18th World Congress of the International Society on Toxinology

The Examination Schools & The Sheldonian Theatre
Oxford, United Kingdom

Congress Agenda

EMAIL: ist2015@LPMHealthcare.com

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The organising committee of the Congress is most grateful to BTG Plc for their generous educational grant to support the organisation of the Congress.
COMMITTEES

Local Organising Committee

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Dr Eddie Rowan, UK (Co-President)
Dr Muhammad Sohail, UK (Admin)
Professor Isabel Bermudez-Diaz, UK
Professor Philippe Billiauld, France
Dr Robert Harrison, UK
Professor Alan Harvey, UK
Dr Denis Servent, France
Professor Christopher Shaw, UK
Professor Peter Strong, UK
Dr Wolfgang Wüster, UK

International Scientific Programme Committee

Warrell, Professor David (IST2015 Co-President), UK
Rowan, Dr Eddie (IST2015 Co-President), UK
Harvey, Professor Alan (IST President), UK
White, Prof Julian (IST Secretary/Treasurer), Australia
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Bermudez-Diaz, Professor Isabel, UK
Billiauld, Professor Philippe, France
Binford, Dr Greta, USA
Borges, Dr Adolfo, Venezuela
Calvete, Professor Juan, Spain
Chippaux, Dr Jean-Philippe, France
Cury, Dr Yara, Brazil
Dart, Professor Richard, USA
de Silva, Professor Janaka, Sri Lanka
Faiz, Professor Md Abul, Bangladesh
Fox, Professor Jay, USA
Gopalakrishnakone, Professor P, Singapore
Grishin, Professor Eugene, Russia
Gutiérrez, Professor José María, Costa Rica

Harrison, Dr Robert, UK
Isbister, Dr Geoff, Australia
Junghanss, Professor Dr Thomas, Germany
Keyler, Dr Daniel E, USA
King, Professor Glenn, Australia
Kini, Professor R Manjunatha, Singapore
Križaj, Professor Igor, Slovenia
Kularatne, Professor SAM, Sri Lanka
Laraba-Djebbari, Professor Fatima, Algeria
Lewis, Professor Richard, Australia
Lomonte, Professor Bruno, Costa Rica
Mackessy, Professor Stephen, USA
Mebs, Professor Dr Dietrich, Germany
Montecucco, Professor Cesare, Italy
Müller, Dr Gert J, South Africa
Nicholson, Professor Graham M, Australia
Olivera, Professor Baldomero, USA
Possani, Professor Lourival D, Mexico
Rahmy, Professor Tarek R, Egypt
Sabatier, Professor Jean-Marc, France
Seifert, Professor Steven, USA
Servent, Dr Denis, France
Shaw, Professor Christopher UK
Sohail, Dr Muhammad, UK
Strong, Professor Peter, UK
Tambourgi, Professor Denise, Brazil
Tytgat, Professor Jan, Belgium
Utkin, Professor Yuri, Russia
van Helden, Dr Dirk, Belgium
Vogel, Professor Carl-Wilhelm, Hawaii
Wagstaff, Dr Simon, UK
Williams, Dr David J, Papua New Guinea
Wüster, Dr Wolfgang, UK
Zachariah, Professor Anand, India
Zhang, Professor Yun, PR China

KEYNOTE PLENARY SPEAKERS

Professor David Julius, California (San Francisco), USA
Professor Harry Greene, New York, USA
Professor Baldomero Olivera, Utah, USA
Professor Oliver Dolly, Dublin, Ireland
Professor Dr Juan Calvete, Valencia, Spain
Professor Dr Cesare Montecucco, Padova, Italy
Professor Hagan Bayley, Oxford, UK
Professor Angela Vincent, Oxford, UK
Professor Peter Ratcliffe, Oxford, UK
PODIUM AGENDA

Friday 25th September, The Examination Schools, High Street

ARRIVAL

11.00-13.00  Registration

Friday 25th September, The Sheldonian Theatre, Broad Street

OPENING CEREMONY

CHAIR:  David Warrell

13.00  Welcome by Professor Alan Harvey (President, IST)

13.05  Congress Inauguration by Professor Sir John Bell “Basic science and industry”

13.15  Welcome to the University of Oxford, to the “City of dreaming spires”, and to toxinology in Oxford by Professor David Warrell (Congress Host Co-President)

13.35  ELSEVIER LECTURE by Professor David Julius

13.45  Comfort break

14.45  REDI AWARD and lecture (awardee to be announced)

15.45  OXFORD STYLE PUBLIC DEBATE – This House believes that venomics will provide a complete understanding of venoms

• PROPOSIERS: i-Juan Calvete (Spain); ii-Bruno Lomonte (Costa Rica); iii-Kini Manjunatha (Singapore)

• OPPOSIERS: i-Gilberto Domont (Brazil); ii-Dietrich Mebs (Germany); iii-Steve Mackessy (USA)

16.45  General discussion for and against the motion followed by vote.

17.30  Close (The Opening Ceremony will be followed by drinks reception at St Hilda’s College)

Friday 25th September, St Hilda’s College, Cowley Place

SOCIAL EVENT

18.30-19.30  Drinks reception

Saturday 26th September, The Examination Schools, The South Schools

TRACK A

SESSION 1:  NATURAL TOXINS AND DRUG DISCOVERY

CHAIRS:  Glenn King | Ray Norton | Yara Cury

09.00 001  Baldomero Olivera (Keynote Plenary)
Rationalizing Toxinology with Species-specific Biology: Fish-hunting Cone Snails and other Conoideans

09.40  Change over

09.50 002  Glenn King (Keynote)
Venoms to drugs: spider-venom peptides for the treatment of chronic pain and epilepsy

10.10 003  Raymond Norton (Keynote)
Potassium channel blocking toxins as treatments for autoimmune diseases: design, synthesis, stability & delivery

10.30  Refreshment break, poster viewing, networking and exhibition in the South Schools

11.00 004  Yara Cury (Keynote)
Bunodosine 391 (BDS 391) - a novel sea anemone compound that induces peripheral analgesia mediated by 5-HT3 and TRPV1 ion channels

11.20 005  Miryam P Alvarez-Flores
Neuroprotective mechanisms of Losac in B27-deprived cortical neurons involve the expression of monocarboxylate transporter 2

11.35 006  Grazyna Faure
Snake venom phospholipase A₂ as a novel dual acting modulator of human F508del-CFTR and regulator of the prokaryotic pentameric proton-gated ion channel
### SESSION 2: TOXINS AND THEIR DERIVATIVES IN CLINICAL USE OR IN DEVELOPMENT

