "Profiling the venom gland of the scorpion *Tityus stigmurus* through a transcriptomic survey: new peptides potentially applicable in pharmaceutical research and biotechnology"
- 3- To be announced
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

AFTERNOON

13h30 - 14h30

CONFERENCE #7: UNDERSTANDING LOCAL TISSUE PATHOLOGY INDUCED BY SNAKE VENOMS: UNSOLVED ISSUES

Chair: Catarina Texeira (Brazil)

Speaker: Jose Maria Gutierrez (Costa Rica)

15h00 - 17h00

SESSION # 19: SNAKE TOXINS

Chairs:

- 1- Ana Maria Moura da Silva (Brazil)
- 2- Heloisa Selistre de Araújo (Brazil)

Speakers:

- 1- Ana Maria Moura da Silva (Brazil) "Diversity of snake venom metalloproteinases targeting hemostasis: an adaptive advantage for Viper snakes with consequences for human pathology"
- 2- Heloisa Selistre de Araújo (Brazil) "RGD disintegrins and the effects of v3 integrin blockade in the tumour microenvironment"
- 3- Danielle Paixão Cavalcante (Brazil) "Biochemical characterization of African adders' venoms (*Bitis ssp*)"
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

15h00 - 17h00

SESSION # 20: ARTHROPOD TOXINS

Chairs:

- 1- Elizabeth F. Schwartz (Brazil)
- 2- Maria Elena de Lima (Brazil)

Speakers:

- 1- Elizabeth F. Schwartz (Brazil) "α-KTx isolated from scorpion venoms and their potential therapeutic use"
- 2- Maria Elena de Lima (Brazil) "Spider toxins: exploring new peptides to possible drug models"
- 3- Adolpho Borges (Venezuela) "Towards a risk map for scorpionism in tropical America: a proposal for a toxinological partitioning of the *Tityus* scorpion fauna"

- 4- Denise Tambourgi (Brazil) - To be announced
- 5- To be selected from the abstracts

15h00 - 17h00

SESSION # 21: ENVENOMATION AND THERAPEUTICS

Chairs:

- 1- Vidal Haddad Junior (Brazil)
- 2- David Warrell (UK)

Speakers:

- 1- Vidal Haddad Junior (Brazil) "Stings of freshwater stingrays as a real neglected problem in North, Midwest and Southeast regions of Brazil"
- 2- David Warrell (UK) "Challenges in the management of envenoming in developing countries"
- 3- Fábio Tozzi (Brazil) "Assistance to riverside communities in the Amazon and its implications for snakebites"
- 4- To be selected from the abstracts
- 5- To be selected from the abstracts

17h00 - 19h00 Poster Session 3

20h00 Galla Dinner

**November, 8th 2013 - Friday
MORNING**

08h30 - 09h30

CONFERENCE #8: WHAT CAN TOXINS PROVIDE FOR DRUG DISCOVERY

- Chair: Yara Cury (Brazil)
Speaker: Alan Harvey (UK)

10h00 - 12h00

SESSION # 22: INITIATIVES IN TOXINOLOGY

Chairs:

- 1- Osvaldo Sant'Anna (Brazil)
- 2- Alan Harvey (UK)

Speakers:

- 1 - Osvaldo Sant'Anna (Brazil) "Five years of the National Institute of Science and Technology on Toxins [INCTTOX]"
- 2 - Hugo Harmelin (Brazil) "Toxins and Cell Signalling Networks"
- 3 - Carlos Alvarez (Cuba) "Iberoamerican Network BIOTOX "
- 4 - Abdulrazaq G. Habiib (Nigeria) "Initiatives for snakebite management in sub-Saharan Africa: The EchiTab study Group (Nigeria-UK)"
- 5 - David Warrel (UK) "The Global Snakebite Initiative"

12h00 - 14h00

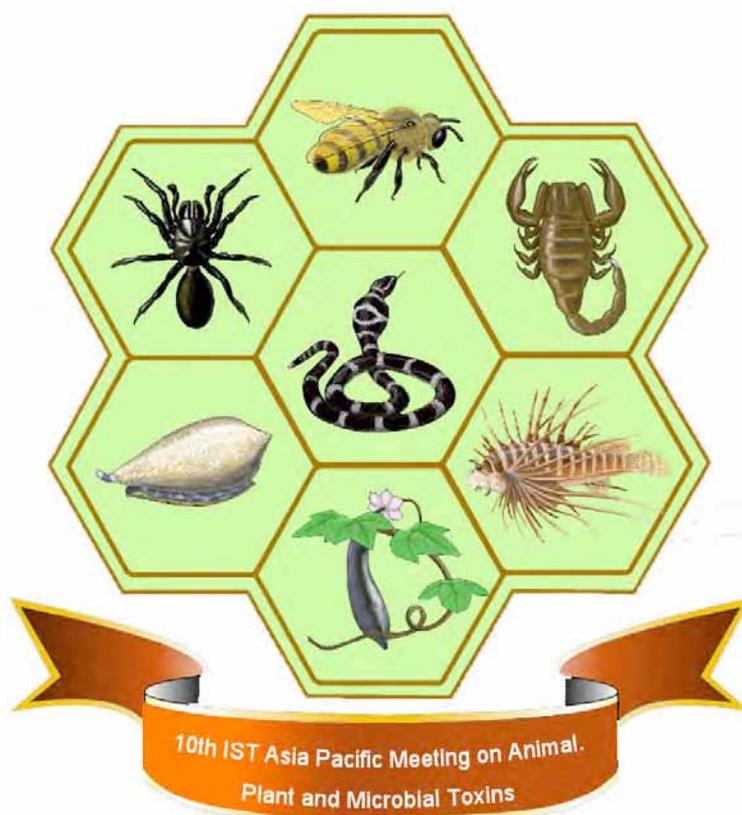
Celebrating 25 years of SBTx

- Chair: Lea Simioni (Brazil)
Speaker: Julia Prado Franceschi (Brazil)

Closing Session
Awards

Invited and confirmed speakers

Abdulrazaq G. Habiiib (Nigeria)
Adolfo Borges (Venezuela)
Alan Harvey (UK)
Alexandre K. Tashima (Brazil)
Ana Maria Moura da Silva (Brazil)
Ana Marisa Chudzinski Tavassi (Brazil)
André Pereira P. Zelanis (Brazil)
Bruno Lomonte (Costa Rica)
Carl W. Vogel (USA)
Carlos Alvarez (Cuba)
Carlos Sevcik (Venezuela)
Catarina Teixeira (Brazil)
Consuelo Latorre Fortes Dias (Brazil)
Danielle Paixão Cavalcante (Brazil)
David Warrell (UK)
Denise V. Tambourgi (Brazil)
Elizabeth F. Schwartz (Brazil)
Fábio Bucarechi (Brazil)
Fábio Tozzi (Brazil)
Fan Hui Wen (Brazil)
Fernanda C.V. Portaro (Brazil)
Frank Mari (USA)
Gilberto Domont (Brazil)
Gina D'Suze (Venezuela)
Gisele Piccolo (Brazil)
Heloisa Selistre de Araújo (Brazil)
Hugo Harmelin (Brazil)
Inácio Junqueira (Brazil)
Jan Tytgat (Belgium)
Jay Fox (USA)
Jonas Perales (Brazil)
Jorge Kalil (Brazil)
Juan Calvete (Spain)
Julian White (Australia)
Lisle Gibbs (USA)
Lourival Possani (Mexico)
Lucia Helena Facioli (Brazil)
Marcos Fontes (Brazil)
Marcos Lacerda (Brazil)
María E. Lanio (Cuba)
Maria Elena de Lima (Brazil)
Mario Sérgio Palma (Brazil)
Marta Marandino (Brazil)
Matheus F. Fernandes Pedrosa (Brazil)
Norma Yamanouye (Brazil)
Osvaldo Sant'Anna (Brazil)
P. Gopalakrishnakone (Singapore)
Paulo Lee Ho (Brazil)
Paulo Sérgio Beirão (Brazil)
R. Manjunatha Kini (Singapore)
Rejâne Lira Casais (Brazil)
Russolina B. Zingali (Brazil)
Sandra Coccuzo (Brazil)
Solange Serrano (Brazil)
Vidal Haddad Junior (Brazil)
Yara Cury (Brazil)

**SECOND CIRCULAR****10th IST Asia Pacific Conference on Animal, Plant & Microbial Toxins (IST-APC 2014)****June 14th –18th, 2014, Changsha, China**

IST-APC 2014 is the 10th IST Asia Pacific Conference on Animal, Plant and Microbial Toxins approved by the International Society on Toxinology (IST). The local organizers of the conference are the College of Life Sciences, Hunan Normal University; Key Laboratory of Tropical Biological Resources of Ministry of Education, Hainan University and the Bio-toxin Committee of the Chinese Society of Biochemistry and Molecular Biology.

