INTERNATIONAL SOCIETY ON TOXINOLOGY

INTERNATIONAL SOCIETY ON TOXINOLOGY NEWSLETTER

December 2014

UPCOMING MEETINGS

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

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

Clinical Toxinology Short Course, Adelaide, Australia, early 2016.

FROM THE IST EXECUTIVE

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

As you may read in the meeting summary, Council had only one bid for the 2017 World Congress, from Hainan, China. This bid has been accepted.

The next IST congress is the World Congress, to be held in the University of Oxford, UK, September 25th to 30th, 2015. It promises to be an exciting meeting in historic venues. Congress organisers will progressively contact members for ideas and suggestions for the congress scientific program. This congress should be rather special, because of the historic setting, quite different from meetings in modern hotel or convention facilities.

Oxford is a charming town. I had the chance to look at venues and stay in college accommodation while attending the small Venoms2013 meeting in September 2013 and it was a most enjoyable experience. A big thank you to Muhammad Sohail, Eddie Rowan and David Warrell for making this meeting possible.

We still don't have a firm proposal for the next Pan-American Section congress, to be held sometimne in 2016. I encourage our Pan-American members to find and agree on a host contry and venue, as a matter of urgency.

Lastly, I wish all members a Happy New Year for 2015 and, for those who celebrate christmas, a Merry Christmas.

Julian White, Secretary/Treasurer, IST

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MEMBERSHIP ANNOUNCEMENTS

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

Because of file size, the Newsletter is too big to email and so it is more practical to post the Newsletter on the IST website and just email members advising it is ready to download, via a link.

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

Julian White
Secretary/Treasurer IST

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

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

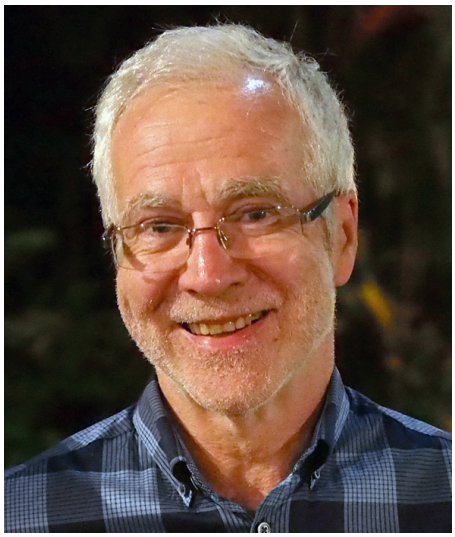
The aims of the Special Interest Group for Student Toxinologists include: to increase opportunities for students to network with possible collaborators and employers; to work with the Executive and Council, IST to ensure students are included and supported in future decisions of the IST; and to train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

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

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

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

MESSAGE FROM THE PRESIDENT (I.S.T)



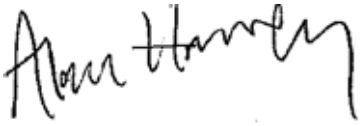
Dear IST members,

Just a brief comment from me, wishing all my fellow toxinologists a Very Merry Christmas and a Happy New Year.

We have the next IST Worl Congress to look forward to in 2015, in Oxford, UK, in September. I am sure this will be a memorable meeting and I wish the organisers every success in their endeavours. I also urge IST Members to plan to attend and present their latest work at this meeting.

IST Council has had a number of matters to consider this year, but there remain areas where we, as a Society, can do better and I hope all of you will make 2015 the year we see real achievments for toxinology and our Society, with greater involvement of members in Society initiatives and affairs.

With best wishes



Alan Harvey
President, IST
Email: A.L.Harvey@strath.ac.uk

THE FUTURE OF THE IST NEWSLETTER

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

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

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

IST COUNCIL MEETING SUMMARY

February, 2014

Those participating (via email): J White, G King, P Gopalakrishnakone, E Grishin, R Harrison, J Fox, JM Gutierrez, D Tambourgi, L Possani, J Calvete, Y Curry, D Warrell, A Harvey

Business covered:
Council discussed progress in planning the Asia-Pacific Section congress, to be held in Changsha, China, June 2014. Plans were progressing well and the meeting appeared on track to be most successful.

Council were provided an update on planning for the next IST World Congress, Oxford University, UK, September 2015. Planning appeared encouraging.

Council discussed the issue of providing adequate analgesia in animal experiments. Prof. Warrell was tasked with forming and chairing a subcommittee to examine this issue, and will report back to Council on progress.

Council considered how the IST might incorporate the membership of national toxinology societies within IST. The Brazilian Toxinology Society, approached about this last year, has yet to consider the matter, so no clear progress at this time, since this was to be the “test case”.

The President (Prof. Alan Harvey) and Secretary/Treasurer (Prof. Julian White) provided reports to Council. The IST finances are currently sufficient to cover expected expenses. Membership dues notices for 2014 have been emailed to members.

The Snake Taxonomy Advisory Committee has not functioned effectively and the recently appointed Chair, W Wuster, has now indicated he may not be able to fulfill this role. J White proposed a new definition of the role and function of the Committee, for Council consideration.

Council considered a letter from Dr. Zoltan Takacs about an issue in the USA around the use of gassing for collection of venomous snakes. Council agreed to support a ban on the gassing technique, as proposed by the Texas Parks and Wildlife Department.

