UPCOMING MEETINGS

Pan-American Section IST
Hotel Real International, San Jose, in Costa Rica, April 18-22, 2010. Details available, both on the IST website and on a site for this Congress, at panamist.icp.ucr.ac.cr. The contact person for this meeting is Prof. Gutierrez, JOSE.GUTIERREZ@ucr.ac.cr.

Asia-Pacific Section IST
The next meeting of the Asia-Pacific Section of the IST will be in Vladivostock, Russia, in September 4-8, 2011, at the Conference Hall of the Primorsky Region Administration (details to be posted later). Current contact person is Marina Tretyak. The main topics are; toxin structure & mode of action, proteomics & genomics, drug development, clinical toxino-logy, toxins miscellaneous. Organising Committee Chairmen are; Prof. Eugene Grishin and Prof. Valentin Stonik..

European Section IST
September 11-15, 2011, Valen-cia, Spain. For details contact catedrasg@cac.es

IST World Congress
Hawaii, 2012, details pending.

The NP2D (Natural Peptides to Drugs, http://www.np2d.com) congress will take place in Zermatt (Switzerland) from April 11th to 14th, 2010. For further information, contact Dr. Reto Stocklin at reto.stocklin@atheris.ch.

FROM THE IST EXECUTIVE

In the next few weeks toxinologists will have the opportunity to participate in two exciting meetings; the Pan-American Section meeting in Costa Rica and the Natural Peptides To Drugs meeting in Zermatt. The former will again showcase the developments in toxino-logy in the “New World”. The latter will highlight the commercial pharmaceutical prospects for toxino-logy.

These meetings highlight progress in toxino-logy, but we also face challenges, not least to weld the toxino-logy community, through IST, into a cohesive community. Still, too many colleagues working in toxino-logy remain outside the IST. Every member should be trying to encourage these colleagues to join with us. Our membership is our strength and if it falls, it is our weakness. The IST President similarly views this issue of IST membership as crucial.

We need to understand what attracts members to IST and what makes them either disinclined to join, or let their membership lapse. I worry that too many national toxino-logy societies are garnering local membership for their organisation, but this is not translating into membership of IST as well. In the past IST has been supportive of national toxino-logy groups, but it is vital for the global health of toxino-logy that all these toxino-logy workers be IST members as well. How can we facilitate that happening. Please let Gopal and I know.

Lastly, as noted in an earlier email to the members, the last few months has been difficult and too busy for me, hence the delay with sending this Newsletter. Please accept my apologies for this.

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). It is hoped that the Membership Database can be made available to all IST members via the IST website, with password protection for access.

Because of file size, the Newsletter may be too big for some member’s email accounts and so it may be more practical to post the Newsletter on the IST website and just email members advising it is ready to download, via a link.

Last Newsletter I raised the issue of access to email addresses by non IST members. Members may prefer to keep email addresses more secure, using the new membership online database, once this is operational, rather than list addresses in the publicly accessible Newsletter. As IST Secretary, I will take direction from the membership on this issue and will not include members email addresses in the Newsletter until and unless it is clear that is what most members want. So far, though, IST members have not told me what they want regarding this matter.

Julian White
Secretary/Treasurer IST

IST STUDENT MEMBERS - THIS IS FOR YOU - ACTION PLEASE!

An announcement for the formation of a Special Interest Group for Student Toxinologists

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 creation of a Special Interest Group for Student Toxinologists has been proposed.

The aims of the Special Interest Group for Student Toxinologists would 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.

The IST is looking for student members interested in being a part of such a network, and for those students (preferably with experience with other organizations) who would like to be considered for leadership positions. 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
antgopal@nus.edu.sg
m.gentz@uq.edu.au

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
Dear Fellow Toxinology Friends,

We are well into 2010, almost 1 year after the last world congress in Brazil when the new council took charge. Membership of IST expects the IST officials to make the necessary changes to the IST so that it will be very relevant to the present times and emerging problems relating to toxinology. Members should be active in discussing these issues by e-mails with officials of IST so that we get regular feedback and based on the feedback the changes could be done. Therefore I urge all the members to raise issues and discuss it through e-mails and forums rather than to wait for world congress which comes only once in three years.

With the whole world concerned about global warming, climate change and preserving the biodiversity, I.S.T. also has a responsibility in utilizing the “natural” resources from where “natural toxins are derived and preserve them, rather than exploiting them.

Various committees and working groups have been established, such as “Nomenclature Committee” “Global Snake Bite Initiative (GSI)”, “Clinical Toxinology Network”, etc. The chairpersons of these groups should provide us with brief reports in the newsletter and this will be greatly appreciated by membership.

I also urge the IST council members to promote I.S.T. activities in the region such as National Meetings and also to recruit new members and to organize student activities. Council members are also encouraged to write brief reports to the newsletter on their achievements and their vision to the region. We must also recognize council members who have contributed a lot to IST, such as “Certificate of Appreciation” or “Patron of IST” or by any other form. Please let me have your suggestions on this. This will encourage council members to take a very active role in IST matters and membership drive.

All of us together can reenergize I.S.T. and make it to the next level in 2010. Together we can achieve.

P. Gopalakrishnakone.
Email: antgopal@nus.edu.sg

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. 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 Global Snakebite Initiative

Background
This important project is the first major undertaking resulting from the Global Issues in Clinical Toxinology Conference, held in Melbourne, Australia, November 2008. At this meeting, attended by stakeholders from all continents (except Antarctica), a steering committee was formed to move towards solutions for envenomed patients worldwide. It was considered by this meeting, attended by some senior IST members, that this process would best be promoted by close association with the IST, as a project under the IST banner. At the Asia-Pacific Section Congress in Vietnam in December 2008, a proposal was made by Prof. David Warrell, seconded by Prof. P Gopalakrishnakone (IST President), that "The Global Snakebite Initiative be formally endorsed as an official initiative of the IST." This was passed unanimously and confirmed unanimously at the IST World Congress in Recife, Brazil, March 2009. This important initiative is now officially a project of the IST. The Steering Committee, which contains a number of IST members, will produce a work plan and timeline to present to all IST members. A new website to promote the Initiative has been launched at www.snakebiteinitiative.org and it is to be hoped that this will progress to a major resource for the Initiative.

Global Snakebite Statistics
Recent research by Kasturiaratne et al, published in PLoS, has redefined global estimates of snakebite epidemiology. However, this is, to some extent, a "work in progress". One of the authors, Prof. Janaka de Silva (Sri Lanka) has kindly made available some of the data tables on which the study conclusions were based, with a “challenge” to IST members (and others) to provide more definitive data for each listed country. These tables will be listed on a separate page structure for the IST website (www.toxinology.org). All interested members are urged to peruse this information and contact Prof. de Silva if they have additional data that might be used to update the tables. This work may be considered as one section of the Global Snakebite Initiative.

