

**SYMPOSIUM 1. REPRODUCTION IN REPTILES: FROM GENES TO ECOLOGY**

This is the first multidisciplinary symposium on reproduction in reptiles.

**2. Organizers:**

**Professor Michael B. Thompson**, Professor in Zoology  
**Dr Scott L. Parker**, ARC Post-doctoral Research Associate

School of Biological Sciences (A08)  
University of Sydney  
NSW 2006, AUSTRALIA

Curriculum Vitae – **M.B. Thompson**

**Ph.D.** University of Adelaide (1983).

**Professional Experience**

1983-89 Postdoctoral researcher, Univ. Adelaide, Australia; UGC Postdoctoral Fellowship in Zoology, Victoria Univ., New Zealand; Archie Carr Postdoctoral Fellow in Zoology, Univ. Florida.

1989-present Academic appointments in Biological Sciences, University of Sydney.

**Research interest:** reproductive physiology of reptiles, especially evolution of viviparity.

**Research Grants:** approx AU\$3M, mostly from the Australian Research Council

**Conference papers:** 80+ presentations, including 14 invites and 2 plenary lectures

**Supervised:** 30 Honours, 3 MSc and 14 PhD students.

**Published:** 127 referees papers, 24 abstracts, 25 reports and popular articles, 1 book

Curriculum Vitae – **S.L. Parker**

**Ph.D.** Virginia Polytechnic Institute and State University (Virginia Tech), U.S.A.

**Professional Experience**

2005-2006. Instructor, Department of Biological Sciences, Virginia Tech.

2006-present. ARC Post-doctoral Research Associate, University of Sydney, Australia.

**Research Interest:** Reproductive physiology of reptiles, regulation of placental angiogenesis.

**Research Grants:** approx U.S.\$5000.00, including Sigma Xi and Virginia Academy of Science.

**Conference Papers:** 10 presentations at national and international conferences.

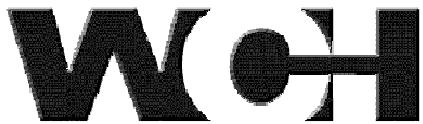
**Publications:** Papers published in *Biological Journal of the Linnean Society*, *Physiological and Biochemical Zoology*, *Oecologia*, and *Comparative Biochemistry and Physiology A*.

**Participants who will be presenting papers**

**1. Phylogenetic patterns in the reproductive biology of chameleons.**

Authors:

Robin M. Andrews (Professor of Biological Sciences)- **Presenter**  
Department of Biological Sciences  
Virginia Polytechnic Institute and State University  
Blacksburg, VA U.S.A. 24061



Kristopher Karsten (Graduate Student)  
Oklahoma State University  
Dept of Zoology  
430 LSW  
Stillwater, OK U.S.A. 74078

*2. Specializations for placentotrophy in African skinks, and their evolutionary implications.*

Authors:

Daniel G. Blackburn (Professor of Biology)- **Presenter**  
Department of Biology,  
Trinity College  
Hartford, CT USA

Dr. Alex Flemming  
Department of Botany and Zoology,  
University of Stellenbosch  
7600 South Africa

*3. Conceptual and Empirical Advances in the Nesting Biology of Reptiles.*

Authors:

J. Sean Doody (Research Fellow)-**Presenter**  
Institute for Applied Ecology  
University of Canberra  
Canberra, ACT Australia

*4. Reproductive Patterns in viviparous and oviparous lizards in Patagonia: convergent evolution in the Southern Hemisphere*

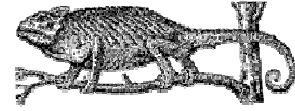
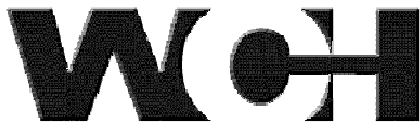
Nora Ibargüengoytía- **Presenter**  
Departamento de Zoología  
Centro Regional Universitario Bariloche  
Universidad del Comahue  
San Carlos de Bariloche  
Argentina

Jorgelina Medina Marlin Boretto  
Instituto Nacional de Investigaciones en Biodiversidad y Medioambiente (INIBIOMA)  
Consejo Nacional de Investigación y Técnica (CONICET)  
Argentina

*5. Can individual plasticity in nesting phenology mitigate the impacts of climate change on populations of reptiles with TSD?*

Authors

Fredric J. Janzen (Professor)- **Presenter**



Ecology, Evolution, and Organismal Biology (EEOB) Department,  
Iowa State University  
Ames, IA USA

Lisa E. Schwanz (NSF Post-doctoral fellow)  
Ecology, Evolution, and Organismal Biology (EEOB) Department,  
Iowa State University  
Ames, IA USA

**6. Endocrine influences on gestation in viviparous lizards**

Authors:

Susan M. Jones (Associate Professor and Head of School)-**Presenter**  
School of Zoology  
University of Tasmania  
Hobart, TAS Australia

**7. Geographical patterns in variation in life-history traits and genetic structure of the northern grass lizard, *Takydromus septentrionalis***

Authors:

Xiang Ji (Professor and President of China Herpetological Society)-**Presenter**  
College of Life Sciences  
Nanjing Normal Univeristy  
Nanjing, Jiangsu, China

Yao Cai (Associate Professor)  
College of Life Sciences  
Nanjing Normal Univeristy  
Nanjing, Jiangsu, China

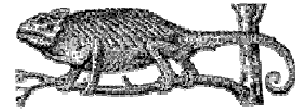
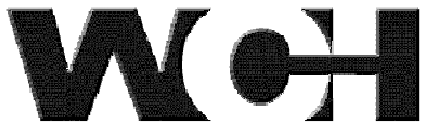
**8. Thermoregulation of the *Sceloporus torquatus* group: consequences on distribution and life history traits**

Authors:

Fausto R. Méndez de la Cruz (Professor)-**Presenter**  
Department of Biology  
Universidad Nacional Autónoma de México  
Distrito Federal, Mexico

Rafael Lara Resendiz  
Department of Biology  
Universidad Nacional Autónoma de México  
Distrito Federal, Mexico

Norberto Martínez Méndez



Department of Biology  
Universidad Nacional Autónoma de México  
Distrito Federal, Mexico

**9. Amniotic rhythmic contraction in reptile embryogenesis**

Authors:

Nechaeva Marina, PhD (Senior Scientist)-**Presenter**  
Institute of Developmental Biology,  
Russian Academy of Sciences  
Laboratory of Developmental Biophysics  
Moscow, Russia

**10. Effects on Tuatara nesting ecology with climate change**

Authors:

Nicola J. Nelson, PhD (Senior Lecturer)-**Presenter**  
School of Biological Sciences  
Victoria University of Wellington  
New Zealand

Susan Keall (Conservation Biology Technician)  
School of Biological Sciences  
Victoria University of Wellington  
New Zealand

Charles Daugherty (Assistant Vice Chancellor)  
Victoria University of Wellington  
New Zealand

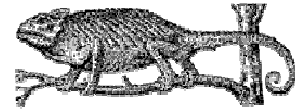
**11. Cytokines in vertebrate reproduction**

Authors:

Luana Paulesu (Professor of Physiology)-**Presenter**  
Department of Physiology  
University of Siena  
Italy

Elisa Bigliardi, Silke Jantra, Fabio Maria Guarino, Roberta Romagnoli, Francesca Letta.  
Department of Physiology  
University of Siena  
Italy.

**12. Regulation of uterine angiogenesis in squamate reptiles: implications for the evolution of reptilian viviparity**



Authors:

Scott L. Parker (ARC Post-doctoral Research Associate-**Presenter**)  
Integrative Physiology Research Group  
School of Biological Sciences (A08)  
The University of Sydney  
Sydney, NSW Australia

Christopher R. Murphy (Professor Histology and Embryology, Associate Dean and Head of  
School of Medical Sciences)  
School of Medical Sciences (Anatomy and Physiology) and Bosch Institute  
The University of Sydney  
Sydney, NSW Australia

Michael B. Thompson (Professor of Zoology)  
Integrative Physiology Research Group  
School of Biological Sciences (A08)  
The University of Sydney  
Sydney, NSW Australia

**13. Genetically female and phenotypically male: evidences for multi-factorial sex-determination in an alpine skink**

Authors:

Rajkumar Radder (Post-doctoral Research Fellow)-**Presenter**  
School of Biological Sciences (A08)  
The University of Sydney  
Sydney, NSW Australia

Richard Shine (Professor of Evolutionary Biology)  
School of Biological Sciences (A08)  
The University of Sydney  
Sydney, NSW Australia

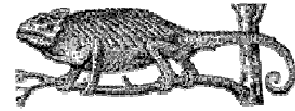
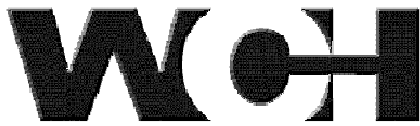
**14. The evolution of placental calcium transport**

Authors:

Jim Stewart (Senior Research Scientist)-**Presenter**  
Department of Biological Sciences  
East Tennessee State University  
Johnson City, TN U.S.A.