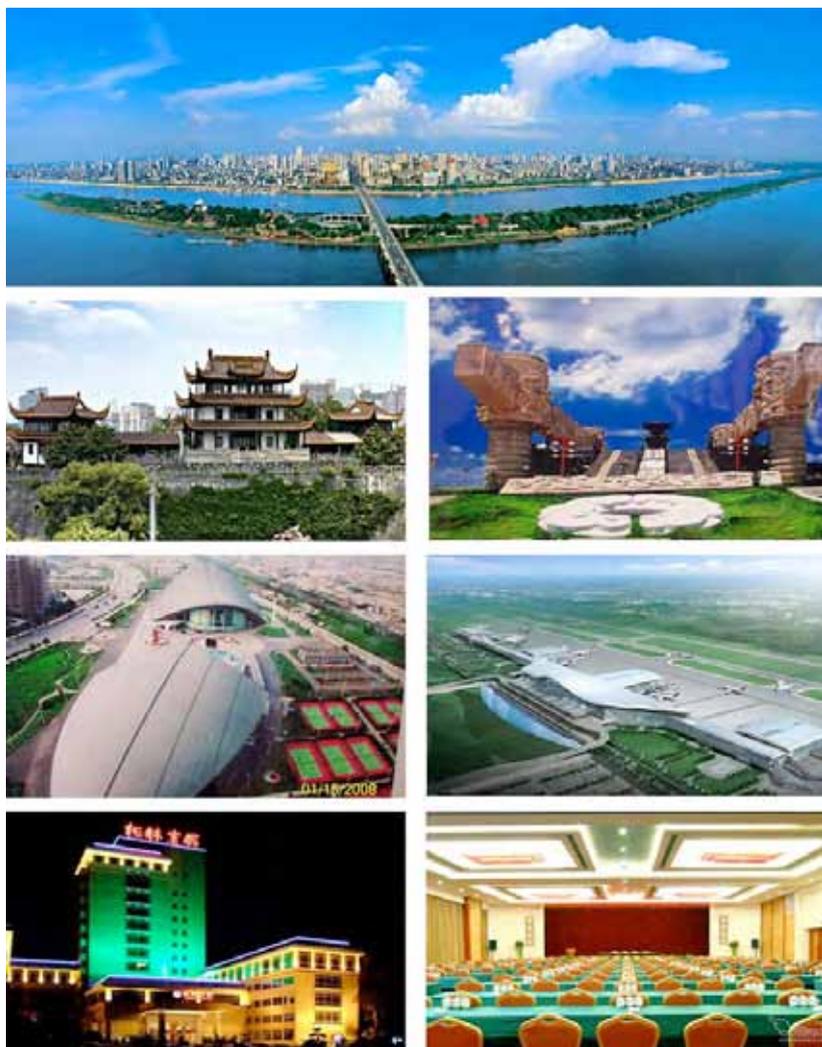
Expecting significant developments in toxinology in the coming years, **IST-APC 2014** is believed to be a unique opportunity to review the progress made and to look into our future. The toxinology community, from young biologists to established practitioners, is invited to meet in Changsha to showcase the toxinology and to enjoy interesting presentations of their colleagues.

Venue

The Conference will be held at Maple Forest Hotel, Yuelu Mountain, Changsha City, China, between 14-18 June 2014.



Changsha is the capital city of Hunan province with a history of 3,500 years, located in south-central China. The Maple Forest Hotel is a quasi-five star hotel, located in the beautiful hill of Yuelu mountain, in Changsha City.



Language

The official language of the 10th IST Asia Pacific Meeting on Animal, Plant and Microbial Toxins is English.

Scientific Program

Continuing the tradition of the 9th IST Asia Pacific Meeting on Animal, Plant and Microbial Toxins (Vladivostock, 2011), the 2014 edition will be a blend of plenary talks given by outstanding personalities in the field of Animal, Plant & Microbial Toxins and contributions of young researchers and students.

The scientific program will consist of invited talks on recent advances in Animal, Plant & Microbial Toxins as well as oral or poster contributions of outstanding results in the following fields:

- **Toxin structure and mode of action**
- **Toxin pharmacology & physiology**
- **Venomics, toxin proteomics and genomics**
- **Bioactive substances from animals, plants and microorganisms**
- **Toxins as leads for drug development**
- **Venomous animal biology**
- **Clinical toxinology-envenomations & management**
- **Biotoxins and bioterrorism**

IST-APC 2014 will consist of plenary talks in the morning which are geared towards a broad audience and several parallel sessions in the afternoon, covering the above mentioned domains. Young researchers and students are strongly encouraged to contribute.

Congress Chairman:

Songping Liang

Hunan Normal University

Sulan Luo

Hainan University

Yun Zhang

Yunnan Zoology Institute, Chinese Academy of Science

International Scientific Committee:

David Craik, Queensland, Australia

Jou-Fang Deng, Taipei, Taiwan

Pierre Escoubas, Nice, France

P. Gopalakrishnakone, Singapore

Eugene Grishin, Moscow Russia

Glenn F. King, Queensland, Australia
Trinh Xuan Kiem, Hanoi, Vietnam
Baldomero Olivera, Utah ,USA
Maria Elena de Lima, Belo Horizonte, Brazil
Reto Stocklin, Switzerland
Toru Tamiya, Tokyo, Japan
Anthony T Tu, Fort Collins, USA
Jan Tytgat, Leuven, Belgium
Victor Tsetlin, Moscow, Russia
Wayne Hodgson, Clayton Australia
Julian White, North Adelaide, Australia
Dacheng Wang, Beijing, China
Jisheng Chen, Beijing, China
Zhengwu Qi, Shanghai China
Sulan Luo, Haikou China
Maikun Teng, Hefei, China
Yun Zhang, Kunming, China
Yonghua Ji, Shanghai, China
Songping Liang, Changsha, China

Invited speakers :

Prof. Alan L. Harvey	Strathclyde Institute for Drug Research, University of Strathclyde, United Kingdom
Prof. P. Gopalakrishnakone	Venom and Toxin Research Programme, National University of Singapore, Singapore
Prof. Baldomero Olivera	Department of Biology, University of Utah, Salt Lake City, USA.
Prof. Jan Tytgat	Laboratory of Toxicology, University of Leuven(KUL), Leuven, Belgium
Prof. David Craik	Institute for Molecular Bioscience ,The University of Queensland, Australia
Prof. Glenn F. King	Institute for Molecular Bioscience ,The University of Queensland, Australia
Prof. Deng-Fwu Hwang	Department of Food Science, National Taiwan Ocean University, Taiwan
Maria Elena de Lima	Lab. Venenose Toxinas Animais, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Belo Horizonte - MG, Brasil

Prof. Eugene Grishin	Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Science, Russian Federation
Prof. Trinh Xuan Kiem	Venom Research & Antivenom Production Unit. The National Poison Control Center of Vietnam 78 Giai Phong Road, Hanoi, Vietnam
Prof. Julian White	Toxinology Dept., Women's and Children's Hospital, Australia
Prof. Pierre Escoubas	University of Nice-Sophia Antipolis, France
Prof. Reto Stocklin	Atheris Laboratories, Switzerland
Prof. Toru Tamiya	Department of Materials and Life Sciences Sophia University, Japan
More speakers to be confirmed soon.....	

Secretary General:

Dongyi Zhang,	National University of Defense Technology, China
Zhonghua Liu,	Hunan Normal University, Changsha, China

Organizing Committee

Songping Liang	Maikun Teng
Sulan Luo	Wenxing Li
Yun Zhang	Yonghua Ji
Chunguang Wang	Jiuping Ding
Xianchun Wang	Shuanglin Xiang
Ren Lai	Hongzhuan Chen
Xianchun Wang	Yingliang Wu
Zhonghua Liu	Dongyi Zhang
Xiongzhi Zeng	Qiuyun Dai
Ping Chen	Ying Wang
Zuohong Chen	Zhen Liu

Conference fees

	EARLY RATE Deadline March 15, 2014	LATE RATE
IST Member	US\$450	US\$500

Non-Member	US\$520	US\$570
Student	US\$250	US\$300
Accompanying person	US\$250	US\$250

Registration fee includes:

Meeting materials

Lunches and dinners (during the time of Meeting)

Coffee breaks (during the time of Meeting)

Meeting rooms, poster rooms

Transportation Between Changsha Airport and the hotel for registered participants and accompanying persons

Local sightseeing in Changsha city

Pre-registration and abstract submission

The Program Committee invites the submission of abstracts. The deadline for abstract submission is March 15, 2014. Abstracts must be submitted by uploading on the conference website (<http://ap-ist.hunnu.edu.cn>), in the specified format. Abstracts may be submitted for talks or "poster" presentations. Final placement of the abstracts will be decided by the Program Committee.

Registration and accommodation

Please fill in the registration at: <http://ap-ist.hunnu.edu.cn>. The conference will start in the morning on Sunday, June 15, so most of the participants are expected to arrive in Changsha on Saturday, June 14.