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TOXINS AVAILABLE FOR RESEARCH

Dear Dr. Harvey,

After working on structure function relationships in several invertebrate toxins for the past several decades, I’m retiring at the end of the current academic year. In the course of going through my freezers, I’ve found several tubes of recombinant wt and mutant anemone (A. xanthogrammica) toxins, containing from 200uG to 2mG of HPLC-purified peptides, which I’d happily make available to any research group that might desire them. If IST has a mechanism by which this information can either be posted to the web, or circulated to its membership and/or attendees at the 2012 congress, I would appreciate your doing so. Interested parties, if any, can contact me through June at this email address.

Thanks for your help, and best wishes,
Ken Blumenthal

Kenneth (Ken) Blumenthal, PhD, Professor and Chairman, Department of Biochemistry
Senior Associate Dean for Research and Graduate Education, School of Medicine and Biomedical Sciences; SUNY at Buffalo, 3435 Main St, Buffalo NY 14214
Voice: (716) 829-2727 Fax: (716) 829-2725
URL: http://medicine.buffalo.edu/content/medicine/faculty/profile.html?ubit=kblumen

IST BUSINESS AND DEFACTO COUNCIL MEETING SUMMARY

June 2014

Those participating (in person) from IST Council: J White, P Gopalakrishnakone, A Harvey, G King, Songping Liang, Sulan Luo. plus at least 20 other IST members.

Business covered:
The meeting was chaired by Prof. Gopalakrishnakone.

Minutes of the last Asia-Pacific Section Business Meeting were not available.

Prof. Songping Liang was elected as Chair of the A-P Section and Prof. Sulan Luo was elected as Secretary.

There was discussion of possible bids for the next A-P Section congress, in 2017, which would also be the World Congress. The Japanese indicated their earlier tentative bid was now suspended, because of logistic issues. The Indians noted an interest, but unconfirmed commitment at this time. The Chinese indicated a clear interest in bidding, likely from Hainan. The Australians indicated a likely bid from Melbourne. All potential bidders were urged to develop formal bids and submit to Council at the earliest opportunity.

The meeting then discussed ideas on how to improve IST congresses. Details will be provided elsewhere in the Newsletter.

The meeting was then closed.

IST COUNCIL MEETING SUMMARY

October 2014

Those Participating (via email): J White, M Kini, L Possani, JM Gutierrez, G King, D Warrell, P Gopalakrishnakone, R Harrison, J Calvete, J Fox, Y Cury, D Tambourgi, A Harvey, S Luo, R Stocklin, Songping Liang

Business covered:
Council congratulated the Chinese group who organised the successful Asia-Pacific Section Congress in Changsha, June 2014.

Council discussed the encouraging progress with planning the 2015 IST World Congress, to be held in Oxford University, UK, September 25-30.

Council again discussed the issue of incorporation of IST and a subcommittee will be constituted to explore this idea.

Council again discussed the issue of providing adequate analgesia in animal experiments, without firm resolution on policy, reflecting the difficulty balancing animal welfare versus experimental requirements. Prof. Warrell, chair of the subcommittee examining this issue, will report back to Council on progress.

Council considered how the IST might incorporate the membership of national toxinology societies within IST. There are constitutional mechanisms available, but it also requires active support from the national societies and it is unclear if this is currently available. This is an important issue for both toxinology and the IST and Council will continue to pursue it.

The President (Prof. Alan Harvey) and Secretary/Treasurer (Prof. Julian White) provided reports to Council. The IST finances are currently sufficient to cover expected expenses. Council considered the issue of members failing to pay annual dues and resolved to be more active in removing members from the membership list if dues were 2 or more years in arrears. Council constituted a subcommittee to examine ways of strengthening our membership base. Members include J White, J Fox, A Harvey, M Kini, R Stocklin. All IST members are invited to contact the subcommittee, through one of it's members, with ideas and suggestions to help maintain and grow membership.

The Snake Taxonomy Advisory Committee has not functioned effectively and the appointed Chair, W Wuster, has resigned. Council moved to approach Assoc. Prof. Scott Weinstein to undertake this role.

Council agreed that A Harvey and J White would finalise guidelines for IST congresses, to assist bidders for future congresses.

Council confirmed the changeover in Executive for the Asia-Pacific Section of IST. Prof. Songping Liang is the new Chair and Prof. Sulan Luo the new Secretary. Both are from China. Council also considered possible bids for the next IST World Congress, in 2017. Despite expressed interest from several nations, only one formal bid was received, from China. Council resolved to accept, with thanks, the Chinese bid. The 2017 IST World Congress will be held in Hainan, China, late 2017. Dates are yet to be finalised.

Council considered ideas to improve future congresses. Details of these suggestions will be provided elsewhere in the Newsletter.

IST Nomenclature Committee

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

Dr Gerardo Corzo, Mexico (Email: corzo@ibt.unam.mx)
Dr Florence Jungo, Switzerland (Email: Florence.Jungo@isb-sib.ch)
Dr Evanguedes Kalapothakis, Brazil (Email: ekalapo@icb.ufmg.br)
Prof. Glenn King, Australia (Chairman; Email: glenn.king@imb.uq.edu.au)
Prof. Manjunatha Kini, Singapore (Email: dbskinim@nus.edu.sg)
Prof. Graham Nicholson, Australia (Email: graham.nicholson@uts.edu.au)
Prof. Toto Olivera, USA (Email: olivera@biology.utah.edu)
Prof. Jan Tytgat, Belgium (Email: jan.tytgat@pharm.kuleuven.be)

ArachnoServer spider toxin database

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

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

IST Snake Taxonomy Advisory Group

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

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

Julian White, Secretary IST

PRESENTATION BY PROF. GOPALAKRISHNAKONE ON THE HISTORY OF THE ASIA-PACIFIC SECTION OF IST

Presented during the June 2014 IST Asia-Pacific Section Congress in China

30TH ANNIVERSARY OF THE ASIA PACIFIC SECTION OF IST WAS CELEBRATED IN CHANGSHA,CHINA DURING THE 10TH AP-IST MEETING ORGANISED BY Prof Songping Liang and his colleagues

1. Singapore, June 1987
Organiser: P.Gopalakrishnakone
Proceedings: Progress in Venom and Toxin Research (P.Gopalakrishnakone, C.K.Tan, eds.), Nat.Univ.of Singapore, 1987.