*Introduction to symposium*

Michael B. Thompson (Professor Zoology)-**Presenter**  
School of Biological Sciences (A08)  
The University of Sydney  
Sydney, NSW Australia



*15. The evolutionary and molecular basis of sex-determining mechanisms in reptiles*

Authors:

Alexander E. Quinn (Graduate Student)-**Presenter**  
Institute of Applied Ecology  
University of Canberra  
Canberra, ACT NSW Australia

Arthur Georges (Professor)  
Institute of Applied Ecology  
University of Canberra  
Canberra, ACT NSW Australia

Stephen D. Sarre (Associate Professor)  
Institute of Applied Ecology  
University of Canberra  
Canberra, ACT NSW Australia

Tariq Ezaz, PhD  
Institute for Applied Ecology  
University of Canberra  
Canberra, ACT NSW Australia

Jennifer A. Marshall Graves (Professor)  
School of Biological Sciences  
The Australian National University  
Canberra, ACT NSW Australia

**Posters**

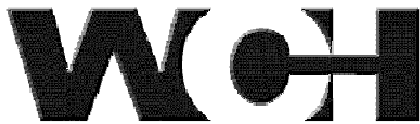
*1. Female "hemipenes" and sexual differentiation in viviparous lizards*

Authors:

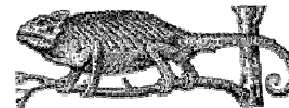
Alison Cree (Associate Professor)-**Presenter**  
Department of Zoology  
University of Otago  
Dunedin, New Zealand

Kelly Hare (Post-doctoral Fellow)  
Department of Zoology  
University of Otago  
Dunedin, New Zealand

Anne Besson  
Department of Zoology  
University of Otago



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Dunedin, New Zealand

*2. Development of eye structures in turtles Emys orbicularis*

Authors:

Ina G Panova, PhD (Senior Research Scientist)-**Presenter**  
Kol'tsov Institute of Developmental Biology  
Russian Academy of Sciences  
Vavilova 26  
Moscow, Russia

Tatiana V. Khokhlova, PhD (Senior Research Scientist)  
Institute for Information Transmission Problems  
Russian Academy of Sciences  
B. Karetnyi per 19  
Moscow, Russia

*3. Effect of incubation temperature on oxygen consumption during pond turtle embryogenesis*

Authors:

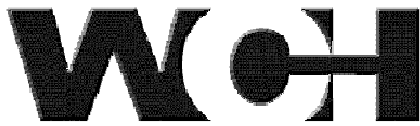
Irina G. Vladimirova, PhD (Senior Scientist)- **Presenter**  
Institute of Developmental Biology  
Russian Academy of Sciences  
Laboratory of Developmental Biophysics  
Vavilov Str 26  
Moscow, Russia

Marina Nechaeva, PhD (Senior Scientist)  
Institute of Developmental Biology  
Russian Academy of Sciences  
Laboratory of Developmental Biophysics  
Vavilov Str 26  
Moscow, Russia

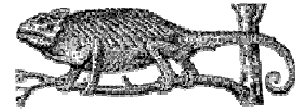
Tatyana Alekseeva, PhD (Senior Scientist)  
Institute of Developmental Biology  
Russian Academy of Sciences  
Laboratory of Developmental Biophysics  
Vavilov Str 26  
Moscow, Russia

*The evolution of placental calcium transport*

Authors:

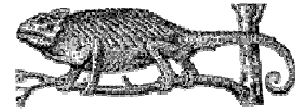


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Jim Stewart (Senior Research Scientist)-Presenter **\*\*Note: Jim is also presenting a paper in the symposium. He would like to include a poster highlighting the current research that some of his students are doing.**

Department of Biological Sciences  
East Tennessee State University  
Johnson City, TN U.S.A.



**Symposium 2: Invasive reptiles and amphibians: Global perspectives and local solutions**

**Purpose:** This symposium will include an international community of biologists working on invasive reptiles and amphibians, so as to establish a working network for sharing data, ideas, and potential control tools.

**Organizers:**

**Robert N. Reed, PhD:** Invasive Species Science, USGS Fort Collins Science Center, 2150 Centre Ave, Bldg C, Fort Collins CO 80526 USA

Brief biosketch: Dr. Reed is a principal investigator for the USGS Brown Treesnake Project, which conducts research on Brown Treesnakes on Guam in order to aid in control efforts and prevent spread to other islands. He is also a PI on several projects in Florida, aimed at research and control efforts for invasive Burmese Pythons and other giant constrictors.

**Fred Kraus, PhD:** Vertebrate Zoologist, Department of Natural Sciences, Bishop Museum, 1525 Bernice St., Honolulu, HI 96817 USA

Brief biosketch: Dr. Kraus is a vertebrate zoologist at the Bishop Museum, with a sunny demeanor and a wide range of research interests. His research foci include evolution and conservation of insular herpetofaunas, evolution and biogeography of the Papuan herpetofauna, patterns and processes of herpetofaunal invasions, and evolution of advanced snakes. He is currently writing a book on invasion pathways for reptiles and amphibians.

**Christina Romagosa, PhD Candidate:** Department of Biological Sciences, Auburn University, 331 Funchess Hall, Auburn University, Alabama 36849-5414 USA

Brief biosketch: Ms. Romagosa's dissertation focuses on invasion risks associated with importation of vertebrates into the United States. She has organized several symposia on the topic, including one at the Ecological Society of America, and is interested in examining whether general ecological patterns postulated for invasive taxa are applicable to invasive reptiles and amphibians.

**Speakers:**

**1. Hidetoshi Ota: "Status of alien reptiles and amphibians in Japan and prospects for their management."**

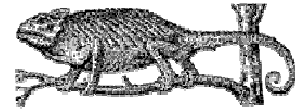
Hidetoshi Ota: Professor; Tropical Biosphere Research Center, University of the Ryukyus; Senbaru 1, Nishihara, Okinawa 903-0213; Japan

**2. Fabian M. Jaksic & Gabriel A. Lobos: "Invasive reptiles and amphibians in Chile."**

Prof. Dr. Fabian M. Jaksic, Ph.D., and Dr. Gabriel A. Lobos, DVM and Ph.D. candidate: Center for Advanced Studies in Ecology and Biodiversity, Catholic University of Chile, Santiago, Chile.

**3. K. Heidy Kikillus, Stephen Hartley, Kelly Hare, & Brett Gartrell: "Exotic reptiles: A risk analysis for New Zealand"**

K. Heidy Kikillus: PhD Candidate: Ecology and Biodiversity, Victoria University of Wellington, P.O. Box 600, Wellington 6140, New Zealand



Dr. Stephen Hartley: Senior Lecturer, School of Biological Sciences, Victoria University of Wellington, P.O. Box 600, Wellington 6140, New Zealand

Dr. Kelly Hare: Postdoctoral Fellow, Department of Zoology, University of Otago, P.O. Box 56, Dunedin, New Zealand

Dr. Brett Gartrell: Senior Lecturer, Institute of Veterinary, Animal, and Biomedical Sciences, Massey University, Private Bag 11-222, Palmerston North, New Zealand

**4. Jim Foster: "Developing good practice in invasive amphibian control: the North American bullfrog in England."**

Jim Foster: Amphibian Specialist, Natural England, Northminster House, Peterborough PE1 1UA, UK.

**5. Purnima Govindarajulu: "To kill or not to kill: Introduced bullfrogs exemplify the complexities of invasive vertebrate management"**

Purnima Govindarajulu: Adjunct Professor, University of Victoria, Small Mammal and Herpetofauna Specialist, Wildlife Science Section, Ministry of Environment, PO Box 9338 Stn Prov Govt, Victoria, BC, V8W 9M1 Canada

**6. Nathaniel B. Hawley: "Utilizing a public awareness campaign to generate support for policy and improve rapid response efforts"**

Nathaniel B. Hawley: Commonwealth of the Northern Mariana Islands Division of Fish and Wildlife Brown Treesnake Program, Lower Base, #10007 Saipan, MP 96950

**7. Nicola van Wilgen, David M. Richardson, and Ernst Baard: "A risk assessment model for alien reptiles and amphibians of application in South Africa" THIS**

PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Nicola van Wilgen: MSc-Student, DST-NRF Centre for Invasion Biology, Department of Botany and Zoology, University of Stellenbosch, P/Bag X1, Matieland, 7602 South Africa

David M. Richardson: Professor and Deputy Director, DST-NRF Centre for Invasion Biology, Department of Botany and Zoology, University of Stellenbosch, P/Bag X1, Matieland, 7602 South Africa

Ernst Baard, Ph.D.: CapeNature, Assegai Bosch Nature Reserve, Jonkershoek, P/Bag X5014, Stellenbosch, 7599, South Africa

**8. Kimberly Burnett and Brooks Kaiser: "Modeling the economic impacts of invasive Brown Treesnakes on Oahu"**

Kimberly Burnett: Assistant Professor, University of Puget Sound, Department of Economics, 1500 N. Warner Street, CMB 1057, Tacoma, WA 98416, USA

Brooks Kaiser: Associate Professor, Gettysburg College, Department of Economics, Box 391, Gettysburg, PA 17325, USA

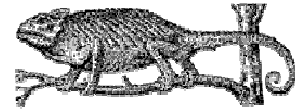
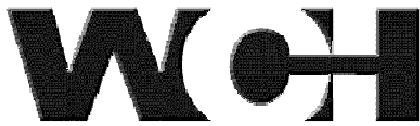
**Ben L Phillips: "The evolutionary consequences of invasion: toads in the Top End"**

Ben L Phillips, PhD: ARC Postdoctoral Fellow, Tropical Ecology Research Facility, University of Sydney, PO Box 441 Humpty Doo NT 0836.