It is strongly suggested to book the room at the Maple Forest Hotel, where the conference is held. The price for a double bed room is about 70 USD. You can also book the hotel room through the web site: <http://ap-ist.hunnu.edu.cn>.

Important dates

March 15, 2014	Deadline for abstract submission
April 15, 2014	Notification on selected talks and posters
March 15, 2014	Deadline for Registration and Accommodation with reduced fees

Post-Conference sightseeing trip

Zhangjiajie National Forest Park is one of the most famous tourist destination in China for its unique natural scenery and abundant tourism resources. It is home to a number of endangered plant and animal species. It was listed into the World Natural Heritage Catalogue by the UNESCO in 1992. What's more, Zhangjiajie was awarded the title of "World Geological Park" in 2004



Conference connection

All correspondence should be addressed to:

Dr. Zhonghua Liu

College of Life Sciences, Hunan Normal University

Lushan Road 36, Yuelu District, Changsha, P.R.CHINA

Tel.: +86 731 88872556, Fax: +86 731 88861304

E-mail: ap-ist2014@hunnu.edu.cn

All information will be posted on the conference web page
<http://ap-ist.hunnu.edu.cn/>

Looking forward to welcoming you in Changsha !

Organizing Committee of IST-APC 2014

Sept 1, 2013

NEXT IST WORLD CONGRESS

As noted in the September IST Council minutes summary, Council has voted to accept the bid from Oxford, UK, to host the 2015 IST World Congress, representing the European Section of IST.

It is early days yet for details on this meeting, but we have tentative dates in September 2015 booked (Friday Sept. 25th to Wednesday Sept. 30th). The congress will be held in the Examination School building and the Sheldonian Theatre, University of Oxford (see photos below), which will impart a sense of history to the congress, in keeping with the long history of Oxford as the host university and town.

I sent out an email to members asking for guidance on interest in staying at Oxford University colleges during the Congress. The organisers are particularly looking at Christ Church, one of the largest colleges of residence. The main dining hall of this college is noteworthy because it is quite splendid in appearance, redolent of history, and for this reason was chosen as a setting for the mythical dining hall for the Harry Potter films. This drew some interesting comments from members. I include what I consider the most amusing so far, below, from Alex Kasheverov.

Julian White
Secretary/Treasurer, IST

Dear Julian,

This is a wonderful idea to hold a scientific Congress in a historic building, where recently the young magician fled on a broom and prepared the love-philtre. I would be happy to try on his gown and live the Congress days in a single room with ensuites (£76/nt). So if it is not too late, please include me in your magic waiting list.

Best regards, Igor



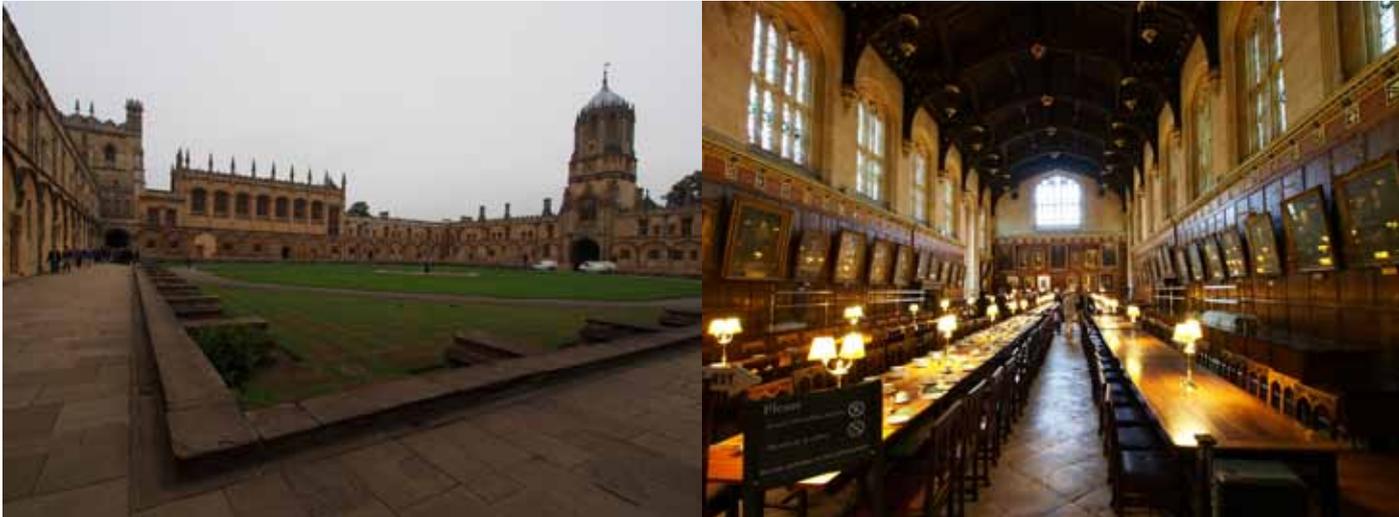
Sheldonian Theatre, Oxford



Sheldonian Theatre, Oxford



Exam School, Oxford



Christ Church, Oxford



Register
Now!



Venomics: Drug Discovery from Nature's Deadliest

Image credit: Bryan Grieg Fry

 Register at www.nyas.org/Venomics

Spiders, snakes, scorpions, sea snails and leeches produce over 10 million compounds, offering great potential in drug discovery. Encouraged by the substantial medicinal and fiscal success of hypertension remedy Captopril and analgesic Prialta,[®] used to alleviate chronic pain in HIV and cancer patients, many pharmaceutical companies are investing heavily in venom-based drug discovery programs. New analgesics, anti-tumor agents and even agricultural pesticides await discovery and can be realized through an integrated approach combining genomic, proteomic, and transcriptomic data, now referred to as 'venomics'. This symposium will investigate integrated strategies necessary to harness the cornucopia of venom compounds using mass spectrometry, nucleotide sequencing, and synthetic chemistry.

Organizers

Mandë Holford, PhD, Hunter College, CUNY / American Museum of Natural History

Steven Gross, PhD, Weill Cornell Medical College

Jennifer Henry, PhD, The New York Academy of Sciences

Speakers

Anirban Banerjee, PhD, National Institute of Child Health and Human Development, NIH

Carole A. Bewley, PhD, National Institute of Diabetes and Digestive and Kidney Diseases, NIH

Pierre Escoubas, PhD, VenomeTech

Bryan Fry, PhD, The University of Queensland, Australia

Mandë Holford, PhD, Hunter College, CUNY / American Museum of Natural History

Inés Ibañez-Tallon, PhD, The Rockefeller University

Baldomero Olivera, PhD, University of Utah

Mark E. Siddall, PhD, American Museum of Natural History

Beatrix Ueberheide, PhD, NYU Langone Medical Center

Silver Sponsor:  **Agilent Technologies**

Presented by **Hot Topics in Life Sciences** at the **New York Academy of Sciences**

Mission Partner support for the Frontiers of Science program provided by **Pfizer**

NOV
04
8:30 AM-
5:00 PM

Reception to follow

Registration

Member: \$30

Student/Postdoc Member: \$15

Nonmember (Academia): \$65

Nonmember (Corporate): \$85

Nonmember (Non-profit): \$65

Nonmember (Student/Postdoc/
Resident/Fellow): \$45

Location

The New York
Academy of Sciences
7 World Trade Center
250 Greenwich St, 40th Fl
New York, NY 10007

Customer Service

Email:

customerservice@nyas.org

Phone (Toll Free):

1.800.843.6927

Phone (Outside USA):

1.212.298.8640

Sponsorship Opportunities

For sponsorship opportunities,

contact **David Smith**

at dsmith@nyas.org

or 212.298.8671

**3rd ANNUAL CONFERENCE OF THE TOXINOLOGICAL
SOCIETY OF INDIA (TSICON)**



&

**1ST INTERNATIONAL CONFERENCE ON
'BIOLOGY OF NATURAL TOXINS'**



**THE DEPARTMENT OF BIOLOGICAL SCIENCES,
BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI,
K K BIRLA GOA CAMPUS, GOA, INDIA**

19th to 21st DECEMBER, 2013

Organising Secretary: Dr. Dibakar Chakrabarty; diba27@yahoo.com



TSICON 2013



3rd Annual Conference of the Toxinological Society of India
& 1st International Conference on
"Biology of Natural Toxins"



With great pleasure, we invite you all to the 3rd Annual Conference of the Toxinological Society of India and 1st International Conference on **"Biology of Natural Toxins"** to be held in BITS Pilani K K Birla Goa Campus, Goa, India from **19-21 December, 2013**. This conference aims to provide a common platform for all researchers, clinicians, students, conservationists and industries working on different aspects of natural toxins of animals, microbes and plant, snake bite management and related environmental issues to discuss their research findings. The conference will consist of plenary sessions, invited lectures, oral and poster presentations.

