

UPCOMING MEETINGS

The 11th Pan-American Section IST Congress will be held at the Grand Casa Hotel, Guarujá, Sao 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 likely be the IST World Congress, probably in 2015, but location and details are not currently available.

Following the IST Constitution revision, approved at the IST World Congress in Hawaii, July 2012, there may be a progressive change in IST Congress scheduling.

FROM THE IST EXECUTIVE

2013 has been busy for at least some of us, so far. As those of you who have paid your 2013 IST membership dues will already know, Society dues increased for 2013, in part to help cover increased costs associated with our association with Elsevier, who publish the Society journal, Toxicon.

From 2013 onwards IST membership dues will entitle financial Full and Associate members access to Toxicon electronically. The mechanics of how this will work, via an Elsevier website, are yet to be finalised and once this detail is worked out I will contact all financial members to inform them about how to access this service. At last all financial members will have access to our journal, Toxicon and Council believes this is a positive development.

The Society is about to embark on another new journey, following through on the concern of many members about venom based diseases such as snakebite. A key to improving outcomes is ensuring health professionals are well trained in diagnosis and management. The Society is about to start a process that will, we anticipate, make it a lead player globally in development of expertise in clinical toxinology. Please see some information about this in the Newsletter.

Many members have already paid their annual dues to the Society, via our website. To those of you who have not yet paid, please can you do so now.

Lastly, for Pan-American members, a reminder about the meeting in Brazil in November. Don't miss it!

Julian White, Secretary/Treasurer, IST

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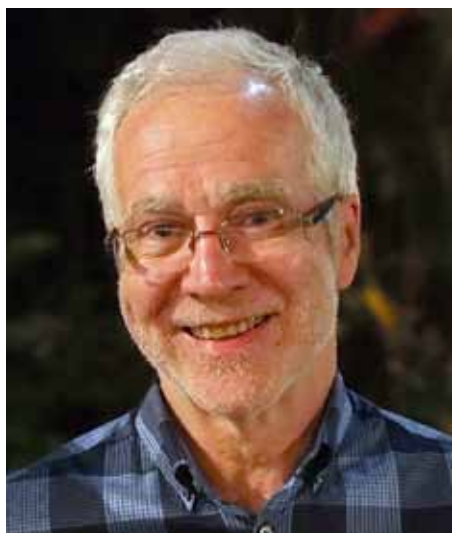
Julian White
Secretary/Treasurer IST

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MESSAGE FROM THE PRESIDENT (I.S.T)



Dear IST members,

Arrangements for the joint meeting with the Brazilian Society on Toxinology appear to be developing well. I encourage all members in the Pan-American region to attend what promises to be a historic meeting, allowing us to celebrate with the Brazilians the strength of their commitment to toxinology.

The Asia-Pacific section meeting to be held in China in 2014 is at its early stages of planning. This will be the second time the Asia-Pacific section has held a meeting in China.

Proposals for the next European section meeting in 2015, which will also be the next International Congress, are urgently needed. I encourage members to step forward.

The move to provide IST members with electronic access to Toxicon in 2013, as part of their membership, has been delayed because the link person in Elsevier, Liz Perill, moved to another position and there has been a delay in appointing her successor. This is now in hand.

The Secretary/Treasurer will inform members once this access has been established.

IST Council has decided to proceed with the development of clinical toxinology as a recognised area of medical expertise, as foreshadowed at the IST Business Meeting in Hawaii last July.

The first step is approval of a constitution for a Board of Clinical Toxinology and appointment of the inaugural Board. The Board constitution and the make-up and functioning of the Board and its activities are controlled by IST Council.

At the March 2013 Council meeting the draft constitution for the Board of Clinical Toxinology was approved and Council decided on the composition of the inaugural Board. Subject to each member agreeing to participate, the Board will consist of Prof. David Warrell, Prof. Rick Dart, Prof. Julian White, Dr. Scott Weinstein and Dr. Jean-Philippe Chippaux. Prof. White will be the initial Chairperson.

This is a major development for the Society and we shall watch with interest how this initiative develops over the coming years.

For more information, see elsewhere in this newsletter and in two papers by Prof. White to be published shortly in Toxicon.

With best wishes

Alan Harvey

President, IST

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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

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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 is 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 is trialling an internet-based process for taxonomists to interact through.

The first stage is a small invited group of experts on snake taxonomy, who can interact through a special wiki site and develop updates and recommendations for dissemination to all IST members through the main IST website or the Newsletter. This group is in its formative stages at present and our experiences with this will be used to guide establishment of similar groups in the future to cover other areas of taxonomy, such as scorpions, spiders, marine organisms etc.