An Update
Work on developing a Global Snakebite Initiative website (www.snakebiteinitiative.org) is continuing, and new content on the snakebite situation in India, Nepal and Nigeria will be coming online before the 31st December, thanks to contributions from Drs Vijay Pillay (India), Sanjib Sharma (Nepal) and Abdul Habib (Nigeria). The website is likely to receive a large increase in traffic in January, with the publication of a position paper on snakebite, and the role of the GSI, due out in The Lancet in the first weeks of the new year. Another paper is currently in press at Toxicon, and as soon as these two important publications are in print, we will provide links to the Journals from the GSI website. Anyone who is willing to take on a position as a country information contributor to the website is encouraged to contact David Williams (toxinologist@hotmail.com) who is currently coordinating the site content.

Emergency physician Dr Simon Jensen is interested in collating information on the present situation regarding first aid for snakebite, and the treatment of the local effects of snakebite, particularly by vipers and some cobra species. The aim of these two exercises is to enable a collaborative review of the current best practice in different countries and regions, so that GSI members can prepare a white paper on each topic for discussion at upcoming IST conferences, with the aim of producing practice guidelines for various regions of the world that can be made available freely through the website. Simon is eager to hear from anyone who would be interested and willing to collaborate with him to move this process forward. If you are able to make a contribution, please contact Simon by email (simondjensen@hotmail.com).

Finally, progress is being made in relation to determining how best to formally register the GSI as a charity NGO, so that funding for projects can be sought, and donations properly administered. A report will be submitted to GSI Committee members in February 2010, and hopefully there will be enough members present at the Pan-American IST meeting in Costa Rica next April, for this issue to be discussed and a resolution adopted that can then be presented to the IST Executive Committee for endorsement and approval.

David Williams on behalf of GSI
The Clinical Toxinology Initiative

The issue of specialist-level training for medical doctors, in the field of clinical toxinology, and credentialling of such training, was canvassed at the Global Issues in Clinical Toxinology Conference and again, through presentations, at the Asia-Pacific Section Congress in Vietnam. As a result a proposal was put by Prof. Julian White, seconded by Prof. Dietrich Mebs, that “The Asia-Pacific Section of the IST supports the development of a clinical toxinology initiative by the IST.” This was passed unanimously and confirmed unanimously at the IST World Congress in Recife, Brazil, March 2009. This important initiative is now officially a project of the IST. A Steering Committee will be established and a report to IST members. The IST will now work towards establishing clinical toxinology as an accredited and recognised medical specialty.

As part of this process, Prof. White has had initial informal discussions with some “key players” in the medical toxicology field, in North America, Europe and Australia. While very early in the whole process, these discussions have been positive and encouraging. Similar positivity was evident in discussions with WHO personnel, although again these were informal and the WHO has not yet been approached to support this initiative.

One likely outcome of developing clinical toxinology under the banner of the IST will be an increase in clinician membership and resurgence of clinical papers and posters at IST meetings, alongside the more basic and applied toxin research. The latter will not be in any way devalued by development of IST involvement in clinical toxinology. It is intended these two aspects of toxinology will grow in partnership.

It should also be recognised that the IST membership has been active in clinical toxinology training for many years, most notably the long-standing French course run through the Paris Museum of Natural History (now in its 30th year - congratulations to Max Goyffon), the International Clinical Toxinology Short Course (held in Adelaide since 1997), and the Brazilian course. The latter hosted discussions on clinical toxinology training at the IST World Congress in Brazil, March 2009, thanks to the efforts of Profs. Baravierra and Haddad.

The International Clinical Toxinology Short Course was held in Adelaide, Australia, March 2-7, 2010 and was successful, with participants rating the Course highly. Dates for the next Course, likely in 2012, have not yet been determined. The faculty for this course has been expanded and this will provide a nucleus of committed individuals to start active development of a full clinical toxinology course, likely spanning multiple institutions and continents.

We would like to hear from clinicians with an active involvement treating clinical toxinology cases who are interested in becoming part of the process of developing and staging a global full course. If you fit this picture, please contact Prof. White at julian.white@adelaide.edu.au.

What we will likely require is a series of hospitals, each with a significant number of toxinology cases likely over a short time period, and with resources to host clinical toxinology trainees. This will provide trainees with direct exposure to and experience with treating actual toxinology cases and in a relevant local setting. It is envisaged that trainees will be fully qualified doctors, probably with higher-level qualifications in a specialty such as emergency medicine, intensive care medicine, or tropical medicine.

In parallel with this we need to develop close working relationships with key medical craft groups in individual countries, as these will be the local certifying bodies for the training scheme. Again, IST members who might fit this profile are invited to contact Prof. White.

We should not expect this process to deliver a solution quickly. It will take considerable time to set up both training facilities in selected locations, and the requisite national craft-group agreements. However, if set up appropriately, the scheme should be independent of any one key person and so have a likely long term future and viability.

Julian White
A local Hawaii organising executive has been formed to develop a plan for the next IST World Congress. All IST members should work together to support Dr. Carl-Wilhelm Vogel, Dr. Angel Yanagihara and Dr. Marilyn Dunlap and their colleagues in ensuring Hawaii can host a successful Congress in 2012. The IST Council are working with our Hawaiian colleagues to determine the best time in 2012 to hold the Congress; July and September are months being considered. We would welcome feedback from members on this. We will be striving to ensure the Congress is affordable, including less expensive accommodation for student members. Several possible venues and hotels are being examined in an effort to deliver a great Congress at a good price. Because Hawaii is part of the US, members from some countries not covered by the US Visa-waiver program will need to organise visas well in advance. More on this as plans develop.

Organising an IST World Congress is not easy and requires a great deal of effort by local IST members. This work, on behalf of all of us, deserves to be valued by the membership and we should all see what we can do to assist the local organisers. It is particularly important to gain an idea of likely attendance to allow budget planning. Therefore, once plans are further advanced, we will ask all members to indicate if they definitely intend to attend the meeting, or will definitely not be coming. Once a Scientific Organising Committee is established for the Congress, input from members on possible meeting content will be sought.

For the present, members should communicate re the Congress via the Secretary IST (julian.white@adelaide.edu.au) and President (antgopal@nus.edu.sg).
Welcome / Bem-vindos / Bienvenidos

You are most welcome to join the 10th Meeting of the Pan American Section of the International Society on Toxinology (IST) in San José, Costa Rica.

This meeting will allow both basic and clinical researchers to exchange their knowledge and expertise on toxins derived from animals, plants and microorganisms.

Contributions on the molecular, biochemical, pharmacological, toxicological and immunological properties of toxins are welcomed.

The meeting will take place from April 18th to April 22nd, 2010, at the Hotel Real Intercontinental, in San José, Costa Rica, at the heart of Central America.

Costa Rica is well known for its beautiful landscapes, cool volcanoes, warm beaches and amazing biodiversity.

This meeting will provide you with an excellent opportunity for scientific and social interaction. Don’t miss it...

We look forward to welcoming you in San José!