OBJECTIVES

To create awareness and understanding of issues related to natural toxins (animal, microbial, plant) and snake bite management.

To discuss:

- ❖ Current research trends in natural toxins
- ❖ Management of envenomation/intoxication of biological origin
- ❖ Applications of biological toxins in drug discovery and as research tools
- ❖ Anti-venom production and related issues
- ❖ Conservation of poisonous and venomous species
- ❖ Ethics in toxin research

TSICON 2013

Organizing Secretary & President Elect

Dr. Dibakar Chakrabarty
Associate Professor,
Department of Biological
Sciences, BITS Pilani K.K
Birla Goa Campus.

Email:
tsicon2013@gmail.com

Phone:
+91 832 2580173



SCIENTIFIC AREAS TO BE COVERED

- ❖ Venomics
- ❖ Clinical toxinology
- ❖ Characterization of natural toxins
- ❖ Pharmacology, pharmacokinetics and drug discovery
- ❖ Anti-venom/Antidotes and Industry
- ❖ Ethics, Conservation and more...

REGISTRATION INFORMATION

Advance registration is encouraged. Registration fee includes cost towards conference material, beverages and all meals from dinner on 18 December till farewell high-tea on 21 December except conference dinner on 20 December.

CATEGORY	Registration till 15 th September, 2013		Late registration between 16 th September to 15 th October 2013	
	Indian Delegates (INR)	Foreign Delegates* (USD)	Indian Delegates (INR)	Foreign Delegates (USD)
Delegates	4000 (TSI Members) 5000 (Non Members)	500	4500 (TSI Members) 5500 (Non Members)	550
Student	3500	300	4000	350
Accompanying person	3500	300	3500	300
Corporate	10000	1000	12000	1200
Conference Dinner (On the Cruise)	150/person	5/person	150/person	5/person

* Registration fees for delegates from Nepal, Bangladesh, Myanmar, Sri Lanka and Pakistan: USD 250 (regular), USD 300 (late) and accom. person USD 200.

MODE OF PAYMENT

Indian Delegates: Demand Draft/Multi-city Crossed Cheque in favour of **Director, BITS Pilani K K Birla Goa Campus**, payable at **State Bank of India, Goa**.

International Delegates: Online transfer to be made to **State Bank of India, Commercial Branch, Vasco da Gama**, using the following details:

Beneficiary Name: BITS Pilani K K Birla Goa Campus
Beneficiary Account Number: 30803684122
IFSC Code: SBIN0010720
SWIFT Code: SBININBB229
Remarks: TSICON 2013

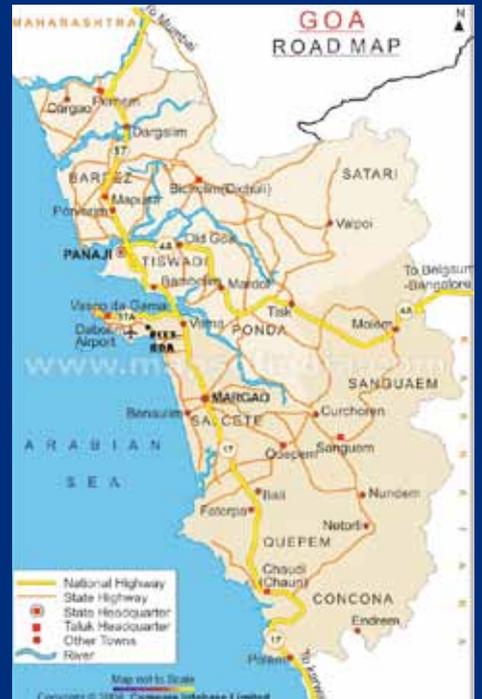
STEP BACK AND FEEL THE SAND BETWEEN YOUR TOES...UNPLUG, UNWIND, STEP OUT IN THE SUNSHINE...

Goa dubbed as the 'Pearl of the Orient' is one of the most sought after holiday destination in India. This tiny but beautiful state located in the western coast of Indian peninsula is full of surprises that leave every visitor spell bound with its magical charm and splendor. Goa is resplendent with picturesque palm dotted beaches, fascinating forts, churches, breathtakingly beautiful waterfalls, absorbing wildlife parks, sanctuaries and much more.

East and west come together in this sun-soaked state, where the beaches have long served as a magnet for hedonists and Indian culture intertwines with Portuguese influences left over from a 450 year occupation. The state of Goa has 39 beaches and all of them are famous for their own unique charm and tranquility. Some of the top beaches that are visited by tourists all the year round are Arambol, Vagator, Calangute, Baga and Bambolim. These are the north Goa beaches and are popular for their striking features and are regular host of all the happening activities and festivals that take place in Goa. Some of the most visited beaches in South of Goa which are perfect for tourists looking forward to experience the tranquility of the beaches and nature are Bogmalo, Majorda, Palolem and Cavellissim Beach. These beaches are ideal for water sports as well as adventurous activities.

Churches of Goa are a reflection of Portuguese dominance in the area. Be sure to visit Basilica of Bom Jesus, Church of St. Alex, Church of St. Cajatan, Convent & Church of St. Francis of Assisi and Se Cathedral. An evening cruise in the river Mandovi with local folk songs and dance add to the tourist attractions in Goa. Other major attractions in Goa are the exotic seafood and the festivals. Goa maintains a festive mood round the year.

During Christmas and New Year, it seems all roads lead to Goa...



BITS Pilani K K Birla Goa Campus from:

- Goa Airport (Dabolim) – 5 Kms
- Vasco da Gama Railway Station – 10 Kms
- Madgaon Railway Station – 25 Kms

Taxi Tariff (Source to Venue)

- Goa Airport (Dabolim) – INR 200-250
- Vasco da Gama Railway Station – INR 300-350
- Madgaon Railway Station – INR 500-550

WEATHER IN DECEMBER

With plenty of sun shine seen each day, the weather remains pleasant throughout with barely any rain seen during the month. This may be winter, but the temperatures remain high, so expect beach weather.

The average daily temperature for this month in Goa is 27°C which can reach 32°C or drop to 21°C. There is an average of 10 hours of sunshine each day in Goa. The average temperature of the sea during this month is 27°C.



BITS Pilani a university of excellence in Technology and Sciences. It is ranked as the best private university in India. BITS Pilani has four campuses in Pilani, Dubai, Goa and Hyderabad. The university is committed to generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world's great challenges. BITS Pilani K K Birla Goa Campus boasts of its innovative teaching methods and state of the art infrastructure. It seeks to develop in each member of its community the ability and passion to work wisely, creatively and effectively for the betterment of mankind.



TSICON 2013

REGISTRATION FORM

Name _____

Organization _____

Street _____

City _____ State _____

Postal Code _____ Country _____

Telephone Number _____ Fax Number _____

Email Address _____

Please tick

I will attend Conference Dinner on Friday evening, 20 December 2013 - INR 150/USD 5 per person.

I will bring an accompanying guest for the Conference Dinner - INR 150/USD 5 per person.

Vegetarian

Non Vegetarian

PAYMENT DETAILS

INDIAN DELEGATES

DD/Multi-city Crossed Cheque Number _____ Amount _____

Bank _____ Date _____

Signature _____

Send to: Dr. Angshuman Sarkar, Treasurer TSICON 2013, Department of Biological Sciences, BITS Pilani K K Birla Goa Campus, Zuarinagar 403726, Goa, India.

INTERNATIONAL DELEGATES

Transaction ID _____ Amount _____

Date _____ Signature _____

Duly filled registration forms should be emailed to Treasurer (treasurersicon2013@gmail.com) and Cc to Organizing Secretary (tsicon2013@gmail.com).

ABSTRACT* (TEMPLATE)

Submission Category: _____

Preference for Presentation (Oral/Poster): _____

Title: _____

Author(s) **: _____

Affiliation: _____

Abstract (Max. 250 words):

ABSTRACT

*Indian delegates presenting paper(s) must obtain TSI membership (annual/life). Form attached.