**CHAIRS:** Baldomero Olivera | Carl-W Vogel

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<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>14.30</td>
<td>Oliver Dolly</td>
<td>Molecular basis for the therapeutic efficacy of botulinum neurotoxins and new recombinant variants</td>
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<td>15.10</td>
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<td>15.20</td>
<td>Samira R Aili</td>
<td>Ant venom as a source of bioinsecticide and antimicrobial drug leads</td>
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<td>15.40</td>
<td>Elaine C Fitches</td>
<td>Exploitation of spider venom peptide toxins for the development of novel molluscicides</td>
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<tr>
<td><strong>16.00</strong></td>
<td><strong>Refreshment break, poster viewing, networking and exhibition in the South Schools</strong></td>
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<tr>
<td>16.30</td>
<td>Francis S Markland</td>
<td>Rational Design of a Snake Venom Derived Anti-invasive Agent: A Novel Recombinant Disintegrin as Cancer Therapeutic</td>
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<tr>
<td>16.45</td>
<td>Masahiro Miyashita</td>
<td>Synthesis and biological characterization of insecticidal toxin LaiT2, a two-domain peptide isolated from the <em>Liocheles australasiae</em> scorpion venom</td>
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<td>17.00</td>
<td>Célia R Carlini</td>
<td>Ion Channel Activity and Neurotoxicity of Jaburetox in Insect Models</td>
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<td>17.15</td>
<td>Marcus V Gomez</td>
<td>Analgesic and side-effects in rodents of Pha1β a spider venom toxin calcium channel blocker</td>
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<td>17.30</td>
<td>Nicolas Gilles</td>
<td>Mambuquaretin, a green mamba toxin as a new therapeutic agent for polycystic kidney diseases</td>
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<td><strong>17.45</strong></td>
<td><strong>Close</strong></td>
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### SESSION 8: ANTIVENOM-1 INNOVATION AND COMMERCIALISATION

**CHAIRS:** José María Gutiérrez | Philippe Billiald

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<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>09.50</td>
<td>José María Gutiérrez</td>
<td>Improving the distribution of antivenoms through a knowledge-based approach: a neglected aspect of innovation</td>
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<td>10.10</td>
<td>Philippe Billiald</td>
<td>An update on the use of antibodies against envenomings</td>
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<td><strong>10.30</strong></td>
<td><strong>Refreshment break, poster viewing, networking and exhibition in the South Schools</strong></td>
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<tr>
<td>11.00</td>
<td>Abdulrazzaq G Habib</td>
<td>Cost-effectiveness of Antivenoms for Snakebite Envenoming in 16 countries in West Africa</td>
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<tr>
<td>11.20</td>
<td>Robert A Harrison</td>
<td>Approaches to improve the snake-species, dose and local tissue-necrosis efficacy of snakebite treatment: Next Generation Snakebite Therapies</td>
</tr>
<tr>
<td>11.40</td>
<td>David J Williams</td>
<td>Papua New Guinea’s innovative Snakebite Research &amp; Training Project: an international collaboration for sustainable change</td>
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**Saturday 26th September, The Examination Schools, The South Schools**

**Saturday 26th September, The Examination Schools, The East Schools**
12.10 064 Jorge Kalil
Reducing costs in antivenom production: present and future

12.30 065 Andreas H Laustsen
Rational design of snake antivenoms: Identification of key toxins targets and drug discovery via Next Generation Phage Display

12.40 066 Elda E Sánchez
Neutralization of Snake Venom Myotoxins with a Chemically-Modified DNA Aptamer: An Approach to the Development of a Universal Antivenom

13.00 Lunch break, poster viewing, networking and exhibition in the South Schools

Saturday 26th September, The Examination Schools, The East Schools

SESSION 9: ANTIVENOM-2-PRE-CLINICAL AND CLINICAL ASSESSMENT

CHAIRS: David Williams | David Lalloo | Fan Hui Wen

15.20 067 David G Lalloo (Keynote)
Clinical evaluation of interventions in envenoming; the challenges

15.35 068 David J Williams (Keynote)
Clinical trials of a new Papuan taipan antivenom in Papua New Guinea: opportunities, challenges and rewards

15.50 069 Julian White (Keynote)
Evidence versus experience; an antivenom dilemma

16.05 Refreshment break, poster viewing, networking and exhibition in the South Schools

16.30 070 Fiona M S Bolton
Refinement of the WHO-recommended preclinical tests of antivenom efficacy

16.45 071 Dan E Keyler
The development of a new polyspecific antivenom for snake envenoming in Sri Lanka: A new model of international research collaboration

17.00 072 Larissa M Alvarenga
Engineered antibody fragments for the detection, quantification and neutralization of Loxosceles intermedia toxins

17.15 073 Steven A Seifert
A prospective, multicenter, double-blind, randomized, controlled, clinical trial comparing Crotalinae Equine Immune F(ab')2 and Crotalidae Polyvalent Immune Fab (ovine) for the treatment of US Crotalinae envenomation

17.30 073A Sanjib K Sharma
A randomized, double blind, clinical trial of two dose regimens of VINS polyvalent antivenom for the treatment of snake bite with neurotoxic envenoming in Nepal

17.45 Close

Sunday 27th September, The Sheldonian Theatre

PUBLIC ENGAGEMENT WITH SCIENCE

09.00 Welcome by the Lord Mayor of Oxford – Councillor Rae Humberstone

09.05 00B Professor Harry Greene (Cornell): Snakes and primates: a deadly 80 million-year-long dialogue

10.00: INTERACTIVE DISCUSSION “Venoms: deadly, but fascinating and potentially life-saving!”
CHAIR: Dietrich Mebs (Frankfurt): “What the hell is toxinology?”
- David Warrell (Oxford): “Deadly and damaging venoms”
- Alan Harvey (Strathclyde/Dublin): “Toxins as drugs”
- Chris Shaw (Belfast): “The evolutionary magic of frog skin toxins”

11.00 Comfort break

11.15 OXFORD STYLE PUBLIC DEBATE – How and why did snakes get their venoms?
CHAIR: David MacDonald, CBE
- THE MOTION “This House believes that venom originated only once in the course of reptilian evolution”
- PROPOSERS: i-Bryan Grieg Fry (Brisbane); ii-Kartik Sunagar, (Jerusalem); iii-Timothy Jackson, (Brisbane)
- OPPOSERS: i-John Mulley (Bangor); ii-Adam Hargreave (Oxford); iii-Scott A Weinstein (New York/Adelaide)

12.15 General discussion for and against the motion followed by a vote.

12.45 Close
### Sunday 27th September, St Hilda’s College, Canada Room

**IST COUNCIL MEETING**

14.30-16.30 IST Council Meeting (by invitation)

### Sunday 27th September, St Hilda’s College, Jacqueline Du Pré Music Building (JdP)

**IST BUSINESS MEETING**

18.00-20.00 IST Business AGM

### Monday 28th September, The Examination Schools, The South Schools

**SESSION 3: GENOMICS AND TRANSCRIPTOMICS**

**CHAIRS:** Rob Harrison | Nick Casewell

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<tr>
<th>Time</th>
<th>Speaker</th>
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<tr>
<td>09.00</td>
<td>Cesare Montecucco</td>
<td><strong>(Keynote Plenary)</strong> The Neuromuscular Junction: a primary site of attack of protein neurotoxins</td>
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<td>09.40</td>
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<td>09.50</td>
<td>Nicholas R Casewell</td>
<td><strong>(Keynote)</strong> Genomic and transcriptomic insights into the origin and evolution of snake venom toxin genes</td>
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<tr>
<td>10.05</td>
<td>Michael K Richardson</td>
<td><strong>(Keynote)</strong> What can we learn from snake genomics?</td>
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<tr>
<td>10.20</td>
<td>John Mulley</td>
<td>Characterisation of snake venom gland transcriptomes using the Oxford Nanopore MinION portable DNA sequencer</td>
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<tr>
<td>10.30</td>
<td>Refreshment break, poster viewing, networking and exhibition in the South Schools</td>
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<tr>
<td>11.00</td>
<td>Naoko Oda-Ueda</td>
<td>Transcriptional activation of venom gland-specific genes by epithelium specific ETS transcription factor ESE-3 homolog in <em>Protobothrops flavoviridis</em> snake venom gland</td>
</tr>
<tr>
<td>11.15</td>
<td>Gareth Whiteley</td>
<td>Characterizing venom composition in the enigmatic genus <em>Aspidelaps</em>: genes, proteins and pathology</td>
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<td>11.30</td>
<td>Stephen P Mackessy</td>
<td>Using venom to acquire complete venom protein cDNA sequences and assemble partial venom gland transcriptomes</td>
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<tr>
<td>11.45</td>
<td>Sergey Kozlov</td>
<td>Venom glands transcriptomics</td>
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<td>12.00</td>
<td>Frédéric Ducancel</td>
<td>First insights about comparative Bumblebees high-throughput transcriptomes and proteomes</td>
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<tr>
<td>12.15</td>
<td>Ricardo C Rodríguez de la Vega</td>
<td>A large scale survey of toxin and toxin-like genes in transcriptomes reveals the molecular tool-kit of scorpion venom evolution</td>
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<tr>
<td>12.30</td>
<td>Lunch break, poster viewing, networking and exhibition in the South Schools</td>
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### Monday 28th September, The Examination Schools, The South Schools