With warmest regards,
Organizing Committee

Message from
Dr. P. Gopalakrishnakone
President of The IST

ICP
Instituto Clodomiro Picado

ICT
Instituto Costarricense de Turismo

Photo Gallery

10th Meeting of the Pan American Section of the International Society on Toxinology
Sponsored by Universidad de Costa Rica UCR and Instituto Clodomiro Picado
The topic of the congress is: “Animal, plant and microbial toxins—From basic to translational venomics. Besides discussing the latest developments in this discipline, the major objective of the meeting is to facilitate contacts between groups of basic and clinical research, molecular biology and proteomics technologies, which may help creating synergies to develop new strategies to alleviate the serious problems caused by envenoming by animal, plant and microbe toxins.”
March 1, 2010

Dear Professor White,

Thank you very much for accepting my invitation to join the International Scientific Committee of the 9th IST Asia Pacific Meeting on Animal, Plant and Microbial Toxins which will be held in Vladivostok, Russia on September 4–8, 2011.

I am pleased to inform you that the International Scientific Committee is set up and includes (in alphabetical order):

- Jou-Fang Deng  Taiwan
- Nobuhiro Fusetani  Japan
- Antony Gomes  India
- P. Gopalakrishnakone  Singapore
- Songping Liang  China
- Chau Van Minh  Vietnam
- Tadeusz F. Molinski  USA
- Anthony T. Tu  USA
- Jan Tytgat  Belgium
- Julian White  Australia

Do not hesitate to contact me if you have any suggestions re the Congress Program. Thank you in advance for your effective collaboration.

Sincerely yours,

EUGENE GRISHIN

Program Committee Co-Chairman
President, IST Asia Pacific Section

Phone: +7(495) 330-5892
E-mail: grev@mx.ibch.ru, AP-IST@ibch.ru, ap.ist.2011@gmail.com
1st National Conference on Animal, Microbial, Plant Toxins & Snakebite Management
“BIO-TOXINS IN HEALTH & DISEASE”
11-12 December, 2010
Jointly Organized by
Indian Institute of Chemical Biology &
KPC Medical College & Hospital, Kolkata, India

Organizing Secretary:
Dr. Aparna Gomes
Indian Institute of Chemical Biology,
4, Raja S.C.Mullick Road
Kolkata – 700 032, India

Jt. Organizing Secretary:
Prof. Sandip Bandyopadhyay
KPC Medical College,
1F, Raja S. C. Mullick Road
Kolkata – 700 032, India

AN INVITATION
With great pleasure, we invite you all to the 1st National Conference on Animal, Microbial, Plant Toxins & Snakebite Management to be held in Kolkata on 11-12 December, 2010. This conference aims to provide a common platform for all researchers (clinicians and non clinicians) working on different aspects of natural toxins of animal, microbial and plant, snakebite management and environmental issues related to natural toxins, to discuss their research findings. The conference will consist of plenary sessions, oration, invited lectures, oral and poster presentation.

OBJECTIVES
To create awareness and understanding of issues related to natural toxins (animal, microbial, plant) and snakebite management.
- To identify scientists working on natural toxins
- To establish research state of art on natural toxins
- Snakebite management current status, problems and future
- Application of toxins in medicine and biotechnology
- Environmental issues related to natural toxins

SCIENTIFIC AREAS TO BE COVERED
- Animal Toxins
- Microbial Toxins
- Plant Toxins
- Toxin Miscellaneous
- Snakebite Management
- Antivenom/Antidotes
- Environmental Issues & Natural Toxins

Your involvement would be a great help to attract scientists and audience for this event. Thank you in advance for your participation and see you at KPC & IICB, Kolkata.

Please contact Organizing Committee
Dr. Aparna Gomes
Organizing Secretary
AMPTOX2010
Drug Development Diagnostics and Biotechnology Division
Indian Institute of Chemical Biology
4, Raja S.C. Mullick Road. Kolkata-700032, India
Contact e-mail : amptox2010@gmail.com
Phone : +91-98311 85589 & +91-94331 39031

Watch out Conference Website (Coming very soon)
EAPCCT
European Association of Poisons Centres and Clinical Toxicologists

XXX International Congress of the European Association of Poisons Centres and Clinical Toxicologists

11-14 May 2010, Bordeaux, France, at the Bordeaux Convention Centre

1. General Information
2. Submitting Abstracts
3. Posters
4. Registration
5. Venue and Accommodation
6. Deadlines
7. Information
8. Congress Stands
9. Local Information and Tourist Attractions

1. General Information:
   - Congress Brochure (pdf 125 kb)
   - Provisional programme (pdf 100 kb)
   - Precongress Lectures (pdf 10 kb)
   - Plenary Lectures (pdf 10 kb)

   The organisation of this Congress is supported by Prof. Régis Bédry, Bordeaux.
   The City of Bordeaux will generously offer a welcome reception at the City Hall.

2. Submitting Abstracts:
   - The on-line abstract submission is closed.
   - Guidance on how to format and submit abstracts (pdf 65 kb).
   - Criteria for scientific review of abstracts submitted to EAPCCT Congresses (pdf, 28 kb)

   Members of the Central European and Accession Countries Committee are ready to help
   scientists who are not used to presenting data and structuring an abstract. If you think that
   a review of your abstract before final submission might help you, please feel free to send
   your abstract as soon as possible, and before the 20th of October, to Vincent Daniel,
   chairman of the committee.

   Members of the committee will respond as quickly as possible so that you will be able to
   submit your abstract in time.
   Please note that this pre-review process is not a guarantee of acceptance of your abstract
   by the Scientific Committee.

   The Young Investigator Award

3. Posters:
   - The format of the posters will be portrait.
   - Size of poster boards: 170cm (height) x 100cm (width).

4. Registration for the Congress:
   - Participants wishing to register for the meeting can use the Registration Form
     (*.doc 90 kb, also as printable file pdf, 25 kb), but
     Online registration is available here and is preferred.
5. Accommodation: There are a number of hotels of all categories in the close proximity of the Conventions Centre (Map). ACCOR hotel rooms at special rates can be booked here via online booking. Note: Please choose first time of arrival and length of stay before you search for the hotels. The room rates include breakfast.

6. Deadline Dates: Receipt of abstracts November 18, 2009
Registration at special rates February 19, 2010
Reserving of accommodation at special rates .
Deadline for presenters to register .

7. For information: EAPCCT General Secretary
Ms Alison M. Good
NPIS (Edinburgh), Scottish Poisons Information Bureau, Royal Infirmary
51 Little France Crescent
EDINBURGH EH16 4SA
tel: +44 131 242 13 81,
fax: +44 131 242 13 87

2010 North American Congress of Clinical Toxicology
Denver, CO - October 7-12, 2010

2010 NACCT General Information

Abstracts now being submitted Click to Learn More

The American Academy of Clinical Toxicology and the American Association of Poison Control Centers is pleased to announce that the North American Congress of Clinical Toxicology 2010 and associated pre-meeting functions will be held at the Hyatt Regency at Colorado Convention Center, CO - October 7-12.

This annual conference allows an opportunity for physicians, nurses, pharmacists, and scientists from around the world to participate in the sharing of knowledge on a wide variety of issues in clinical toxicology.

In addition, there will be multiple original research papers presented, a number of symposia, as well as other traditional and novel continuing education sessions.

