

ICE 2012 DAEGU KOREA
XXIV International Congress of Entomology
DAEGU KOREA
August 19-25, 2012



The XXIV International Congress of Entomology
Scientific Program



Scientific Program for ICE 2012 (January 10, 2011)

■ List of Sessions

※ To see the details, click the session title as you are pressing the 'Ctrl' key.

1. Systematics, Phylogeny and Zoogeography
2. Morphology and Ultrastructure
3. Insect Immunology, Physiology and Neurobiology
4. Development and Reproduction
5. Genetics, Genomics and Evolutionary Entomology
6. Behavior and Chemical Ecology
7. Insect related Interactions at a Multi-trophic Ecosystem
8. Pesticides, GM Crops, Resistance and Toxicology
9. Conservation, Biodiversity and Climate Change
10. Integrated Pest Management
11. Insect Biological Control
12. Urban, Stored Product and Post Harvest Entomology
13. Medical & Veterinary Entomology
14. Invasive Species and Quarantine
15. Acarology
16. Social Insects
17. Special Issues

■ Sub-sessions with Organizers & Tentative Speakers

1. Systematics, Phylogeny and Zoogeography

- **Dr. Ho-Yeon Han**, Yonsei University, Korea (E-mail: hyhan@yonsei.ac.kr)
- **Dr. John Heraty**, University of California, Riverside, USA
(E-mail: john.heraty@ucr.edu)

1-1. Globalized insect taxonomy in the 21st century: current accomplishments, future prospects

- **Organizers:**
 - Matthew Buffington, USA (matt.buffington@ars.usda.gov)
 - John LaSalle, Australia (John.Lasalle@csiro.au)
- **Tentative titles and speakers:**
 - 1) Collaborative Databasing of Bee Collections Within a Global Informatics Network
John Ascher, John Pickering, and Doug Yanega (ascher@amnh.org)
 - 2) Towards the insect tree of life: addressing incomplete identification in mined data
D Chesters, AR LUO, CD ZHU (dc.1984@yahoo.co.uk)
 - 3) New standards in ant taxonomy
Brian L Fisher, Alex Smith, Phil S Ward (bfisher@calacademy.org)
 - 4) LepBase: Mobilizing data on butterflies and moths in a community architecture
I.J. Kitching, T.J. Simonsen, C.H.C. Lyal & A. Hine (i.kitching@nhm.ac.uk)
 - 5) Advanced phenomics in support of taxonomy
John La Salle, Paul Jackway, Chuong Nguyen & David Lovell (john.lasalle@csiro.au)
 - 6) CyberCicadas and WWWasps: Utilising innovative digitisation technologies in collection management and delivery
Beth Mantle and Nicole Fisher (Beth.Mantle@csiro.au)
 - 7) Dipterorum – a global nomenclatural platform for the taxonomy of flies
Thomas Pape & Chris Thompson (tpape@snm.ku.dk)
 - 8) Viewing specimen data through the prism of collecting events: expanding the utility and resolution of the traditional collection database
Andrew Short (aezshort@ku.edu)
 - 9) Scratchpads - progress and prospects: the first five years of running a data-publishing framework for biodiversity researchers
Smith, V.S., Rycroft, S.D., Brake, I., Baker, E., Scott, B., Livermore, L., Roberts, D.
(vince@vsmith.info)
 - 10) Remote microscopy: a success story in Australian and New Zealand plant biosecurity
Michael Thompson (Michael.Thompson@csiro.au)
 - 11) PBI and beyond: databasing and the heteropteran community
C. Weirauch & R. T. Schuh (christiane.weirauch@ucr.edu)



- 12) Cybertaxonomy of species rich clades using character matrices as data repositories and natural language parsing for rapid publication of species descriptions
Shaun Winterton (wintertonshaun@gmail.com)
- 13) An integration of cryobanking and web-based image recognition systems for systematic studies and curation
Tsai J.M. (1); Yeh W.B.(2); Fu Y.S. (3); Chan M.L. (4); YANG M.M.
(mmyang@dragon.nchu.edu.tw)
- 14) Virtual Taxonomy Laboratory Networking for Sustainable Agriculture in China
CD ZHU, John La Salle, DS WANG (zhucd2005@gmail.com)

1-2. Dates and rates: diversification and dating methods and their applications to entomology

➤ Organizers:

- Sean Brady, Smithsonian Institution, USA (BRADYS@si.edu)
Jessica L. Ware, Rutgers University, USA (jware42@andromeda.rutgers.edu)

➤ Tentative titles and speakers:

- 1) Sources of error and uncertainty in divergence dating
Sean Brady, Smithsonian Institution, USA (BRADYS@si.edu)
- 2) Divergence dating in dragonflies
Seth Bybee, Brigham Young University, USA (seth.bybee@gmail.com)
- 3) Divergence dating in bees (Apidae)
Sophie Cardinal, Canadian National Collection of Insects, Canada (scc44@cornell.edu)
- 4) Divergence dating in caddisflies
Marianne Espeland, Harvard University, Sweden (Marianne.Espeland@nrm.se)
- 5) Divergence dating in bees (Megachilidae)
Jesse Litman, Cornell University, USA (jrl72@cornell.edu)
- 6) Divergence dating in fig wasps
Carlos Lopez-Vaamonde, Institut National de la Recherche Agronomique (INRA)-Centre d'Orlean, France (Carlos.lopez-vaamonde@orleans.inra.fr)
- 7) Diversification rates in beetles
Duane McKenna, University of Memphis, USA (dmckenna@memphis.edu)
- 8) Divergence dating and diversification rates in ants
Corrie Moreau, Field Museum, USA (cmoreau@fieldmuseum.org)
- 9) Diversification rates methodology and case studies from ants and bees
Marcio Pie, Universidade Federal do Paraná, Brazil (marcio.pie@gmail.com)
- 10) Divergence dating and diversification rates in ants (Cephalotes)
Shauna Price, UCLA, USA (sprice@ucla.edu)
- 11) Divergence dating in Orthoptera
Hojun Song, University of Central Florida, USA (song@ucf.edu)



- 12) Divergence dating in dragonflies
Jessica Ware, Rutgers University, USA (jware42@andromeda.rutgers.edu)
- 13) Divergence dating and diversification rates in Neuropterida
Shaun Winterton, California State Collection of Arthropods, USA
(wintertonshaun@gmail.com)

1-3. Biogeography: challenges to a biological synthesis

➤ **Organizers:**

James K. Liebherr, USA (jk15@cornell.edu)
Kipling (Kip) Will, USA (kipwill@berkeley.edu)
Eduardo Almeida, Brazil (eduardo@ffclrp.usp.br)