**9. Trenton WJ Garner, Susan Walker, Jon Bielby, Jaime Bosch, Gerardo Garcia, Andrew A Cunningham and Matthew C Fisher: "Are invasive amphibians spreading *Batrachochytrium dendrobatidis*?"**

Trenton WJ Garner, Jon Bielby, and Andrew A Cunningham: Institute of Zoology, Zoological Society of London, Regent's Park, NW1 4RY, London, UK

Susan Walker and Matthew C Fisher: Imperial College, Division of Primary Care & Population Health Sciences, Imperial College, St. Mary's Hospital, Norfolk Place, W2 1PG, London, UK



Jaime Bosch : Museo Nacional de Ciencias Naturales (CSIC), José Gutierrez Abascal 2, 28006 Madrid, Spain

Gerardo Garcia: Durrell Wildlife Conservation Trust, Les Augrès Manor, La Profonde Rue, Trinity, Jersey, Channel Islands, JE3 5BP, UK

**10. Daniel Vice: "Preventing the spread of Brown Treesnakes from Guam"**

Daniel Vice: Assistant State Director, USDA, APHIS, Wildlife Services, HI/GU/Pacific Islands, USA

**11. Romagosa, C. M. "Patterns of live vertebrate importation into the United States: an analysis of an invasion pathway". THIS PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.**

Christina M. Romagosa: Doctoral Candidate, Department of Biological Sciences, Auburn University, 331 Funchess Hall, Auburn University, Alabama 36849-5414 USA.

**12. Gordon Rodda, Catherine Jarnevich, and Robert N. Reed: "Using climate matching to predict the potential range of invasive reptiles"**

Gordon Rodda, Catherine Jarnevich, and Robert N. Reed: Invasive Species Science, USGS Fort Collins Science Center, 2150 Centre Ave, Bldg C, Fort Collins CO 80526 USA

**13. Robert N. Reed, Gordon H. Rodda, and Julie A. Savidge: "Growth rates of Brown Treesnakes on Guam in a bounded population: Implications for control and interdiction"**

Robert N. Reed and Gordon H. Rodda: Invasive Species Science, USGS Fort Collins Science Center, 2150 Centre Ave, Bldg C, Fort Collins CO 80526 USA

Julie A. Savidge: Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO 80523

**14. Frank Mazzotti and Ray F. Snow: "Ecology of invasive Burmese Pythons in the Everglades ecosystem, with management implications"**

Frank Mazzotti: University of Florida – FLREC, 3205 College Ave, Davie, FL 33314, USA

Ray F. Snow: U.S. National Park Service, Everglades National Park, 40001 SR 9336. Homestead, FL 33034, USA

**15. Michelle Christy, Julie A. Savidge, and Gordon H. Rodda: "Pathways of recent amphibian invasions in the Mariana Islands"**

Michelle Christy and Julie A. Savidge: Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO 80523

Gordon H. Rodda: Invasive Species Science, USGS Fort Collins Science Center, 2150 Centre Ave, Bldg C, Fort Collins CO 80526 USA

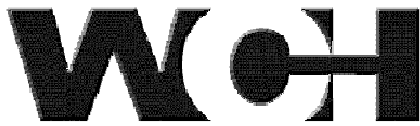
**16. Fred Kraus, Brooks Kaiser, and Kimberly M. Burnett. "Worldwide herpetological species movements from 1850: accidental, purposeful, and costly ecological change."**

Fred Kraus: Vertebrate Zoologist, Department of Natural Sciences, Bishop Museum, 1525 Bernice St., Honolulu, HI 96817 USA

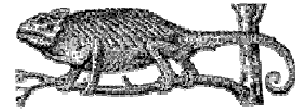
Brooks Kaiser: Associate Professor, Gettysburg College, Department of Economics, Box 391, Gettysburg, PA 17325, USA

Kimberly Burnett: Assistant Professor, University of Puget Sound, Department of Economics, 1500 N. Warner Street, CMB 1057, Tacoma, WA 98416, USA

**17. Earl Campbell. "Solving herpetological invasions: paths beyond documentation of the problem."**



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Earl Campbell, PhD: Invasive species & Marianas terrestrial issues, US Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, 300 Ala Moana Blvd, PO Box 50088, Honolulu HI 96817

**18. Fred Kraus. "Pathways and patterns of herpetological introductions since 1850."**

Fred Kraus: Vertebrate Zoologist, Department of Natural Sciences, Bishop Museum, 1525 Bernice St., Honolulu, HI 96817 USA

**19. Stephen Sarre: "Invasive Species Education in Australia"**

Stephen Sarre, PhD: Applied Ecology Research Group, University of Canberra, ACT 2601, Australia

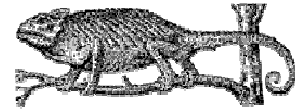
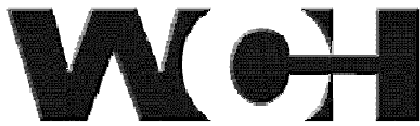
**20. Marc Girondot: "Ecology and impacts of invasive turtles in Europe."**

Marc Girondot, PhD: Muséum National d'Histoire Naturelle de Paris, Département de Systématique et Evolution, Laboratoire des Reptiles et Amphibiens, 25 rue Cuvier, 75005 Paris, France

**21. Robin Moore and Richard A. Griffiths: "Ecology and control opportunities for *Natrix maura* on Mallorca."**

Robin Moore: Amphibian Conservation Officer, Conservation International, 2011 Crystal Drive, Suite 500, Arlington, VA 22202 USA

Richard A. Griffiths: Durrell Institute of Conservation and Ecology, Department of Anthropology, University of Kent, Cante



**6WCH SYMPOSIUM 3: Sensory Ecology of Anuran Communication**

Anurans are model systems for understanding the patterns and processes of signal evolution

ORGANIZERS: T. Ulmar Grafe and Peter M. Narins

**T. Ulmar Grafe: Associate Professor, Department of Biology, University Brunei**

**Darussalam, Tungku Link, Gadong BE 1410, Brunei Darussalam. Phone: +673-**

**2463001, Fax: +673-2461502, Email: [ulmar@fos.ubd.edu.bn](mailto:ulmar@fos.ubd.edu.bn)**

**PhD from Cornell University (1995). Habilitation from the University of Würzburg(2001). His research interests are: Systematics and biodiversity of amphibians and reptiles, community ecology of rain forest stream amphibians in Borneo, behavioural ecology and communication in foot-flagging frogs, respiratory physiology of calling anurans and sensory ecology of blood-sucking flies and their frog hosts.**

**Peter M. Narins: Professor, Departments of Physiological Sciences and Ecology &**

**Evolutionary Biology, University of California, Los Angeles, CA 90095-1606. Email:**

**[pnarins@ucla.edu](mailto:pnarins@ucla.edu)**

**PhD from Cornell University (1976). AAAS Fellow (1997). Editor of the Journal of**

**Comparative Physiology. Editor of recent book on Hearing and Sound Communication in**

**Amphibians (Springer Verlag, 2007). His research interests are: Frog robotics, novel sound**

**pathways in amphibians, seismic communication, ultrasonic sound production in frogs,**

**sound localization, energy flow in the frog ear, frog chorus interactions, crossmodal binding,**

**middle ear mechanics, and hair cell function.**

**Title of talks and authors (asterisks indicate presenters)**

**1. How do frogs solve the 'cocktail party problem'?**

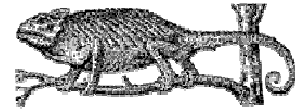
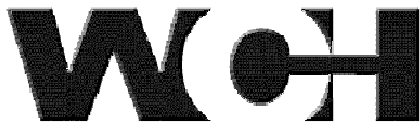
**Mark A. Bee**

**Assistant Professor, Department of Ecology, Evolution, and Behavior**

**University of Minnesota, USA**

**Importance: Has used frogs as model systems to investigate how organisms communicate in noisy social settings. He has advanced our understanding of the mechanisms underlying the human cocktail party problem. He is one of the major researchers shaping the field of anuran communication.**

**•2.Communication in a noisy environment: eco-acoustic and visual signalling in**



**Staurois latopalmatus**

**Doris Preininger\*, Markus Böckle and Walter Hödl**

**Doctoral Candidate, Department of Evolutionary Biology, University of Vienna,  
Austria**

**Importance: Has studied the shift of frogs from acoustic to visual communication  
and advanced techniques in robotics to manipulate visual signals.**

**3. Ultrasound communication in ranid frogs**

**Victoria Arch\*, T. Ulmar Grafe and Peter M. Narins**

**Doctoral Candidate, Department of Ecology and Evolutionary Biology,  
University of California Los Angeles, USA**

**Importance: Is investigating novel and unusual mechanisms of sound production  
and hearing in anurans. She has made significant contributions to ultrasound  
recording and playback.**