Abstracts
Learn More about Submitting an Abstract

Awards
International Travel Scholarship

Continuing Education

Registration and Housing
Hyatt Regency at Colorado Convention Center, CO
Room Reservations
Les Animaux Venimeux et Vénéneux

Systématique, biologie, toxicologie

Année 2009 - 2010

MODULE I  Responsables : Max Goyffon et Michel Thiebaux

Vénimologie générale - Vertébrés terrestres
Lundi 18 janvier - Vendredi 22 janvier 2010

Lundi 18 janvier 2010
09h00 - 09h15  Accueil
09h15 - 10h45  La fonction venimeuse
C. Bourg, Muséum
11h00 - 12h15  Toxicité aiguë des venins et neutralisation par les antivenins
J.P. Caupin, IRD, Paris
14h00 - 15h15  Venins génotypiques, protéomiques et bio-informatiques
E. Soule, Arènes, GEN
15h30 - 17h30  Les amphibiens
J. Jais, Muséum

Mardi 19 janvier 2010
09h00 - 10h45  Les serpents : anatomie de l’opercule venimeux
J.P. Caupin, Muséum
11h00 - 12h30  Visite du vivarium de la ménagerie ou films sur les serpents
14h00 - 15h30  Visite du vivarium de la ménagerie ou films sur les serpents
15h30 - 17h00  Les serpents : systématique moléculaire
N. Vial, Muséum

Mercredi 20 janvier 2010
09h00 - 11h30  Biologie, comportements des serpents
S. Grasset, CNRS, Villers-en-Bois
14h00 - 16h45  Composition et mode d’action des venins de serpents Viperidae
S. Grasset, CNRS, Villers-en-Bois
16h45 - 17h30  Les mammifères venimeux et les oiseaux vénéneux
J.-L. Bertier, Muséum

Jeudi 21 janvier 2010
09h00 - 10h30  Composition générale et mode d’action des venins de serpents Elapidae
D. Serre, CEA
10h45 - 12h15  Immunodéfenses des envenimations phobidienne
M. Sore, Laboratoire du Val d’Ornois, Versailles
14h00 - 16h30  Épidémiologie et clinique des envenimations phobidienennes
J.P. Caupin, IRD, Paris

Vendredi 22 janvier 2010
09h00 - 10h15  Inhibiteurs naturels des PLA2, Résistance naturelle aux venins
O. Gace, INRA, France
10h30 - 12h00  Les Aracnéaspidides : biologie et venins
F. Ducisier, CEA
14h15 - 15h30  Anticoagulants recombinants neutrophilsien
F. Bourd, Muséum et Tours
15h45 - 17h00  Synthèse et conclusion
J.P. Caupin, IRD, Paris

MODULE II  Responsables : Christine Rollard et Max Goyffon

Arthropodes terrestres - Parasites
Lundi 15 mars - Vendredi 19 mars 2010

Lundi 15 mars 2010
09h00 - 10h15  Accueil
10h45 - 12h15  Présentation des arthropodes
C. Bourg, Muséum
14h00 - 16h30  Les insectes hyménoptères
J. Weisberg, Muséum
16h45 - 17h30  Les venins d’hyménoptères
M. Goyffon, Muséum

Mardi 16 mars 2010
09h00 - 12h15  Les insectes piqueurs autres que les hyménoptères
F. Bourd, IRD, Paris
14h00 - 16h30  Les protistes, Les vers parasites, Effets venimeux
F. Bourd, IRD, Paris
15h45 - 17h15  Composition et activités biologiques de la salive des diptères
Y. Chouquet, Institut Pasteur, Paris

Mercredi 17 mars 2010
09h00 - 12h30  Les myriapodes : systématique, biologie et fonction venimeuse
J.J. Chippaux, CNRS et Muséum
14h00 - 16h15  Les aracnides : systématique et biologie venimeuse
S. Briant, IRD, Paris
16h30 - 17h00  Les arachnides : systématique
Y. Corrè, Muséum

Jeudi 18 mars 2010
09h00 - 12h30  Les araignées : systématique, biologie, répartition, espèces dangereuses
M.-L. Cézier, CEA
14h00 - 15h15  Venins d’araignées et canaux ioniques
S. Doci, CNRS, Sophia Antipolis
15h30 - 17h45  Les scorpions : systématique, biologie, répartition
J.-J. Geoffroy, CNRS et Muséum

Vendredi 19 mars 2010
09h00 - 12h00  Les venins de scorpions
C. Legros, Angers
14h00 - 16h15  Aracnisme - Scorpionisme
M. Goyffon, Muséum

MODULE III  Responsables : Christine Rollard et Nadia Améziane

Faune marine - Écosystèmes marins
Lundi 17 mai - Vendredi 21 mai 2010

Lundi 17 mai 2010
09h00 - 10h30  Panorama de la faune venimeuse et vénéneuse de la mer Méditerranée
S. Bigogno, Montpellier
10h45 - 12h00  L’électrophysiologie canine : méthode d’étude des biotoxines d’origine marine
C. Matel, DGA
14h00 - 17h00  Les éponges et les ascidies
M. Durand, Muséum

Mardi 18 mai 2010
09h00 - 10h30  Les mollusques
P. Patard, Arènes, GEN
10h45 - 12h30  Venins de cônes : diversité de leurs peptides et cibles moléculaires
S. Malgo, CNRS, Gif-sur-Yvette
14h00 - 15h45  Les mollusques bivalves toxiques
A. Lefebvre, IFREMER, Nantes
16h00 - 17h00  Les annélidés
F. Mancini, Muséum

Mercredi 19 mai 2010
09h00 - 12h00  Les poissons venimeux
C. Ochmann, IFREMER, Châtillon-sur-Morin
14h00 - 15h30  Les poissons venimeux (suite)
S. Baghdigian, CNRS, Gif-sur-Yvette
15h45 - 17h00  Les bryozoaires
J.-L. D’Hondt, Muséum

Jeudi 20 mai 2010
09h00 - 11h45  Les éponges et les ascidies
M. L. Boulanger-Rolland, MAR
11h15 - 12h45  Les échinodermes
N. Amidon, Muséum
14h00 - 17h00  Les toxines ciguateres et ciguatarea
F. Bourd, IRD, Paris

Vendredi 21 mai 2010
09h00 - 10h45  Intoxications par consommation de chair de tortues marines
J. Jais, Muséum
10h45 - 12h00  Les serpents marins (sans suivi d’un film)
J. Jais, Muséum
14h00 - 16h00  Les serpents marins (suite)
J. Jais, Muséum

Renseignements, inscriptions et coordination :
Service de la formation continue, MUSÉUM
43, rue Buffon, 75005 Paris
Tel : 01 40 79 48 85
Fax : 01 40 79 39 06

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Jean-Philippe Chipaux
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4, avenue de l’Observatoire - 75270 Paris cedex 6
chipaux@ird.fr

© IRD - J.-P. Chipaux et M. Chroll, Ch. R, F. G and J.-F. T
Dear Professor Julian White,

I am glad to inform you that:
The 10th Congress of APAMT will be organized from
November 24 to 26, 2010 in Hanoi, Vietnam.
You are warmest wellcome!
The website of the Congress will be finished at the end of February.

Looking forward to receive your reply.