**Presenting author's name should be underlined.

(The abstract should be typed using Times New Roman font size 12. Please do not include figures in the abstract. The abstract should be sent to tsicon2013@gmail.com in .doc/.pdf format before 15 June 2013. Hard copy of abstracts will not be accepted)



Toxinological Society of India

(Registered under West Bengal Society Act : No. S/1L/77216)

MEMBERSHIP APPLICATION

To
The Secretary
Toxinological Society of India
Department of Biochemistry
KPC Medical College & Hospital
1F, Raja S.C. Mallick Road, Jadavpur
Kolkata – 700 032

Dear Sir,

I wish to be Annual Member / Life Member / Corporate Member of the Toxinological Society of India. I am furnishing the required particulars below, and request you to kindly allow me to be a member of the Society. The fee* for Annual Membership / Life Membership / Corporate Membership is enclosed as a Demand Draft (No. _____ Dt _____), in the name of "Toxinological Society of India" payable at Kolkata. I am also enclosing a copy of my Curriculum Vitae and two recent Passport size photographs for your record. Yours sincerely,

Place :

Date : _____ (Signature of the Applicant) _____ (Signature of the Nominating member of TSI)

Particulars of applicant

Full Name (in Block Letters) : _____

Date of Birth : _____ Qualifications (Name of University, Year) _____

Present Designation/ Department/ Institute/ Place : _____

Permanent Address : _____

Address for Correspondence (With Phone No., & Email ID) : _____

----- *For Official Use Only* -----

Membership No. _____ [] Approved [] Disapproved

Secretary, TSI

Note : Duly filled application form along with the Bank Draft should be forwarded to :

Prof. Antony Gomes

Secretary, Toxinological society of India

Lab. Of Toxinology & Exp. Pharmacodynamics,

Department of Physiology, University of Calcutta

92, A. P. C. Road, Kolkata – 700 009

E-mail : secretary.tsi@gmail.com

Mobile : +91-9433139031

Fax : 91-033-23519755

*Rs.1000 /4000 / 20,000 for Annual / Life / Corporate Membership respectively.

TENTATIVE LIST OF SPEAKERS

1. Anthony T. Tu

Professor Emeritus, Department of Biochemistry and Molecular Biology, Colorado State University - Fort Collins, USA.

Prof. Tu was bestowed The Order of the Rising Sun by the Japanese Emperor Akihito in November, 2009 for solving case of sarin-gas attacks in Japan in 1994 and 1995

Lifetime Special Recognition and Awards: NIH Merit Award, NIH Career Development Award.

Research Interests

Sea snake neurotoxins, Raman spectroscopy, structure-function relations of toxins, chemical weapons defense, NBCR anti-terrorism.

2. Alan L. Harvey

Professor of Pharmacology in Strathclyde Institute of Pharmacy and Biomedical Sciences and Vice Dean of Research in The Faculty of Science, University of Strathclyde Glasgow, UK

President, International Society on Toxinology and Editor-in-Chief, Toxicon

Research Interests

Physiology and Pharmacology of synaptic signaling, with particular interests in drugs and toxins affecting receptors and ion channels

3. P. Gopalakrishnakone

Professor, Department of Anatomy, Yong Loo Lin School of Medicine, National University Health System, Singapore.

Research Interests

Mechanism of action of venoms and toxins from various marine creatures, mechanism of venom secretion, venom and toxin induced muscle damage, immunology and cloning of toxins, microarray technology for proteomics and genomics, biosensors and biomedical applications.

4. Julian White

Professor and Head of Toxinology, Women's & Children's Hospital, Adelaide, Australia

Secretary/Treasurer of International Society on Toxinology.

Research Interests

Envenomation by snakes and other venomous animals and their clinical implications.

5. Shripad B. Deshpande

Professor of Physiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India.

Fellow of Indian Academy of Neuroscience
Editor, Indian Journal of Physiology and Pharmacology

Research Interests

Neuroscience, Electrophysiology, Toxicology and Toxinology.

6. Antony Gomes

Laboratory of Toxinology & Experimental Pharmacodynamics, Department of Physiology, University of Calcutta, India.

Fellow of the Indian Pharmacological Society

Research Interests

Snake venom hemorrhagins, antivenom from plants, therapeutic uses of venom, nanopeptides for applications in iron deficiency anemia and snakebite in animal models, Anticancer potential of animal venoms and toxins, Toxins from Indian toad, Indian monocellate cobra and Indian black scorpion.

7. Glenn F. King

Institute for Molecular Bioscience, The University of Queensland, Australia.

Research Interests

Structure-function characterisation, and therapeutic development of venom peptides from the venoms of spiders, scorpions, centipedes, and other venomous animals.

8. Jay W. Fox

Professor & Associate Dean of Research of Microbiology, Immunology & Cancer Biology, University of Virginia School of Medicine.

Research Interests

Basement Membrane Structure & Metalloproteinases.

9. R. Manjunatha Kini

Professor, Department of Biological Science, National University of Singapore. Affiliate Professor in the Department of Biochemistry at Virginia Commonwealth University.

Founder and Chief Scientific officer of Pro-Therapeutics Private Ltd.
Chairman and co-chairman of the Registry of Exogenous Hemostatic factors.

Research Interests

Structure-function relationships and mechanism of action of proteins especially snake venom toxins, Protein-protein interaction and Protein design and engineering.

10. Romulus Whitaker

Noted Herpetologist and conservationist. Founder of Irula Snake Catchers' Co-operative Society and Madras Snake Park. World renowned expert on King Cobra behavior. Known as savior of gharials of India.

11. Gerry Martin

Founder Director of The Gerry Martin Project (TGMP)

Herpetologist, Naturalist, Wildlife conservation expert and educationist.

In 2000, Martin became the first Indian Adventurer for the National Geographic Channel and worked with them in India.

12. Manas Mandal

Associate Professor of Pharmaceutical Sciences, College of Pharmacy, University of Southern Nevada, South Jordan UTAH, USA.

Research Interests

Cellular immunology, vaccine development and cancer immunotherapy.

18-Dec-13				
5.30-7.30 pm	7.45-9.30pm			
Registration	Welcome Dinner			
19-Dec-13				
8.00-9.00am	9.00-9.50am	9.50-10.20am	10.20-10.30am	10.30am-11.15am
Breakfast	Inauguration by Prof. Alan L. Harvey (President IST)	Plenary Lect. I	Tea	S.C Lahiri Memorial Oration
11.15-12.00pm	12.00-1.00pm	1.00-2.00pm	2.15-2.45pm	2.45-3.45pm
Lectures (3X2)	Poster Session I	Lunch	Plenary Lect. II	Lectures (4X2)
3.45-4.00pm	4.00-5.00pm	5.00-6.15pm		
Tea	Lectures (4X2)	Lectures (5X2)		
20-Dec-13				
8.00-9.00am	9.00-9.45am	9.45-10.15am	10.15-10.30am	10.30-11.30am
Breakfast	A.K Nag Chaudhuri Memorial Oration	Plenary Lect. III	Tea	Lectures (4X2)
11.30am-12.30pm	12.30-1.30pm	1.30-2.00pm	2.00-4.00pm	4.00-4.15pm
Poster Session II	Lunch	Plenary Lect. IV	Lectures (8X2)	Tea
4.15-5.15pm	5.15-6.30pm	6.30 pm onwards		
Lectures (4X2)	Annual General Meeting	Gala Dinner		
21-Dec-13				
8.00-9.00am	9.00-10.00am	10.00-11.15am	11.15-11.30am	11.30am-1.00pm
Breakfast	Lifetime Achievement Award to Prof. Anthony T. Tu	Lectures (4X2)	Tea	Lectures (6X2)
1.00-2.00pm	2.00-2.45 pm	2.45-3.00pm	3.00-3.30pm	3.30-4.30pm
Lunch	Student Lectures (Best Poster Winners-3)	Tea	Plenary Lect. V	Validictory Ceremony
4.30pm onwards				
Farewell High Tea				



University of Adelaide
Faculty of Health Sciences



CLINICAL TOXINOLOGY SHORT COURSE 2014

Women's & Children's Hospital
Adelaide, Australia

March 31st to April 5th
2014



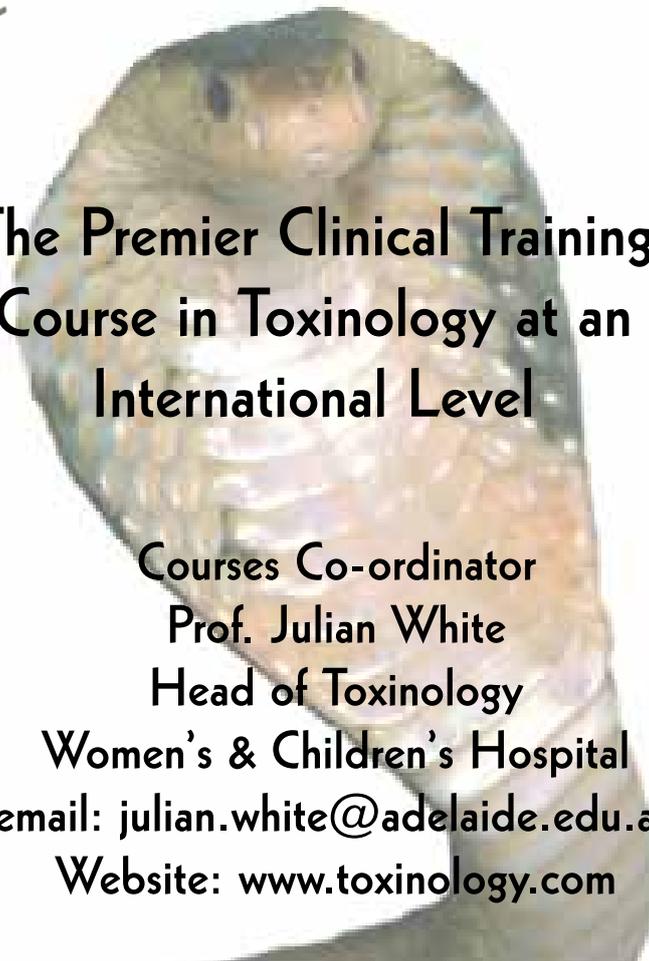
The Premier Clinical Training
Course in Toxinology at an
International Level

Courses Co-ordinator
Prof. Julian White
Head of Toxinology

Women's & Children's Hospital

email: julian.white@adelaide.edu.au

Website: www.toxinology.com



IMPORTANT COURSE INFORMATION

COURSE RELATED QUESTIONS:

Who is this course designed for?