➤ **Tentative titles and speakers:**

- 1) TBA
Eduardo Almeida, Universidade de Sao Paulo (e-mail)
- 2) TBA
Dalton Anorim, Universidade de Sao Paulo (e-mail)
- 3) Interplay of species interactions and geography in shaping Australia's biota: the case study of land bugs and seed plant interactions in Australia
Gerry Cassis, University of New South Wales (e-mail)
- 4) How Area Taxonomy will Unify Biogeography and turn it into Big Science
Malte Ebach, University of New South Wales (e-mail)
- 5) A History of Biogeographical Regionalization in Australia
Malte Ebach, University of New South Wales (e-mail)
- 6) Diversification of Caribbean and Neotropical mainland entomine weevils (Coleoptera: Curculionidae: Entiminae): untangling the effects of host plants and biogeography
Nico Franz, Arizona State University (e-mail)
- 7) Local variation, species, and biogeography of New Zealand Beetles: Challenges and Solutions
Richard Leschen, Landcare, New Zealand (e-mail)
- 8) Extinction: elucidating Hawaiian biogeographic dark matter
James K. Liebherr, Cornell University, USA (jk15@cornell.edu)
- 9) Biogeography (and evolution) at the Mexican transition zone
Juan Morrone, UNAM, Mexico City (e-mail)



- 10) Biogeography of Patagonian Carabidae: distribution, endemism, diversity and historical patterns
Sergio Roig, IADIZA, Mendoza (e-mail)
- 11) Evolutionary and biogeographic patterns in African and Madagascan dung beetles
Catherine Sole, University of Pretoria (e-mail)
- 12) The fossils within: use of nuclear mitochondrial pseudogenes to understand historical biogeography
Hojun Song, University of Central Florida (e-mail)
- 13) The interface of biogeography and phylogeography in dune restricted insects in North America
Matthew VanDam, UC, Berkeley (e-mail)
- 14) TBA
Niklas Wahlberg, University of Turku (e-mail)
- 15) Large-scale biogeography of Carabid beetles using phylobetadiversity methods
Kipling Will, UC, Berkeley (e-mail)
- 16) Large-scale biogeography of Carabid beetles using phylobetadiversity methods
David Yeates, CSIRO, Canberra (e-mail)

1-4. Phylogenomics and the evolution of insects

➤ **Organizers:**

Brian Wiegmann, Department of Entomology, North Carolina State University, USA
(bwiegman@ncsu.edu)

➤ **Tentative titles and speakers:**

- 1) Keynote Address: Phylogenomic Distribution and Functions of DNA Methylation in Insect Genomes
Soojin Yi, Georgia Institute of Technology, Atlanta GA, USA (e-mail)
- 2) Insect diversification through time: a phylogenomic approach
Christopher Wheat, University of Helsinki, Department of Biosciences, Finland (e-mail)
- 3) Can phylogenomic studies tell us the evolution of insects?
Sabrina Simon, Stiftung Tierärztliche Hochschule Hannover, ITZ, Ecology & Evolution, Hannover, Germany (e-mail)
- 4) Transcriptomics and the phylogeny of phytophagous beetles
Duanne McKenna, Biological Sciences, University of Memphis, Memphis TN, USA (e-mail)
- 5) Recovering the evolution of flies: contributions from phylogenomics
Michelle Trautwein, Entomology, North Carolina State University, Raleigh NC, USA (e-mail)



➤ **Invited Speakers Pending:**

Alfried Vogler (NHM London)
Antonis Rokas (Vanderbilt, TN USA)
Bernard Misof (Bonn, Germany)
Heather Hines (NCSU, North Carolina USA)

1-5. Phylogeny and evolution of the Coleoptera

➤ **Organizers:**

Kojun Kanda, Oregon State University, USA
(kandak@science.oregonstate.edu)

➤ **Tentative titles and speakers:**

- 1) Molecular phylogeny of Adephaga
David R. Maddison, Oregon State University - Zoology Department, USA
(david.maddison@science.oregonstate.edu)
- 2) Phytophaga or beetle genomics
Duane D. McKenna, University of Memphis, USA (dmckenna@memphis.edu)
- 3) Molecular phylogeny of Tenebrionoidea
Kojun Kanda, Oregon State University - Zoology Department, USA
(kandak@science.oregonstate.edu)
- 4) Tenebrionoidea/Cucujoidea
Richard Leschen, Landcare Research, New Zealand (leschenr@landcareresearch.co.nz)
- 5) Hydrophiloidea
Andrew Short, University of Kansas, USA (aezshort@ku.edu)
- 6) Coleoptera nomenclature
Patrice Bouchard, Agriculture and Agri-Food Canada, Canada
(Patrice.Bouchard@AGR.GC.CA)
- 7) Curculionoidea
Adriana E. Marvaldi, Instituto Argentino de Investigaciones de Zonas Aridas, Argentina
(marvaldi@mendoza-conicet.gov.ar)
- 8) Molecular phylogeny of Coleoptera
Alex Wild, University of Illinois, USA (alexwild@illinois.edu)
- 9) Morphological phylogeny of Coleoptera
Ainsley Seago, CSIRO, Australia (Ainsley.Seago@csiro.au)
- 10) Cucujoidea
Joseph V. McHugh, University of Georgia, USA (mchugh.jv@gmail.com)
- 11) Phylogeny of Cerylonid series of Cucujoidea
James A. Robertson, University of Arizona (erotyld@gmail.com)



1-6. Evolution of the Aculeata and the rise of Eusociality

➤ **Organizers:**

Michael Schwarz, Australia (michael.schwarz@flinders.edu.au)
Jason Gibbs, USA (jason.gibbs@cornell.edu)
Miriam Richards, Canada (miriam@brocku.ca)

1-7. Phylogeny and Evolution of the Lepidoptera

➤ **Organizers:**

Soowon Cho, Korea (chosowon@gmail.com)
Akito Y Kawahara, USA (kawahara@flmnh.ufl.edu)
Thomas J. Simonsen, England (t.simonsen@nhm.ac.uk)