Sincerely yours,

Trinh Xuan Kiem

Office: Venom Research & Antivenom Production Unit
The National Poison Control Center of Vietnam
78 Giai Phong Road, Hanoi, Vietnam
Mobile: + 84 169 9837 919
Fax: + 84 4 3641 0921
Email: kiemtrinhxuan211@yahoo.com
IST Article 02-2010 – Viper Day / Summer Position

Viper Day
As the only Viper Resource Center in the United States, the Natural Toxins Research Center (NTRC) at Texas A&M University-Kingsville (TAMUK) has a mission to provide global research, training and resources that will lead to the discovery of medically important toxins found in snake venoms. Part of the task of providing training for venom researchers is the recruitment of students from high school through Ph.D candidacy, and introducing them to the world of venom research through special events and intern programs.

For the past 11 years, the NTRC has invited area high school students and teachers to visit its facilities on the campus of TAMUK for Viper Day. Viper Day is the NTRC’s annual outreach program to introduce venom and biomedical research to soon-to-graduate high school students. This program is used to encourage the pursuit of degrees and careers in the sciences. This year, eight scholarships were awarded at Viper Day 2010, held on Friday, January 22, with eight high schools in attendance, totaling 400 students taking part in the event.

This year’s Viper Day Keynote Speaker was Celia Garcia-Prieto, Ph.D., and an alumna of the NTRC. She is now a Postdoctoral Fellow at M.D. Anderson Cancer Center. She gave an overview of her path from college student to Ph.D., and gave the students an overview of her work at M.D. Anderson, explaining the mechanisms of cancer treatments. The keynote speaker is always a former NTRC student who has moved forward into a rewarding career. Many have become biomedical researchers, physicians, and dentists, and have been very successful in their careers.

The NTRC Researchers were on-hand to explain their research projects, and a week prior the Viper Day, the schools were all sent copies of these research abstracts, so they could be reviewed in the classrooms. The students then use this knowledge in a trivia game put together along the lines of television’s, “Who Wants to be a Millionaire.” One student from each high school was randomly picked to play for a chance to win up to $100.00 by answering questions drawn from the research abstracts. Scholarships were awarded to encourage attendees to attend college and to seek careers in the sciences.

During the afternoon, all 400 students were led on tours of the NTRC lab facilities. The NTRC researchers took rotations of students to show them their workspace and to explain the goals of their research and what they hope to find with the tests and assays they run each day. Visitors were encouraged to ask questions of the researchers, and heard overviews on how the NTRC characterizes, tests, clones and stores venom and venom products. For some students, this was the first time they had been into a functioning research environment.

Before heading home, the visitors were taken through the newly constructed NTRC Serpentarium, where the curator and technicians were on-hand to answer any questions about animal husbandry and the types of snakes and their place in biomedical research.

The NTRC’s Viper Day program has proven to be a popular event for high school science teachers of South Texas, and some schools travel over an hour to attend. Due to the annual response to Viper Day invitations, plans are being explored to expand the attendance capacity for future years. This year’s attendees were invited to apply for the 2010 Summer Research Program, set to start in June.
**Summer Research Program for Students**

The 2010 Summer Research Program will be the second year the NTRC has hired students from both high school and universities in the United States, and one teacher or college professor, into the NTRC facilities and train them in the characterization and purification of snake venoms. Applications for the students and teaching positions are being accepted until May 24, 2010. This program is part of the American Recovery and Reinvestment Act of 2009 passed by the United States Congress and all students and faculty must be USA citizens or be permanent residents.

The NTRC trains the students in every aspect of its venom research, from planning and performing assays and keeping publication-ready lab journals, to explaining their activities at weekly presentations, complete with slideshows of their results. Dr. John C. Perez works with them each day with lectures to explain the rationale behind the math and procedures used in the labs. The main idea of this program is that students learn best when able to work in a mentoring relationship with an experienced researcher. Being able to apply their knowledge in a practical laboratory setting takes learning out of the classroom and shows students the day-to-day duties of a research scientist.

In last year’s Summer Program, the students were placed into four groups, and each group was given a different research assignment, such as purification of venoms with instrumentation, tissue culture assays for testing the effects of toxins, other activity assays for screening useful molecules that have important biomedical applications, and cloning of medically important toxins. NTRC mentors worked with the student through each stage of their training and research. In order to best benefit the students, a visiting scientist position was included in the American Recovery and Reinvestment Act of 2009, to add to the number of mentors available during the Summer Program. For anyone wishing to apply, the application may be found at [http://www.ntrc.tamuk.edu/summerapplication.html](http://www.ntrc.tamuk.edu/summerapplication.html), and sent via email to kanmd00@tamuk.edu, or by fax to (361) 593-3798.
SCORPIONS OF THE WORLD

A NEW GUIDE FROM NAP EDITIONS
Publication time June 2010
All information: www.napeditions.com
Authors: Roland Stockmann and Eric Ythier

A comprehensive insight into scorpion biology. The book features the biology of scorpions (their anatomy and major biological functions, ecology, radiation resistance). It also goes into the venomology and medical importance of species across the world (venoms and treatment of envenomation, scorpion control). The myths and legends surrounding scorpions also appear, and useful advice is given for people wishing to rear these animals in captivity.

Over 350 species of scorpions described and illustrated by biogeographical area. Descriptions with essential information to enable non-specialists to recognise easily each species illustrated, with notes on toxicity, habitat, habits and distribution.

The guide presents the taxonomy and diversity of scorpions and provides a taxonomic key for families and a description of genera, plus a complete list of currently known species and their distribution.

Over 400 photos of live scorpions
Precise description of each species with details on the animals’ biology, along with distribution maps.
Line drawings help clarify decisive anatomical characters.

Over 500 pages
Format 13 x 20 cm
Bound volume, hardback

Contact: NAP EDITIONS – 3 chemin des Hauts Graviers – 91370 Verrières – France
Tel: (+33) 1 60 13 59 52

The authors:
Roland Stockmann is Honorary Lecturer of the Université-Pierre-et-Marie-Curie (Paris VI). For many years he was also correspondent of the Muséum National d’Histoire Naturelle in Paris.

Eric Ythier, an entomologist and ecotoxicologist, has worked in the plant protection industry for many years. He is currently in charge of the Department of Ecotoxicology and Public Health in a private scientific research organization.
# CATALOGUE OF INSECT VENOMS (2009-2010)

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.).