Once this early stage has allowed us to develop a viable structure and processes the IST will invite members to submit names of taxonomists in each major taxa who could then be approached re involvement in this initiative. Until then I ask that members do not send me names or indicate their own interest in this area, but rather allow me to work with this initial trial group to iron out details of how to make the process deliver results.

Julian White, Secretary IST

CLINICAL TOXINOLOGY INITIATIVE

At the World Congress of IST in Recife, Brazil in March 2009 the members voted to support a clinical toxinology initiative of the Society. There has been progressive work behind the scenes on this since then and at the World Congress of the IST in Hawaii in July 2013 members approved a new constitution for the Society that gave your Council the authority to advance matters further.

IST Council has now considered a new constitution for a Board of Clinical Toxinology, which is the next step in developing a globally recognised medical speciality of clinical toxinology. The initial constitution for this Board process is shown in the following pages, but perhaps a simple overview might help members understand the processes proposed.

There are several key elements we need in place if we are to ensure good outcomes for envenomed patients. Firstly we need well resourced health services. This remains a challenge in many areas. Secondly we need ready availability of affordable treatments for envenoming, especially antivenom. The IST, through the efforts of a number of members, has assisted the WHO in developing guidelines to improve antivenoms. But all of this is to no avail if workers in the health system do not understand envenoming and how to treat it. All too often that is the case. So, education and training is a key to unlocking better outcomes for envenomed patients.

Clinical toxinology is a term for expertise, at the medical level, in the diagnosis and treatment of toxin-based diseases, such as snakebite. Currently there is no internationally recognised medical speciality of clinical toxinology. There is a well established Clinical Toxinology Short Course, held every 2 years in Adelaide, Australia. This is the only course at this level available, but a course like this, even though it is intense, cannot produce doctors able to be recognised as clinical toxinologists. A far more detailed training program is required. Possibly the Adelaide course will remain as a part of that training process.

What the IST is seeking to do is develop a framework within which a detailed training and accreditation program for clinical toxinology can be developed and maintained long term. To manage this process the Society will establish a Board of Clinical Toxinology. The functions of the Board will be governed by the constitution which establishes the Board. That constitution is established by the IST Council and they will continue to watch over the Board, so the IST will be central to development of clinical toxinology as a recognised area of medical expertise.

A key word here is “medical”. This will be a recognised speciality or subspeciality within medicine. To be a clinical toxinologist you must first be a qualified medical doctor. You will then, in most cases, need to successfully undertake training in a broader area of medical speciality, such as emergency medicine, intensive care, or toxicology. Only after achieving this will a doctor be eligible to undertake training in clinical toxinology.

The details of that training process, what it will involve and over what time period, will be decided by the Board of Clinical Toxinology. IST Council will initially appoint a select group of IST members who are medical doctors already specialising in clinical toxinology as a main focus of their professional work. These doctors, through the Board, will then establish criteria for training and training mechanisms. This will take time and it may be several years before the process matures.

The Board will work with existing medical organisations such as academies, colleges etc, to establish training and accreditation criteria for each country, based on the global model established by the IST, through the Board.

As this process advances, IST members will be kept informed. It is likely that, over time, this will expand IST membership, as doctors wishing to become clinical toxinologists, join the Society.

CONSTITUTION OF THE BOARD OF CLINICAL TOXINOLOGY OF THE INTERNATIONAL SOCIETY ON TOXINOLOGY**CONSTITUTION AND BY-LAWS OF THE BOARD OF CLINICAL TOXINOLOGY OF THE INTERNATIONAL SOCIETY ON TOXINOLOGY****ARTICLE I*****NAME***

The name of this organization shall be the BOARD OF CLINICAL TOXINOLOGY of the INTERNATIONAL SOCIETY ON TOXINOLOGY, hereinafter referred to as the “Board” and the “Society”.

ARTICLE II***OBJECTS***

The objects of the Society are to advance knowledge on the properties and clinical aspects of poisons, toxins and antitoxins derived from animals, plants and microorganisms, and antivenoms and other treatments for toxin-induced illness, and to bring together those scholars and clinicians interested in these substances and their effects through a common Society and to support training and credentialing of medical doctors in the specialty of clinical toxinology.

The objects of the Board are to develop, support and maintain the medical field of Clinical Toxinology as a recognised area of specialist medical expertise, through establishment and continuance of training schemes in clinical toxinology and through establishment and continuance of a formal accreditation structure for medical practitioners meeting Board certified standards for specialist level expertise in clinical toxinology, in conjunction with existing national medical organisations certifying specialist expertise in related medical fields.

ARTICLE III***NOT FOR PROFIT CLAUSE***

The assets and income of the organisation shall be applied solely in furtherance of its above-mentioned objects and no portion shall be distributed directly or indirectly to the members of the organisation except as bona fide compensation for services rendered or expenses incurred on behalf of the organisation.