**SESSION 4: PROTEOMICS, VENOMICS, ANTIVENOMICS**

**CHAIRS:** Juan Calvete | Bruno Lomonte

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<tr>
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<tr>
<td>14.30</td>
<td>Juan Calvete</td>
<td><strong>(Keynote Plenary)</strong> The bright future of venomics</td>
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<td>15.10</td>
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<td>15.20</td>
<td>Stephen P Mackessy</td>
<td><strong>(Keynote)</strong> Venom variation, taxon-specific toxins and biological roles of venoms</td>
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<tr>
<td>15.40</td>
<td>Bruno Lomonte</td>
<td><strong>(Keynote)</strong> &quot;Toxicovemomics&quot; - towards an integrative view of compositional and functional aspects of snake venoms</td>
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**18th World Congress of the International Society on Toxicology | 25-30 September 2015 | Oxford, UK**
<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>16.00</td>
<td>Refreshment break, poster viewing, networking and exhibition in the South Schools</td>
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</table>
| 16.30 | David J Williams (Keynote)  
Making antivenoms for the developing world: is there a place for high quality venomic and antivenomic technologies? |
| 16.50 | Florence Jungo  
VenomZone: a new web-portal to unravel venom complexity |
| 17.05 | Julien Echterbille  
High-throughput sequencing of toxins with pharmacological interest: proof of concept and first applications |
| 17.20 | Daniel Petras  
Pushing the limits - Integrating Top-down mass spectrometry into snake venomics |
| 17.35 | Close |
|       | **Monday 28th September, The Examination Schools, The East Schools**      |
|       | **TRACK B**                                                              |
|       | **SESSION 10: CLINICAL-1: SNAKE BITES**                                   |
|       | **CHAIRS:** Julian White | Steven Seifert               |
| 09.50 | Steven A Seifert (Keynote)  
Far From Home: The Challenges of Non-Native Snake Envenomations |
| 10.10 | Owen K Paiva  
Clinical evaluation of the 20 Minute Whole Blood Clotting Test (20WBCT) and reliability at different temperatures and types of glassware |
| 10.30 | Refreshment break, poster viewing, networking and exhibition in the South Schools |
| 11.00 | Joerg Blessmann  
Snakebites in Lao PDR: Community-based surveys disclose high incidence of an invisible public health problem |
| 11.20 | Abdulrazaq G Habib  
The Public Health Burden of Snakebite Envenoming in 16 Countries in West Africa |
| 11.40 | Chamara Wijesinghe  
Development and assessment of a brief psychological intervention for snakebite victims |
| 12.00 | Jeremy N Day  
Space, time and species trends in snake envenomation in the south of Vietnam 1997 – 2012 |
| 12.20 | Dirk F van Helden  
A pharmacological approach to snakebite first aid |
| 12.40 | Lunch break, poster viewing, networking and exhibition in the South Schools |
|       | **Monday 28th September, The Examination Schools, The East Schools**      |
|       | **TRACK B**                                                              |
|       | **SESSION 11: CLINICAL-2: ARTHROPOD BITES AND STINGS**                    |
|       | **CHAIRS:** Rick Dart | Fábio Bucareuchi               |
| 15.20 | Fábio Bucareuchi (Keynote)  
Scorpion stings in Brazil |
| 15.40 | Richard C Dart (Keynote)  
Efficacy of F(ab)2 Antivenom for the Treatment of *Latrodectus mactans* Envenoming in the United States |
| 16.00 | Refreshment break, poster viewing, networking and exhibition in the South Schools |
| 16.30 | Ronelle E Welton  
Hospitalisations and deaths due to venomous bites and stings in Australia from 2000 to 2013 |
| 16.45 | David A Warrell  
Severe neurotoxic scorpion envenoming (*Parabuthus leiosoma*) in East Africa |
| 17.00 | John Rathbone  
Use of emergency transport by patients with envenomation injury in Queensland, Australia: a retrospective longitudinal study from 2007 to 2014 |
| 17.15 | Thomas Junghanss and Mauro Bodio  
"VAPAGuide – The free access Emergency Guide to Venomous and Poisonous Animals" |
| 17.45 | Close |
Monday 28th September, The Examination Schools, Hall 9

SESSION 15: MARINE AND FRESHWATER ALGAL AND DINOFLAGELLATE TOXINS

CHAIRS: Brett Neilan | Richard Lewis

09.50  112  Brett A Neilan (Keynote)
Saxitoxin: a trans-kingdom sodium channel-blocking purine alkaloid

10.10  113  Aurelia Tubaro (Keynote)
Toxicological profiles of new palytoxins, a world wide problem for human health

10.30  Refreshment break, poster viewing, networking and exhibition in the South Schools

11.00  114  Richard J Lewis (Keynote)
Ciguatera: recent advances but the risk remains

11.20  115  Floriane Bouliot
Characterization of the voltage-gated sodium channel in *Crassostrea gigas*: its sensitivity to paralytic shellfish toxins produced by * Alexandrium minutum*

11.40  116  John P Berry
Xanthophyll Glycosides from Cyanobacteria are Teratogenic Pro-Retinoids with Potential Implications to Global Declines in Aquatic Vertebrates

12.00  Lunch break, poster viewing, networking and exhibition in the South Schools

Monday 28th September, The Examination Schools, Hall 9

SESSION 16: TOXINS AND THE HAEMOSTATIC SYSTEM

CHAIRS: Manjunatha Kini | Kenneth Clemetson

15.20  117  R Manjunatha Kini (Keynote)
Fasxiator: a Novel, Highly Specific Factor Xla Inhibitor from Krait Venom

15.40  118  Kenneth J Clemetson (Keynote)
Toxins and their effects on platelets

16.00  Refreshment break, poster viewing, networking and exhibition in the South Schools

16.30  119  Ana Marisa Chudzinski-Tavassi
Phospholipids role on Amblyomin-X selectivity for tumor cells and on its antihemostatic activity

16.45  120  Xia Han
Regulation of expression of venom prothrombin activators

17.00  121  Ashis K Mukherjee
Potential biomedical application of Kunitz-type protease inhibitors from *Daboia russelii russelii* venom

17.15  122  Euikyung Kim
Characterization and Molecular Cloning of Antithrombotic Activity of *Nemopilema nomurai* Jellyfish Venom

17.30  123  Janaki Krishnamoorthy Iyer
Thrombin inhibitors from hematophagous animals

17.45  Close

Monday 28th September, St Edmund Hall (Dining Hall), High Street

SOCIAL EVENT

19.15-20.45 Congress banquet (by invitation or prior booking only)