Primarily for doctors/health professionals requiring detailed and practical information on snakebite, spiderbite, scorpion stings, marine envenoming, poisonous plants & mushrooms and related topics with a global and Australian perspective. It is particularly relevant for those working in emergency medicine, toxicology, intensive care, or in rural practice. Throughout there will be an emphasis on practical clinical issues and development of clinically relevant skills. It will also be of interest to poisons information pharmacists and graduate nurses in emergency medicine and toxinology scientists. You should be fluent in English, as no language translation will be available.

When and where are the courses held?

The course runs over 6 days; Monday March 31st to Saturday April 5th, 2014. The venue is the Women's and Children's Hospital, North Adelaide, SA, Australia

What does the course cover?

We cover terrestrial & marine animals, plants & mushrooms, including extensive sessions on venomous snakes by region. Detailed sheets on course content will be available on the web at <http://www.toxinology.com>.

Is the course accredited in any way?

The course is a University of Adelaide postgraduate training course. We are seeking formal accreditation of continuing education points with relevant colleges and possible incorporation within some college specialist training schemes.

How many people can attend the course?

The maximum course capacity is 50 registrants, to ensure a chance for interactions with faculty. Previous courses filled early, so early registration is advisable.

How much does the course cost and what does this cover?

The course costs Aus\$2,200 (+GST for Australians only); the fee covers the full course, course notes, field trip, morning and afternoon teas and light lunches. It does not cover the course dinner or accommodation.

Are there any course notes or reading material available prior to the course?

We produce course notes for registrants prior to the course, which will include recommended textbooks and reading list. You are still strongly advised to take notes during all sessions. (The 2012 Course Handbook exceeded 500 pages.)

What sort of practical clinical sessions are included?

The programme includes many interactive sessions discussing "clinical evolving problems" (CEPs) to develop registrant's understanding of clinical skills in toxinology and test those skills in a group setting. These are all based on real patients contributed by faculty members, drawn from their own clinical experience.

Is there any formal evaluation of my performance on the course?

Yes! Faculty will be evaluating all registrants on their interactions, especially during the clinical evolving problem sessions. On the Saturday there will be a written examination.

For further information contact Prof. White (julian.white@adelaide.edu.au) or Dr. David Bates (david.bates@adelaide.edu.au).



1961 West Brichta Dr.
Tucson, AZ 85745, USA
Tel: 1 520 884-9345
Fax: 1 520 884-9345
ponerine@dakotacom.net

Southwest Venoms

CATALOGUE OF INSECT VENOMS (2012-2013)

Prices in U.S. dollars. All venoms are pure venoms (not venom sac or apparatus homogenates) collected according to the methods of Schmidt (1986. *In*: Venoms of the Hymenoptera [T. Piek, ed.], pp. 425-508. Academic Press: London.).

Prod. No.	VENOM	(LD ₅₀ mg/kg, mice)	VENOM PRICE			
			1 mg	5 mg	25 mg	100 mg
SOCIAL WASPS		(LD ₅₀)				
Yellowjackets -- <i>Vespula</i>						
W-10	<i>V. pensylvanica</i>	(6.4)	50	225	1000	*
W-19	other species**		*			
Hornets -- <i>Vespa</i>						
W-20	<i>V. mandarina</i>	(4.1)	50	225	1000	*
W-21	<i>V. tropica</i>	(2.8)	50	225	1000	*
W-29	others **		*			
Paper wasps -- <i>Polistes</i>						
W-30	<i>P. comanchus navajoe</i>	(5)	40	180	800	*
W-31	<i>P. flavus</i>	(3.8)	40	180	800	*
W-32	<i>P. canadensis</i>	(2.5)	50	225	*	
W-33	<i>P. erythrocephalis</i>	(1.5)	50	225	*	
W-39	<i>Polistes</i> sp. as available**		30	135	600	2100
New World Polybiine wasps						
W-40	<i>Brachygastra mellifica</i>	(1.5)	60	270	1200	*
W-50	<i>Synoeca septentrionalis</i>	(2.7)	60	270	1200	*
W-60	<i>Parachartergus fraternus</i>	(5)	70	300	1400	*
W-70	<i>Polybia sericea</i>	(6)	80	350	*	
W-71	<i>P. simillima</i>	(4.1)	80	350	*	
W-72	<i>P. occidentalis</i>	(5)	100	*		
W-80	<i>Agelaia myrmecophila</i>	(5.6)	140	*		
Old World Polybiine wasps						
W-90	<i>Belonogaster juncea colonialis</i>	(3)	80	350	*	
SOCIAL BEES						
Honey bees -- <i>Apis</i>						
B-10	<i>A. mellifera</i>	(2.8)	20	90	400	1400
B-11	<i>A. mellifera</i> Africanized bees	(2.8)	20	90	400	1400
B-12	<i>A. mellifera</i> queens		40	180	800	2800
B-13	<i>A. dorsata</i>	(2.8)	50	225	1000	3500
B-14	<i>A. cerana</i>	(3.1)	55	245	*	
B-19	others (<i>A. florea</i> , etc.)**		*			
Bumble bees -- <i>Bombus</i>						
B-20	<i>B. sonorus</i>	(12)	50	225	1000	*
B-21	<i>B. impatiens</i>	(12)	50	225	*	
B-29	other species**		30	*		

Prod. No.	VENOM	(LD ₅₀ mg/kg, mice)	VENOM PRICE			
			1 mg	5 mg	25 mg	100 mg
ANTS -- FORMICIDAE		(LD ₅₀)				
<i>Pogonomyrmex</i> -- harvester ants						
A-10	<i>P. barbatus</i>	(0.6)	50	225	1000	3500
A-11	<i>P. maricopa</i>	(0.12)	60	270	1200	4200
A-12	<i>P. occidentalis</i>	(0.5)	70	315	1400	*
A-13	<i>P. rugosus</i>	(0.7)	50	225	1000	3500
A-15	<i>P. desertorum</i>	(0.7)	160	*		
A-19	<i>Pogonomyrmex</i> sp. as available		45	200	900	3200
Myrmecia -- bull ants						
A-20	<i>M. gulosa</i>	(0.18)	60	270	1200	4200
A-21	<i>M. tarsata</i>	(0.18)	60	270	1200	*
A-22	<i>M. browningi</i>	(0.18)	70	315	*	
A-23	<i>M. rufinodis</i>	(0.35)	70	315	*	
A-24	<i>M. simillima</i>	(0.21)	70	315	*	
A-25	<i>M. pilosula</i>	(5.7)	100	*		
A-30	<i>Pachycondyla (Neoponera) villosa</i>	(7.5)	60	270	*	
A-31	<i>P. (Neoponera.) apicalis</i>	(> 16)	70	*		
A-32	<i>P. crassinoda</i>	(2.8)	80	*		
A-33	<i>P. (Megaponera) foetens</i> (Metabele ant)	(130)	70	315	*	
A-34	<i>P. (Paltothyreus) tarsatus</i> (stink ant)	(64)	50	225	1000	3500
A-35	<i>P. (Bothroponera) strigulosa</i>	(9)	70	*		
A-36	<i>Termitopone commutata</i>	(10)	70	315	1400	*
A-40	<i>Platythyrea lamellosa</i>	(11)	70	315	*	
A-50	<i>Diacamma</i> sp.**	(35)	100	450	*	
A-60	<i>Dinoponera gigantea</i>	(11)	60	270	1200	4200
A-70	<i>Paraponera clavata</i> (bullet ant)	(6.0)	60	270	1200	4200
A-80	<i>Ectatomma tuberculatum</i>	(1)	60	270	*	
A-81	<i>E. quadridens</i>	(17)	60	270	*	
A-90	<i>Odontomachus</i> sp.**	(33)	60	275	*	
A-110	<i>Tetraponera</i> sp.**	(.35)	140	600	*	
A-120	<i>Streblognathus aethiopicus</i>	(8.0)	80	360	*	
SOLITARY WASPS AND BEES						
Spider wasps -- Pompilidae						
SW-10	<i>Pepsis</i> sp.**	(65)	60	270	1200	4200
Mutillid wasps -- Mutillidae						
SW-20	<i>Dasymutilla</i> sp.**	(71)	70	315	1400	*
SW-39	Other wasps (Scoliidae, Tiphiidae, Sphecidae, Eumenidae, etc.)**		*			
Carpenter bees -- <i>Xylocopa</i>						
SB-10	<i>X. californica</i>	(21)	50	225	1000	*
SB-11	<i>X. veripuncta</i>	(33)	55	245	*	
SB-20	<i>Proxycopa rufa</i>	(11)	100	450	*	
SB-39	Other bees**		*			

*Inquire for prices and availability.