ARTICLE IV***BOARD OF CLINICAL TOXINOLOGY***

Section 1. Preamble: The Society recognizes, in it's Objects (Article II of the Constitution of the Society) that toxins cause disease in humans and that the Society has an interest and involvement in the clinical management of toxin-based disease. Expertise in the diagnosis and treatment of toxin-based disease is defined as the specialty of Clinical Toxinology. The Society has an interest in fostering development and dissemination of this clinical toxinology expertise, in concert with existing national and international medical organizations and to this end, seeks to engender recognition of clinical toxinology expertise within existing medical frameworks, by developing criteria for this expertise and applying this as a recognition process through existing medical organizations empowered to certify specific medical expertise such as the Medical Boards in the USA and the Specialist Colleges in the Commonwealth system.

Section 2. Council of the Society (hereinafter referred to as the “Council”) shall have the right to establish a Board of Clinical Toxinology for the purpose of developing and maintaining training, skills development and continuing education in the medical specialty field of clinical toxinology in support of a Board Certification program for

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registered medical practitioners with expertise in this field. Council recognizes that such Board Certification will only have meaning at a practical level if recognized by national medical registration authorities and this will require written agreements with existing medical credentialing organizations at a national level on a country by country basis.

Section 3. Council shall, on establishment of the Board, appoint to the Board five financial Members who are registered medical practitioners with demonstrable expertise in clinical toxinology and thereafter the Board shall recommend to Council nominations to join the Board and Council shall consider and appoint suitably qualified financial Members from the nominations provided. Once the Board has established a Board Certification process and appointed Clinical Fellows from amongst suitably qualified financial Members, then a suitable qualification for Board membership shall be Clinical Fellows of the Society. Clinical Fellows may separately nominate a Clinical Fellow to Council, for consideration as a member of the Board and such nomination shall be endorsed by at least 6 Clinical Fellows in writing to be valid. Council shall consider Board nominations and valid Clinical Fellow nominations equally.

Section 4. Financial Members of the Society who are registered medical practitioners and can demonstrate to Council and the Board their high level expertise in clinical toxinology shall be eligible for membership of the Board and once Board Certification is established, such Certification as a Clinical Fellow shall be required as evidence of high level expertise in clinical toxinology. During the establishment phase of the Board, the persons appointed by Council to the Board, including the Director of Training and Board Censor shall meet criteria for expertise in clinical toxinology as recommended by an interim Council-appointed committee of financial Members who fit the broad definition of eligibility for Clinical Fellowship and these initial Board members appointed by Council shall be granted status as Clinical Fellows for an interim period of 5 years. The initial criteria to be considered as evidence of expertise in clinical toxinology are set out in By-Laws Article XII.

Section 5. Board membership shall be conferred for a period of 5 years and no more than 2 consecutive terms may be served by any Board member. Each Board member must be a financial Member of the Society and a financial Board Certified Clinical Fellow throughout their term on the Board, except that, during establishment of the Board and the Board Certification process, this requirement for Board Certification shall be waived.

Section 6. The Board of Clinical Toxinology shall consist of a minimum of 5 members and a maximum of 11 members. Council shall have the right to temporarily increase the maximum number of Board members up to 15, for a period of up to 3 years, with the right to extend this period, but shall only consider exercising this right on the recommendation of the Board, or if, in the opinion of Council, there is a clear and urgent need to increase the size of the Board. The Board shall recommend to Council a Board member to act as Chairperson of the Board for a 3 year term, with no more than two consecutive terms permitted. Council of the Society shall then appoint a Board Chairperson taking into consideration the recommendations of the Board.

Section 7. The Board shall appoint a Board member as Director of Training and separately appoint a Board member as Board Censor and no Board member shall hold more than one such position simultaneously. The Board may, at its discretion, terminate the appointments of Director of Training and Board Censor, at the request of the Board member holding the position, or due to concerns about the performance of the

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person holding that position, except that if the Board terminates an appointee due to concerns about performance by the appointee, the appointee may appeal the termination to Council and Council's determination in the appeal shall be final and non-contestable by the appointee.

Section 8. The Board shall develop and maintain training criteria and programs in support of Board Certification in clinical toxinology and the Director of Training shall be the coordinator of all training activities in clinical toxinology on behalf of the Board and the Society and shall report regularly to the Board on such training activities. The Director of Training shall have the right to establish and dissolve subcommittees of the Board to assist in planning and delivery of training activities, subject to Board approval.