<table>
<thead>
<tr>
<th>Prod. No.</th>
<th>VENOM</th>
<th>(LD₅₀ mg/kg, mice)</th>
<th>VENOM PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 mg 5 mg 25 mg 100 mg</td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL WASPS</strong></td>
<td>(LD₅₀)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W-10</td>
<td><em>V. pensylvanica</em></td>
<td>(6.4) 50 225 1000</td>
<td>*</td>
</tr>
<tr>
<td>W-19</td>
<td>other species</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>W-20</td>
<td><em>V. mandarinia</em></td>
<td>(4.1) 50 225 1000</td>
<td>*</td>
</tr>
<tr>
<td>W-21</td>
<td><em>V. tropica</em></td>
<td>(2.8) 50 225 1000</td>
<td>*</td>
</tr>
<tr>
<td>W-29</td>
<td>others **</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>W-30</td>
<td><em>P. canadensis</em></td>
<td>(2.5) 50 225</td>
<td>*</td>
</tr>
<tr>
<td>W-31</td>
<td><em>P. flavus</em></td>
<td>(3.8) 40 180 800</td>
<td>*</td>
</tr>
<tr>
<td>W-32</td>
<td><em>P. canadensis</em></td>
<td>(2.5) 50 225</td>
<td>*</td>
</tr>
<tr>
<td>W-33</td>
<td><em>P. erythrocephalis</em></td>
<td>(1.5) 50 225</td>
<td>*</td>
</tr>
<tr>
<td>W-39</td>
<td><em>Polistes</em> sp. as available **</td>
<td>(1.5) 40 180 800</td>
<td>*</td>
</tr>
<tr>
<td>W-40</td>
<td><em>Brachygastra</em></td>
<td>(1.5) 60 270 1200</td>
<td>*</td>
</tr>
<tr>
<td>W-50</td>
<td><em>Synoeca</em></td>
<td>(2.7) 60 270 1200</td>
<td>*</td>
</tr>
<tr>
<td>W-60</td>
<td><em>Parachartergus</em></td>
<td>(5) 70 300 1400</td>
<td>*</td>
</tr>
<tr>
<td>W-70</td>
<td><em>Polybia</em></td>
<td>(6) 80 350</td>
<td>*</td>
</tr>
<tr>
<td>W-71</td>
<td><em>P. similima</em></td>
<td>(4.1) 80 350</td>
<td>*</td>
</tr>
<tr>
<td>W-72</td>
<td><em>P. occidentalis</em></td>
<td>(5) 100</td>
<td>*</td>
</tr>
<tr>
<td>W-80</td>
<td><em>Agelaia</em></td>
<td>(5.6) 140</td>
<td>*</td>
</tr>
<tr>
<td>W-90</td>
<td><em>Belonogaster</em></td>
<td>(3) 80 350</td>
<td>*</td>
</tr>
<tr>
<td><strong>SOCIAL BEES</strong></td>
<td>(LD₅₀)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-10</td>
<td><em>A. mellifera</em></td>
<td>(2.8) 20 90 400 1400</td>
<td></td>
</tr>
<tr>
<td>B-11</td>
<td><em>A. mellifera</em> Africanized bees</td>
<td>(2.8) 20 90 400 1400</td>
<td></td>
</tr>
<tr>
<td>B-12</td>
<td><em>A. mellifera</em> queens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-13</td>
<td><em>A. dorsata</em></td>
<td>(2.8) 40 180 800 2800</td>
<td></td>
</tr>
<tr>
<td>B-14</td>
<td><em>A. cerana</em></td>
<td>(3.1) 55 245</td>
<td>*</td>
</tr>
<tr>
<td>B-19</td>
<td>others (A. florea, etc.) **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-20</td>
<td><em>B. sonorus</em></td>
<td>(12) 50 225 1000</td>
<td>*</td>
</tr>
<tr>
<td>B-21</td>
<td><em>B. impatiens</em></td>
<td>(12) 50 225</td>
<td>*</td>
</tr>
<tr>
<td>B-29</td>
<td>other species **</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ANTS -- FORMICIDAE

*Pogonomyrmex* -- harvester ants

<table>
<thead>
<tr>
<th>Prod. No.</th>
<th>VENOM</th>
<th>(LD₅₀ mg/kg, mice)</th>
<th>VENOM PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-10</td>
<td><em>P. barbatus</em></td>
<td>(0.6)</td>
<td>50  225  1000  3500</td>
</tr>
<tr>
<td>A-11</td>
<td><em>P. maricopa</em></td>
<td>(0.12)</td>
<td>60  270  1200  4200</td>
</tr>
<tr>
<td>A-12</td>
<td><em>P. occidentalis</em></td>
<td>(0.5)</td>
<td>70  315  1400  *</td>
</tr>
<tr>
<td>A-13</td>
<td><em>P. rugosus</em></td>
<td>(0.7)</td>
<td>50  225  1000  3500</td>
</tr>
<tr>
<td>A-15</td>
<td><em>P. desertorum</em></td>
<td>(0.7)</td>
<td>160  *  *</td>
</tr>
<tr>
<td>A-19</td>
<td><em>Pogonomyrmex</em> sp. as available</td>
<td></td>
<td>45  200  900  3200</td>
</tr>
</tbody>
</table>

*Myrmecia* -- bull ants

<table>
<thead>
<tr>
<th>Prod. No.</th>
<th>VENOM</th>
<th>(LD₅₀)</th>
<th>VENOM PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-20</td>
<td><em>M. gulosa</em></td>
<td>(0.18)</td>
<td>60  270  1200  4200</td>
</tr>
<tr>
<td>A-21</td>
<td><em>M. tarsata</em></td>
<td>(0.18)</td>
<td>60  270  1200  *</td>
</tr>
<tr>
<td>A-22</td>
<td><em>M. browningi</em></td>
<td>(0.18)</td>
<td>70  315  *</td>
</tr>
<tr>
<td>A-23</td>
<td><em>M. rufina</em></td>
<td>(0.35)</td>
<td>70  315  *</td>
</tr>
<tr>
<td>A-24</td>
<td><em>M. similis</em></td>
<td>(0.21)</td>
<td>70  315  *</td>
</tr>
<tr>
<td>A-25</td>
<td><em>M. pilosula</em></td>
<td>(5.7)</td>
<td>100  *</td>
</tr>
<tr>
<td>A-30</td>
<td><em>Pachycondyla (Neponera) villosa</em></td>
<td>(7.5)</td>
<td>60  270  *</td>
</tr>
<tr>
<td>A-31</td>
<td><em>P. (Neponera) aptica</em></td>
<td>(&gt;16)</td>
<td>70  *</td>
</tr>
<tr>
<td>A-32</td>
<td><em>P. crassina</em></td>
<td>(2.8)</td>
<td>80  *</td>
</tr>
<tr>
<td>A-33</td>
<td><em>P. (Megaonera) foetens</em> (Metabele ant)</td>
<td>(130)</td>
<td>70  315  *</td>
</tr>
<tr>
<td>A-34</td>
<td><em>P. (Patotyrex) tarsatus</em> (stink ant)</td>
<td>(64)</td>
<td>50  225  1000  3500</td>
</tr>
<tr>
<td>A-35</td>
<td><em>P. (Bothroponera) striatula</em></td>
<td>(9)</td>
<td>70  *</td>
</tr>
<tr>
<td>A-36</td>
<td><em>Termitopone commutata</em></td>
<td>(10)</td>
<td>70  315  1400  *</td>
</tr>
<tr>
<td>A-40</td>
<td><em>Platythrea lamellosa</em></td>
<td>(11)</td>
<td>70  315  *</td>
</tr>
<tr>
<td>A-50</td>
<td><em>Diacamma</em> sp. **</td>
<td>(35)</td>
<td>100  450  *</td>
</tr>
<tr>
<td>A-60</td>
<td><em>Dinoponera gigantea</em></td>
<td>(11)</td>
<td>60  270  1200  4200</td>
</tr>
<tr>
<td>A-70</td>
<td><em>Paraponera clava</em> (bullet ant)</td>
<td>(6.0)</td>
<td>60  270  1200  4200</td>
</tr>
<tr>
<td>A-80</td>
<td><em>Ectatomma tuberculatum</em></td>
<td>(1)</td>
<td>60  270  *</td>
</tr>
<tr>
<td>A-81</td>
<td><em>E. quadridens</em></td>
<td>(17)</td>
<td>60  270  *</td>
</tr>
<tr>
<td>A-90</td>
<td><em>Odonomachus</em> sp. **</td>
<td>(33)</td>
<td>60  275  *</td>
</tr>
<tr>
<td>A-110</td>
<td><em>Tetraponera</em> sp. **</td>
<td>(.35)</td>
<td>140  600  *</td>
</tr>
<tr>
<td>A-120</td>
<td><em>Tetribognathus aethiopicus</em></td>
<td>(8.0)</td>
<td>80  360  *</td>
</tr>
</tbody>
</table>