**4. Call plasticity in anurans: the effect of the structure of the environment**

**Lucia Ziegler\* and Matías Arim**

**MSc Candidate, Department of Zoology, Universidad de la República, Uruguay**

**Importance: Has advanced our understanding of the variability in anuran calling  
behaviour and its environmental correlates.**

**5. Shhh...they might hear us: Interaction between Corethrella blood-sucking  
flies and their anuran prey**

**Ximena Bernal**

**Postdoctoral Researcher, Section of Integrative Biology, University of Texas at  
Austin, USA**

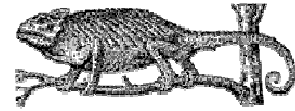
**Importance: She has added an additional component to our understanding of the  
selective pressures acting on signal design and signaling behaviour in anurans.**

**She has contributed significantly to our understanding of anuran communication  
networks.**

**6. Communication in network environments**

**T Ulmar Grafe**

**Associate Professor, Department of Biology, University Brunei Darussalam,  
Brunei Darussalam**



**Importance: See above**

**7. Functional mapping of auditory responses to mate-choice cues**

**Sabrina S. Burmeister**

**Assistant Professor, Department of Biology, University of North Carolina, Chapel Hill, USA**

**Importance: Has provided novel insights into the functional mechanisms of hormonal modulation of phonotaxis in anurans and the associated neuronal pathways.**

**8. Modulation of frequency response of the tympanic membranes in frogs**

**Marcos Gridi-Papp**

**Postdoctoral Researcher, Department of Ecology and Evolutionary Biology, University of California Los Angeles, USA**

**Importance: Has made major contributions to our understanding of sound localization, energy flow in the frog ear, and middle ear mechanics.**

**9. Vibrational cues in predator-induced hatching of red-eyed treefrogs**

**Karen Warkentin\*, Michael S. Caldwell, and J. Gregory McDaniel**

**Assistant Professor, Biology Department, Boston University, USA**

**Importance: Has studied the behavior, ecology, evolution, and development of early life stages of amphibians (i.e. eggs and tadpoles), and interactions with their natural enemies.**

**10. Vibrational signalling in male-male agonistic interactions of red-eyed treefrogs**

**Michael Caldwell\*, J. Gregory McDaniel and Karen M. Warkentin**

**Doctoral Candidate, Biology Department, Boston University, USA**

**Importance: Is investigating the role of vibrational communication in frogs. This work will invigorate the field of anuran sensory ecology.**

**11. Evolution of visual communication**

**Adolfo Amézquita**

**Professor, Universidad de los Andes, Bogotá, Colombia**



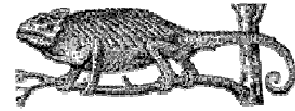
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**Importance: He has made a major contribution to our understanding of the important role of visual communication in anurans.**

#### **12. Roundtable discussion**

**A roundtable discussion will conclude the symposium. It will offer senior researchers in the field of anuran communication to comment on the recent developments in the field and for participants to identify future problems still to be tackled.**



## 6WCH SYMPOSIUM 5: Herpetofaunal Reintroductions, Translocations, and Supplementations

Reintroductions and translocations have become important tools for the conservation management of herpetofauna worldwide; the goal of this symposium is to discuss techniques and issues involved with these tools.

### ORGANIZERS:

Jen Germano  
PhD Student  
Zoology Department  
University of Otago  
P.O. Box 56  
Dunedin New Zealand

Phil Bishop  
Senior Lecturer  
Zoology Department  
University of Otago  
P.O. Box 56  
Dunedin New Zealand

Robert Cook (National Park Service, USA) "The role of translocations in the restoration of the herpetofaunal community of Gateway NRA: potentials and limitations of translocations"  
THIS  PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL  ASSISTANCE.

Kimberly Miller (Victoria University, New Zealand) Potential Loss of Genetic Diversity in Source and Translocated Populations of Tuatara

Jim Foster, English Nature, Herpetofaunal translocations in the UK: policy and practice

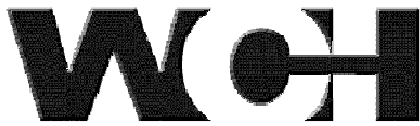
Richard Griffiths and Brett Lewis. Translocations as a tool for mitigating the impacts of development

Richard Gibson (Chester Zoo; AArk). The Role of Captive Breeding in Herpetofaunal Reintroductions

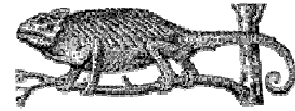
Ben D. Bell & Kerri Lukis (Victoria University) Lessons learnt from two translocations of *Leiopelma pakeka*, a terrestrial frog from New Zealand

Tracey Tuberville: Penning of Tortoises to Improve Site Fidelity Following Translocation. THIS  PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL  ASSISTANCE.

Glenn Gerber, Ph.D.  Caribbean Program Head  Conservation and Research for Endangered Species  Zoological Society of San Diego. Lessons Learned from West Indian Iguana Translocations. **Still waiting for a definite acceptance.**



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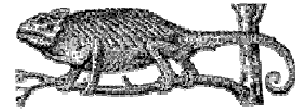
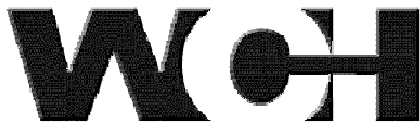


**6WCH Symposium 7: THE BIOLOGY AND MANAGEMENT OF CROCODYLIANS**

Organizers John. Thorbjarnarson and Kent Vliet

Contact [jthorbjarnarson@wcs.org](mailto:jthorbjarnarson@wcs.org)

1. Frank Mazzotti. The recovery of American crocodiles in Florida
2. Chris Brochu. The role of paleontological information in the conservation of crocodylians.
3. Lew Desmore. Genetic variation and interspecific hybridization in New World Crocodiles: Implications for Conservation and Management
4. Val Lance. The reproductive cycle of the American alligator
5. Kent Vliet. Management implication of training crocodilians in U.S. zoos and aquaria.
6. Marcos Coutinho. The management of caiman in Brazil
7. Robinson Botero. Management of caiman in the Brazilian Amazon: A case study.
8. Francisco Villamarin. Nesting ecology of the Black caiman in the Brazilian varzea forests
9. Boris Marioni. Harvesting of caiman from the Piagaçu-Purus Sustainable Development Reserve
10. William Vascolcelos. Diversity and distribution of Caimans from Amazon to Pantanal - Brazil
11. J. Thorbjarnarson and Ronis de Silveira. Challenges for Caiman management in South America



6<sup>th</sup> WCH Symposium 8: **Herpetological Conservation & Biology**

Organizer:

Bob Brodman, Biology Department, Saint Joseph's College, IN, 47978, USA. E-mail: [bobb@saintjoe.edu](mailto:bobb@saintjoe.edu), Phone 219-866-6215, FAX 219-866-6300

Co-chairs:

Bob Murphy, Centre for Biodiversity & Conservation Biology, Department of Natural History, Royal Ontario Museum, 100 Queen's Park, Toronto, Canada. E-mail: [drbob@zoo.utoronto.ca](mailto:drbob@zoo.utoronto.ca),

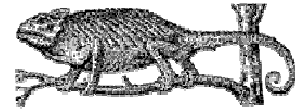
Ben Bell, School of Biological Sciences, Victoria University of Wellington, PO Box 600, Wellington, New Zealand. E-mail: [ben.bell@vuw.ac.nz](mailto:ben.bell@vuw.ac.nz), Phone: +64-4-463-5570, Fax: +64-4-463-5331

The organizer and co-organizers are ready to assume the organization of a symposium on Herpetological Conservation and Biology.

Goal: In addition to the many species of amphibians and reptiles that are threatened with extinction, NatureServe lists one quarter of amphibian species and one in six squamate species as data deficient. Despite the need for natural history information, several influences have reduced natural history publishing in herpetology journals. However, baseline and natural history information is essential for informed conservation efforts, and much conservation activity relies on understanding life history dynamics. The open-access, peer-reviewed journal Herpetological Conservation and Biology (HCB) proposes an international symposium on the life history ecology, management and conservation of amphibians and reptiles. The focus of the symposium will be to demonstrate the importance of natural history to practical conservation efforts. Presentation topics will include:

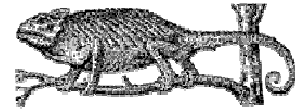
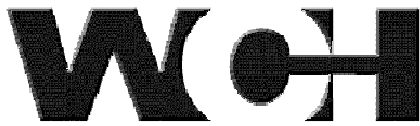
- \* Life history (reproduction, physiology, etc.)
- \* Sampling (design, techniques)
- \* Inventory and long-term monitoring
- \* All aspects of ecology, especially field studies
- \* Management Case Studies

A second goal of the symposium is to strengthen the ties between HCB and its co-sponsor WHC. HCB provides an opportunity to publish this symposium. Many international researchers do not have fees to access many journals, and will be attracted to HCB because of its free downloads and page charges. By providing an outlet for natural history and basic conservation/management manuscripts, HCB facilitates information exchange in a rapid and timely manner, improves conservation efforts, and reduces overall costs to conservation through reduction of duplicated efforts.