Section 9. The Board shall ensure that expertise in clinical toxinology meets standards that are set by the Board and that financial Members of the Society who have met the requirements for eligibility as Clinical Fellows are both duly inducted as Clinical Fellows, at their request, and that they continue to maintain the level of expertise required of Clinical Fellows. The Board Censor shall, on behalf of the Board, and reporting to the Board, oversee processes to ensure only appropriately qualified financial Members are inducted as Clinical Fellows and that they meet ongoing requirements to remain as Clinical Fellows through an annual Board Certification process and a recertification process, the timing of which will be set, from time to time, by the Board. The Board Censor, subject to approval of the Board, may appoint a Clinical Fellow who is not a Board member, as a regional Censor for the purposes of liaising with any national medical specialist college, board or association with which the Board may establish a cooperative training and certification process in clinical toxinology. The decisions of the Board Censor regarding the eligibility of a financial Member applying for Clinical Fellowship are subject to appeal to the full Board, providing the applicant meets the criteria set out in By-Laws Article IX.

Section 10. The Board may, on behalf of the Society, develop and maintain cooperative certification processes and agreements with national medical specialist colleges or boards or associations for the purpose of establishing and maintaining nationally recognised specialist or sub-specialist expertise in clinical toxinology, through existing programs of such national specialist medical colleges or boards or associations, subject to approval of Council. The Board is encouraged to seek out such cooperative arrangements.

Section 11. The Board shall meet, either in person or through electronic means, on a regular basis, at least 4 times per year and with no longer than 4 months between such meetings. The Board shall determine frequency of meetings for any subcommittees established by or on behalf of the Board.

Section 12. The Board shall report to Council through the Chairperson of the Board or their proxy on a regular basis and at least once per year.

Section 13. The Board shall provide an annual written report of activities to the Council and Society at the general meeting of the Society, or through the Society Newsletter, as determined from time to time by Council.

Section 14. The Board shall determine annual Board Certification fees for Clinical Fellows taking into account the costs involved in administering the Board Certification and supporting continuing education processes. On written application of no less than 6 Clinical Fellows, to Council, Council may consider annual fees set by the Board,

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taking into consideration the costs incurred by the Board and ensuring that the fees set are sufficient to meet costs incurred.

- Section 15.* The Board shall maintain funds collected as annual Board Certification fees from Clinical Fellows and use these funds in accordance with the objects and duties of the Board and such funds shall not be used for the financial advantage of any Board member or Clinical Fellow, in accordance with Article III of this constitution.

**ARTICLE V
MEMBERS**

- Section 1.* The Board shall consist of Financial Full Members of the International Society on Toxinology who meet specific requirements set out in this Constitution and requirements for Full Membership of the Society, as set out in the Constitution of the Society.
- Section 2.* Registered medical practitioners who have undertaken training in clinical toxinology at a standard approved by the Society through the Board of Clinical Toxinology and have passed any examination or assessment process set by or approved by the Board of Clinical Toxinology and resulting in Board Certification as a Clinical Toxinologist, shall be eligible for Clinical Fellowship of the Society, subject to successful completion of periodic reassessment of competence by or approved by the Board of Clinical Toxinology and conditional on payment of annual dues as a Member of the Society and annual Board Certification fees.
- Section 3.* Applications for Clinical Fellow membership shall be made in writing to the Board Censor of the Board of Clinical Toxinology of the Society and shall be considered subject to the requirements of the Board of Clinical Toxinology (note Article IV of this Constitution).
- Section 4.* **Dues.** Each Clinical Fellow Member of the Society shall pay annual dues as prescribed by the Council of the Society, and as approved by the membership at a general meeting or special meeting of the Society and shall pay annual Board Certification fees as prescribed by the Board.
- Section 5.* Failure to pay annual dues in a timely manner shall constitute a reason for the Board to suspend Clinical Fellow accreditation, until dues are paid.

**ARTICLE VI
COMMITTEES**

- Section 1.* **The Board** has the right to establish, and disestablish, committees and subcommittees, as required from time to time to meet the objectives of the Board. Council of the Society has the right to oversee the Board's establishment and disestablishment of such committees and subcommittees.
- Section 2.* **The Director of Training** has the right to establish, and disestablish, committees and subcommittees, as required from time to time to meet the duties of Director of Training. The Board has the right to oversee the Director of Training's establishment and disestablishment of such committees and subcommittees.

**ARTICLE VII
AMENDMENT OF CONSTITUTION**

This Constitution of the Board of Clinical Toxinology may be amended, at the specific request of the Board of Clinical Toxinology, at a specially convened electronic or in-person meeting of the Council of the Society by the affirmative vote of a minimum two thirds majority of the Council

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Members, who may be present in person or represented by proxy provided that notice of the proposed amendment is given to the Council at least 90 days before the meeting at which the amendment is offered.