2. Varanasi, India, February 1990
Organiser: S.C.Sanyal

3. Kuala Lumpur, Malaysia, June-July 1993
Organiser: N.H.Tan
Proceedings: Advances in Venom and Toxin Research (N.H.Tan, S.L.Oo, V.Thambyrajah, N.Azila,eds.), published by the Malayan Society on Toxinology, Kuala Lumpur 1993.

4. Kunming, Yunnan, China, June 1996
Organiser: Y.Xiong

5. Pataya, Thailand, October 1999
Organiser: V Sitprija

6. Cairns, Australia, July 2002
Organiser: R Norton

7. Cebu City, Philippines, October 2005
Organiser: Lourdes J Cruz & Rhodora V Azanza

8. Hanoi & Halong Bay, Vietnam, December 2008
Organiser: Dr. Trinh Xuan Kiem & Dr. Le Van Dong

9. Vladivostok, Russia, September 2011
Organisers: Prof. Eugene Grishin & Prof. Valentin Stonik

FIRST ASIA-PACIFIC CONGRESS ON ANIMAL PLANT AND MICROBIAL TOXINS
24th - 27th JUNE 1987 SINGAPORE


Singapore Health Minister welcomed by Prof Gopal


Opening

Varnarsi,India 1990

Kula Lumpur,Malaysia,1993

OPENING CEREMONY

KUNMING,CHINA,1996

OPENING

Prof Y.Xiong,Dr Gao Rong with Prof Gopal in Kunming, 1996

Prof Gopal with Prof Yun Zhang and Dr Gao Rong, in Yunnan,China 1996


IST
FIFTH ASIA-PACIFIC CONGRESS ON
ANIMAL, PLANT AND MICROBIAL TOXINS
October 12-15, 1999
Royal Cliff Beach Resort
Pattaya, Thailand