## SOLITARY WASPS AND BEES

Spider wasps -- Pompilidae

*Pepsis* sp. ** | (65) | 60  270  1200  4200 |

Mutillid wasps -- Mutillidae

*Dasymutilla* sp. ** | (71) | 70  315  1400  *   |

Other wasps (Scoliidae, Tiphidae, Sphecidae, Eumenidae, etc.) **

Carpenter bees -- Xylocopa

<table>
<thead>
<tr>
<th>Prod. No.</th>
<th>VENOM</th>
<th>(LD₅₀)</th>
<th>VENOM PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB-10</td>
<td><em>X. californica</em></td>
<td>(21)</td>
<td>50  225  1000  *</td>
</tr>
<tr>
<td>SB-11</td>
<td><em>X. veripuncta</em></td>
<td>(33)</td>
<td>55  245  *</td>
</tr>
<tr>
<td>SB-20</td>
<td><em>Proxilocopa ruja</em></td>
<td>(11)</td>
<td>100  450  *</td>
</tr>
<tr>
<td>SB-39</td>
<td>Other bees**</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

*Inquire for prices and availability.

**Available species provided; exact determinations usually included.
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.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Diamondback Rattlesnake</td>
<td>Crotalus atrox</td>
<td>$125.00</td>
</tr>
<tr>
<td>Texas Coral Snake</td>
<td>Micrurus tener</td>
<td>$200.00</td>
</tr>
<tr>
<td>Prairie Rattlesnake</td>
<td>Crotalus viridis viridis</td>
<td>$70.00</td>
</tr>
<tr>
<td>Florida Coral Snake</td>
<td>Micrurus fulvius</td>
<td>$180.00</td>
</tr>
<tr>
<td>Northern Pacific Rattlesnake</td>
<td>Crotalus oreganus helleri</td>
<td>$400.00</td>
</tr>
<tr>
<td>Prairie Rattlesnake</td>
<td>Crotalus viridis viridis</td>
<td>$70.00</td>
</tr>
<tr>
<td>Red Spitting Cobra</td>
<td>Naja pallida</td>
<td>$100.00</td>
</tr>
<tr>
<td>Desert Massasauga</td>
<td>Sistrurus catenatus edwardsii</td>
<td>$100.00</td>
</tr>
<tr>
<td>Western Massasauga</td>
<td>Sistrurus catenatus tergeniinus</td>
<td>$100.00</td>
</tr>
<tr>
<td>Bushmaster</td>
<td>Lachesis muta muta</td>
<td>$200.00</td>
</tr>
</tbody>
</table>

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 opportunoites 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
## Lyophilised Venoms

### Snakes

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Price(US$)/200mg</th>
<th>Price(US$)/gm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acanthophis antarcticus</td>
<td>$170</td>
<td>$745</td>
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<tr>
<td>Acanthophis praelongus</td>
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<td>$845</td>
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<tr>
<td>Agkistrodon bilineatus</td>
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<td>$200</td>
</tr>
<tr>
<td>Austrelaps superbus</td>
<td>$400</td>
<td>$1,600</td>
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<tr>
<td>Austrelaps labialis</td>
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<td>$3,000</td>
</tr>
<tr>
<td>Bitis arietans</td>
<td>$70</td>
<td>$300</td>
</tr>
<tr>
<td>Bitis rhinoceros</td>
<td>$75</td>
<td>$340</td>
</tr>
<tr>
<td>Bitis nasicornis</td>
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<td>$340</td>
</tr>
<tr>
<td>Bothriechis schlegelii</td>
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<td>$850</td>
</tr>
<tr>
<td>Crotalus adamanteus</td>
<td>$100</td>
<td>$450</td>
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<tr>
<td>Crotalus unicolor</td>
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<td>$900</td>
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<tr>
<td>Crotalus vegrandis</td>
<td>$160</td>
<td>$700</td>
</tr>
<tr>
<td>Hoplocephalus stephensi</td>
<td>$220</td>
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<tr>
<td>Hoplocephalus bitorquatus</td>
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<td>$900</td>
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<tr>
<td>Naja kaouthia</td>
<td>$60</td>
<td>$250</td>
</tr>
<tr>
<td>Naja melanoleuca</td>
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<td>$200</td>
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<tr>
<td>Naja mossambica</td>
<td>$60</td>
<td>$250</td>
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<tr>
<td>Naja siamensis</td>
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<td>$250</td>
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<tr>
<td>Notechis ater humpreysi</td>
<td>$350</td>
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<tr>
<td>Notechis ater niger</td>
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<tr>
<td>Notechis ater serventyi</td>
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<tr>
<td>Notechis scutatus</td>
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<td>$1,445</td>
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<tr>
<td>Ophiophagus hannah</td>
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<td>$850</td>
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<tr>
<td>Oxyuranus microlepidotus</td>
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<tr>
<td>Oxyuranus scutellatus</td>
<td>$260</td>
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<tr>
<td>Oxyuranus scutellatus kanni</td>
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<tr>
<td>Pseudechis australis</td>
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<tr>
<td>Pseudechis butleri</td>
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<tr>
<td>Pseudechis colletti</td>
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<tr>
<td>Pseudechis guttatus</td>
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<tr>
<td>Pseudechis porphyriacus</td>
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<tr>
<td>Pseudechis papuanus</td>
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<tr>
<td>Pseudonaja affinis</td>
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<tr>
<td>Pseudonaja aspidorhyncha</td>
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<tr>
<td>Pseudonaja inframacula</td>
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<tr>
<td>Pseudonaja nuchalis</td>
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<td>$3,990</td>
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<tr>
<td>Pseudonaja textilis</td>
<td>$760</td>
<td>$3,700</td>
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<tr>
<td>Tropidechis carinatus</td>
<td>$300</td>
<td>$1,500</td>
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</tbody>
</table>

### Spider Venom

- *Lampona cylindrata*: $360 / 10 sac contents  
- *Latrodectus hasseltii*: $500/50 sac contents

### Bee Venom

- Pure 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  
  
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.
## VENOM PRICELIST SPRING/SUMMER 2009