Tuesday 29th September, The Examination Schools, The South Schools

SESSION 5: ION CHANNEL TOXINS

CHAIRS: Eddie Rowan | Jan Tytgat | Isabel Bermudez-Diaz

09.00  034  Hagan Bayley (Keynote Plenary)
DNA sequencing ... and other applications of pore-forming toxins
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<td>09.40</td>
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<td>09.50</td>
<td></td>
<td>Neil V Marrion (Keynote)</td>
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<td>The folding of an ion channel revealed by toxin binding</td>
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<td>10.10</td>
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<td>Graham M Nicholson (Keynote)</td>
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<td>Spider peptide neurotoxins as positive allosteric modulators of insect nicotinic acetylcholine receptors</td>
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<td>Refreshment, poster viewing, networking and exhibition in the South Schools</td>
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<td>11.00</td>
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<td>Isabel Bermudez-Diaz (Keynote)</td>
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<td>Use of concatamers to identify and map the binding site of pharmacologically active compounds on Cys-loop ligand-gated ion channels</td>
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<td>11.20</td>
<td></td>
<td>Yuri N Utkin</td>
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<td>What are nicotinic acetylcholine receptor blockers in venoms of Viperidae snakes?</td>
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<td>11.35</td>
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<td>Alexander A Vassilevski</td>
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<td>What's common between animal toxins and plant defence peptides?</td>
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<td>11.50</td>
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<td>Pierre E Bougis</td>
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<td>Micrurotokins MmTX1 and MmTX2 from coral snake venom potently modulate GABA&lt;sub&gt;A&lt;/sub&gt; receptor activity</td>
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<td>12.05</td>
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<td>Yingliang Wu</td>
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<td>Defensins, a novel kind of potassium channel inhibitors</td>
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<td>12.20</td>
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<td>Victor I Tsetlin</td>
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<td>Three-finger toxic and non-toxic proteins, old and new tools for research on neuroreceptors</td>
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<td>Lunch break, poster viewing, networking and exhibition in the South Schools</td>
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<td><strong>Tuesday 29&lt;sup&gt;th&lt;/sup&gt; September, The Examination Schools, The South Schools</strong></td>
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<td>TRACK A</td>
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<td><strong>SESSION 6: CONOTOXINS AND OTHER PAIN-INDUCING TOXINS</strong></td>
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<td><strong>CHAIRS:</strong> Richard Lewis</td>
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<td>14.30</td>
<td></td>
<td>Angela Vincent (Keynote Plenary)</td>
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<tr>
<td></td>
<td></td>
<td>Using animal toxins to explore neurological diseases: where would we be without them?</td>
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<td>15.10</td>
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<td>Change over</td>
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<td>15.20</td>
<td></td>
<td>Richard J Lewis (Keynote)</td>
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<tr>
<td></td>
<td></td>
<td>Evolution of new function in conotoxins</td>
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<td>15.40</td>
<td></td>
<td>Sébastien Dutertre (Keynote)</td>
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<td></td>
<td></td>
<td>Novel insights into cone snail venom-ecology relationships</td>
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<tr>
<td>16.00</td>
<td></td>
<td>Refreshment, poster viewing, networking and exhibition in the South Schools</td>
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<td>16.20</td>
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<td>Sulan Luo (Keynote) <strong>Please note an early start</strong></td>
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<td>16.40</td>
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<td>A new Hainan Conotoxin Potently Blocks α9α10 Nicotinic Acetylcholine Receptors</td>
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<td>16.55</td>
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<td>Irène R Chassagnon</td>
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<td>Inhibition of acid-sensing ion channel 1a by a novel double-knot spider toxin provides neuroprotection after stroke with a large therapeutic window</td>
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<td>17.10</td>
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<td>Catharina Reimers</td>
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<td>Cono-RFamide from Conus textile modulates proton-activated ASIC3 currents and alters sensory neuron excitability</td>
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<td>17.25</td>
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<td>Zhonghua Liu</td>
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<td>Naja atra venom peptide selectively blocks voltage-gated sodium channel Nav1.8 to abolish pain</td>
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<td>17.40</td>
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<td>Steve Peigneur</td>
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<td>When cone snails and spiders meet: design of selective and potent cyclized sodium channel inhibitors</td>
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<td>17.55</td>
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<td>Christina I Schroeder</td>
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<td>Rational design and synthesis of a novel Na&lt;sub&gt;V&lt;/sub&gt;1.8 selective inhibitor</td>
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18<sup>th</sup> World Congress of the International Society on ToxinoLOGY | 25-30 September 2015 | Oxford, UK
Tuesday 29th September, The Examination Schools, The East Schools

SESSION 21: CLINICAL SNAKE-BITE CASES

CHAIRS: David Warrell | David Williams | Thomas Junghanss

09.50 148  Fábio Bucaretchi (Keynote)
Coral snake (Micrurus spp.) bites in Brazil: A review of literature reports over the last 147 years

10.10 149  Joseph K Joseph
Morbidity and Mortality Related to Capillary Leak Syndrome in Daboia russelli Bite

10.25  Refreshment break, poster viewing, networking and exhibition in the South Schools

11.00 150  Paula R Oliveira
Epidemiology of Snakebites in Angola

11.15 151  Lois Armstrong
Snakebites in rural northern Bihar, India – A one year, prospective study on snakebite epidemiology and risk factors for bad outcomes

11.30 152  Marieke A Dijkman
The clinical presentation of an Aruban rattlesnake bite is comparable with bites by snakes belonging to the Crotalus durissus complex

11.45 153  Sadanand Raut
Snake Bite management experience in western Mah (INDIA)

12.00 154  Scott A Weinstein
An instructive case of presumed brown snake (Pseudonaja spp.) envenoming

12.15 155  Dileep P Punde
Crusade against Snake Bite poisoning

12.30 156  Gus A Gross
“Size Does Matter”

12.45 157  Aniruddha Ghose
Russell’s Viper (Daboia Russellii): A Newly Recognized Cause of Neuro-Myo-Renal toxic envenomation in Bangladesh

13.00  Lunch break, poster viewing, networking and exhibition in the South Schools

Tuesday 29th September, The Examination Schools, The East Schools

SESSION 22: MARINE AND FRESHWATER STINGS AND VENOMS

CHAIRS: Dietrich Mebs | David Warrell

15.20 158  Rongfeng Li
Lethal factor and mechanism of the venom from Jellyfish Nemopilema nomurai (Stomolophus meleagris)

15.35 159  Yehu Moran
State-of-the-art transgenic, genomic and microscopic approaches for characterizing venom and toxin producing cells in sea anemones

15.50  Refreshment break, poster viewing, networking and exhibition in the South Schools

16.15 160  Dalia Ponce **Please note an early start**
Unravelling the venom complexity of the jellyfish Chrysaora fuscescens (Cnidaria, Scyphozoa) by an integrated transcriptome and proteome approach

16.30 161  Vidal Haddad Junior
The lionfish in the New World: dissemination, ecological impact and risks to humans

16.45 162  Angel A Yanagihara
Cubozoan Envenomations: Pathogenetic Mechanisms and Clinical Management Implications

17.00 163  Luis M Botana
Presence of tetrodotoxin in an increasing number of vectors, and the real value of TEF (toxic equivalent factor)

17.15 164  Julian White
The Clinical Toxinology Resources Website; An Update On 13 Years Experience