Resort
hailand

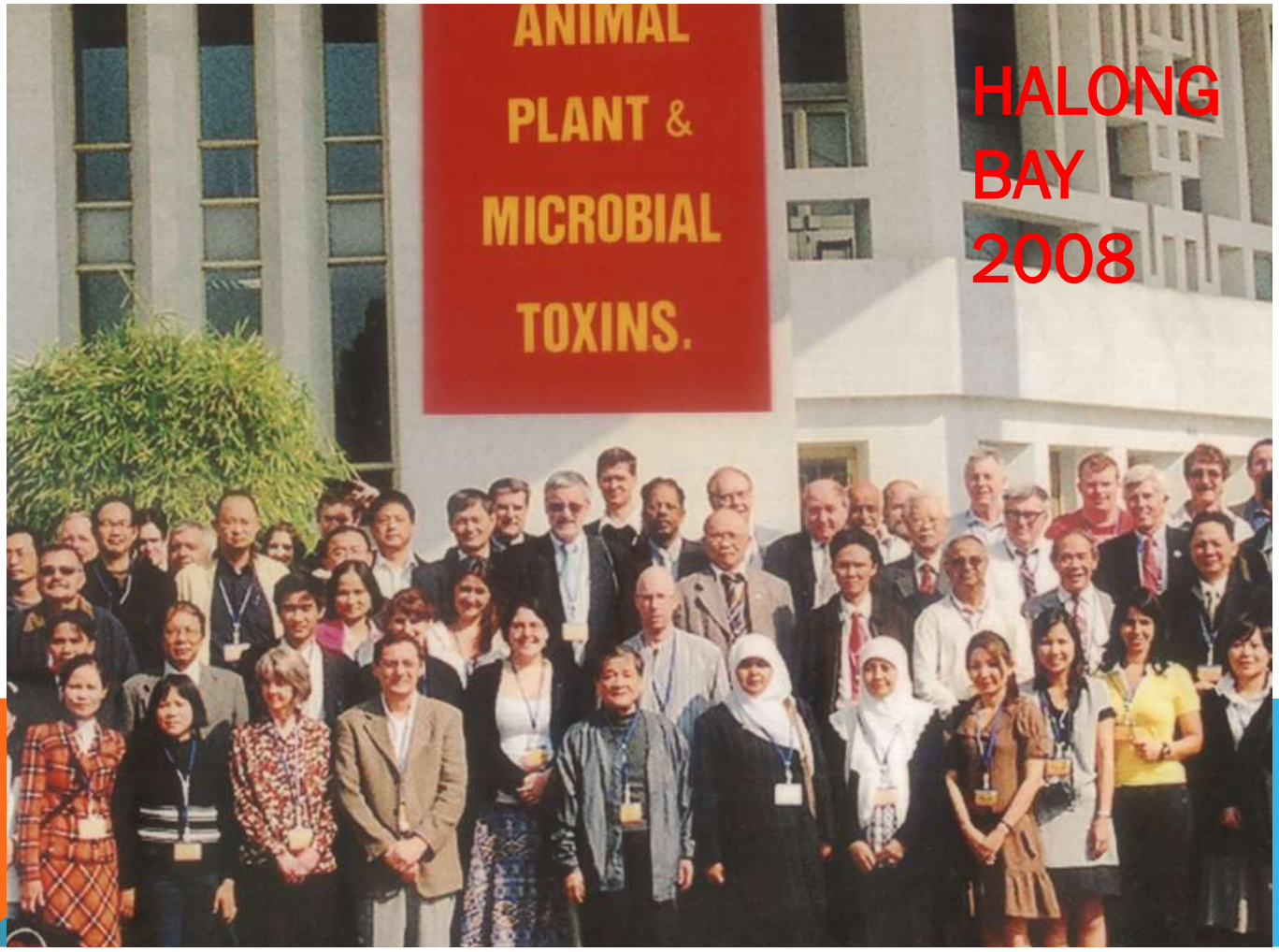
PATTAYA,THAILAND 1999

Ray Norton and Visith Sitprija in full swing with Cassian on background

Cairns ,Australia,2002

Hội nghị Độc học quốc tế lần thứ nhất tại Hạ Long Việt Nam 12/2008

Foto: Châu - HVQY



HALONG BAY 2008

Hội nghị Độc học quốc tế lần thứ nhất tại Hạ Long Việt Nam 12/2008

Foto: Châu - HVQY


Hội Thảo Độc học quốc tế tại Hạ Long Việt Nam tháng 12/2008
BANQUET IN HAOLONG BAY 2008
foto Chau-HVQY 2008