➤ **Tentative titles and speakers:**

- 1) Richard Brown, Mississippi State Univ., USA (RBrown@entomology.msstate.edu)
- 2) Donale Davis, Smithsonian Institution, USA (davidd@si.edu)
- 3) Giovanni Fagua, Pontificia Universidad Javeriana, Colombia (fagua@javeriana.edu.co)
- 4) Akito Y. Kawahara, Universidade Estadual de Campinas, Brazil, (baku@unicamp.br)
- 5) Akito Y. Kawahara, University of Florida, USA (kawahara@flmnh.ufl.edu)
- 6) Atsushi Kawakita, Kyoto University, Japan (kawakita@ecology.kyoto-u.ac.jp)
- 7) Niels P. Kristensen, University of Copenhagen, Denmark (npkristensen@snm.ku.dk)
- 8) Sang-Mi Lee, Mississippi State Univ., USA (microlepi@hotmail.com)
- 9) David Lees, INRA, France (dclees@gmail.com)
- 10) Carlos Lopez-Vaamonde, INRA, France (Carlos.Lopez-Vaamonde@orleans.inra.fr)
- 11) Marko Mutanen, Zoological Museum, University of Oulu, Finland
(marko.mutanen@oulu.fi)
- 12) Erik Nieuwerkerken, National Museum of Natural History, Leiden, Netherlands
(Erik.vanNieuwerkerken@ncbnaturalis.nl)
- 13) Issei Ohshima, National Institute for Basic Biology, Japan (issei@nibb.ac.jp)
- 14) Kyu-Tek Park, Kangwon National University, Korea (ktpark02@gmail.com)
- 15) Jadranka Rota, University of Copenhagen, Denmark, (jrota@snm.ku.dk)
- 16) Daniel Rubinoff, University of Hawaii, USA (rubinoff@hawaii.edu)
- 17) Thomas Simonsen, Natural History Museum, London, UK (t.simonsen@nhm.ac.uk)
- 18) Jae-Cheon Sohn, University of Maryland, USA (jsohn@umd.edu)
- 19) Felix Sperling, University of Alberta, Canada (felix.sperling@ualberta.ca)



- 20) Niklas Wahlberg, University of Turku, Finland (niklas.wahlberg@utu.fi)
- 21) Shen-Horn Yen, National Sun Yat-sen Univ., Taiwan (shenhornyen@mail.nsysu.edu.tw)
- 22) Andreas Zwick, State Museum of Natural History, Stuttgart, Germany
(zwick.smns@naturkundemuseum-bw.de)

1-8. Phylogeny and evolution of the Diptera

➤ **Organizers:**

Brian Wiegmann, USA (bwiegman@ncsu.edu)
David Yeates, Australia (David.Yeates@csiro.au)

1-9. Phylogeny and evolution of the Paraneoptera

➤ **Organizers:**

Christiane Weirauch, USA (christiane.weirauch@ucr.edu)
Jason Cryan, USA (icryan@mail.nysed.gov)
Kevin Johnson, USA (kjohnson@inhs.uiuc.edu)

➤ **Tentative titles and speakers:**

- 1) Morphological homologies across Paraneoptera and the evolution of GC content in Psocodea
Kazunori Yoshizawa (Japan)
- 2) EST phylogeny of Paraneoptera
Joseph Hughes (UK)
- 3) Mitochondrial genomics of Paraneoptera
Steve Cameron (Australia)
- 4) Molecular dating of the age of lice
Vince Smith (UK)
- 5) Phylogeny of lice and phylogenomics using next generation genomic sequencing
Kevin Johnson (USA)
- 6) A combined morphological and molecular perspective on Thysanoptera
Veronica Pereyra (Argentina)
- 7) Phylogeny of Sternorrhyncha
Nate Hardy (USA)
- 8) Phylogeny and evolution of Aphidini (Sternorrhyncha)
Hyojoong Kim (South Korea)
- 9) Phylogeny of Hemiptera with emphasis on Auchenorrhyncha
Jason Cryan (USA)
- 10) Hemiptera and fossils



- Jacek Szwedo (Russia)
- 11) Phylogeny of Coleorrhyncha
Daniel Burckhardt (Switzerland)
 - 12) Molecular systematics in Heteroptera
Wenjun Bu (PR China)
 - 13) Phylogeny of Heteroptera - combined morphological and molecular perspective
Christiane Weirauch & Randall Schuh (USA)
 - 14) Dating, feeding habits, and ancestral state reconstructions: evolution of Cimicomorpha (Heteroptera)
Sunghoon Jung (South Korea)
 - 15) Host-symbiont co-speciation in Hemiptera-Heteroptera
Takahiro Hosokawa (Japan)

1-10. From fossils to molecules: evolution of the stick and leaf Insects

- **Organizers:**
Sven Bradler, Georg-August-Universität Göttingen, Germany (sbradle@gwdg.de)
Thomas Buckley, Landcare Research, New Zealand
(BuckleyT@landcareresearch.co.nz)
- **Tentative titles and speakers:**
 - 1) Homologies in stick-insect wing venation and taxonomic implications
Olivier Bethoux, 40 rue d'Aveillans, 38770 La Motte d'Aveillans, France
(obethoux@yahoo.fr)
 - 2) The phasmatodean tree of life: progress and enigmas
Sven Bradler, Johann-Friedrich-Blumenbach-Institut für Zoologie und Anthropologie,
Georg-August-Universität Göttingen, Berliner Strasse 28, 37073 Göttingen, Germany
(sbradle@gwdg.de)
 - 3) Towards a global biogeographic reconstruction of the stick insects (Phasmatodea)
Thomas R. Buckley, Landcare Research, Private Bag 92170, Auckland, New Zealand
(buckleyt@landcareresearch.co.nz)
 - 4) The sperm structure of phasmatodea (Insecta): morphological diversity and phylogenetic significance
Marco Gottardo*, Department of Evolutionary Biology, University of Siena, Via Aldo Moro
2, I-53100, Siena, Italy (gottardo@unisi.it)
Romano Dallai, same (?)
 - 5) Molecular phylogeny of stick insects based on mitochondrial genome
Natuo Komoto*, Division of Insect Science, National Institute of Agrobiological Sciences,
1-2 Ohwashi, Tsukuba, Ibaraki 305-8634, Japan (natuo@affrc.go.jp)
Kenji Yukuhiro
Shuichiro Tomita



- 6) Speciation through clasper divergence in the New Zealand stick insect genus *Clitarchus*
Shelley Myers*, Landcare Research, Private Bag 92170, Auckland, New Zealand (?)
Thomas R. Buckley
- 7) Genomic divergence during *Timema* stick insect speciation
Patrik Nosil, Department of Ecology and Evolutionary Biology, University of Boulder,
Colorado, Boulder, CO 80309, USA (patrik.nosil@colorado.edu)
- 8) TBA
Marco Passamonti, Department of Biologia Evoluzionistica Sperimentale, University of
Bologna, Bologna, Italy (marco.passamonti@unibo.it)
- 9) Phylogeny of Phasmatodea: evolution of egg laying techniques and co-evolution
between ants and stick insects
James A. Robertson, Dept. of Entomology, 410 Forbes Building, University of Arizona,
Tucson, AZ 85721-0036, USA, (erotyid@gmail.com)

1-11. Biology of Chrysomelidae

- **Organizers:**
Michael Schmitt, Ernst-Moritz-Arndt-Universitaet, Germany
(michael.schmitt@uni-greifswald.de)
Jong Eun Lee, Andong National University, Korea (jelee@andong.ac.kr)

1-12. Origin and early splits of hexapods

- **Organizers:**
Günther Pass, Austria (quenther.pass@univie.ac.at)
Bernhard Misof, Germany (b.misof.zfmk@uni-bonn.de)
Ryuichiro Machida, Japan (machida@sugadaira.tsukuba.ac.jp)