Potential Speakers:

1. **Natalia Ananjeva** (Russia): Eurasian lizards
2. **Omar Attum** (Egypt): Egyptian Tortoise conservation
3. **Georgina Santos Barrera** (Mexico): Mexican amphibian conservation
4. **Ben Bell** (New Zealand) Co-organizer: Natural history and conservation of New Zealand native frogs (*Leiopelma*) and lizards.
5. **Marius Berger** (South Africa): Southern African Reptile Conservation Assessment
6. **Bob Brodman**, (USA) Organizer: Long-term monitoring and the coexistence of pond-breeding salamanders.
7. **R Bruce Bury** (USA): Amphibian declines in western North America: Where's the beef or do we have assessments all ass-backwards?
8. **Mathieu Denoel** (Belgium): landscape ecology, invasive species, heterochrony and extinction in European "Triturus" newts.
9. **Michael Dorcas** (USA): Sampling design and techniques
10. **Gary Fellers** (USA): Pesticides and amphibian declines in mountain populations
11. **Richard Griffiths** (UK): **20 year publication trends of herp conservation and natural history.**
12. **Shi Haitao** (China): **An Action Plan for Turtle Conservation and Research in China.**
13. **Tyrone Hayes** (USA): The effect of Atrazine on amphibian development.
14. **Daryl Karns and Harold Voris** (USA): Conservation and natural history of Homolopsine snakes in Thailand.
15. **Nancy Karraker** (Hong Kong): Relative importance of tadpole biomass to stream communities in Hong Kong.
16. **Mirza Dikari Kusriani** (Indonesia): Effects of harvesting, disease, and habitat loss on Indonesian amphibians.
17. **Bruce Kingsbury** (USA): Natural History and Snake Conservation in the Midwestern United States
18. **Mike Lannoo** (USA): Amphibian declines.
19. **Robert Lovich** (USA): The dearth of collections-based natural history information in herpetology.
20. **Bob Murphy** (Canada) Co-organizer: Snake genomics and conservation.



**21. Carlos Navas** (Brazil): Conservation physiological and natural history of Neotropical frogs.

**22. Nicola Nelson** (New Zealand): Conservation and Natural History of Tuataras

**23. Renata Platenberg** (US Virgin Islands): Conservation of the endangered Virgin Island tree boa.

**24. Pritpal Soorae** (United Arab Emirates): Conservation of Reptiles in the United Arab Emirates.

**25. Lin Schwarzkopf and Leone Valentine** (Australia): Pesticide affects on Australian reptiles.

### Geography

General: 2

North America: 8 (Canada 1, USA 7)

Latin America: 3 (Mexico 1, Brazil 1, Virgin Islands 1)

Europe: 1 (Belgium 1)

Asia: 5 (China 1, Hong Kong 1, Thailand 1, Indonesia 1; United Arab Emirates)

Australasia: 2 (New Zealand 2, Australia 0)

Africa: 0 ( )

### Taxa

Herps 3

Amphibians 11

Frogs 3

Salamanders 2

Reptiles 8

Snakes 4

Lizards 1

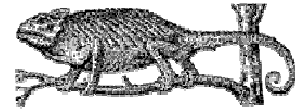
Tuatara 1

Crocodylians

Turtles 1

Need more non-snake reptiles

Need African & European



WCH6 - Symposium 9

**Biogeography of the South and South East Asian Herpetofauna**

Goal: to advance understanding of the biogeography of the megadiverse South and South East Asian herpetofauna by improving communication among leading workers in the field.

**Organizer:**

Dr David J. Gower  
Researcher and Co-Head of Herpetology Research Group  
Department of Zoology  
The Natural History Museum  
London SW7 5BD  
UK  
[d.gower@nhm.ac.uk](mailto:d.gower@nhm.ac.uk)  
Tel: +44 (0)207 942 5080  
Fax: +44 (0)207 942 5054

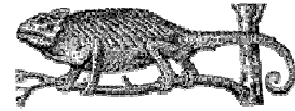
I am 38 and have worked at the Natural History Museum since 1999. I study caecilian amphibians (Gymnophiona) and burrowing and aquatic snakes, with S/SE Asia as one of my main focuses. My previous track record in the symposium topic can be summarized by these two publications:

- Bossuyt, F., Beenaerts, N., Meegaskumbura, M., **Gower, D. J.**, Pethiyagoda, R., Roelants, K., Mannaert, A., Wilkinson, M., Bahir, M. M., Manamendra-Arachchi, K., Oommen, O. V., Ng, P. K. L., Schneider, C. J., & Milinkovitch, M. C. (2004) Local endemism within the Western Ghats-Sri Lanka biodiversity hotspot. *Science* 306: 479-481.
- Gower, D. J.**, Kupfer, A., Oommen, O. V., Himstedt, W., Nussbaum, R. A., Loader, S. P., Presswell, B., Müller, H., Krishna, S. B., Boistel, R. & Wilkinson, M. (2002) A molecular phylogeny of ichthyophiid caecilians (Amphibia: Gymnophiona: Ichthyophiidae): Out of India or out of southeast Asia? *Proceedings of the Royal Society B* 269: 1563-1569.

**Speakers/Topics:**

All of the following have provisionally agreed to participate.

1. Dr Christopher Austin (Assistant Professor, Museum of Natural Science, Louisiana State University, USA)  
*Earth history and the megadiverse New Guinean lowland herpetofauna*
2. Dr Raoul Bain (Biodiversity Specialist, Herpetology, American Museum of Natural History, New York, USA)  
*Diversity and distribution of the herpetofauna of Laos, Cambodia, and Vietnam*
3. Dr David Bickford (Postdoctoral Fellow, Biological Sciences, National University of Singapore, Singapore)  
*Straddling Wallace's Line: frogs of the genus Oreophryne offer new insights into SE Asian biogeography*
4. Dr S. D. Biju (Professor, Environmental Biology, University of Delhi, India)  
*Diversity and distribution of Indian amphibians and the impact of DNA taxonomy*



THIS PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

5. Dr Franky Bossuyt and/or Ms Ines Van Bocxlaer (Head of Amphibian Evolution Lab/PhD student, Biology, Free University of Brussels, Belgium)

*Biogeography of frogs of the Indian subcontinent*

6. Drs Arvin & Mae Diesmos (Postdoctoral Fellows, Biological Sciences, National University of Singapore, Singapore)

*Biogeography of Philippines herpetofauna.*

7. Dr David J. Gower (Researcher, Zoology, The Natural History Museum, London, UK)

*Caecilian amphibians and Asian biogeography*

8. Dr L. Lee Grismer (Professor, Biology, La Sierra University, USA) and Cambodian colleagues

*Exploration of the Cardamom Mountains of Cambodia: a biogeographical link between the Indomalayan and Indochinese herpetofauna*

9. Dr Fred Kraus and/or Dr Allen Allison (Zoologists, Bishop Museum, Honolulu, USA)

*Herpetological biogeography of the Papuan region*

10. Dr Ulrich Kuch (Researcher, Herpetology, Senckenberg Museum, Frankfurt, Germany)

*Did climatic or geological events dominate the cladogenesis of elapid snakes in South and Southeast Asia*

11. Dr Jimmy McGuire (Assistant Professor, Integrative Biology, University of California, Berkeley, USA)

*Biogeography of Sulawesi – evidence from the phylogenetics and population genetics of reptiles and amphibians*

12. Dr Stephen J. Richards (Research Scientist, Vertebrates, South Australian Museum, Adelaide)

*Patterns of frog diversity on New Guinea, the world's largest tropical island*

THIS PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

13. Dr Jodi Rowley (Biologist, Conservation International, Phnom Penh, Cambodia)

*Herpetology of Cambodia*

14. Kate L. Sanders (Postdoctoral Fellow, University of Adelaide, Australia)

*Phylogeography of the file snakes *Acrochordus**

15. Dr Eric Smith (Assistant Professor, Biology, University of Texas, Arlington, USA) and colleagues

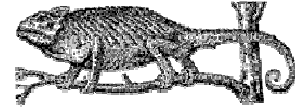
*New species and tadpole diversity: Rapid montane sampling and molecular techniques discover spectacular anuran genetic diversity and biogeographic structure in Sumatra*

16. Dr Bryan Stuart (Postdoctoral Fellow, Integrative Biology, University of California, Berkeley, USA)

*Species complexes and species boundaries in SE Asian frogs – the implication of cryptic species for biogeography*



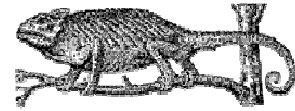
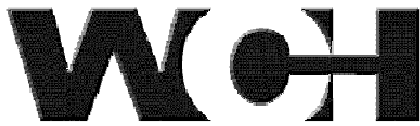
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17.Mr Jeet Sukumaran (PhD student, Ecology and Evolutionary Biology, University of Kansas, USA)

*Herpetology of the Malay peninsula*

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**6WCH Symposium 10. CONSERVATION GENETICS OF AMPHIBIANS AND REPTILES IN THE 21ST CENTURY**

Organizers:

Robert Jehle  
School of Environment and Life Sciences  
University of Salford  
M5 5BW Salford, Greater Manchester  
United Kingdom  
Ph: 0044 (0)161 2952146  
Email: R.Jehle@salford.ac.uk

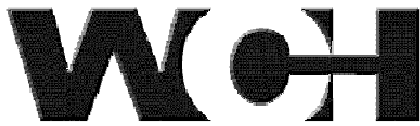
Robert is interested in population processes in amphibians, by using a combination of field and molecular genetic approaches.