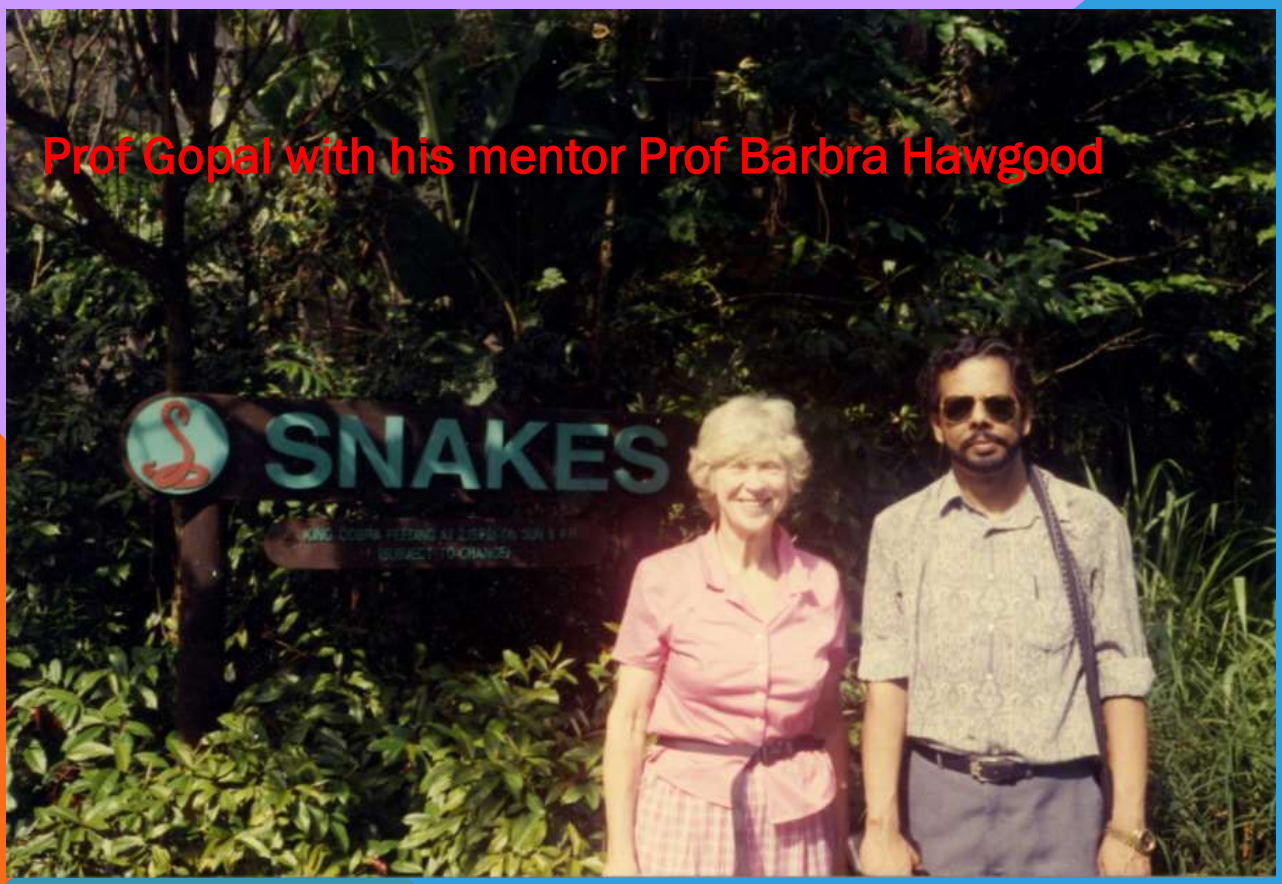

Hội Thảo Độc học quốc tế tại Hạ Long Việt Nam tháng 12/2008
foto Chau-HVQY 2008

Vladivostok,Russia 2011

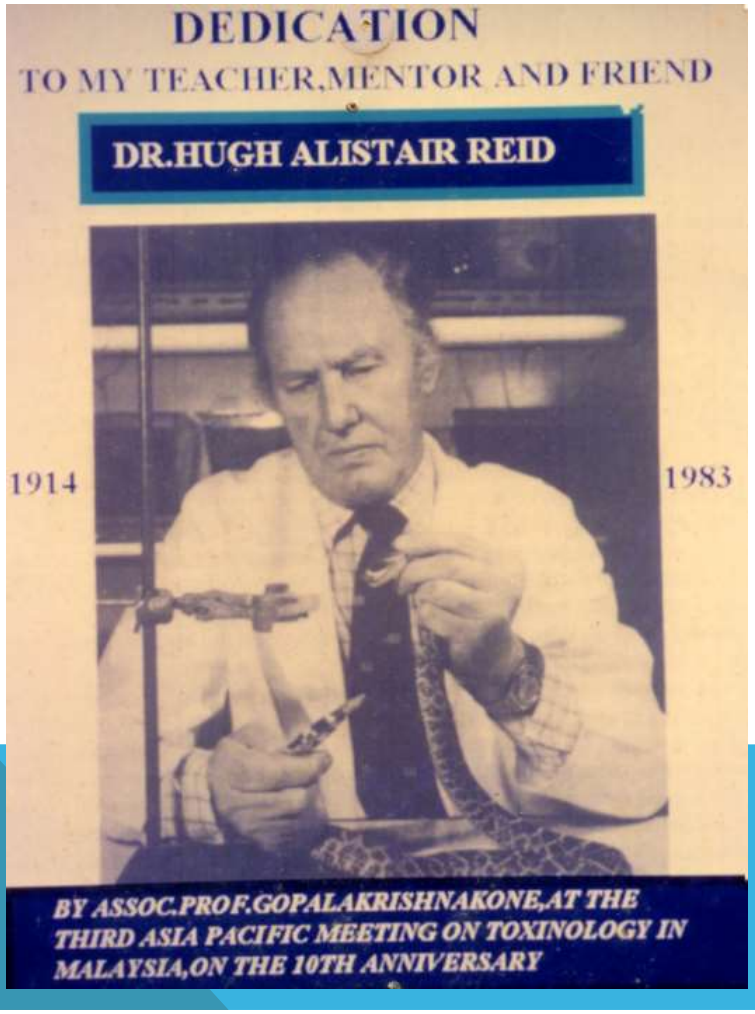
Partying in Vladivostok Prof Jan Tygat and Gopal

Prof Stonik and Prof Grishin

Toxinology meeting in full format



Prof Gopal with his mentor Prof Barbra Hawgood



30TH ANNIVERSARY OF AP-IST WAS CELEBRATED DURING THE BANQUET OF 10TH AP-IST MEETING WITH MORE THAN 400 PARTICIPANTS

Songping's team with Prof Alan Harvey

Recognition was given to all the 10 Chairmen of all the 10 AP-IST Congresses

President IST,Alan Harvey presenting the Certificate of Appreciation to Prof Gopal,Founder President of AP-IST and Immediate Past President of IST

Prof Songping and Gopal during the celebration, all credits should go to Songping and his team for making this a memorable event in the 30 YEAR history of AP-IST

This is how I started 40 years ago and 30years in A-P IST

THIS IS MY REAL ACHEIVEMENT SO FAR WITH FIVE GIRLS IN MY LIFE

MYANMAR (BURMA) SNAKEBITE PROJECT

Report to IST by Prof. Julian White

In early 2014 I was approached by a colleague, Dr. Chen Au Peh, a renal physician based at the Royal Adelaide Hospital Dept. of Renal Medicine, in regard to the possibility of developing a foreign aid project to tackle the snakebite problem in Myanmar. On his frequent visits to Myanmar to assist with development of renal medicine services in that country, Dr Peh had noted the huge snakebite burden, with more than 70% of cases of renal failure being due to snakebite, specifically Russell's viper bite.

Dr. Peh, myself and Dr. Afzal Mahmood (a public health expert), all from the University of Adelaide, worked on developing an initial submission for funding from the Australian Government, Dept. of Foreign Affairs and Trade. We also involved Assoc. Prof. Scott Weinstein (the second clinical toxinologist in my dept. at the Women's & Children's Hospital, Adelaide) and Dr. Sam Alfred (an emergency physician from the Royal Adelaide Hospital and also involved with my dept.). Our "expression of interest" was one of those which were successful and we were then invited to submit a full submission for funding. This was completed in late September and at the end of October we were notified our submission was successful.

The project we had submitted had a combined value of nearly $4 million, making it possibly the largest foreign aid grant to deal with snakebite ever made. It is important to note this is a foreign aid project, not a research project, and funds are for foreign aid purposes only, so that any "research" that might be involved is only in the direct service of the foreign aid objective for the project. It is clearly very clinically focussed, not venom research focussed. The total monetary value of the project is made up from a grant from the Australian government, matched by "in kind" contributions (mostly staff time) from government ministries in Myanmar and from participating Australian organisations.

Project Title

Improving the health outcomes for snakebite patients in Myanmar

Summary of Project

Snakebite is a major cause of mortality and morbidity, particularly among the farming poor in Myanmar. The central aim of this Project is to address this problem through the identification and implementation of achievable objectives. In response to requests from the Ministries of Industry and Health in Myanmar, the University of Adelaide will partner with CSL Limited and University of Sydney to improve the health outcomes for snakebite patients in Myanmar by applying a coordinated and systematic approach:

(1) to improve the quantity and quality of antivenom production,
(2) to increase the availability of antivenom to health centres especially in rural regions, and
(3) to optimise the management of snakebite patients at the community level.

This Project intends to apply a comprehensive strategy to each of these areas through the use of a team of experts, supporting Myanmar colleagues to build local capacity and resolve local problems sustainably.