1-13. Marine Insects: systematics, ecology, phylogeny and zoogeography

- **Organizers:**
Kee-Jeong Ahn, Chungnam National University, Korea (kjahn@cnu.ac.kr)
Lanna Cheng, University of California, San Diego, USA
(lcheng@ucsd.edu)
- Tentative titles and speakers:
 - 1) Introductory remarks - Marine entomology, then and now
Lanna Cheng, Scripps Institution of Oceanography, University of California, San Diego,
USA (lcheng@ucsd.edu)
 - 2) Genetic structure of the ocean-skater *Halobates sericeus* suggests stability of Pacific
equatorial conditions since the late Pleistocene



- Sarah Leo*, University of Alberta, Edmonton, Canada (ssleo@ualberta.ca)
- Lanna Cheng, Scripps Institution of Oceanography, University of California, San Diego, USA (lcheng@ucsd.edu)
Felix Sperling, University of Alberta, Edmonton, Canada (felix.sperling@ualberta.ca)
- 3) Ecology of three endangered sea skaters in Japan
Terumi Ikawa, Morioka College, Iwate, Japan (trmi@pop02.odn.ne.jp)
 - 4) Molecular phylogeny of marine midges (Diptera: Chironomidae)
Peter S. Cranston, Australian National University, Canberra, Australia (pcranston@gmail.com)
 - 5) Live with the rhythm of the tides: Genetics and evolution of local adaptations in adult emergence time in the marine midge *Clunio marinus* (Diptera: Chironomidae)
Tobias Kaiser, Max Planck Institute for Chemical Ecology, Germany (tobias.kaiser@univie.ac.at)
 - 6) Mechanism for semilunar emergence rhythm of the intertidal midge *Pontomyia* (Diptera: Chironomidae)
Keryea Soong*, National Sun Yet Sun University, Taiwan (keryea@gmail.com)
In-how Chang
Yi-Jen Lee
 - 7) Zoogeography of coastal marine Staphylinidae (Coleoptera)
Howard Frank*, University of Florida, Gainesville, Florida, USA (jhfrank@ufl.edu)
Kee-Jeong Ahn, Chungnam National University, Daejeon, Korea (kjahn@cnu.ac.kr)
 - 8) Phylogeny of the marine littoral genus *Cafius* (Coleoptera: Staphylinidae)
Mi-Jeong Jeon*, National Institute of Biological Resources, Incheon, Korea (jeonmj@korea.kr)
Kee-Jeong Ahn, Chungnam National University, Daejeon, Korea (kjahn@cnu.ac.kr)
 - 9) Molecular phylogeny and coastal habitat evolution of the genus *Aleochara* (Coleoptera: Staphylinidae)
Jeong-Hun Song*, Chungnam National University, Daejeon, Korea (mong8@naver.com)
Kee-Jeong Ahn, Chungnam National University, Daejeon, Korea (kjahn@cnu.ac.kr)
 - 10) Histeridae, Salpingidae and Hydrophilidae (Coleoptera) on seashore of Japan
Masahiro Ohara, Hokkaido University Museum, Sapporo, Japan
(ohara@museum.hokudai.ac.jp)
 - 11) Concluding remarks
Kee-Jeong Ahn, Chungnam National University, Daejeon, Korea (kjahn@cnu.ac.kr)

1-14. Systematics, biogeography and ecology of Cerambycidae and Buprestidae

➤ Organizers:

Qiao Wang, Massey University, New Zealand (Wang@massey.ac.nz)
Steve Lingafelter, USDA, USA (steve.lingafelter@ars.usda.gov)



1-15. Biological transitions in the Hymenoptera: a phylogenetic approach

- **Organizers:**
Andy Austin, Australia
John Heraty, University of California at Riverside, USA (john.heraty@ucr.edu)
- **Tentative titles and speakers**
 - 1) Introductory Remarks (5 mins.)
Andy Austin
 - 2) Phylogeny of the Hymenoptera: latest results and implications
Mike Sharkey, University of Kentucky (msharkey@uky.edu)
 - 3) Phylogeny of the Chalcidoidea: latest results and implications
John Heraty, UC Riverside (john.heraty@ucr.edu)
 - 4) Phylogeny of the aculeate Hymenoptera: latest results and implications
Denis Brothers, University of Kwazulu-Natal (brothers@ukzn.ac.za)
 - 5) Evolution of the hymenopteran ovipositor system: implications for host exploitation
Don Quicke, Imperial College, Silwood Park (d.quicke@imperial.ac.uk)
 - 6) Evolution of endoparasitism: strategies for dealing with the host milieu
Mike Strand, University of Georgia (mrstrand@uga.edu)
 - 7) Host switching as biological transitions among parasitoids: exploiting spiders as a resource
Andy Austin, University of Adelaide (andy.austin@adelaide.edu.au)
 - 8) Evolution of sex determination and endosymbionts in the Hymenoptera
Leo Beukeboom, University of Groningen (l.w.beukeboom@rug.nl)
 - 9) Evolution of pollen feeding and secondary phytophagy among the Hymenoptera
Astrid Cruaud, University of California, Riverside (cruaud@supagro.inra.fr)
 - 10) Evolution of ant foraging strategies
Speaker: TBA

1-16. Aphid systematic and evolution

- **Organizers:**
Seunghwan Lee, Seoul National University, Korea (seung@snu.ac.kr)
Robert Footitt, Agriculture and Agri-Food Canada, Canada (Robert.Footitt@AGR.GC.CA)



2. Morphology and Ultrastructure

- **Dr. R.A. Steinbrecht**, Max Planck Institut (MPI) für Verhaltensphysiologie, Germany (E-mail: asd@orn.mpg.de)
- **Dr. Myungjin Moon**, Dankook University, Korea (E-mail: moonmj@dankook.ac.kr)

2-1. Reproductive Systems

2-2. Insect Neuroendocrine Systems: Morphology and Function

2-3. The Insect Antenna: A Multimodal Sensory Organ

2-4. Spiracular Mechanisms: Ultrastructure and Physiology

2-5. Feeding and Mouthparts

2-6. Locomotor Systems: Functional Morphology

2-7. The Insect Brain

2-8. Insects – The Most Successful Crayfish on Land (Comparative Microanatomy and Phylogenetics)

2-9. Insect flight and migration: aerial performance in a changing world

➤ **Organizers:**

Robert Dudley, University of California, Berkeley, USA (wings@berkeley.edu)
Jason Chapman, Rothamsted Research, UK (jason.chapman@bbsrc.ac.uk)