Trent Garner  
Institute of Zoology  
Zoological Society of London  
Regents Park  
London  
NW1 4RY  
United Kingdom  
Ph: 00 44 (0)20 7449 6687  
Email: Trent.Garner@ioz.ac.uk

Trent is interested in how mating behaviour and disease emergence may influence population genetic structure, and vice versa.

Participants:

1. Pim Arntzen (Naturalis Leiden, The Netherlands): *to be confirmed*
2. Dan Edwards (Australian National University, Canberra, Australia): The convoluted biogeographic history of southwestern Australian herpetofauna: conservation implications (*to be confirmed*)
3. Francesco Ficetola (University of Milan, Italy): Census size, polygyny and effective population size in small populations of the threatened frog *Rana latastei*
4. W Chris Funk (College of William and Mary, Virginia, USA): *to be confirmed*
5. Susanne Hauswaldt (University of Braunschweig, Germany): MHC class II - a novel marker for amphibian conservation genetics
6. Robert Jehle (University of Salford, UK): The genetic structure of toad populations under long-term, natural fragmentation



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7. David Lesbarreres (Laurentian University, Canada): Developmental Instability and Amphibian Conservation

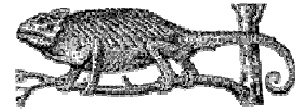
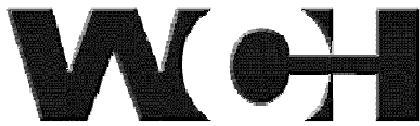
8. Mollie Manier (Stanford University, USA): Beyond Fst: a multidisciplinary approach to conservation genetics

9. Hilary Miller (University of Wellington, New Zealand): Conservation genetics and the MHC: a case study on tuatara (*to be confirmed*)

10. H Bradley Shaffer (UC Davis, USA): Conservation genetics in the California tiger salamander (*to be confirmed*)

11. Sebastian Steinfartz (University of Bielefeld, Germany): Conservation genetics of Galapagos marine iguanas

12. Andrew Storfer (Washington State University, USA): Landscape genetics as a new tool for amphibian conservation



6WCH Symposium 11: **"THE BIOLOGY OF NEOTROPICAL POISON FROGS AND THEIR RELATIVES (DENDROBATOIDEA)"**

Organizers: Taran Grant & Stefan Lötters

Neotropical poison frogs and their relatives (Dendrobatoidea) have been the focus of extensive research in a broad diversity of fields for decades. In recent years, however, there has been a wave of new findings that point to new and challenging areas of research. This interdisciplinary symposium will bring leading experts from around the world together to present their findings to the broader herpetological community and share their experiences with the goal of exchanging theoretical and empirical information and forging future collaborations.

1. Paleoclimate and species diversity: molecular insight into the evolutionary history of dart-poison frogs

Brice Noonan

The University of Mississippi

Department of Biology

USA

2. Safeguarding nature's pharmaceutical treasure chests: The role of ex situ breeding in conservation of dendrobatid (poison) frogs

Ron Gagliardo

The Dorothy C. Fuqua Conservatory

Atlanta Botanical Garden

USA

3. Conservation status of aromobatid frogs in the Venezuelan Andes

Enrique La Marca

Laboratorio de Biogeografía

Universidad de Los Andes

Mérida, Venezuela

4. Evaluating key behavioral and environmental factors contributing to the evolution of biparental care in Peruvian poison frogs

Jason Brown [presenter] and Kyle Summers

East Carolina University

Department of Biology

USA

5. On the use of phytotelmata for tadpole deposition in Andean species of *Ranitomeya*

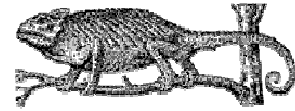
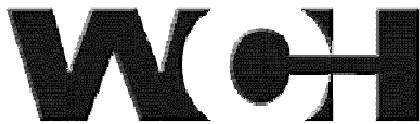
Adolfo Amézquita

Departamento de Ciencias Biológicas

Universidad de los Andes

Bogotá, Colombia

6. *Allobates femoralis* (Dendrobatidae): A handy "white rat" for anuran field bioacoustics



Walter Hödl  
University of Vienna  
Institute of Zoology  
Austria

7. Amazonian poison frogs during the Last Glacial Maximum (LGM): potential distributions based on climate envelope models

Stefan Lötters  
Trier University  
Faculty of Geography/Geosciences  
Biogeography Department  
54286 Trier, Germany

8. Chemical ecology of dendrobatids: A review of dietary arthropods and their contribution to chemical defense

Ralph Saporito  
Old Dominion University  
Department of Biology  
USA

9. The phylogeny of dendrobatoids and the evolution of alkaloid defense

Taran Grant  
Faculdade de Biociências  
Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS)  
Av. Ipiranga 6681  
90619-900  
Porto Alegre, RS, Brasil

10. Reproductive biology of dendrobatoids [tentative title]

Karl-Heinz Jüngfer  
Gaildorf, Germany

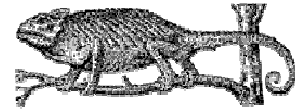
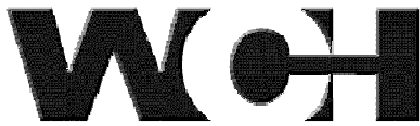
11. Behavioral ecology of *Oophaga pumilio*

Heike Pröhl  
Institute of Zoology  
School of Veterinary Medicine  
Bünteweg 17  
30559 Hannover  
Germany

12. Disease and population decline in Central American dendrobatoids

Karen R. Lips  
Department of Zoology  
Southern Illinois University  
Carbondale, IL 62901-6501

Dr. Stefan Lötters  
Trier University  
Faculty of Geography/Geosciences  
Biogeography Department  
54286 Trier, Germany  
[loetters@uni-trier.de](mailto:loetters@uni-trier.de)



**6WCH SYMPOSIUM 11. Biology of Neotropical Poison Frogs and their Relatives  
(Dendrobatoidea)**

Neotropical poison frogs and their relatives (Dendrobatoidea) have been the focus of extensive research in a broad diversity of fields for decades. In recent years, however, there has been a wave of new findings that point to new and challenging areas of research. This interdisciplinary symposium will bring leading experts from around the world together to present their findings to the broader herpetological community and share their experiences with the goal of exchanging theoretical and empirical information and forging future collaborations.

**2. Organizers**

Taran Grant, Ph.D. [NOTA: Complete CV in Lattes]  
Current position: Professor Adjunto, Faculdade de Biociências,  
Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Av.  
Ipiranga 6681, 90619-900, Porto Alegre, RS, Brasil, Tel.:  
+55-51-3320-3500, ext. 4411, email: [taran.grant@pucrs.br](mailto:taran.grant@pucrs.br)  
PhD: Columbia University, 2005  
Post-doc: American Museum of Natural History, 2005-2007

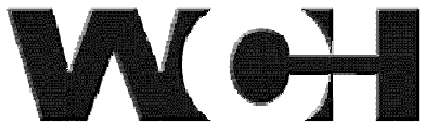
Stefan Lötters, PhD. [NOTA: Complete CV attached]  
Current position: Researcher and Lecturer, Trier University, Faculty  
of Geography/Geosciences, Biogeography Department, 54286 Trier, Germany  
Tel.: +49 (0)651 201 4174, email: [loetters@uni-trier.de](mailto:loetters@uni-trier.de)  
PhD: Bonn University, 2000  
Research postdoc and project coordinator, Mainz University, 2001-present  
Research postdoc, Amsterdam University, 2005-2007

**Participants:**

1. Paleoclimate and species diversity: molecular insight into the  
evolutionary history of dart-poison frogs.  
PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL  
ASSISTANCE.