ARTICLE VIII

ADOPTION AND AMENDMENT OF BY-LAWS

By-Laws may be adopted, amended, or rescinded at any meeting of the Board by the affirmative vote of a two thirds majority of the Board Members present or represented by proxy provided that notice of the proposed actions is given to the Board at least 90 days before the meeting where such action is to be considered.

ARTICLE IX

THE EFFECTIVE DATE OF THE CONSTITUTION This Constitution will be deemed to be effective from the date of most recent revision. The most recent revision was approved on _____, in accordance with the rules and articles of this Constitution and the Constitution of the Society.

ARTICLE X

DISSOLUTION CLAUSE

In the event of the Board or the Society being dissolved, the amount that remains after such dissolution and the satisfaction of all debts and liabilities shall be transferred to another organisation with similar purposes and which has rules prohibiting the distribution of its assets and income to its members.

BY-LAWS-ARTICLE I

BOARD

- Section 1.* ***Meetings.*** The Board shall meet at each general meeting of the Society for the purpose of transaction of business, and if a quorum of the Board be present, no prior notice of such meeting need be given. The Board shall meet at least four times per year, with no more than four months between successive meetings, as prescribed in Article IV, Section 11 of this Constitution. Special meetings of the Board may be held at the call of the Board Chairperson, or upon the written request of four members of the Board, and shall be called by the Chairperson. Meetings of the Board, held either in person or through electronic communication, may be called by the Chairperson to discuss and, where appropriate, decide on action in response to matters concerning the Society as may arise from time to time and no notice is required if the meeting shall be held by electronic communication except that Board Members shall have at least 48 hours to respond as part of the electronic communication process.
- Section 2.* ***Notice of meetings.*** Notice of all meetings of the Board shall be given by electronic or other distribution means at least 15 days before the meeting, except where the Chairperson calls an electronic communication meeting as noted in Section 1 (above), or in regard to general meetings of the Society where a meeting of the Board is a requirement as noted in Section 1 (above).
- Section 3.* ***Chairperson.*** At all in-person meetings of the Board the Chairperson, or in their absence their nominee, shall preside.
- Section 4.* ***Quorum.*** A Quorum of the Board shall be at least half of the Board members plus one. At all meetings of the Board the act of a majority of those members present shall be the act of the Board. In the absence of a quorum of the Board at a regular

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meeting of the Society and when it becomes apparent that decisions vital to the Board and Society are necessary, the Society Council shall make the necessary decisions.

- Section 5.* ***Elections to the Board:*** The eligibility, terms of office for members of the Board and initial appointment to the Board are prescribed in Article V of this Constitution. Council of the Society shall determine subsequent frequency of elections for Board positions and shall supervise such elections, but shall take into account advice from the Board on the frequency of elections.

BY-LAWS-ARTICLE II
ANNUAL AND FINANCIAL REPORTS

The Board shall submit annually to the Council of the Society for adoption and approval a report on the general state and proceedings of the Board for the past year, a balance sheet and financial statement for the past year.

BY-LAWS-ARTICLE III
CUSTODY OF PAPERS, ADDRESSES AND REPORTS

All papers, addresses and reports read before the Society, or accepted by the Society, shall be lodged with the President and become the property of the Society. Publications of these reports in the official Journal of the Society, or in any other way, may be recommended by the Board or Council or appropriate Committee.

BY-LAWS-ARTICLE IV
EXECUTIVE OFFICERS OF THE BOARD

- Section 1.* ***Duties.*** The Executive Officers of the Board shall perform the duties usually performed by such officers, together with such duties as shall be prescribed by the Constitution and ByLaws or by the Society or Council or Board. The Executive Officers of the Board shall be the Chairperson, the Director of Training and the Board Censor, and if so established as positions by the Board, the Deputy Chairperson, the Secretary and the Treasurer.
- Section 2.* ***The Chairperson.*** The Chairperson shall preside at all meetings of the Board. The Chairperson shall be an *ex officio* member of all committees. The Chairperson shall have general charge and supervision of the business and affairs of the Board.
- Section 3.* ***The Director of Training:*** The Board shall appoint a Director of Training, as prescribed in Article IV of the Constitution.
- Section 4.* ***The Board Censor:*** The Board shall appoint a Board Censor, as prescribed in Article IV of the Constitution.
- Section 5.* ***The Deputy Chairperson.*** The Board may establish a position of Deputy Chairperson, to be appointed from the membership of the Board. At the request of the Chairperson, or in the event of his/her absence or disability, the Deputy Chairperson may perform any or all duties of the Chairperson.
- Section 6.* ***The Secretary:*** The Board may establish a position of Secretary to the Board, to be appointed from the membership of the Board, to undertake such duties and under such guidance as the Chairperson and Board shall determine, from time to time.
- Section 7.* ***The Treasurer:*** The Board may establish a position of Treasurer to the Board, to be appointed from the membership of the Board, to undertake such duties and under such guidance as the Chairperson and Board shall determine, from time to time.