➤ **Speakers:**

- 1) Robert Dudley and Steve Yanoviak (spyanoviak@ualr.edu)
- 2) Sanjay Sane (sane@ncbs.res.in) and Tom Daniel (danielt@u.washington.edu)
- 3) Michael Dickinson (flyman@caltech.edu)
- 4) Hao Liu (hliu@faculty.chiba-u.jp)
- 5) Mao Sun (m.sun@263.net)
- 6) Ty Hedrick (thedrick@bio.unc.edu)
- 7) Graham Taylor (graham.taylor@zoo.ox.ac.uk)
- 8) Richard Bomphrey (richard.bomphrey@zoo.ox.ac.uk)
- 9) Jason Chapman



- 10) Steve Reppert
- 11) Greg Sword
- 12) Constanti Stefanescu
- 13) Alistair Drake
- 14) Akira Otuka
- 15) Hongqiang Feng

2-10. Mechanisms of regulation of growth rate and shape in insects

➤ **Organizers:**

Jon Harrison, Arizona State University, USA (j.harrison@asu.edu)

➤ **Tentative titles and speakers:**

- 1) Regulation of organ allometry in *Drosophila*
Alex Shingleton, Michigan State University, USA
- 2) Systems integration and the regulation of insect size
Fred Nijhout, Duke University, USA
- 3) Mechanisms and evolution of nutrient-dependent horn allometry in beetles
Douglas Emlen, University of Montana, USA
- 4) Mechanisms for oxygen-regulation of insect body size
John Harrison, Arizona State University, USA
- 5) Interactions between ecdysone and nutrition-dependent development
Christen Mirth, Instituto Gulbenkian de Ciência, Portugal (christen@igc.gulbenkian.pt)
- 6) Molecular mechanisms of organ growth control
Konrad Basler, Univ. of Zurich
- 7) Interactions between insulin and steroid signaling in the control of growth and size in *Drosophila*
Pierre Léopold, Institute of Developmental Biology and Cancer, France
- 8) Starvation regulation of insulin signaling and growth in *Bombyx*
Sheng Li, Chinese Academy of Sciences, Shanghai, China
- 9) Evolution of sexual size dimorphism in insects
Craig Stillwell, University of Houston, USA



- 10) Evolution and development of beetle horns
Armin Moczek, Indiana Molecular Biology Institute, USA

3. Insect Immunology, Physiology and Neurobiology

- **Dr. Yonggyun Kim**, Andong National University, Korea
(E-mail: hosanna@andong.ac.kr)
- **Dr. Michael Kanost**, Kansas State University, USA (E-mail: kanost@ksu.edu)

3-1. Hemolymph protein in immune

- **Organizers:**
Mike Kanost, Kansas State University, USA (kanost@ksu.edu)
Bok Luel Lee, Pusan National University, Korea (brlee@psu.ac.kr)
- **Tentative titles and speakers:**
- 1) TBA (30 min.)
Bok Luel Lee, Pusan National University, Korea (brlee@psu.ac.kr)
 - 2) TBA (30 min.)
Yoshinobu Nakanishi, Kanazawa University, Japan
 - 3) TBA (30 min.)
Shoichiro Kurata, Tohoku University, Japan
 - 4) TBA (30 min.)
Kenneth Söderhäll, Uppsala University, Sweden
 - 5) TBA (30 min.)
In-Hee Lee, Hoseo University, Korea
 - 6) TBA (30 min.)
Michael Kanost, Kansas State University, USA (kanost@ksu.edu)

3-2. Immune mediators and cross-talk

- **Organizers:**
David Stanley, University of Missouri, USA (stanleyd@missouri.edu)
Yonggyun Kim, Andong National University, Korea (hosanna@andong.ac.kr)
- **Tentative titles and speakers:**
- 1) Probing the insect immune system with the insect pathogen *Photorhabdus* (15 min.)
Richard Ffrench-Constant, University of Exeter, UK (R.Ffrench-Constant@exeter.ac.uk)
 - 2) Deploying the mosquito IMD pathway in the war against malaria (15 min.)
George Dimopoulos, Johns Hopkins School of Public Health, USA



- 3) Biological functions of insect cytokine growth-blocking peptide (GBP) (15 min.)
Yoichi Hayakawa, Saga University, Japan (hayakayo@cc.saga-u.ac.jp)
- 4) *Drosophila* immune responses against entomopathogenic nematodes (15 min.)
Ulrich Theopold, Stockholm University, Sweden (uli@molbio.su.se)
- 5) Functional amyloids in insect immune response (15 min.)
Francesco Pennacchio, University of Napoli, Italy
- 6) Relationship between *Drosophila* prophenoloxidase structure and enzyme activity (15 min.)
Ling Erjun, Shanghai Institutes for Biological Sciences, China
- 7) Is leucocin-like protein an antibacterial peptide that specifically functions in the midgut of *Spodoptera litura*? (15 min.)
Qili Feng, South China Normal University, China
- 8) TBA (30 min.)
Norman Ratcliffe, Swansea University, UK (n.a.ratcliffe@swan.ac.uk)
- 9) Parasitic wasp symbiotic viruses against host immune response (15 min.)
Jean-Michel Drezen, Directeur de Recherche CNRS, France
- 10) Both biogenic monoamine and PSP activate hemocyte-spreading via eicosanoids (15 min.)
Yonggyun Kim, Andong National University, Korea (hosanna@andong.ac.kr)

3-3. Ecological immunity

- **Organizers:**
Jens Rolff (jor@sheffield.ac.uk)
Michael Siva-Jothy (m.siva-jothy@sheffield.ac.uk)

3-4. Integrative nutrition: from physiology to ecology and beyond

- **Organizers:**
Spencer T. Behmer, Texas A&M University, USA
Kwang Pum Lee, Seoul National University, Korea (kwanglee@snu.ac.kr)
Stephen J. Simpson, Sydney University, Australia

- **Speakers:**

- 1) David Raubenheimer (Massey University, New Zealand) – Keynote speaker



- 2) Mattew Piper (University College London, UK)
- 3) Hubi Amerein (Texas A&M University, USA)
- 4) Lindsay Gray (University of Sydney, Australia)
- 5) Mike Pankratz (University of Bonn, Germany)
- 6) Spence Behmer (Texas A&M University, USA)
- 7) Audrey Dussutour (Univeriste Paul Sabatier, France)
- 8) Geraldine Wright (Newcastle University, UK)
- 9) Fiona Clissold (University of Sydney, Australia)
- 10) Fleur Ponton (University of Sydney, Australia)
- 11) Shawn Wilder (University of Sydney, Australia)
- 12) Mathieu Lihoreau (University of Sydney, Australia)
- 13) Kwang Pum Lee (Seoul National University, Republic of Korea)
- 14) Rebecca Clark (TexasA &M University, USA)
- 15) Tony Joern (Kansas State University, USA)
- 16) Jerome Casas (Universite de Tours, France)
- 17) Heiko Vogel (Max Planck Institute of Chemical Ecology, Germany)
- 18) David Giron (Universite de Tours, France)
- 19) Arianne J. Cease (Arizona State University, USA)
- 20) Christelle Robert (University of Neuchatel, Switzerland)