17.30  Close
### TRACK C

#### SESSION 17: BIOTOXINS AND BIOTERRORISM

**CHAIRS:** Daniel Gillet | P Gopalakrishnakone

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker and Title</th>
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<tbody>
<tr>
<td>09.50</td>
<td>Daniel Gillet (Keynote)</td>
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<tr>
<td></td>
<td>Inhibitors of Ricin and Shigatoxin Intracellular Trafficking Treat Mice with O104:H4 STEC Infection</td>
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<td>10.10</td>
<td>P Gopalakrishnakone (Keynote)</td>
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<td>Detection of Venoms and Toxins</td>
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<td>10.30</td>
<td>Refreshment break, poster viewing, networking and exhibition in the South Schools</td>
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<tr>
<td>11.00</td>
<td>Leonard A Smith</td>
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<td>Progress toward Developing a Safe and Efficacious Ricin Vaccine</td>
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<td>11.20</td>
<td>Mahdi Balali-Mood</td>
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<td>Chemical weapons with biological toxins origin</td>
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<td>11.40</td>
<td>Virginie Brun</td>
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<td>Exploring the toxinome of <em>Staphylococcus aureus</em> using targeted proteomics</td>
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<td>12.00</td>
<td>Suzanne R Kalb</td>
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<td>Functional Characterization of a Novel Botulinum Neurotoxin Hybrid</td>
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<td>Lunch break, poster viewing, networking and exhibition in the South Schools</td>
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#### TRACK C

#### SESSION 18: ADVANCES IN THE UNDERSTANDING OF BACTERIAL AND FUNGAL TOXINS

**CHAIRS:** Cesare Montecucco | Len Smith

**Including the International Society for Neurochemistry symposium on “Medically-important bacterial neurotoxins affecting the nervous system”**

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>15.20</td>
<td>Marina de Bernard</td>
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<td><em>Treponema pallidum</em> (syphilis) antigen TpF1 induces angiogenesis through the activation of the IL-8 pathway</td>
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<td>15.40</td>
<td>Ornella Rossetto</td>
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<td>The new world of hundreds of different Botulinum Neurotoxins</td>
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<td>16.00</td>
<td>Refreshment break, poster viewing, networking and exhibition in the South Schools</td>
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<tr>
<td>16.30</td>
<td>Giampietro Schiavo</td>
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<td>The journey of tetanus and botulinum neurotoxins in the CNS</td>
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<td>16.50</td>
<td>Jordi Molgó</td>
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<td>13,19-didesmethyl and 13-desmethyl spirolide-C neurotoxic actions are mainly due to interactions with nicotinic rather than muscarinic receptors</td>
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<td>17.10</td>
<td>Robert J French</td>
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<td>New complexities of μ-Conotoxin actions are seen in their inhibition of “simple” prokaryotic sodium channels</td>
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#### TRACK D

#### SESSION 12: DISCOVERING NEW TOXINS IN UNEXPECTED TAXA MAMMALS, AMPHIBIANS, ANNELIDS, CRUSTACEANS, TICKS

**CHAIRS:** Christopher Shaw | Bryan Fry | Pat Nuttall

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>09.50</td>
<td>Chris Shaw (Keynote)</td>
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<td></td>
<td>Anorexigenic peptides in amphibian skin: unexpected or not?</td>
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<td>10.10</td>
<td>K Anna I Nekaris (Keynote)</td>
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<td>What is the ecological function of slow loris (Primates, <em>Nycticebus</em>) venom?</td>
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**Tuesday 29th September, The Examination Schools, Hall 11**

**SESSION 13: TOXINS IN NATURAL HISTORY AND EVOLUTION**

**CHAIRS:** Wolfgang Wüster | Kevin Arbuckle | Kartik Sunagar

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>15.20</td>
<td>098</td>
<td>Wolfgang Wüster (Keynote)</td>
<td>Snakes behaving badly: evolution of venom spitting in cobras in its historical context</td>
</tr>
<tr>
<td>15.40</td>
<td>099</td>
<td>Nicholas R Casewell (Keynote)</td>
<td>Extreme convergence in toxin resistance by predictable parallel molecular evolution</td>
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<td>16.00</td>
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<td>Refreshment break, poster viewing, networking and exhibition in the South Schools</td>
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<tr>
<td>16.20</td>
<td>100</td>
<td>Kartik Sunagar <strong>Please note an early start</strong></td>
<td>The rise and fall of an evolutionary innovation</td>
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<tr>
<td>16.35</td>
<td>101</td>
<td>Eivind A B Undheim</td>
<td>Limitations on a biochemical arsenal — do centipede venoms evolve under morphological constraint?</td>
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<tr>
<td>16.50</td>
<td>102</td>
<td>Gary M Buccarelli</td>
<td>Fluctuations of toxin levels in a chemically defended amphibian</td>
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<tr>
<td>17.05</td>
<td>103</td>
<td>Timothy N W Jackson</td>
<td>Ontogenetic shifts in the diet of Pseudonaja sp. are paralleled by ontogenetic shifts in venom</td>
</tr>
<tr>
<td>17.20</td>
<td>104</td>
<td>Bryan G Fry</td>
<td>The dynamic diversification of the reptile venom system</td>
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<tr>
<td>17.35</td>
<td>105</td>
<td>Kevin Arbuckle</td>
<td>It’s Not Easy Being Mean: Consequences of Chemical Antipredator Defence for Ecology, Evolution, and Conservation</td>
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**Wednesday 30th September, The Examination Schools, The South Schools**

**SESSION 7: SNAKE VENOM METALLOPROTEINASES, PHOSPHOLIPASES AND OTHER TOXINS MEDIATING INFLAMMATION**

**CHAIRS:** Jay Fox | José María Gutiérrez | Ana Maria Moura de Silva

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<th>Time</th>
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<th>Speaker(s)</th>
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<tr>
<td>09.00</td>
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<td>Gordon Duff</td>
<td>Welcome from St Hilda’s College</td>
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18th World Congress of the International Society on Toxinology | 25-30 September 2015 | Oxford, UK
09.05 052  Peter J Ratcliffe (Keynote Plenary)
Oxygen sensing in animals: the new physiology of hypoxia

09.45  

09.50 053  Jay W Fox (Keynote)
Correlating Snake Envenomation Mechanisms and Pathophysiology with Wound Exudate Proteomics Over Time and Space

10.10 054  José María Gutiérrez (Keynote)
Understanding the mechanisms of microvascular damage induced by snake venom hemorrhagic metalloproteinases

10.30  Refreshment break, poster viewing, networking and exhibition in the South Schools

11.00 055  Igor Križaj (Keynote)
Protein disulphide isomerase in the retrograde cell transport of ammodytoxin and the structurally related mammalian secreted phospholipases A2

11.20 056  Michela Rigoni
Animal presynaptic neurotoxins provide a relevant model of motor axon terminal degeneration followed by regeneration

11.40 057  Jonas Perales
Structural determinants of the interaction between snake venom metallopeptidase and its natural inhibitors

12.00 057  Marie Delafontaine
Bothrops lanceolatus venom: Potential mechanisms involved in envenoming

12.20 167  Alan Harvey (Closing Plenary-1)
The future of toxinology: where are we heading?