Key Implementation Steps

At a workshop in Myanmar (July 2014), a team comprising experts from Australia, the Ministries of

Industry & Health planned the following strategies (first 2 operating at a national level; the 3rd at regional level).

1. IMPROVING ANTIVENOM PRODUCTION:
Improving the quantity and quality of antivenom is a key to this Project. Current production is inadequate to meet the need. The Project will:
1.1 Improve the health and survival of horses used for antivenom production towards the standard benchmark of <1%.
1.2 Develop sustainable availability of venom used in immunisation of horses.
1.3 Establish quality control of production processes.
1.4 Determine the mix of venom used for immunisation.
1.5 Improve animal welfare (snakes & horses).

2. INCREASE THE AVAILABILITY OF ANTIVENOM:
2.1 The lack of electricity mandates a change from liquid to lyophilised (freeze dried powder) form of antivenom to avoid cold chain requirement. We will assist in establishing lyophilisation capacity in Myanmar.
2.2 Currently there is suboptimal distribution of antivenom. We will develop a trackable distribution system to reduce waste, to maximise availability of antivenom when and where needed, and to redress the supply-need mismatch.

3. OPTIMISE THE MANAGEMENT OF SNAKEBITE PATIENTS:
3.1 We will undertake clinical and epidemiologic surveys to establish the health system capacity to respond to snakebites, using selected Project townships.
3.2 Strategies will be implemented to improve responsiveness in terms of timely and appropriate management at community health centres to reduce morbidity and complications from snakebites.
3.3 Training programs will be developed using international experience, and implemented in Project townships to train front-line community health workers for timely and appropriate management of snakebites.
3.4 First-aid options will be examined, selected, and tested to ensure applicability in rural settings.
3.5 Strategies to strengthen primary prevention will be implemented in the Project townships.

The project will commence in late 2014 and is scheduled to complete the initial funded phase in mid 2017. It is likely that some project activities will continue past this time. The benefits produced through this project should be sustainable in the long term in Myanmar and the underlying aim of the project is to empower the people of Myanmar to sustain good outcomes for snakebite patients into the future.

ORGANISATIONS INVOLVED IN THE PROJECT

In Australia
Coordinating Organisation
University of Adelaide, Faculty of Health Sciences

Organisations linked through the University of Adelaide
Royal Adelaide Hospital; Departments of Renal Medicine and of Emergency Medicine
Women's & Children's Hospital; Toxinology Department

Partner Organisations
CSL Ltd (Melbourne)
University of Sydney (Sydney)

Other participating organisations

Venom Supplies, Tanunda

In Myanmar
Government of Myanmar; Departments of Health, of Industry, of Forestry and of Livestock
Myanmar Medical Association

The Project Team

Project Team Leaders (Project Executive Committee)
Dr. Chen Au Peh; Renal Physician, Royal Adelaide Hospital (overall Project Leader)
Prof. Julian White; Clinical Toxinologist, Women's & Children's Hospital
Dr. Afzal Mahmood, Public Health Expert, University of Adelaide

Other Principal Team Members (outside of Myanmar)
Assoc. Prof. Scott Weinstein, Clinical Toxinologist, Women's & Children's Hospital
Dr. Sam Alfred, Emergency Physician/Toxicologist, Royal Adelaide Hospital
Prof. Bob Cumming, Epidemiologist, University of Sydney
Prof. Michael Thompson, Herpetologist, University of Sydney
Prof. David Warrell, Clinical Toxinologist, University of Oxford
Prof. JM Gutierrez, Toxinologist/Antivenom Expert, University of Costa Rica
Mr. Keiran Ragas, Antivenom Expert, CSL Ltd
Dr. John Moody, Veterinarian/Antivenom Expert, CSL Ltd
Mr. Nathan Dunstan, Herpetologist/Venom Extraction Expert, Venom Supplies
Prof. Neil Das, Herpetologist, Malaysia

There may be other experts, including IST members, who we may approach to be involved in some way with this project, as project needs dictate.

In addition there are a number of colleagues in Myanmar who are critical to the success of the project. Our project executive group have just returned from Myanmar where we had the privelege of interacting with both clinical colleagues and senior government officials and establishing the vital personal links that will make the project possible. We received clear support from all four Myanmar Government ministries involved. The project will now move into top gear from early 2015.

University of Adelaide
Faculty of Health Sciences

CLINICAL TOXINOLOGY SHORT COURSE 2016

Women's & Children's Hospital
Adelaide, Australia
Dates to be determined
Likely early 2016

The Premier Clinical Training Course in Toxinology at an International Level

Courses Co-ordinator
Prof. Julian White
Head of Toxinology
Women's & Children's Hospital
email: julian.white@adelaide.edu.au
Website: www.toxinology.com

IMPORTANT COURSE INFORMATION

COURSE RELATED QUESTIONS:

Who is this course designed for?

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

When and where are the courses held?

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

What does the course cover?

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

Is the course accredited in any way?

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

How many people can attend the course?

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

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

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

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

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

What sort of practical clinical sessions are included?