3-5. The role of immunity in host-pathogen interactions

➤ **Organizers:**

Sussan Asgari, University of Queensland, Australia (s.asgari@uq.edu.au)

➤ **Tentative titles and speakers:**

- 1) Evolutionary plasticity of insect immunity (30 min)
Andreas Vilcinskas, Justus-Liebig-University of Giessen, Denmark
- 2) Virulence factors produced by pathogens provide important insights into the function of the insect immune system (30 min)
Mike Strand, University of Georgia, USA
- 3) Infection-induced physiological interaction between the mosquito circulatory and immune systems (15 min)



Julian Hillyer, Vanderbilt University, USA

- 4) The impact of isoprenoid precursors released by parasites and pathogens on the immune response in *Drosophila* and *Anopheles* (15 min)
Ingrid Faye, Stockholm University, Sweden
- 5) The endosymbiont *Wolbachia* as an extension of the host antiviral immune system (15 min)
Karyn Johnson, University of Queensland, Australia
- 6) Mosquito immunity to human pathogens
George Dimopoulos, Johns Hopkins University, USA
- 7) Biochemical characterization of host-immune related molecules by infection of pathogenic or symbiotic bacteria into the hemimetabolous insect, *Riptortus pedestris* (15 min)
Bok Luel Lee, Pusan National University, Korea
- 8) Bacterial flagellin as an initiator of insect immune responses (15 min)
Stuart Reynolds, University of Bath, UK

3-6. Neuropeptides and GPCRs

➤ **Organizers:**

Youngjoon Kim, Gwangju Institute of Science and Technology, Korea
(yikim108@gmail.com)

➤ **Speakers:**

- 1) Yamanaka Naoki, Department of Genetics, Cell Biology & Development, University of Minnesota, USA (yamanaka_naoki@hotmail.com)
- 2) Ping Shen, Department of Cellular Biology, University of Georgia, USA
(pshen@cb.uga.edu)
- 3) Dusan Zitnan, Institute of Zoology, Slovakia Academy of Sciences, Slovakia
(dusan.zitnan@savba.sk)
- 4) Jan Veenstra, Laboratoire de Neuroendocrinologie des Insectes Centre National de la Recherche Scientifique (CNRS)/Université Bordeaux I Avenue des Facultés, France
(j.veenstra@Inc.u-bordeaux1.fr)
- 5) Subba Reddy Palli, Department of Entomology, University of Kentucky, USA (rpalli@uky.edu)
- 6) Shengli Li, Institute of Plant Physiology and Ecology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China (shengli@sippe.ac.cn)



- 7) Ryusuke Niwa, Initiative for the Promotion of Young Scientists' Independent Research, University of Tsukuba, Japan (ryusuke-niwa@umin.ac.jp)
- 8) Young-Joon Kim, School of Life Sciences, Gwang-Ju Institute of Science and Technology, Korea (kimyj@gist.ac.kr)
- 9) Liliane Schoofs, Research group of Functional Genomics and proteomics, Katholieke Universiteit Leuven, Belgium (Liliane.Schoofs@bio.kuleuven.be)
- 10) Wolfgang Blenau, Goethe-Universität, Germany

3-7. Neuroendocrine system in control of physiology

➤ **Organizers:**

Yoonseung Park, Kansas State University, USA (ypark@ksu.edu)
Patricia Pietrantonio, Texas A&M University, USA (p_pietrantonio@tamu.edu)

➤ **Speakers:**

- 1) Michael Adams, Univ California, Riverside, USA
- 2) Neil Audsley, The Food and Environment Research Agency, UK
- 3) Willi Honegger, Vanderbilt University, USA
- 4) Angela Lange, Univ Toronto, Canada
- 5) Bin Li, Nanjing Normal University, China
- 6) Ian Orchard, University of Toronto, Canada
- 7) Yoonseong Park, Kansas State University, USA
- 8) David Schooley, University of Nevada, USA
- 9) Qisheng Song, University of Missouri, USA
- 10) Yashiaki Tanaka, National Institute of Agrobiological Sciences, Japan

3-8. Insect sensory neurobiology

➤ **Organizers:**

Hyung Wook Kwon, Seoul National University, Korea (biomodeling@snu.ac.kr)
Walton Jones (Walton@jonelab.org)

➤ **Tentative titles and speakers:**



- 1) TBA
Brian Smith, Arizona State University, USA
- 2) TBA
Walter Leal, University of California at Davis, USA
- 3) Behavioral representation of odor information in the *Drosophila* brain
Bill Hansson, Max Planck Institute for Chemical Ecology, Germany
- 4) From sensory receptors to functional neural networks: Constructing and deconstructing olfactory circuits in *Drosophila*
Pelin Volkan, Duke University, USA
- 5) Encoding and processing of olfactory information in neural circuits
Silke Sache, Max Planck Institute for Chemical Ecology, Germany
- 6) Odors in the insect brain: how fast can a bee smell?
Giovanni Galizia, University of Konstanz, Germany
- 7) TBA
Aki Ejima, Kyoto University, Japan
- 8) TBA
Marcus Stensmyr, Max Planck Institute for Chemical Ecology, Germany
- 9) TBA
Hugh Robertson, University of Illinois at Urbana-Champaign, USA
- 10) Optophysiological approaches to olfactory signal transduction and odor processing in larval *Drosophila*
Andre Fiala, University of Goettingen, Germany
- 11) TBA
Walton Johns, KAIST, Korea
- 12) TBA
Hyung-Wook Kwon, Seoul National University, Korea

3-9. Insect Cuticle

- **Organizers:**
Subbaratnam Muthukrishnan, Kansas State University, USA (smk@ksu.edu)
- **Tentative titles and speakers**
 - 1) Epidermal cell and cuticle
Bernard Moussian, University of Tubingen



- 2) Cuticular hydrocarbon synthesis
Rene Feyereisen, INRA, Centre de Sophia, France
- 3) Cuticular hydrocarbons and behavior in social insects
Judith Korb, University of Osnabrueck
- 4) Insect cuticular proteins
Mike Kanost, Kansas State University, USA
- 5) Laccase activation in ecdysis process
Tsunaki Asano, Tokyo Metropolitan University, Japan
- 6) Yellow-e protein cuticle
Yasuyuki Arakane, Chonnam National University, Korea
- 7) Evolution and development of color patterns
Ryo Futahashi, AIST, Japan
- 8) Wing melanization patterns
Teruyuki Niimi, Nagoya University, Japan
- 9) Chitin binding proteins
Muthukrishnan, Kasas State University, USA
- 10) Chitin inhibitors
Hans Merzendorfer, University of Osnabrueck