12.30 166  Jay W Fox (Closing Plenary-2)
What’s Wrong Right with Toxinology

12.40 040  Closing remarks by Congress Co-Presidents (Closing Plenary-3)

12.50 Close of Congress and Departure

Wednesday 30th September, The Examination Schools, The East Schools

SESSION 20:  PLANT AND MUSHROOM POISONING

CHAIRS:  Michael Eddleston | Julian White

09.50 142  Michael Eddleston (Keynote)
Epidemiology and management of plant self-poisoning in South Asia

10.10 143  Julian White (Keynote)
Mushroom poisoning: a proposed new clinical classification

10.30  Refreshment break, poster viewing, networking and exhibition in the South Schools

11.00 144  Thomas R Zilker
Management of Amanita poisoning

11.20 145  Régis Bédry
The “new” mushroom syndromes

11.40 146  M Abul Faiz
Challenges of diagnosis of fatal plant related acute intoxication in Bangladesh

12.00 147  David A Warrell
Supping with the Panará: a case for Inspector Morse in Oxford

12.15  Back to the South Schools for Closing Plenaries

Wednesday 30th September, The Examination Schools, Hall 9

SESSION 19:  VENOM AND TOXIN PHARMACOLOGY

CHAIRS:  Denis Servent | Christine Wright

09.50 135  Denis Servent (Keynote)
Aminergic Toxins interacting with GPCRs: Identification, pharmacological characterization, structural and engineering studies
<table>
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<tr>
<th>Time</th>
<th>Session</th>
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| 10.10 | Christine E Wright (Keynote)  
The cardiovascular pharmacology of the venom of the Papuan black snake *Pseudechis papuanus* |
| 10.30 | Refreshment break, poster viewing, networking and exhibition in the South Schools |
| 11.00 | Patrick I Harrison  
Using atomic force microscopy to characterise the mechanism of action of two antimicrobial peptides from the venom of *Scorpio maurus palmitus* |
| 11.20 | Luciene M Zanchetta  
Cytoskeleton participation on crotaline-induced antinociception in inflammatory pain |
| 11.35 | Fernando C Cardoso  
Harnessing animal venoms in the discovery of potent Na$_{+}$ inhibitors through fluorescent and automated patch clamp assays |
| 11.50 | Janeyuth Chaisakul  
Sudden cardiovascular collapse in snakebite: differing mechanisms of hypotension with a venom PLA$_2$ compared to a prothrombin activator |
| 12.05 | Lucas A Freitas  
Assessment of neurotoxic activity of an isolated toxin from *Tityus bahiensis* scorpion venom intrahippocampally injected in rats |
| 12.20 | Back to the South Schools for Closing Plenaries |

### Wednesday 30th September, The Examination Schools, Hall 11

#### TRACK D

**SESSION 14: VENOMS AS AN EMERGING EVOLUTIONARY MODEL**

**CHAIRS:** Juan Calvete | Marymegan Daly

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<th>Time</th>
<th>Session</th>
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| 09.50 | Mandë Holford (Keynote)  
Using The Molecular Diversity of Terebrid Snail Venom To Investigate Gene Evolution and Adaptive Change |
| 10.10 | Marymegan Daly (Keynote)  
Evolutionary diversity of sea anemone venom |
| 10.30 | Refreshment break, poster viewing, networking and exhibition in the South Schools |
| 11.00 | Ronald A Jenner (Keynote)  
Tracking toxins in neglected venomous invertebrates |
| 11.20 | Stephen P Mackessy  
Expression of venom gene homologs in diverse python tissues: a new model for the evolution of snake venom and a re-assessment of transcriptome-based definition of venoms |
| 11.40 | Anita Malhotra  
Mechanisms of toxin evolution evaluated using the Phospholipase A2 gene family from pitvipers |
| 12.00 | Thomas M McCabe  
Evidence for the Presence of an Endogenous Venom-Resistance Molecule in a Local Population of Deer Mouse (*Peromyscus maniculatus*) |
| 12.20 | Back to the South Schools for Closing Plenaries |
POSTER LISTING

Presentation Date: Saturday 26th September, The North Schools

26-1-1: José E Barbosa, Production of human monoclonal antibodies (scFv) able to inhibit toxic actions of crude venom, purified melittin and PLA2, from Africanized bees
26-1-2: Evelyne Benoit, Effects of pinnatoxins and other cyclic imine phycotoxins on the mouse neuromuscular system in vivo
26-1-3: Cháriston A. Dal Belo, Neurotoxicity of Jack Bean Urease: Investigation of its convulsive-like activity
26-1-4: Thomas Besson, Binding Site and Inhibitory Mechanism of the Mambalgin-Z Pain-relieving Peptide on Acid-sensing Ion Channel 1a
26-1-5: Cicilia de Carvalho, A prothrombin activator protein and derived peptides as promising tissue remodeling agents
26-1-6: Felipe Augusto Cerni, Ts19 Fragment II: a new long-chain potassium channel toxin from Tityus serrulatus venom
26-1-7: Laura Droctové, Structure and molecular mode of action of a snake toxin acting on type 2 vasopressin receptor
26-1-8: Fernanda Faria, Placolin, a new inhibitor of platelet aggregation from Haematernity depressa leech
26-1-9: Mathews F Fernandes-Pedrosa, Structural characterization of a novel peptide with antimicrobial and anticancer activities from the venom gland of the scorpion Tityus stigmurus
26-1-10: Suely G Figueiredo, Identification of C-type isolecitins in the venom of the scorpionfish Scorpaena plumieri
26-1-11: Suely G. Figueiredo, Scorpaena plumieri venom and skin mucus: biochemical and pharmacological features
26-1-12: Francis García, Identification and characterization of a peptide with anti-nociceptive effect isolated from the skin secretion of an American veined tree frog
26-1-13: Aya Kiriake, Primary structure of a proteinaceous toxin from rabbitfish Siganus Juscescens
26-1-14: Hang Fai Kwok, High-throughput approach for isolation and identification of novel peptides with anticancer activities from scorpion venoms
26-1-15: Sara E Lucena, Purification, isolation and partial characterization of four dimeric disintegrins from the venom of Broad-Banded and Trans-Pecos Copperheads
26-1-16: Iraesma Oroz-Parras, Capaspe3/7-related apoptosis induced by two synthetic disulfide bond toxins from Conus californicus in lung cancer cell lines
26-1-17: Manuela Berno Pucca, Tityus serrulatus toxins as immunosuppressants: insights of a novel K+ channel pattern in T cells
26-1-18: Kalyani Saha, Neutralization of Naja kaouthia venom induced acute stress and cytokines response with herbal gold nano particle (VN-GNP)
26-1-19: Cristina P Sousa, Endophytic Poenicbacillus terrae can produce toxic effect in promastigotes forms of Leishmania infantum/chagasi nitric oxide sensitive
26-1-20: Mohamed M Tawfik, Cytotoxic properties of smp24 and smp43, alpha-helical antimicrobial peptides from the egyptian scorpion, Scorpio maurus palmatus
26-1-21: Kiem T Trinh, The application and result application of sero-therapy for snake bite patients in Vietnam
26-1-22: Héctor H Valdivia, Structure-function relationship of Calcins, a group of high-affinity membrane-permeable peptide ligands of Ca2+ release channels/Ryanodine Receptors
26-1-23: Sarah J Whitfield, Superantigens in sepsis: effective treatment of staphylococcal enterotoxin B intoxication in the mouse
26-7-1: Oyama Etsuko, Purification and characterization of two platelet-aggregation inhibitors, named angustatin and H-toxin TAg, from the venom of Dendroaspis angusticeps
26-7-2: Carlos A. H. Fernandes, Biophysical studies suggest a new arrangement of crotoxin complex and provide insights into CB oligomerization
26-7-3: Consuelo L Fortes-Dias, Structural and evolutionary insights into endogenous alpha-phospholipase A2 inhibitors of Latin American pit vipers
26-7-4: Karina G Giannotti, Snake venom phospholipases A2 (MT-3 and BthTx-2) induce vascular smooth muscle foam cell formation dependent on lipid metabolism factors
26-7-5: Alexandra Rucavado, Proteolytic degradation of muscle basement membrane by SVMPs: pathophysiologic implications in muscle necrosis
26-7-6: Léa Rodríguez-Simioni, A new neuromuscular active fraction from Bothrops jararacussu venom
26-7-7: Luciana A F Sousa, Comparison of venoms from wild and long-term captive Bothrops atrox snakes and characterization of Batroxhagin, the predominant class PI11-SVMP
26-7-8: Catarina Teixeira, Phospholipase A2 subunit of crotoxin inhibits expression of endothelial cell adhesion molecules involved in leukocyte diapedesis during inflammation
26-7-9: Hossein Vatanpour, Direct Cytotoxic activity of Iranian Agkistrodon Halsys Crude Venom on Endothelial Cells
29-7-10: Binta Kurfi, Effect of serum creatine kinase in rabbits as affected by myotoxic phospholipase A2 partially purified from Naja nigricollis venom
29-7-11: Teresa Escalante, Snake venom metalloproteinases inhibit angiogenesis in a three-dimensional in vitro assay
26-8-1: Alexandra Bak Jakobsen, Economic analysis of the underlying causes for the snake antivenom market failure in sub-Saharan Africa: looking beyond science for explanations
26-8-2: Milind V Khadilkar, Development of equine origin lyophilized polyvalent Snake Venom Antiserum against 4 Bitis, 3 Echis, 3 Naja and 4 Dendroaspis species for Africa
26-8-3: Andreas H Laustsen, The future of antivenoms: Oligoclonal mixtures of recombinant, human(ized) antibodies
26-9-1: Joerg Blessmann, High incidence of anaphylactic shock to horse-derived F(ab')2 antivenom in 99 snakebite patients treated at Savannakhet provincial hospital, Lao PDR
RESUME