Brice Noonan  
Assistant Professor  
The University of Mississippi  
Department of Biology  
USA

2. Safeguarding nature's pharmaceutical treasure chests: The role of  
ex situ breeding in conservation of Dendrobatid (Poison) frogs  
Ron Gagliardo  
Amphibian Conservation Coordinator



The Dorothy C. Fuqua Conservatory  
Atlanta Botanical Garden  
USA

3. Conservation status of aromobatid frogs in the Venezuelan Andes  
PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Enrique La Marca  
Professor  
Laboratorio de Biogeografía  
Universidad de Los Andes  
Mérida, Venezuela

4. Evaluating key behavioral and environmental factors contributing to the evolution of biparental care in Peruvian poison frogs  
PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Jason Brown [presenter] and Kyle Summers  
Graduate Student and Professor of Biology  
East Carolina University  
Department of Biology  
USA

5. On the use of phytotelmata for tadpole deposition in Andean species of *Ranitomeya*  
PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Adolfo Amézquita  
Professor  
Departamento de Ciencias Biológicas  
Universidad de los Andes  
Bogotá, Colombia

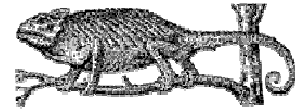
6. *Allobates femoralis* (Dendrobatidae): A handy "white rat" for anuran field bioacoustics

Walter Hödl  
Associate Professor  
University of Vienna  
Institute of Zoology  
Austria

7. Amazonian poison frogs during the Last Glacial Maximum (LGM): potential distributions based on climate envelope models

Stefan Lötters  
Researcher and Lecturer  
Trier University  
Faculty of Geography/Geosciences  
Biogeography Department  
54286 Trier, Germany

8. Chemical ecology of dendrobatids: A review of dietary arthropods and their contribution to chemical defense



PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Ralph Saporito  
NSF Post Doctoral Fellow  
Old Dominion University  
Department of Biology  
USA

9. The phylogeny of dendrobatoids and the evolution of alkaloid defense

Taran Grant  
Faculdade de Biociências  
Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS)  
Av. Ipiranga 6681  
90619-900  
Porto Alegre, RS, Brasil

10. Reproductive biology of Dendrobatoids

PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Karl-Heinz Jüngfer

11. Behavioral ecology of *Oophaga pumilio*

PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Heike Pröhl  
Juniorprofessor  
Institute of Zoology  
School of Veterinary Medicine  
Bünteweg 17  
30559 Hannover  
Germany

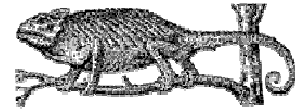
12. Disease and population decline in Central American dendrobatoids

PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

Karen R. Lips  
Department of Zoology  
Southern Illinois University  
Carbondale, IL 62901-6501

Taran Grant  
Faculdade de Biociências  
Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS)  
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Skype name: tarangrant  
USA Skypein number: 312-212-3517



**6WCH SYMPOSIUM 12:ECOPHYSIOLOGY OF REPTILES**

ORGANIZERS: Denis Otávio Vieira de Andrade<sup>1</sup> and Glenn Tattersall<sup>2</sup>

<sup>1</sup> Departamento de Zoologia, Universidade Estadual Paulista, Rio Claro, SP, Brazil  
e-mail: denis@rc.unesp.br

<sup>2</sup> Department of Biological Sciences, Brock University, St. Catharines, Canada  
e-mail: gtatters@brocku.ca

LIST OF SPEAKERS

**1.Speaker:** Glenn Tattersall

**Affiliation:** Department of Biological Sciences, Brock University, St. Catharines, Canada.

**Title:** Dynamics of heat exchange in juvenile tegu lizards (*Tupinambis merianae*)

**2Speaker:** Anthony Herrell

**Affiliation:** Dept. Organismic and Evolutionary Biology, Harvard University.

**Title:** Sexual selection, physiology and performance in lizards: do big boys always get the girls?

**3Speaker:** Rafael Parelli Bovo

**Affiliation:** Pós-Graduação em Biologia Animal, Depto. de Zoologia e Botânica, Instituto de Biociências, Letras e Ciências Exatas, UNESP - São José do Rio Preto, Brasil.

**Title:** An integrated view on the metabolic and cardiorespiratory consequences of feeding in the South American rattlesnake, *Crotalus durissus*?

THIS PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

**4Speaker:** José Eduardo de Carvalho

**Affiliation:** Departamento de Zoologia, Universidade Estadual Paulista, Rio Claro, SP, Brazil.

**Title:** Metabolic physiology of tropical reptiles: from cells to environment. THIS PRESENTATION CAN ONLY BE PRESENTED IF THE SPEAKER RECEIVES FINANCIAL ASSISTANCE.

**5Speaker:** Marshall McCue

**Affiliation:** Biological Sciences, University of Arkansas, USA.

**Title:** Fast and feast: the physiological consequences of the feeding biology in snakes.

**6Speaker:** Denis Andrade

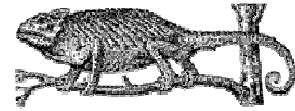
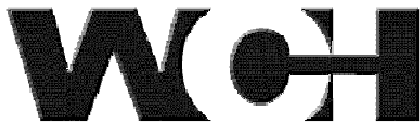
**Affiliation:** Departamento de Zoologia, Universidade Estadual Paulista, Rio Claro, SP, Brazil

**Title:** Tegus go dormant. Physiological consequences and proximal factors involved with the seasonal metabolic depression in a lizard.

**7Speaker:** Carlos Navas

**Affiliation:** Departamento de Fisiologia, Instituto de Biociências, Universidade de São Paulo, São Paulo, SP, Brazil

**Title:** Physiological basis for differences in whole organism performance in tegu lizards.



**6WCH SYMPOSIUM 13: Sequestered Defensive Compounds in Tetrapod Vertebrates**

Organizers: Alan H. Savitzky, Akira Mori, and Deborah A. Hutchinson

**List of Proposed Speakers and Titles:**

Presentations by twelve proposed speakers have been organized by general topics. All individuals indicated their tentative agreement to participate in the symposium, although most indicated that their participation would be dependent in part on the availability of funding.

*Introduction to Sequestration in Tetrapod Vertebrates*

**1. Alan H. Savitzky** (Old Dominion Univ., USA): Introduction to Sequestration in Tetrapod Vertebrates

**2. Jerrold Meinwald** (Cornell Univ., USA): Lessons from Arthropods that Sequester Chemical Defenses

*Sequestration of Arthropod Toxins*

**3. Taran Grant** (Pontificia Univ. Católica do Rio Grande do Sul; Brazil): Phylogeny of Alkaloid Sequestration in Dendrobatoid Frogs

**4. Ralph A. Saporito** (Old Dominion Univ., USA): Patterns of Variation in Sequestered Alkaloids in Dendrobatoid and Mantellid Frogs

**5. Wade C. Sherbrooke** (Southwestern Research Station; USA): Evidence for Sequestration of Alkaloids in *Phrynosoma*

**6. Jonathan K. Webb** (Univ. of Sydney; Australia): Potential for Sequestration of Prey Toxins in Scolecophidian Snakes

**7. John P. Dumbacher** (California Academy of Sciences; USA): Sequestration of Alkaloids in Birds

*Sequestration of Salamander Toxins*

**8. Edmund D. Brodie III** (Univ. of Virginia, USA): Patterns of Interactions Between Garter Snakes and Newts

**9. Becky Williams** (Univ. of California, Berkeley, USA): Persistence of Tetrodotoxin from Newts in Garter Snakes

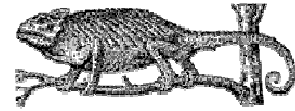
*Sequestration of Anuran Toxins*

**10. Akira Mori** (Kyoto Univ., Japan): Behavioral Aspects of Sequestration in *Rhabdophis*

**11. Deborah A. Hutchinson** (Old Dominion Univ., USA): Chemical Aspects of Sequestration of Bufadienolides in *Rhabdophis*

*Chemical Aspects of Sequestration*

**12. Frank C. Schroeder** (Boyce Thompson Institute for Plant Research, USA): The Chemistry of Sequestration



**6WCH SYMPOSIUM 13.1: DEFENSIVE MECHANISMS OF AMPHIBIANS AND REPTILES: ACTUAL KNOWLEDGE AND FUTURE PERSPECTIVES**

The knowledge about the defensive mechanisms of amphibians and reptiles has improved a lot during the last decades. Simultaneously, several studies focusing on the predator-prey interactions have raised important questions (and eventually answers) in the fields of speciation, evolution, co-evolution, and phylogeny. Therefore, a symposium like the present may help us to organize the current knowledge, to have a broader understand of the subject, and may help herpetologists to find new directions for future studies.

**ORGANIZER: Dr. Luís Felipe Toledo**

Universidade Federal do Paraná (UFPR)  
Pós Graduação em Ecologia e Conservação (PPGECO)  
Setor de Ciências Biológicas, Centro Politécnico  
Caixa Postal 19031, CEP 81531-980  
Jardim das Américas, Curitiba, PR, Brasil  
Cel: +55 11 9196-9970  
E-mail: [toledolf2@yahoo.com](mailto:toledolf2@yahoo.com)

**Luís Felipe Toledo** begun in science studying reptiles' physiology and turned to anurans' behavior during the graduate courses. He is a Zoologist with special interest in natural history, behavior, and conservation of anurans, subjects that he is working and publishing since the year 2000. He is now member of the graduate program of the Universidade Federal do Paraná (UFPR) conducting field studies in the Atlantic Rain Forest.

**Talks**

**01) BEHAVIORAL DEFENSES OF ANURANS**

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*Luís Felipe Toledo<sup>1</sup>, Ivan Sazima<sup>2</sup> & Célio F. B. Haddad<sup>3</sup>*

<sup>1</sup>Pós Graduação em Ecologia e Conservação, Setor de Ciências Biológicas, Centro Politécnico, Universidade Federal do Paraná, Curitiba, PR, Caixa Postal 19031, CEP 81531-980, Brasil. E-mail: [toledolf2@yahoo.com](mailto:toledolf2@yahoo.com).