3-10. Salivary proteins

- **Organizers:**
Jose M. C. Ribeiro (jribeiro@niaid.nih.gov)

3-11. Brain science in insects

- **Organizers:**
Nicholas Strausfeld (flybrain@neurobio.arizona.edu)
Alexander Steinbrecht (asd@orn.mpg.de)



4. Development and Reproduction

- **Dr. Hideharu Numata**, Kyoto University, Japan
(E-mail: numata@ethol.zool.kyoto-u.ac.jp)
- **Dr. František Sehnal**, Biology Centre, ASCR, Czech Republic
(E-mail: sehnal@bc.cas.cz)

3-1. From embryo to metamorphosis: Genes for insect development

- **Organizers:**
Sumihare Noji, Tokushima University, Japan (noji@bio.tokushima-u.ac.jp)
Antonia Monteiro, Yale University, USA (antonia.monteiro@yale.edu)

3-2. Neuropeptides in insect development and reproduction

- **Organizers:**
Klaus H. Hoffmann, Bayreuth University, Germany
(Klaus.Hoffmann@uni-bayreuth.de)
Liesbeth Badisco, Catholic University of Leuven, Belgium
(liesbeth.badisco@bio.kuleuven.be)
- **Tentative titles and speakers**
 - 1) Modifying insect physiology as a pest control strategy
Neil Audsley, UK (neil.audsley@fera.gsi.gov.uk)
 - 2) Neurohormonal control of desert locust (*Schistocerca gregaria*) reproductive physiology
Liesbeth Badisco, Belgium (liesbeth.badisco@bio.kuleuven.be)
 - 3) An RNAi approach to understanding regulators of juvenile hormone biosynthesis
William G. Bendena, Canada (bendenaw@queensu.ca)
 - 4) The potential for disrupting pupal diapauses in *Heliothis/Helicoverpa* with diapauses hormone
Dave Delinger, USA (denlinger.1@osu.edu)
 - 5) Juvenile hormone titer and allatopregulating neuropeptides in wood-feeding cockroaches and primitive termites
Klaus Hoffmann, Germany (klaus.hoffmann@uni-bayreuth.de)
 - 6) Elaboration of the allatotropin pathway in insects
Roger Huybrechts, Belgium (roger.huybrechts@bio.kuleuven.be)
 - 7) Epigenetic regulation of locust phase polymorphism
Elwyn Isaac, UK (r.e.isaac@leeds.ac.uk)



- 8) Neuropeptides and the control of reproductive tissue
Angela Lange, Canada (angela.lange@utoronto.ca)
- 9) RNAi technology reveals the roles of G-protein coupled receptors in moth reproductive behavior
Ada Rafaeli, Israel (vtada@volcani.agri.gov.il)
- 10) The influence of the male sex peptide on sleep and wakeful activity in post-mated females of *Drosophila melanogaster* and other *Drosophila* species
Schoofs Liliane, Belgium (liliane.schoofs@bio.kuleuven.be)
- 11) Peptide regulation of feeding, digestion, locomotion and reproduction in *Periplaneta Americana*
Makio Takeda, Japan (mtakeda@kobe-u.ac.jp)
- 12) Neuroparsin
Jan A. Veenstra, France (j.veenstra@cnic.u-bordeaux1.fr)
- 13) Neuropeptides regulating feeding and reproduction in the desert locust *Schistocerca gregaria*
Pieter van Wielendaele, Belgium (pieter.vanwielendaele@bio.kuleuven.be)
- 14) ETH signaling and activity of the corpora allata
Dusan Zitnan, Slovakia (dusan.zitnan@savba.sk)

3-3. Hormonal control of development

➤ **Organizers:**

Marek Jindra, Biology Centre Acad. Sci., Czech Rep. (jindra@entu.cas.cz)
Tetsuro Shinoda, NIAS, Japan (shinoda@affrc.go.jp)

3-4. Evolution and development of integrated phenotypes

➤ **Organizers:**

Pavel Tomancak, Max Planck Institute for Molecular Cell Biology and Genetics, Germany (tomancak@mpi-cbg.de)
Christine K. Mirth, Instituto Gulbenkian de Ciência, Portugal (christen@iqc.gulbenkian.pt)



3-5. Molecular aspects of insect reproduction

➤ **Organizers:**

Klaus Hartfelder, University of Sao Paulo, Brazil (klaus@fmrp.usp.br)

Maria Dolors Piulachs, CSIC, Spain (mdolors.piulachs@ibe.upf-csic.es)

Halyna R. Shcherbata, Max Planck Institute of Biophysics and Chemistry, Germany
(halyna.shcherbata@mpibpc.mpg.de)

3-6. Photoperiodic induction of diapause and seasonal morphs

➤ Organizers:

Shin G. Goto, Osaka City University, Japan (shingoto@sci.osaka-cu.ac.jp)

Jim Hardie, Imperial College, UK (j.hardie@imperial.ac.uk)

3-7. New complexities in the regulation of insect diapause and cold hardiness

➤ Organizers:

Kyeong-Yeoll Lee, Kyungpook National University, Korea (leeky@knu.ac.kr)

David L. Denlinger, Ohio State University, USA (denlinger.1@osu.edu)



5. Genetics, Genomics and Evolutionary Entomology

- **Dr. Yong-ping Huang**, Shanghai Center for Biological Sciences, CAS
Shanghai, China (E-mail: yphuang@sibs.ac.cn)
- **Dr. Kostas Bourtzis**, University of Ioannina, Greece
(E-mail: kbourtz@uoi.gr)

5-1. Insect genomics based on insect species

- **Organizers:**
Susan Brown, Kansas State University, USA (sjbrown@ksu.edu)
Owain Edwards, CSIRO, Australia (Owain.Edwards@csiro.au)

5-2. Genomics and functional genomics of non-Diptera insects

- **Organizers:**
John Werren, USA (werr@mail.rochester.edu)
Stephen Richards, USA (stephenr@bcm.edu)
- **Tentative titles and speakers:**
 - 1) Functional genomics of the migratory locust
Li Kang, China
 - 2) Comparative genomics of ants
Juergen Gadau, USA
 - 3) Comparative methylomics of wild and domestic silkworms
Wen Wang, China
 - 4) The 5000 insect genomes (i5K) project
Richard Stephens, USA
 - 5) What nasonia genomes reveal about adaptation & Speciation?
Jack Werren, USA
 - 6) Ecological genomics of Daphnia
John Colbourne, USA
 - 7) The spider mite genome
Grbic Miodrag, CANADA
 - 8) Microbial lateral gene transfers in arthropod genomes
Dave Wheeler, USA
 - 9) What genomes tell us about the evolution of arthropod development?
Nipam Patel, USA
 - 10) Biological implications of the aphid genome
Denis Tagu, France (denis.tagu@rennes.inra.fr)