**Available species provided; exact determinations usually included.

Natural Toxins

Research Center
(NTRC)

TEXAS A&M UNIVERSITY
KINGSVILLE

VENOM QUALITY GUARANTEE

Authenticity of Species • Purity of Venom
Maximum Biological Activity • Our Venom is Never Pooled

Snake venoms contain important molecules which are valuable for researching the treatments of strokes, heart attacks, and cancer.

The Natural Toxins Research Center (NTRC) at Texas A&M University-Kingsville is dedicated to providing high quality snake products for biomedical research. We are committed to the procurement and distribution of venoms, venom fractions and tissue for biomedical research. Venoms from the same species can be different, and therefore extracted venoms are never pooled. Each vial contains venom from a single snake, and venoms of the same species are never mixed. The vials are labeled with the snakes' scientific and common names, ID tag number and sex. The ID tag number can be traced back to the NTRC Internet Database (ntrc.tamuk.edu/cgi-bin/serpentarium/snake.query) for additional information about each snake.

Southern Copperhead - <i>Agkistrodon contortrix contortrix</i>	\$75 ⁰⁰ /1g	\$50 ⁶³ /500mg		
Broad-Banded Copperhead - <i>Agkistrodon contortrix laticinctus</i> ..	\$100 ⁰⁰ /1g	\$67 ⁵⁰ /500mg		
Northern Copperhead - <i>Agkistrodon contortrix mokasen</i>	\$50 ⁰⁰ /1g	\$33 ⁷⁵ /500mg		
Trans-Pecos Copperhead - <i>Agkistrodon contortrix pictigaster</i>	\$75 ⁰⁰ /1g	\$50 ⁶³ /500mg		
Florida Cottonmouth - <i>Agkistrodon piscivorus conanti</i>	\$60 ⁰⁰ /1g	\$40 ⁵⁰ /500mg		
Western Cottonmouth - <i>Agkistrodon piscivorus leucostoma</i>	\$56 ⁰⁰ /1g	\$37 ⁸⁰ /500mg		
Eastern Diamondback Rattlesnake - <i>Crotalus adamanteus</i>	\$50 ⁰⁰ /1g	\$33 ⁷⁵ /500mg		
Western Diamondback Rattlesnake - <i>Crotalus atrox</i>	\$45 ⁰⁰ /1g	\$30 ³⁸ /500mg		
Sonoran Sidewinder - <i>Crotalus cerastes cercobombus</i>	\$125 ⁰⁰ /1g	\$84 ³⁸ /500mg		
Timber Rattlesnake - <i>Crotalus horridus</i>	\$70 ⁰⁰ /1g	\$47 ²⁵ /500mg		
Mottled Rock Rattlesnake - <i>Crotalus lepidus lepidus</i>	\$125 ⁰⁰ /1g	\$84 ³⁸ /500mg		
Blacktail Rattlesnake - <i>Crotalus molossus molossus</i>	\$400 ⁰⁰ /1g	\$270 ⁰⁰ /500mg	\$72 ⁹⁰ /100mg	\$49 ²¹ /50mg
Great Basin Rattlesnake - <i>Crotalus oreganus lutosus</i>	\$125 ⁰⁰ /1g	\$84 ³⁸ /500mg		
Grand Canyon Rattlesnake - <i>Crotalus oreganus abyssus</i>	\$250 ⁰⁰ /1g	\$168 ⁷⁵ /500mg	\$45 ⁵⁶ /100mg	\$30 ⁷⁵ /50mg
Texas Coral Snake - <i>Mircrurus tener tener</i>	\$2000 ⁰⁰ /1g			
Florida Coral Snake - <i>Mircrurus fulvius</i>	\$1800 ⁰⁰ /1g			
Southern Pacific Rattlesnake - <i>Crotalus oreganus helleri</i>	\$400 ⁰⁰ /1g	\$270 ⁰⁰ /500mg	\$72 ⁹⁰ /100mg	\$49 ²¹ /50mg
Northern Pacific Rattlesnake - <i>Crotalus oreganus oreganus</i>	\$400 ⁰⁰ /1g	\$270 ⁰⁰ /500mg	\$72 ⁹⁰ /100mg	\$49 ²¹ /50mg
Mohave Rattlesnake - <i>Crotalus scutulatus scutulatus</i> (A)	\$250 ⁰⁰ /1g	\$168 ⁷⁵ /500mg	\$45 ⁵⁶ /100mg	\$30 ⁷⁵ /50mg
Mohave Rattlesnake - <i>Crotalus scutulatus scutulatus</i> (B)	\$1000 ⁰⁰ /1g	\$675 ⁰⁰ /500mg	\$182 ²⁵ /100mg	\$123 ⁰² /50mg
Prairie Rattlesnake - <i>Crotalus viridis viridis</i>	\$70 ⁰⁰ /1g	\$47 ²⁵ /500mg		
Red Spitting Cobra - <i>Naja pallida</i>	\$100 ⁰⁰ /1g	\$67 ⁵⁰ /500mg		
Desert Massasauga - <i>Sistrurus catenatus edwardsii</i>	\$1000 ⁰⁰ /1g	\$675 ⁰⁰ /500mg	\$182 ²⁵ /100mg	\$123 ⁰² /50mg
Western Massasauga - <i>Sistrurus catenatus tergeminus</i>	\$1000 ⁰⁰ /1g	\$675 ⁰⁰ /500mg	\$182 ²⁵ /100mg	\$123 ⁰² /50mg
Bushmaster - <i>Lachesis muta muta</i>	\$2000 ⁰⁰ /1g	\$1350 ⁰⁰ /500mg	\$364 ⁵⁰ /100mg	\$246 ⁰⁴ /50mg

(A) - neurotoxic venom
(B) - non-neurotoxic venom
*Subject to availability

Venom is collected under stringent laboratory conditions using disposable labwear for each extraction. Venom is collected in new, non-reusable plastic cups with parafilm coverings. Snakes are allowed to bite into the parafilm diaphragm and the venom glands are not massaged. Immediately following collection, each venom sample is clarified by centrifugation at 500 x g for 5 minutes to remove cellular debris and frozen at -90° C until lyophilized.

Foreign Investigators: Please note that your order may be subject to import duties, taxes, tariffs, customs charges, DDP, VAT, and the like, once your package reaches your country. It is your responsibility to pay for these charges. The Natural Toxins Research Center will not be responsible for paying these charges, and we will not bill you for such charges when you place your order.

Venom glands and fractions also for sale - call for pricing & availability

If you're interested in study or research opportunities at the NTRC, call us at the number below!

www.ntrc.tamuk.edu

Please Contact Us for More Information:

Phone: (361) 593-3082 • Fax: (361) 593-3798 • Email: kanmd00@tamuk.edu





Venom Supplies Pty Ltd

ABN number 39 458 465 843

PO Box 547

Tanunda

South Australia

Phone 08 8563 0001

+61 8 8563 0001

Fax 08 8563 0020

+61 8 8563 0020

Email: venoms@venomsupplies.comWeb: www.venomsupplies.com**Lyophilised Venoms****Snakes****Scientific name****Price(US\$)/200mg****Price(US\$)/gm**

<i>Acanthophis antarcticus</i>	\$170	\$745
<i>Acanthophis praelongus</i>	\$210	\$845
<i>Agkistrodon billineatus</i>	\$50	\$200
<i>Austrelaps superbus</i>	\$400	\$1,600
<i>Austrelaps labialis</i>	\$700	\$3,000
<i>Bitis arietans</i>	\$70	\$300
<i>Bitis rhinoceros</i>	\$75	\$340
<i>Bitis nasicornis</i>	\$75	\$340
<i>Bothriechis schlegelii</i>	\$200	\$850
<i>Crotalus adamanteus</i>	\$100	\$450
<i>Crotalus unicolor</i>	\$200	\$900
<i>Crotalus vegrandis</i>	\$160	\$700
<i>Hoplocephalus stephensii</i>	\$220	\$900
<i>Hoplocephalus bitorquatus</i>	\$220	\$900
<i>Naja kaouthia</i>	\$60	\$250
<i>Naja melanoleuca</i>	\$50	\$200
<i>Naja mossambica</i>	\$60	\$250
<i>Naja siamensis</i>	\$60	\$250
<i>Notechis ater humphreysi</i>	\$350	\$1,600
<i>Notechis ater niger</i>	\$350	\$1,600
<i>Notechis ater serventyi</i>	\$350	\$1,600
<i>Notechis scutatus</i>	\$300	\$1,445
<i>Ophiophagus hannah</i>	\$200	\$850
<i>Oxyuranus microlepidotus</i>	\$300	\$1,300
<i>Oxyuranus scutellatus</i>	\$260	\$1,250
<i>Oxyuranus scutellatus canni</i>	\$400	\$1,500
<i>Pseudechis australis</i>	\$110	\$520
<i>Pseudechis butleri</i>	\$160	\$700
<i>Pseudechis colletti</i>	\$110	\$500
<i>Pseudechis guttatus</i>	\$110	\$500
<i>Pseudechis porphyriacus</i>	\$140	\$650
<i>Pseudechis papuanus</i>	\$288	\$1,380
<i>Pseudonaja affinis</i>	\$800	\$3,900
<i>Pseudonaja aspidorhyncha</i>	\$800	\$3,990
<i>Pseudonaja inframacula</i>	\$800	\$3,990
<i>Pseudonaja nuchalis</i>	\$800	\$3,990
<i>Pseudonaja textilis</i>	\$760	\$3,700
<i>Tropidechis carinatus</i>	\$300	\$1,500

Spider Venom*Lampona cylindrata*

\$360 / 10sac contents \$720 / 25sac contents

Latrodectus hasseltii

\$500/50 sac contents.