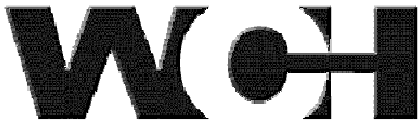
<sup>2</sup>Departamento de Zoologia e Museu de História Natural, Caixa Postal 6109 Universidade Estadual de Campinas, 13083-970 Campinas, São Paulo, Brasil.

<sup>3</sup>Departamento de Zoologia, Instituto de Biociências, Unesp, Rio Claro, São Paulo, Caixa Postal 199, CEP 13506-970, Brasil.

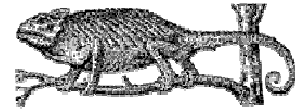
**02) ANTIPREDATOR MECHANISMS AND TOXINS OF SALAMANDERS**

*Edmund Brodie Jr.*

Professor & Director of Graduate Studies  
Department of Biology



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Utah State University  
Logan, UT 84322-5305  
Phone (435) 797-2489  
Fax (435) 797-0532  
E-mail: [brodie@biology.usu.edu](mailto:brodie@biology.usu.edu)

**03) A REVIEW OF DIET AND TOXICITY IN TROPICAL POISON FROGS**

*Maureen Donnelley<sup>1</sup>, Ralph A. Saporito & John W. Daly*

<sup>1</sup>Florida International University, Department of Biological Sciences, Office: OE 225, Phone: (305) 348-1235, Lab: ECS 153, Phone: (305) 348-6513, E-mail: [donnelly@fiu.edu](mailto:donnelly@fiu.edu)

**04) DEFENSIVE STRATEGIES OF SNAKES**

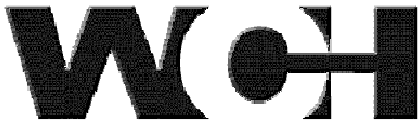
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*Marcio Martins*

Universidade de São Paulo, Instituto de Biociências, Departamento de Ecologia Geral.  
Rua do Matão, Travessa 14, s/n, Cidade Universitária, CEP 05508090, São Paulo, SP, Brasil.  
Telefone (11)3091-7597; Fax (11)3091-8096; URL: [www.ib.usp.br/labvert](http://www.ib.usp.br/labvert)

**5) *Tracy Langkilde*. – DEFENSIVE BEHAVIOR OF LIZARDS**

Department of Biology  
Pennsylvania State University, USA  
Phone: (814) 867 2251  
E-mail: [tll30@psu.edu](mailto:tll30@psu.edu)



**6<sup>th</sup> WCH SYMPOSIUM 14: DEVELOPMENT AND IMPLEMENTATION OF RECOVERY PROGRAMS FOR ENDANGERED CHELONIANS**

Despite a small number of well-known and highly publicized conservation and recovery efforts for chelonians, most ongoing programs have not been running long enough to be termed “successful.” Further, some notable long-running programs have failed to demonstrate any sign of population recovery, largely because of critical errors due to lack of good science and conservation practice. Unfortunately for a number of critically endangered species, biologists are developing and implementing conservation methodologies simultaneously, a less-than-optimal but necessary situation. These methodologies may involve labor intensive, costly and high-tech conservation measures - often headstarting and release - a technique still considered controversial by many and subject to criticism as “halfway technology.” In fact few good examples exist where headstarting and release have actually resulted in population recovery. Though this symposium will highlight chelonian recovery programs that involve a range of techniques including nest protection, egg collection, headstarting and release, captive breeding, translocation, and protection of wild populations and habitats, there will be an emphasis on those with a captive component. Efforts to correct previous flaws in methodology that may have contributed to lack of success will be stressed.

ORGANIZER: Rick Hudson, Fortworth Zoo

**Speakers:**

1) *Piku in trouble -- Conservation of the pig-nosed turtle, *Carettochelys insculpta*, in the Kikori Delta, Papua New Guinea.*

Carla Eisemberg, Arthur Georges & Mark Rose

Carla C. Eisemberg  
Institute for Applied Ecology  
Building 3, University of Canberra  
ACT 2601 AUSTRALIA

2) *Two decades of *Pseudemydura umbrina* recovery through captive breeding and re-introduction: influence of captive environment and life style on behavior of released juveniles and suitability of captive-bred versus wild turtles for translocation.*

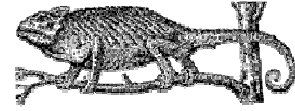
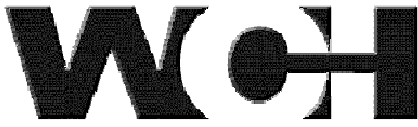
Gerald Kuchling and Dean Burford

Gerald Kuchling, PhD  
University of Western Australia  
Perth, WA

3) *Impact of climate change on persistence of two re-introduced *Pseudemydura umbrina* populations based on captive-bred headstarted juveniles*

Gerald Kuchling, Andrew Burbidge and Lyndon Mutter

Gerald Kuchling, PhD  
University of Western Australia  
Perth, WA



4) *Erymnochelys madagascariensis* at Ankarafantsika: how to address temperature dependent sex determination and headstarting environment in a recovery program of a large tropical river turtle

Gerald Kuchling, Gerardo Garcia and Ernest Bekarany

Gerald Kuchling, PhD  
University of Western Australia  
Perth, WA

5) *Is headstarting a viable component to our turtle conservation toolkit? Lessons learned from headstarting India's red crowned roof turtle, Batagur kachuga.*

Brian D. Horne, PhD  
Division of Conservation & Research  
Zoological Society of San Diego  
San Diego, CA

6) *Manipulating nest temperatures in riverside hatcheries as a mean of assuring the production of both sexes during in situ conservation projects: Batagur kachuga, a case study.*

Brian D. Horne, PhD  
Division of Conservation & Research  
Zoological Society of San Diego  
San Diego, CA

7) *Overview of Mangrove Terrapin, Batagur baska, conservation program in Malaysia*

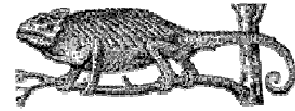
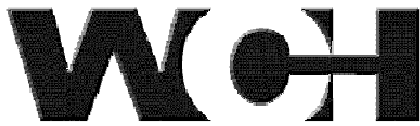
Eng-Heng CHAN  
Professor  
Institute of Oceanography  
University Malaysia Terengganu

8) *Restoring a Depleted Population of Madagascar sideneck turtles, Erymnochelys madagascariensis, in Ankarafantsika National Park*

Juliette Veloso  
Wetlands Coordinator  
Durrell Wildlife Conservation Trust- Madagascar Programme  
Madagascar

9) *A big turtle in a big river - Directions for the management of the giant snakeneck turtle, Chelodina expansa*

Debbie Bower  
Institute for Applied Ecology  
Building 3, University of Canberra  
ACT 2601 AUSTRALIA



10) *Ecology and Habitat Use of the Gopher tortoise in Florida: implications for translocation strategies.*

Henry R. Mushinsky and Earl McCoy  
Henry R. Mushinsky  
Department of Biology  
University of South Florida  
Tampa, Florida 33620

11) *The history of captive breeding and reintroduction programs for Galapagos tortoises.*

Cruz Marquez  
Charles Darwin Foundation

12) *Conservation of Madagascar's ploughshare tortoise, Geochelone yniphora: successes and setbacks.*

Richard Lewis, Gerrardo Garcia and Lora Smith

13) *The U.S. Fish and Wildlife Service recovery program for the endangered yellow-blotched map turtle, Graptemys flavimaculata, in the Pascagoula River system.*

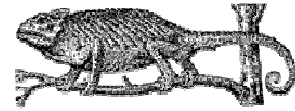
Will Selman

14) *An overview of a successful reintroduction program for Podocnemis expansa*

Richard C. Vogt



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**Further statements:**

Presentations should be of 20 minute duration for each participant (this time should include time for questions and discussions). If the Symposium organizer has compelling reasons for other time allotments, the symposium organizer must make his/her case with the Organizing Committee for an alternate scheme of time allotments that would allow for time coordination with the other symposia being held simultaneously.

All talks should be prepared in Power Point for PC, we will have slide projectors and white boards with crayons available if anyone finds this impossible, we will also have students available on site to help you produce your first Power Point if necessary, and in exchange for taking them to dinner.

We have a new and exciting format in Herpetology today, the new electronic journal, Herpetological Conservation and Biology (HCB), where it is FREE to publish and receive. WCH is the academic sponsor of this publication. The leadership of HCB is offering to publish on line all of the abstracts for the 6thWCH, and publish them as expanded abstracts including 1 photo, 1 table, 1 graph (3 figures). This is an unprecedented opportunity!! I hope all of you will take advantage of this.

In addition WCH is willing to accept submissions for publication of all of the presentations from all of the symposia! I am not kidding. We will expand the editorial force to do this if necessary. The submissions will be sent out for review like any other paper, and when the submissions for each symposium are ready they will be published. No symposium will have to wait for the straggler, who never completes deadlines, he will merely not appear, and can publish his results 3 years later in a paper journal. This is the opportunity to get your cutting edge research published almost instantaneously with all of the color you want.

HCB is also inviting all plenary speakers to publish their presentations. HCB is an electronic journal with no terabit limits so all authors presenting contributed oral presentations will be invited to present their talks as papers as well, and these will be published next to instantaneously upon acceptance.