CONSTITUTION OF THE BOARD OF CLINICAL TOXINOLOGY OF THE INTERNATIONAL SOCIETY ON TOXINOLOGY**BY-LAWS-ARTICLE V*****LIABILITY OF BOARD MEMBERS AND EXECUTIVE OFFICERS***

Each Board Member or Executive Officer, or former Board Member or Executive Officer of the Board of Clinical Toxinology, shall be indemnified by the Board and the Society against expenses actually and necessarily incurred by him/her in connection with the defense of any action, suit or proceeding in which he/she is made a party by reason of his/her being or having been a Board Member or an Executive Officer of the Board, except in relation to matters as to which he/she shall be adjudged in such action, suit or proceeding to be liable for negligence or misconduct in the performance of his/her duties as such Board Member or Executive Officer.

BY-LAWS-ARTICLE VI***CONTRACTS***

The Board, except as provided in the By-Laws may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Board, and such authority may be general or confined to specific instances; and unless so authorized by the Board, no officer, agent or employee shall have power or authority to bind the Society by any contract or engagement or to pledge its credit or render it liable financially for any purpose or amount.

BY-LAWS-ARTICLE VII***FISCAL YEAR***

The fiscal year of the Society shall begin on the first day of January in each year and shall end on the thirty-first day of the following December.

BY-LAWS-ARTICLE VIII***PUBLICATIONS***

The Board may determine, by majority vote, to recommend to Council to determine, by majority vote, to recommend to the membership of the Society that a further publication or publications be designated as official publications of the Society, but such a recommendation shall only come into effect if a majority of financial Members vote in favor of the recommendation at a properly constituted general or special meeting of the Society.

BY-LAWS ARTICLE IX***BOARD OF CLINICAL TOXINOLOGY CERTIFICATION CRITERIA***

- Section 1. To be eligible for certification as a Clinical Fellow, the applicant must meet the following criteria:
- A. Be a financial Member of the Society.
 - B. Be a registered medical practitioner. The Board shall have discretion in determining if a particular medical practitioner training scheme meets the requirements for designating eligibility as an applicant for Clinical Fellowship.
 - C. Have attended a training course in clinical toxinology. After the initial establishment phase of the Board, the training course must have been considered in detail by the Board Censor and approved by the Board.
 - D. Have a demonstrated clinical experience in diagnosis and treatment of patients suffering toxin-based disease. After the initial establishment phase of the Board, the clinical experience must have been considered in detail by the Board Censor and approved by the Board.

CONSTITUTION OF THE BOARD OF CLINICAL TOXINOLOGY OF THE INTERNATIONAL SOCIETY ON TOXINOLOGY

- E. Have undergone a program of training in clinical toxicology with an appropriate exit exam or assessment which the applicant has passed and which has been assessed by the Board Censor and approved by the Board. In the initial establishment phase this requirement may be waived, by Council for the initial Board appointees, and by the Board for initial Clinical Fellow appointees.
- F. Undertakes a regular continuing education program in clinical toxicology, assessed as suitable by the Board Censor and approved by the Board.
- G. Undertakes a regular reassessment of expertise in such a form and at such intervals as shall be determined by the Board Censor and/or the Board, from time to time, to ensure the Clinical Fellow continues to display the level of expertise required by the Board.

Section 2. The Board may, in cooperation with a national specialist medical college, board or association, permit the national body to undertake part of the continuing education and/or regular assessment process, in cooperation with the Board or its appointees, such as a local Censor, so that the Clinical Fellows undertaking this process may gain full recognition as an expert clinical toxicologist under the aegis of the national body, such as national “board certification” or “fellowship” awarded by the respective national body and this certification will be considered the primary evidence of eligibility for Clinical Fellowship of the Society. Where such an arrangement is established the annual fee for Clinical Fellowship may be adjusted, at the discretion of the Board, to take account of fees required by the national body.

Section 3. The Board Censor shall be the coordinator of the Board Certification and recertification process, both within the Society and in cooperation with national specialist medical colleges, boards or associations. The Board Censor shall be answerable to the Board. Decisions of the Board Censor regarding eligibility for Clinical Fellowship and related matters may be subject to challenge, at the discretion of the Board.



The city of Guarujá, State of São 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!