Bee VenomPure bee venom (*Apis mellifera*)

250mg

\$58

(1-5gm)

\$130/gm

(6-10gm)

\$116/gm

(60gm and over)

\$95/gm

Amphibian Venoms*Bufo marinus*

\$95/200mg

\$450/gm

5% discount will apply for all orders over 5 gm and 7% will apply to orders over 15gm for venoms produced at Venom Supplies Pty Ltd.

Medtoxin Venom Laboratories
2710 Big John Drive
Deland, Florida 32724
Phone: 386-734-3049
386-740-9143
Fax: 386-734-4163
elapid33@aol.com
www.Medtoxin.com

VENOM PRICELIST SPRING/SUMMER 2009

Dendroaspis polylepis	\$550.00
Dendroaspis angusticeps	\$400.00
Dendroaspis viridis	\$750.00
Naja nivea	\$205.00
Naja melanoleuca	\$205.00
Naja nigricollis (Tanzania)	\$205.00
Naja nigricollis (Ghana)	\$205.00
Naja h. annulifera	\$125.00
Naja kaouthia	\$205.00
Naja naja (Pakistan)	\$250.00
Ophiophagus hannah	\$150.00
Micrurus f. fulvius	\$2100.00
Bitis arietans	\$150.00
Bitis g. gabonica	\$150.00
Bitis g. rhinoceros	\$150.00
Crotalus adamanteus	\$150.00
Crotalus atrox	\$150.00
Crotalus h. atricaudatus	\$150.00
Crotalus h. horridus	\$150.00
Crotalus s.scutulatus	\$450.00
Crotalus d. terrificus	\$450.00
Sistrurus m. barbouri	\$450.00
Agkistrodon c.contortrix	\$190.00
Agkistrodon c. laticinctus	\$190.00
Agkistrodon c. mokasen	\$100.00
Agkistrodon p. conanti	\$100.00

Many other venoms available in limited quantity, please inquire
 Special orders to meet research needs

Exact locality data on most species available, Species are guaranteed

Prices are quoted per gram in U.S. dollars, subject to change without notice

Payment terms net 30 days check, money order, or wire transfer

Shipping is free in the U.S. may be extra for international orders

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crystallized venoms**

Bothrops alternatus	1440,00 US\$
Bothrops jararaca	220,00 US\$
Bothrops jararacussu	264,00 US\$
Bothrops moojeni	300,00 US\$
Bothrops neuwiedi	340,00 US\$
Crotalus durissus terrificus	220,00 US\$
Crotalus durissus collineatus	300,00 US\$
Lachesis muta muta	600,00 US\$
Bufo marinus / schneideri	264,00 US\$

All venoms collected in a sterile manner

Blood cells and freeze dried blood plasma from snakes

We have also other proteins, aminoacids and toxin polyclonal antibodies from Brazilian snakes

We trade or sale our products only with CITES from the IBAMA (Brazilian Environment Agency & Wildlife)

Prices quoted per gram in US\$. Transport FOB

Brazilian Contact:

Sanmaru Serpentarium,

Rod. Brig. Faria Lima km 365

14765-000 Taquaral SP, Brazil

herpetoscience@hotmail.com

taquaral@gmail.com

Fone (55) 14 9731 2436

(55) 16 3958 7269

Kentucky Reptile Zoo

Venom Price List 2009-2010

200 L and E Railroad

Slade, KY 40376

Tel:606-663-9160

Fax: 606-663-6917

Web: www.kyreptilezoo.orgEmail: reptilezoo@bellsouth.net**Crotalidae**

<i>Agkistrodon contortrix contortrix</i>	\$60.00
<i>Agkistrodon contortrix mokasen</i>	\$55.00
<i>Agkistrodon contortrix laticinctus</i>	\$70.00
<i>Agkistrodon contortrix phaeogaster</i>	\$70.00
<i>Agkistrodon contortrix pictigaster</i>	\$70.00
<i>Agkistrodon piscivorus leucostoma</i>	\$45.00
<i>Agkistrodon piscivorus piscivorus</i>	\$45.00
<i>Bothrops asper</i>	\$100.00
<i>Bothrops atrox</i>	\$100.00
<i>Bothrops moojeni</i>	\$100.00
<i>Crotalus adamanteus</i>	\$60.00
<i>Crotalus atrox</i>	\$70.00
<i>Crotalus basiliscus basiliscus</i>	\$200.00
<i>Crotalus cerastes</i>	\$100.00
<i>Crotalus durissus cumanensis</i>	\$300.00
<i>Crotalus durissus durissus</i> (fmr. <i>C. d. dryinas</i>)	\$200.00
<i>Crotalus durissus terrificus</i>	\$175.00
<i>Crotalus horridus</i>	\$100.00
<i>Crotalus horridus</i> (type A neurotoxin)	\$100.00
<i>Crotalus molossus</i> (Texas origin)	\$70.00
<i>Crotalus scutulatus scutulatus</i>	\$250.00
<i>Crotalus viridis viridis</i>	\$70.00
<i>Protobothrops flavoviridis</i>	\$200.00
<i>Trimeresurus borneoensis</i>	\$200.00

Elapidae

<i>Dendroaspis angusticeps</i>	\$350.00
<i>Dendroaspis jamesoni kaimosae</i>	\$400.00
<i>Dendroaspis polylepis</i>	\$400.00
<i>Micrurus tenere</i>	\$1000.00
<i>Naja kaouthia</i>	\$100.00
<i>Naja kaouthia</i> (Suphan province)	\$100.00
<i>Naja melanoleuca</i>	\$80.00
<i>Naja naja</i> (India)	\$85.00
<i>Naja naja</i> (Pakistan)	\$80.00
<i>Naja nigricollis nigricollis</i>	\$80.00

<i>Naja nivea</i>	\$100.00
<i>Naja pallida</i>	\$100.00
<i>Naja siamensis</i>	\$60.00
<i>Ophiophagus hannah</i>	\$95.00
<i>Pseudechis colletti</i>	\$320.00

Viperidae

<i>Bitis arietans</i>	\$120.00
<i>Bitis gabonica rhinoceros</i>	\$130.00
<i>Daboia (Vipera) russelli</i>	\$200.00
<i>Daboia (Vipera) siamensis</i>	\$200.00
<i>Echis carinatus</i>	\$350.00
<i>Echis pyramidium</i>	\$350.00

Helodermatidae

<i>Heloderma horridum</i>	\$600.00
<i>Heloderma suspectum</i>	\$600.00

Terms

- All venoms are collected in a sterile manner and frozen at -70C before lyophilization.
- Other venoms are available upon request in small quantities; please contact us for more information on other venoms
- CITES papers available on all CITES listed species. Extra costs apply for permits and inspection fees.
- Locale information available for most species.
- Payment may be made by check, money order, wire transfer, PayPal, MC, Visa, and Discover. All prices are listed per gram in US dollars. Shipping and packing charges are extra.
- Discounts on standing orders and orders of 10g or more.
- KRZ makes every effort to stay current regarding nomenclature and taxonomy. Our listing reflects current trends, with former names in parentheses. If you have questions, please feel free to contact us.
- Scale clippings for DNA analysis available at an extra charge. Please contact us for more information.

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Laboratoire de production de venin
Fournisseur en venin
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Pure toxins dealer

Venins cristallisés, venins lyophilisés, bases pour teintures mères, plasma,...

Crystallised venom, lyophilised venom, mother tincture bases, plasma,...

ALPHA BIOTOXINE est une jeune société spécialisée dans la production de venin.

Nous mettons à votre service plus de 20 ans d'expérience dans l'étude des animaux venimeux et la production de venin.

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ALPHA BIOTOXINE is a young society specialised on venom production.

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