<table>
<thead>
<tr>
<th>Venom Name</th>
<th>Price</th>
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<tbody>
<tr>
<td>Dendroaspis polylepis</td>
<td>$550.00</td>
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<tr>
<td>Dendroaspis angusticeps</td>
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<td>Dendroaspis viridis</td>
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<td>Naja nivea</td>
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<td>Naja melanoleuca</td>
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<tr>
<td>Naja nigricollis (Tanzania)</td>
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<tr>
<td>Naja nigricollis (Ghana)</td>
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<tr>
<td>Naja h. annulifera</td>
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<tr>
<td>Naja kaouthia</td>
<td>$205.00</td>
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<tr>
<td>Naja naja (Pakistan)</td>
<td>$250.00</td>
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<tr>
<td>Ophiophagus hannah</td>
<td>$150.00</td>
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<tr>
<td>Micrurus f. fulvius</td>
<td>$2100.00</td>
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<tr>
<td>Bitis arietans</td>
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<tr>
<td>Bitis g. gabonica</td>
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<tr>
<td>Bitis g. rhinocerous</td>
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<tr>
<td>Crotaulus adamanteus</td>
<td>$150.00</td>
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<tr>
<td>Crotaulus atrox</td>
<td>$150.00</td>
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<tr>
<td>Crotaulus h. atricaudatus</td>
<td>$150.00</td>
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<tr>
<td>Crotaulus h. horridus</td>
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<tr>
<td>Crotaulus s. scutulatus</td>
<td>$450.00</td>
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<tr>
<td>Crotaulus d. terrificus</td>
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<tr>
<td>Sistrurus m. barbouri</td>
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<tr>
<td>Agkistrodon c. contortrix</td>
<td>$190.00</td>
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<td>Agkistrodon c. laticinctus</td>
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<tr>
<td>Agkistrodon c. mokasen</td>
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</tr>
<tr>
<td>Agkistrodon p. conanti</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

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
HIGH QUALITY VENOMS & TOXINS

Lyophilized and crystallized venoms

Bothrops alternatus 1440, 00 U$
Bothrops jararaca 220,00 U$
Bothrops jararacussu 264,00 U$
Bothrops moojeni 300,00 U$
Bothrops neuwiedi 340,00 U$
Crotalus durissus terrificus 220,00 U$
Crotalus durissus collineatus 300,00 U$

Lachesis muta muta 600,00 U$
Bufo marinus / schneideri 264,00 U$

All venoms collected in a sterile manner
Blood cells and freeze dried blood plasm from snakes
We have also outhers 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 U$. 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.org
Email: reptilezoo@bellsouth.net

**Crotalidae**

<table>
<thead>
<tr>
<th>Species</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Agkistrodon contortrix contortrix</td>
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<tr>
<td>Agkistrodon contortrix mokasen</td>
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<td>Agkistrodon contortrix laticinctus</td>
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<tr>
<td>Agkistrodon contortrix phaeogaster</td>
<td>$70.00</td>
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<tr>
<td>Agkistrodon contortrix pictigaster</td>
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<tr>
<td>Agkistrodon piscivorus leucostoma</td>
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<tr>
<td>Agkistrodon piscivorus piscivorus</td>
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</tr>
<tr>
<td>Bothrops asper</td>
<td>$100.00</td>
</tr>
<tr>
<td>Bothrops atrox</td>
<td>$100.00</td>
</tr>
<tr>
<td>Bothrops moojeni</td>
<td>$100.00</td>
</tr>
<tr>
<td>Crotalus adamanteus</td>
<td>$60.00</td>
</tr>
<tr>
<td>Crotalus atrox</td>
<td>$70.00</td>
</tr>
<tr>
<td>Crotalus basiliscus basiliscus</td>
<td>$200.00</td>
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<tr>
<td>Crotalus cerastes</td>
<td>$100.00</td>
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<tr>
<td>Crotalus durissus cumanensis</td>
<td>$300.00</td>
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<tr>
<td>Crotalus durissus durissus (fmr. C. d. dryinas)</td>
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<tr>
<td>Crotalus durissus terrificus</td>
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<tr>
<td>Crotalus horridus</td>
<td>$100.00</td>
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<tr>
<td>Crotalus horridus (type A neurotoxin)</td>
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<tr>
<td>Crotalus molossus (Texas origin)</td>
<td>$70.00</td>
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<tr>
<td>Crotalus scutulatus scutulatus</td>
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<tr>
<td>Crotalus viridis viridis</td>
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<tr>
<td>Protobothrops flavoviridis</td>
<td>$200.00</td>
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<tr>
<td>Trimeresurus borneoensis</td>
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**Elapidae**

<table>
<thead>
<tr>
<th>Species</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Dendroaspis angusticeps</td>
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<tr>
<td>Dendroaspis jamesoni kaimosae</td>
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<tr>
<td>Dendroaspis polylepis</td>
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<tr>
<td>Micrurus tenere</td>
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</tr>
<tr>
<td>Naja kaouthia</td>
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<tr>
<td>Naja kaouthia (Suphan province)</td>
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<tr>
<td>Naja melanoleuca</td>
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<td>Naja naja (India)</td>
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<td>Naja naja (Pakistan)</td>
<td>$80.00</td>
</tr>
<tr>
<td>Naja nigricollis nigricollis</td>
<td>$80.00</td>
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</tbody>
</table>
Naja nivea  $100.00
Naja pallida  $100.00
Naja siamensis  $60.00
Ophiophagus hannah  $95.00
Pseudechis colletti  $320.00

Viperidae
Bitis arietans  $120.00
Bitis gabonica rhinoceros  $130.00
Daboia (Vipera) russelli  $200.00
Daboia (Vipera) siamensis  $200.00
Echis carinatus  $350.00
Echis pyramidium  $350.00

Helodermatidae
Heloderma horridum  $600.00
Heloderma suspectum  $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.
Laboratoire de production de venin
Fournisseur en venin
Négociant en toxines purifiées

Venom production laboratory
Venom supplier
Pure toxins dealer
Venins cristallisés, venins lyophilisés, bases pour teintures mères, plasma,…

Crystalised 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.
Notre laboratoire s’adapte à tout type de demande. Contactez nous.

**ALPHA BIOTOXINE** is a young society specialised on venom production.
We offer you more than 20 years of experience on study of venomous animals and venom production.
Our laboratory is adapted to all kind of request. Please contact us.

**Rudy Fourmy**
Barberie 15
7911 Montreuil-au-Bois
Belgique - Belgium
info@alphabiotoxine.be

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Please, visit our website : www.alphabiotoxine.be
Searching for your Discovery

Venoms, Toxins, Ion Channel and Receptor Ligands
Alkaloids and Plant Compounds

LATOXAN provides an exclusive range of bioactive natural molecules from Plant and Animal origins:

- Purified small molecules from unique plants.
- Venom fractions for an easy access to new peptides, alkaloids or polyamines with high pharmacological activity potential.
- Pure venoms from over 250 animal species.

LATOXAN’s products are supplied with reliable taxonomy, elucidated molecular structure or complex mixtures chromatograms.

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