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



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 Kalil - 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 04/23/2013	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:

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Tels: 11-2532-6227

Organized by:



Supported by:



Invited and confirmed speakers

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

FEBRUARY 2013

VENOME NEWS

THE ELECTRONIC NEWSLETTER
OF THE VENOMICS EUROPEAN
PROJECT



ISSUE #1 WWW.VENOMICS.EU

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Editorial

Welcome to the the first issue of the VENOMICS project newsletter. Its purpose is to disseminate information about the progress of VENOMICS to the broadest possible audience, not only to toxicologists and biologists but also to an audience that may share our fascination with the potential of venomous creatures, large and small. Indeed, VENOMICS, beyond its obvious scientific goals, also wants to reach further and promote a message: venomous animals are sometimes deadly, often detested or feared but they also represent a treasure trove of molecules that may prove beneficial to a wide range of patients. Conserving, studying and exploiting the potential of these creatures is therefore a necessity if we want to take advantage of that spectacular potential.

Pierre Escoubas - Scientific and strategic coordinator



VENOMICS M12 meeting

The latest VENOMICS meeting marked the end of the first year of the project, and was attended by all consortium members. Held on september 28-29th in Marseille, France, it was the opportunity for VENOMICS members to take stock of the status of the initial research and technical development phase, 12 months after the beginning

of the project. The main advances concerned the release of the first venom transcriptomes, and the associated discovery of novel peptides, the demonstration of the first prototype of the VENOMICS database, and the successful production of several dozen peptides in *Escherichia coli*. The next consortium meeting will be held in April 2013 in Paris, France.

VENOMICS website traffic

Since the launch of the VENOMICS website visitor tracking tool on March 16th, 2012, more than 1400 internauts connected to the website for a cumulative total of ca. 2200 visits and 8600 web pages viewed. 38% of the visits originated from France, 13% from Spain, and 10% from the United States.

VENOME NEWS

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VENOMICS featured in National Geographic



The VENOMICS project is highlighted in this month issue of the prestigious National Geographic magazine (French version), with an article presenting the therapeutic potential of venoms.

Sample sourcing

Completion of the Biobank involves various strategies: field trips represent the main source of samples with two successful missions already conducted in Mayotte and French Guiana. But other strategies such as in-house breeding and purchase from specialized suppliers are also used for maximum efficacy.



Mayotte 2012 cone snail sourcing mission

VenomeTech, as leader of the VENOMICS Biobank and Sourcing work package, organized a mission in the French overseas territory of Mayotte in late March 2012 to collect the first cone snail samples. The

collecting team included Pierre Escoubas (CEO/VenomeTech), Frédéric Ducancel (Researcher/CEA), Renaud Vincentelli (Researcher/UMED), Norbert Verneau (Local teacher), and David Tuitou (Pharmacist and cone expert). More than 400 cone snail specimen were collected by snorkeling or diving, corresponding to 39 different species, a significant proportion of the Mayotte biodiversity (72 species recorded).



French Guiana 2012 sourcing mission

The VenomeTech team flew to French Guiana on October 30th, 2012 for a 12-days sourcing mission aiming at expanding the insect specimen samples in the VENOMICS biobank. Collection took place mostly in two areas: near the

"Petit Saut" field station, and in the forest near the swamps of Kaw, with different biotopes and species distribution. The mission fully fulfilled its objectives, with 17 wasp species collected, as well as ants, spiders and scorpions. A total of 1367 wasps and 1058 ants were dissected.



Project partner: Denis Palanque, photographer

Denis Palanque is a very talented nature photographer with a background in biology, who has been awarded by the National Geographic Magazine. Denis joined the

VenomeTech team French Guiana sourcing mission in november 2012 to illustrate the National Geographic article featuring the VENOMICS project. Denis is particularly committed to using his photography skills for the support of wildlife conservation and environmental protection. To discover Denis' work, visit www.denispalanque.com

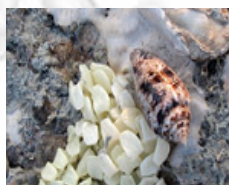
VENOME NEWS

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Featured consortium partner: Sistemas Genómicos

Sistemas Genómicos is a Spanish company specializing in Molecular Biology and Genetics. It has a leading position in Spain, and even in Europe, in the fields of DNA and RNA analysis, and possesses the capability to participate in international genome sequencing projects. Its role in the VENOMICS project concerns the sequencing of venom gland transcriptomes, using cutting-edge Next Generation Sequencing methods. Sequences of venom peptides will be stored in the VENOMICS database, and subsequently used for production of a peptide bank. Since the start of the project, the company has been able to successfully sequence several venom gland transcriptomes using Illumina technology.



Media exposure

From the beginning of the VENOMICS project, a great deal of effort has been placed in public exposure. Up to now, 7 articles have been published in various newspapers, and 2 TV reports have been broadcasted on French and Spanish channels. In addition, VENOMICS benefits from LinkedIn, Twitter, Facebook and Youtube accounts.