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

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

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

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

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

Southwest Venoms

CATALOGUE OF INSECT VENOMS (2012-2013)

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

Prod. No.	VENOM	(LD_{50} mg/kg, mice)	VENOM PRICE 1 mg	5 mg	25 mg	100 mg
	SOCIAL WASPS	(LD_{50})				
	Yellowjackets -- *Vespula*					
W-10	*V. pensylvanica*	(6.4)	50	225	1000	*
W-19	other species**		*			
	Hornets -- *Vespa*					
W-20	*V. mandarinia*	(4.1)	50	225	1000	*
W-21	*V. tropica*	(2.8)	50	225	1000	*
W-29	others **		*			
	Paper wasps -- *Polistes*					
W-30	*P. comanchus navajoe*	(5)	40	180	800	*
W-31	*P. flavus*	(3.8)	40	180	800	*
W-32	*P. canadensis*	(2.5)	50	225	*	
W-33	*P. erythrocephalis*	(1.5)	50	225	*	
W-39	*Polistes* sp. as available**		30	135	600	2100
	New World Polybiine wasps					
W-40	*Brachygastra mellifica*	(1.5)	60	270	1200	*
W-50	*Synoeca septentrionalis*	(2.7)	60	270	1200	*
W-60	*Parachartergus fraternus*	(5)	70	300	1400	*
W-70	*Polybia sericea*	(6)	80	350	*	
W-71	*P. simillima*	(4.1)	80	350	*	
W-72	*P. occidentalis*	(5)	100	*		
W-80	*Agelaia myrmecophila*	(5.6)	140	*		
	Old World Polybiine wasps					
W-90	*Belonogaster juncea colonialis*	(3)	80	350	*	
	SOCIAL BEES					
	Honey bees -- *Apis*					
B-10	*A. mellifera*	(2.8)	20	90	400	1400
B-11	*A. mellifera* Africanized bees	(2.8)	20	90	400	1400
B-12	*A. mellifera* queens		40	180	800	2800
B-13	*A. dorsata*	(2.8)	50	225	1000	3500
B-14	*A. cerana*	(3.1)	55	245	*	
B-19	others (*A. flo*rea, etc.)**		*			
	Bumble bees -- *Bombus*					
B-20	*B. sonorus*	(12)	50	225	1000	*
B-21	*B. impatiens*	(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})				
	Pogonomyrmex -- harvester ants					
A-10	*P. barbatus*	(0.6)	50	225	1000	3500
A-11	*P. maricopa*	(0.12)	60	270	1200	4200
A-12	*P. occidentalis*	(0.5)	70	315	1400	*
A-13	*P. rugosus*	(0.7)	50	225	1000	3500
A-15	*P. desertorum*	(0.7)	160	*		
A-19	*Pogonomyrmex* sp. as available		45	200	900	3200
	Myrmecia -- bull ants					
A-20	*M. gulosa*	(0.18)	60	270	1200	4200
A-21	*M. tarsata*	(0.18)	60	270	1200	*
A-22	*M. browningi*	(0.18)	70	315	*	
A-23	*M. rufinodis*	(0.35)	70	315	*	
A-24	*M. simillima*	(0.21)	70	315	*	
A-25	*M. pilosula*	(5.7)	100	*		
A-30	*Pachycondyla (Neoponera) villosa*	(7.5)	60	270	*	
A-31	*P. (Neoponera.) apicalis*	(>16)	70	*		
A-32	P. *crassinoda*	(2.8)	80	*		
A-33	*P. (Megaponera) foetens* (Metabele ant)	(130)	70	315	*	
A-34	*P. (Paltothyreus) tarsatus* (stink ant)	(64)	50	225	1000	3500
A-35	*P. (Bothroponera) strigulosa*	(9)	70	*		
A-36	*Termitopone commutata*	(10)	70	315	1400	*
A-40	*Platythyrea lamellosa*	(11)	70	315	*	
A-50	*Diacamma* sp.**	(35)	100	450	*	
A-60	*Dinoponera gigantea*	(11)	60	270	1200	4200
A-70	*Paraponera clavata* (bullet ant)	(6.0)	60	270	1200	4200
A-80	*Ectatomma tuberculatum*	(1)	60	270	*	
A-81	*E. quadridens*	(17)	60	270	*	
A-90	*Odontomachus* sp.**	(33)	60	275	*	
A-110	*Tetraponera* sp**	(.35)	140	600	*	
A-120	*Streblognathus aethiopicus*	(8.0)	80	360	*	
	SOLITARY WASPS AND BEES					
	Spider wasps -- Pompilidae					
SW-10	*Pepsis* sp.**	(65)	60	270	1200	4200
	Mutillid wasps -- Mutillidae					
SW-20	*Dasymutilla* sp.**	(71)	70	315	1400	*
SW-39	Other wasps (Scoliidae, Tiphiidae, Sphecidae, Eumenidae, etc.)**		*			
	Carpenter bees -- *Xylocopa*					
SB-10	*X. californica*	(21)	50	225	1000	*
SB-11	*X. veripuncta*	(33)	55	245	*	
SB-20	*Proxylocopa rufa*	(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.