Presentation Date: Monday 28th September, The North Schools

28-3-1: Márcia H Borges, Global profile of the venom of Grammostola Iheringi Brazilian tarantula: searching for biotechnological potential

28-3-2: Michel Deguelde, Multi-analytical method to characterise Naja atra venom

28-3-3: Mikael Engmark, High-throughput epitope identification for snakebite antivenom

28-3-4: Julián Fernández, Snake venomomics of Micrurus alleni and Micrurus mosquitensis from Costa Rica: two divergent compositional patterns in New World elapid

8-3-5: Paul M N Heiss, Venomomic characterization and bioactivity screening of Vipera anatolica, Vipera darevskii and Montivipera bulgaraghica

28-3-6: Florence Jungo, VenomZone: a new website to unravel venom complexity

28-3-7: Tai Kubo, Utilization of neurotoxin-inspired peptide libraries in in-vitro evolution, and its proved pluripotency to target GPCRs, proteases and trophic factors

28-3-8: Rafael D Melani, Top-down Venomics: mapping intact proteoforms and protein complexes in king cobra venom.

28-3-9: Bruno Madio, Proteomic and transcriptomic investigation of the venom from Australian sea anemones provides insight into venom evolution and ecology

28-3-10: Gilles Mourier, VENOMICS project: Production of two and three-Disulfide-Bridges small Toxins

28-3-11: Carlos Correa-Netto, Monoclonal-based antivenomics and biological activities revealing conserved neutralizing epitopes across Elapidae family

28-3-12: Carolina A Nicolau, Bothrops jararaca proteopeptidome: extensive molecular characterization of samples to be assayed by the connectivity map approach

28-3-13: Davinia Pla Snake, venomics of the palm-pitvipers Bothriechis bicolor, B. aurifer and B. thallasinus from Guatemala

28-3-14: Loic Quinton, Diversity of peptide toxins from four Conus venoms revealed by combined cutting-edge technologies of proteomics, transcriptomics and bioinformatics

28-3-15: Ene Sigur, Vipera lebetina venom nucleases

28-3-16: Leiliane F de Sousa, Adaptive advantages of individual variation of Bothrops atrox venom from snakes collected at different phytogeographical scenarios in Brazilian Amazon

28-3-17: Ana F Sequeira, High-Throughput synthesis and cloning of genes encoding venom peptides: developing a platform for the discovery of novel therapeutic molecules


28-3-19: Choo Hock Tan, Venomics of Hydrophis schistosus, the beaked sea snake: a simple toxin arsenal cross-neutralised by two heterologous antivenoms

28-3-20: Kae Yi Tan, Geographical variations of Naja kaouthia (monocled cobra) venom from Southeast Asia: a venomic and functional study
28-3-21: Norma Yamanouye, Mechanisms of production and secretion of toxins by secretory cells from Bothrops jararaca venom gland in culture: a secretome study
28-4-1: Diego D Almeida, An overview on the development of Bothrops jararaca genome project
28-4-2: Diana R Amazonas, Population genomics of Bothrops atrox in the West of Para State, Brazil: Analyses Using RADseq Genetic Markers
28-4-3: Jimena Cid-Urribe, Transcriptome analysis of venomous glands of male and female scorpions of the species Centruroides limpidus
28-4-4: Jordi Durban, Testing the hypothesis that miRNAs modulate ontogenetic changes in the venom of Crotalus simus
28-4-5: Fernanda Faria, Genes Involved in Blood Coagulation: Exploring Salivary Complexes from Haementeria vizottoi leeches through Transcriptomic and Phylogenetic Studies
28-4-6: Andrea Figueroa-Montiel, In silico identification of protein disulfide isomerase genes in the de novo assembled transcriptomes of four different species of the genus Conus
28-4-7: Inácio L M Junqueira-de-Azevedo, Deciphering the venom of the rear fanged snake Phalotris mertensi by integrative multimics and biochemical approaches
28-4-8: Ursula C de Oliveira, Comparative transcriptomes and proteomes from medically important scorpions from the genus Tityus
28-4-9: María T Romero-Gutiérrez, Insights on the transcriptomic analysis of the venomous gland of the scorpion Thorellius atrox
28-4-10: Libia Sanz, Genomic organization of Echis ocellatus Pi- and Pi-SVMP genes
28-4-11: Montamas Suntravat, Transcriptomic analysis of the venom gland of the Venezuelan mapanare (Bothrops colombiensis) using expressed sequence tags (ESTs)
28-10-1: Lois Armstrong, Snakebites in rural northern Bihar, India – A one year, prospective study on snakebite epidemiology and risk factors for bad outcomes
28-10-2: Huil Wen Fan, Microbiota isolated from blisters and abscess secretions in patients bitten by Bothrops snakes.
28-10-3: Kasun Fernando, Severe local pain after Hump nosed viper bite alleviation with new methods: Audit in Base Hospital Elpitiya Sri Lanka
28-10-4: Jay W Fox, Proteomic Analysis of Human Blister Fluids Following Envenomation by Three Snake Species: Differential Markers for Venom Mechanisms of Action and Potential for Personalized Therapeutic Intervention
28-10-5: Francisco O S França, Rattlesnakes (Crotalus durissus) bites in Santarém/Pará (Brazilian Amazonia)
28-10-6: Francisco O S França, Forest pit viper (Bothriopsis bilineata bilineata) bite in the Brasilian Amazon with acute kidney injury and persistent thrombocytopenia
28-10-7: Eric C K Gren, From Vemon to Syndrome: Using Mass Spectrometry to Understand the Correspondence of Rattlesnake Venom Composition and Clinical Symptoms of Snakebite
28-10-8: Gus A Gross, Classic “Depo-effect” of Crotalus Venom
28-10-9: Gus A Gross, “Tip of The Iceberg”
28-10-10: Gus A Gross, Our Country’s Coral Conundrum
28-10-11: Nicholas B. Hurst, Venous Thrombosis Following Rattlesnake Envenomation
28-10-12: Joseph K Joseph, Six interesting cases of snakebite
28-10-13: Jing-Hua Lin, A rapid, sensitive, and specific lateral-flow immunochromatographic device to detect most Asian Naja snake venom
28-10-14: Nguyen Thi Thuy Nguyen, A retrospective study of Red-necked Keelback envenomation at Cho Ray Hospital, Ho Chi Minh City, Viet Nam
28-10-15: Paula R Oliveira, Registration and location of Bitis Gabonica in Angola
28-10-16: Deb P Pandey, Medically relevant venomous snakes in Nepal
28-10-17: Deb P Pandey, A season of snakebite envenomation: presentation patterns, timing of care, anti-venom use, and case fatality from a hospital of southcentral Nepal
28-10-18: Pallavi Raut, 0% mortality & 0% renal failure in Russell’s Viper bite patients in rural set up
28-11-2: Francisco O S França, Acute cerebellar dysfunction with neuromuscular manifestations after scorpionism presumably caused by Tityus obscurus in Santarém, Pará/Brazil
28-11-3: Kenneth D Winkel, Venom Allergy – Lessons from Auditing 30+ years of Fatalities in Australia
28-15-1: Amparo Alfonso, Effect of growth conditions over TTX-like compounds produced by Prorocentrum minimum
28-16-1: Raghuvir K Arni, Structural Analysis of Snake Venom Serine Proteinases