Upcoming events

- **PepCon 2013 - BIT's 6th Annual Protein and Peptide Conference** - 21 to 23 March 2013 - International Conference Center, Suzhou, China
- **61st American Society for Mass Spectrometry conference** - 9 to 13 June 2013 - Minneapolis, USA
- **11th congress of the Pan-American section of the International Society on Toxicology** - 3 to 8 November 2013 - Casa Grande Hotel, Guarujá, São Paulo, Brazil
- **Natural peptides to drugs 6th international congress** - 8 to 11 December 2013 - Zermatt, Switzerland

For more information on the VENOMICS project,
please visit www.venomics.eu

NEXT ASIA-PACIFIC SECTION OF IST CONGRESS

The 10th IST – Asia Pacific Meeting on Animal, Plant & Microbial Toxins

June 14th –18th, 2014

Changsha, China

Organized by:

College of Life Sciences, Hunan Normal University

Co-organized by :

Key Laboratory of Tropical Biological Resources of Ministry of Education,
Hainan University

The Bio-toxin Committee of the Chinese Society of Biochemistry and Molecular
Biology

Congress Chairman:

Songping Liang
Sulan Luo
Yun Zhang

Hunan Normal University
Hainan University
Yunnan Zoology Institute, Chinese
Academy of Science

International Scientific Committee:

Baldomero Olivera, USA
Gleen F. King, Queensland, Australia
Pierre Escoubas, Nice, France
Eugene Grishin, Moscow Russia
Anthony T Tu, Fort Collins, USA
Jan Tytgat, Leuven Belgium
Julian White, North Adelaide, Australia
P. Gopalakrishnakone, Singapore
Hodgson Wayne, Clayton Australia
Reto Stocklin, Switzerland
Songping Liang, Changsha, China
Sulan Luo, Haikou China
Yun Zhang, Kunming, China

Organizing Committee

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

Conference Venue

Maple Forest Hotel, Yuelu Mountain, Changsha City, China

Something important about the meeting:

1. About the meeting venue:
Changsha is the capital city of Hunan province, in south-central China, with the population of three millions. The Maple Forest Hotel is a quasi-five star hotel, located in the beautiful hill of Yuelu mountain, in Changsha City. The hotel has 400 bedrooms and 8 meeting rooms, which can hold 500, 300, 150, and 50 people, respectively. The price for a double bed room is about 70 USD. There are also three other hotels near the Maple Forest Hotel with the price of about 40-50 USD, which are good for students.
2. The registration fee of the meeting will be about 450-500 USD, which includes all of the food, bus fee between Changsha airport and the hotel for all the attendees.
3. We are going to invite about 30 outstanding scientists worldwide as invited speaker for the meeting. We will pay the hotel fee and the registration fee for all the invited speakers.



Changsha



Maple Forest Hotel

**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





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Tel: 1 520 884-9345
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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. mandarinia</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
	<i>Myrmecia</i> -- 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>Proxyllocopa 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
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
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
Northern Pacific Rattlesnake - <i>Crotalus oreganus oreganus</i>	\$400.00/1g	.....	\$270.00/500mg	\$72.90/100mg
Mohave Rattlesnake - <i>Crotalus scutulatus scutulatus</i> (A)	\$250.00/1g	.....	\$168.75/500mg	\$45.56/100mg
Mohave Rattlesnake - <i>Crotalus scutulatus scutulatus</i> (B)	\$1000.00/1g	.....	\$675.00/500mg	\$182.25/100mg
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
Western Massasauga - <i>Sistrurus catenatus tergeminus</i>	\$1000.00/1g	.....	\$675.00/500mg	\$182.25/100mg
Bushmaster - <i>Lachesis muta muta</i>	\$2000.00/1g	.....	\$1350.00/500mg	\$364.50/100mg

(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.

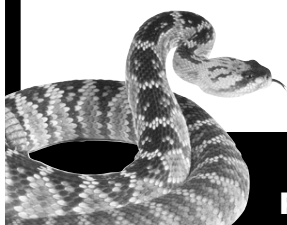
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Email: venoms@venomsupplies.comWeb: www.venomsupplies.com

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

<i>Lampona cylindrata</i>	\$360 / 10sac contents	\$720 / 25sac contents
<i>Latrodectus hasseltii</i>	\$500/50 sac contents.	

Bee Venom

Pure bee venom (<i>Apis mellifera</i>)	250mg	\$58
	(1-5gm)	\$130/gm
	(6-10gm)	\$116/gm
	(60gm and over)	\$95/gm

Amphibian Venoms

<i>Bufo marinus</i>	\$95/200mg	\$450/gm
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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
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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
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Agkistrodon c.contortrix	\$190.00
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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

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Rod. Brig. Faria Lima km 365

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herpetoscience@hotmail.com

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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 pyramidum</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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