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

Southern Copperhead - *Agkistrodon contortrix contortrix*	$75.00/1g	$50.63/500mg			
Broad-Banded Copperhead - *Agkistrodon contortrix laticinctus*	$100.00/1g	$67.50/500mg			
Northern Copperhead - *Agkistrodon contortrix mokasen*	$50.00/1g	$33.75/500mg			
Trans-Pecos Copperhead - *Agkistrodon contortrix pictigaster*	$75.00/1g	$50.63/500mg			
Florida Cottonmouth - *Agkistrodon piscivorus conanti*	$60.00/1g	$40.50/500mg			
Western Cottonmouth - *Agkistrodon piscivorus leucostoma*	$56.00/1g	$37.80/500mg			
Eastern Diamondback Rattlesnake - *Crotalus adamanteus*	$50.00/1g	$33.75/500mg			
Western Diamondback Rattlesnake - *Crotalus atrox*	$45.00/1g	$30.38/500mg			
Sonoran Sidewinder - *Crotalus cerastes cercobombus*	$125.00/1g	$84.38/500mg			
Timber Rattlesnake - *Crotalus horridus*	$70.00/1g	$47.25/500mg			
Mottled Rock Rattlesnake - *Crotalus lepidus lepidus*	$125.00/1g	$84.38/500mg			
Blacktail Rattlesnake - *Crotalus molossus molossus*	$400.00/1g	$270.00/500mg	$72.90/100mg	$49.21/50mg	
Great Basin Rattlesnake - *Crotalus oreganus lutosus*	$125.00/1g	$84.38/500mg			
Grand Canyon Rattlesnake - *Crotalus oreganus abyssus*	$250.00/1g	$168.75/500mg	$45.56/100mg	$30.75/50mg	
Texas Coral Snake - *Mircrurus tener tener*	$2000.00/1g				
Florida Coral Snake - *Mircrurus fulvius*	$1800.00/1g				
Southern Pacific Rattlesnake - *Crotalus oreganus helleri*	$400.00/1g	$270.00/500mg	$72.90/100mg	$49.21/50mg	
Northern Pacific Rattlesnake - *Crotalus oreganus oreganus*	$400.00/1g	$270.00/500mg	$72.90/100mg	$49.21/50mg	
Mohave Rattlesnake - *Crotalus scutulatus scutulatus (A)*	$250.00/1g	$168.75/500mg	$45.56/100mg	$30.75/50mg	
Mohave Rattlesnake - *Crotalus scutulatus scutulatus (B)*	$1000.00/1g	$675.00/500mg	$182.25/100mg	$123.02/50mg	$33.22/10mg
Prairie Rattlesnake - *Crotalus viridis viridis*	$70.00/1g	$47.25/500mg			
Red Spitting Cobra - *Naja pallida*	$100.00/1g	$67.50/500mg			
Desert Massasauga - *Sistrurus catenatus edwardsii*	$1000.00/1g	$675.00/500mg	$182.25/100mg	$123.02/50m	$33.22/10mg
Western Massasauga - *Sistrurus catenatus tergeminus*	$1000.00/1g	$675.00/500mg	$182.25/100mg	$123.02/50mg	$33.22/10mg
Bushmaster - *Lachesis muta muta*	$2000.00/1g	$1350.00/500mg	$364.50/100mg	$246.04/50mg	$66.43/10mg

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 -90º 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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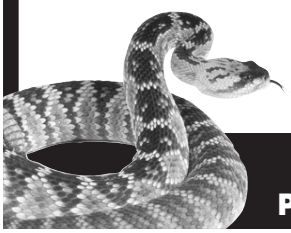
www.ntrc.tamuk.edu



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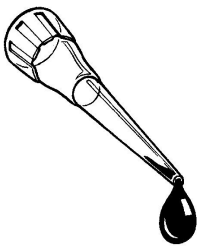

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Austrelaps superbus	$400	$1,600
Austrelaps labialis	$700	$3,000
Bitis arietans	$70	$300
Bitis rhinoceros	$75	$340
Bitis nasicornis	$75	$340
Bothriechis schlegelii	$200	$850
Crotalus adamanteus	$100	$450
Crotalus unicolor	$200	$900
Crotalus vegrandis	$160	$700
Hoplocephalus stephensii	$220	$900
Hoplocephalus bitorquatus	$220	$900
Naja kaouthia	$60	$250
Naja melanoleuca	$50	$200
Naja mossambica	$60	$250
Naja siamensis	$60	$250
Notechis ater humphreysi	$350	$1,600
Notechis ater niger	$350	$1,600
Notechis ater serventyi	$350	$1,600
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Oxyuranus microlepidotus	$300	$1,300
Oxyuranus scutellatus	$260	$1,250
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Pseudechis australis	$110	$520
Pseudechis butleri	$160	$700
Pseudechis colletti	$110	$500
Pseudechis guttatus	$110	$500
Pseudechis porphyriacus	$140	$650
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Pseudonaja textilis	$760	$3,700
Tropidechis carinatus	$300	$1,500

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Pure bee venom (*Apis mellifera*)	250mg	$58
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	(60gm and over)	$95/gm

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Kentucky Reptile Zoo
Venom Price List 2009-2010
200 L and E Railroad
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Fax: 606-663-6917
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Crotalidae

Agksitrodon contortrix contortirx	$60.00
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Agkistrodon contortrix laticinctus	$70.00
Agkistrodon contortrix phaeogaster	$70.00
Agkistrodon contortrix pictigaster	$70.00
Agkistrodon piscivorus leucostoma	$45.00
Agkistrodon piscivorus piscivorus	$45.00
Bothrops asper	$100.00
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Bothrops moojeni	$100.00
Crotalus adamanteus	$60.00
Crotalus atrox	$70.00
Crotalus basiliscus basiliscus	$200.00
Crotalus cerastes	$100.00
Crotalus durissus cumanensis	$300.00
Crotalus durissus durissus (fmr. *C. d. dryinas*)	$200.00
Crotalus durissus terrificus	$175.00
Crotalus horridus	$100.00
Crotalus horridus (type A neurotoxin)	$100.00
Crotalus molossus (Texas origin)	$70.00
Crotalus scutulatus scutulatus	$250.00
Crotalus viridis viridis	$70.00
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Naja melanoleuca	$80.00
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Naja nigricollis nigricollis	$80.00

Naja nivea	$100.00
Naja pallida	$100.00
Naja siamensis	$60.00
Ophiophagus hannah	$95.00
Pseudechis colletti	$320.00

Viperidae

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Terms

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- 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.
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- 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.
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