Presentation Date: Tuesday 29th September, The North Schools
29-5-7: Neville M Ngum, Centipede venom components and their synthetic analogues as tools to study ion channels and as potential drugs and pesticides
29-5-8: Andrias O O’Reilly, Expression of disulfide-rich toxins in E.coli: co-expressed chaperone enzymes produce correct disulfide reticulation and folding of a scorpion β-toxin
29-5-9: Rohit N Patel, Investigating the inhibition of nicotinic acetylcholine receptors by ladybird alkaloids
29-5-10: Jennifer J Smith, Mapping the residues that mediate interaction of the spider-venom peptide μ-TRTX-Hd1a with the analgesic target Na₅.1.7
29-5-11: Kittipong Tachampa, Disturbance of Intracellular Calcium Homeostasis and Cardiomyocyte Function by a protein in fraction six of Naja kaouthia Venom
29-5-12: Changlin Tian, Chemical synthesis of mambalgin-1 toxin and binding analysis to Acid Sensing Ion Channels using two-Photon Fluorescence Microscopy
29-6-1: Yaroslav A Andreev, Natural compounds as inhibitors of acid sensing channel ASIC3
29-6-2: Johanna Bernáldez, Member of gamma-conotoxin family isolated from Conus princeps displays novel molecular target
29-6-3: Qiyun Dai, Structures, functions of several novel conotoxins from Conus snails in South China Sea
29-6-4: Sylvie Diochot, Pharmacological exploration with animal toxins of the role of Acid-Sensing Ion Channels in pain pathways
29-6-5: Eline K M Lebbe, Conus australis, an as yet unexplored Conus sp. with novel conotoxins
29-6-6: Maria Elena de Lima, PnPP-19, a synthetic peptide representing an epitope of the toxin PnTx2-6 from the spider Phoneutria nigriventer, shows antinociceptive effect
29-6-7: Dmitry I Osmakov, ASIC3 channel inhibitors produced by a mutagenesis of inactive homolog of peptide Ugr9-1 from the venom of sea anemone Urticina grebelnyi
29-6-8: Natalie J Saez, Complementary molecular dynamics and mutagenesis approach reveals critical interactions for PcTx1 inhibition of the therapeutic target ASIC1a
29-9-6: Adolfo de Roordt, Neutralization of Crotalus atrox venom by heterologous antivenom in experimental model
29-9-7: Adolfo de Roordt, The immunochemical reactivity and the neutralizing capacity of Crotalus durissus terrificus antivenom
29-9-8: Laura Sánchez, Preclinical efficacy of four antivenoms distributed in Western sub-Saharan Africa against Echis ocellatus venom from three countries
29-10-19: Julian White, The Myanmar Snakebite Project: Experience With A Practical Approach To Confronting The Snakebite Problem In A Developing Nation
29-11-4: Adolfo de Roordt, Mortality by venomous animals in Argentina: Arachnids and Hymenoptera are responsible of the highest mortality
29-12-1: Pavlina Bartiková, “Tick toxins” target vertebrate host wound healing
29-12-2: Mária Kazimírová, Amblyoma variegatum (Acari: Ixodidae) salivary glands are a rich source of antihaemostatic compounds
29-12-3: Yun Zhang, Pore-forming toxin aerolysin-like proteins (ALPs) in immunity and venoms
29-13-1: Karen de Morais-Zani, Comparative study of venom biochemical and biological activities of captive and wild Brazilian Viperidae snakes
29-13-2: Raquel Sanz-Soler, Distribution of the RTS-disintegrin-coding RPLTN gene across Reptilia
29-13-3: Anita Mitico Tanaka-Azevedo, Comparative Analysis of Venoms from Brazilian Bothrops jararaca snake Born in Captivity and Bothrops Reference Venom
29-13-4: Giulia Zancoli, Transcriptomic differences in the venom of Mohave rattlesnakes (Crotalus scutulatus) are dictated by presence or absence of toxin genes
29-18-1: John P Berry, A Novel Method of Detoxification of the Mycotoxin, Ochratoxin-a, as a Contaminant of Wine Using Yeast (Saccharomyces cerevisiae): Toxicological Studies and Current Progress
29-18-2: Yang Xiang, Intracellular potassium leakage may directly induce the oligomerization of NLRP3
29-18-3: Mildá Zilnyte, Amblyodonta variegatum: Toxicological Studies and Current Progress
29-19-16: Adolfo de Roordt, Effect of Crotalus durissus terrificus venom, Bothrops ammodytoides venom its acidic phospholipase A₂ on leukaeic cell lines K562 and KVS62
29-19-17: María Herrera, Neutralization, by two antivenoms, of the neuromuscular blocking activity of the venom of taipan (Oxyuranus scutellatus) and its neurotoxin taipoxin
29-19-18: Melisa Bénard-Valle, Proteomic analysis and species specificity of the venom of the Mexican coral snake Micrurus browni
29-21-1: Mayra P Becerra, Analysis in vivo of sublethal effects of venom from the jellyfish Chrysaora sp. in zebrafish (Danio rerio)
29-21-2: Francisco O. S. França, Tetanus after envenomations caused by freshwater stingrays
29-21-3: Vidal Haddad, Junior, Injuries by fish in fishing communities in the Southeast and Midwest Brazil: frequency, clinical aspects, treatment and prevention
29-21-4: Dalia Ponce, Comparative study of the cytotoxic effects of Chrysaora quinquecirrha (Scyphozoa) and Chironex fleckeri (Cubozoa) venoms using cell-based assay
29-21-5: Huahua Yu, Treatment for jellyfish stings
29-21-6: Christie Wilcox, Development of realistic, quantitative and repeatable cnidarian envenomation models to standardize treatment testing