- 11) Epigenetics of aphids
Owain Edwards, Australia
- 12) The arthropod genomics revolution
Xin Zhou, China (xinzhou@genomics.org.cn)
- 13) The evolution of odorant receptors
Hugh Robertson, USA

5-3. Genomics and functional genomics of non-Drosophilid Diptera insects

- **Organizers:**
Charalambos (Babis) Savakis, Greece (Savakis@fleming.gr)
Giuliano Gasperi, Italy (gasperi@unipv.it)

5-4. Evolutionary genomics of social behavior

- **Organizers:**
Christina Grozinger, The Pennsylvania State University, USA
(cmgrozinger@psu.edu)
- **Tentative titles and speakers:**
 - 1) Comparative genomics of solitary/social bees,
Gene Robinson, USA
 - 2) Genomics of social behavior in slime molds
Joan Strassmann, USA
 - 3) Comparative genomics of ants
Juergen Gadau, USA
 - 4)
 - 5) Comparative genomics of pheromone communication
Christina Grozinger, USA
 - 6) Genomics of reproductive groundplan in social insects
Gro Amdam, USA/Norway
 - 7) Epigenetics of caste differentiation in honey bees,
Ryzard Maleska, Australia
 - 8) Epigenetics across species (Nasonia, ants, bees)
Soojin Yi, USA
 - 9) Genomics of wasp social behavior (and epigenetics)
Amy Toth, USA
 - 10) Bumble bee genomics
Paul Schmid-Hempel, Switzerland



- 11) Genomics of social aphids
Denis Tagu, France
- 12) Genomics of social behavior in migratory locusts
Le Kang, China
- 13) Termite genomics
Judith Korb, Germany
- 14) Genomics of facultatively social behavior in Halictid bees
Sarah Kocher, USA
- 15) Genomics of social behavior in fire ants
John Wang, Taiwan
- 16) Genomics of pheromone communication in honey bees
Osnat Malka, Israel

5-5. Insect transgenics

➤ Organizers:

Antony James, USA (aaajames@uci.edu)

Alfred M. Handler, USA (Al.Handler@ARS.USDA.GOV)

➤ Tentative titles and speakers:

- 1) Functional transposon structure and function in multiple eukaryotic systems
Peter Atkinson, USA
- 2) Transposon-based forward-genetic analysis of Anopheles mosquitoes
David O'Brochta, USA
- 3) Transgenic silkworms for analysis of gene function and productions of recombinant protein
Hideki Sezutsu, Japan
- 4) The A transgene-based maternally-driven RNAi leading to male-only progeny in the Mediterranean fruitfly *Ceratitis capitata*
Giuseppe Saccone, Italy
- 5) First and Second Generation Paratransgenesis for Control of Vector-borne Diseases
Ravi Durvasula, USA
- 6) TBA
Antony James, USA
- 7) TBA
Alfred M. Handler, USA
- 8) TBA
Matt DeGennaro, USA
- 9) TBA
Michael Zurovec, Czech Republic



10) TBA
Max Scott, USA

11) TBA
Marcelo Jacobs Lorena, USA

12) TBA
David Lampe, USA

5-6. Insect symbiosis and applications

- **Organizers:**
Boaz Yuval, Israel (yuval@agri.huji.ac.il)
Heike Feldhaar, Germany (Heike.Feldhaar@Biologie.Uni-Osnabrueck.DE)

5-7. Insects and biofuels

- **Organizers:**
Jianzhong Sun, China (jzsun1002@ujc.edu.cn)
Xuguo 'Joe' Zhou, USA (xuguozhou@uky.edu)

5-8. Small non-coding RNAs and genome expression

- **Organizers:**
Denis Tagu, France (denis.tagu@rennes.inra.fr)
- **Tentative titles and speakers:**
 - 1) Sassan Asgari (University of Queensland, Australia)
 - 2) Alexandre S. Cristino (University of Queensland, Australia)
 - 3) Fei Li (University of Nanjing, China)
 - 4) Maria Dolors Piulachs (CSIC, Spain)
 - 5) Guy Smagghe (Ghent University, Belgium)
 - 6) Qingfa Wu (University of Science and Technology, China).

5-9. Insect mitochondrial genomics

- **Organizers:**
Stephen Cameron, ANIC & CSIRO Entomology, Australia



(Stephen.Cameron@csiro.au)

Iksoo Kim, Chonnam National University, Korea (ikkim81@chonnam.ac.kr)

5-10. Physiological genomics of the insect midgut

➤ **Organizers:**

Daniel Doucet, Natural Resources Canada/Ressources Naturelles, Canada
(Dan.Doucet@NRCAN.gc.ca)

John Christeller, Plant and Food Research, New Zealand
(john.christeller@plantandfood.co.nz)

5-11. Applied genetics and sterile insect technique

➤ **Organizers:**

Gerald Franz, FAO/IAEA, Austria (G.Franz@iaea.org)

5-12. Bioinformatics

➤ **Organizers:**

Jake (Zhijian) Tu, Virginia Tech University, USA (jaketu@vt.edu)

5-13. Sexual selection and sperm competition: Theories and applications

➤ **Organizers:**

Qiao Wang, New Zealand (Q.Wang@massey.ac.nz)

5-14. Evolutionary dynamics of insect acoustic communication

➤ **Organizers:**

Yikweon Jang, Ewha Womans University, Korea (jangy@ewha.ac.kr)
David Gray, California State University, USA (dave.gray@csun.edu)

5-15. RNAi methods for controlling insects and their pathogens

➤ **Organizers:**

S.R.Palli, USA (rpalli@uky.edu)
Guy Smaghee, Belgium (guy.smagghe@ugent.be)
Qili Feng, China (qlfeng@scnu.edu.cn)

➤ **Tentative titles and speakers:**

- 1) Introduction: History, technology and future prospective
N. Perrimon, USA
- 2) RNAi for identification of target sites for developing newer pest management methods
S. R. Palli, USA



- 3) RNAi-based strategies for disease vector management
John M. Marshall, UK
- 4) RNAi for controlling lepidopteran pests
Xiaoya Chen, China
- 5) RNAi for controlling coleopteran pests-transgenic crops
Gerrit Segers, USA
- 6) Feeding RNAi for controlling pests
Fang Zhu, USA
- 7) RNAi control of honeybee diseases
Ilan Sela, Israel
- 8) RNAi methods for protecting silk worms against viruses
J. Nagaraju, India
- 9) RNAi strategies for control of brown plant hopper
(G.C. He, China)
- 10) RNAi for protection of beneficial insects, lady bird beetles
T. Niimi, Japan
- 11) RNAi for regulation of development of silkworm wing discs during metamorphosis
Qili Feng, China

5-16. RNAi methods for controlling insects and their pathogens

➤ **Organizers:**

Daniel Bopp, Zurich, Switzerland (Daniel.Bopp@imls.uzh.ch)
Leo Beukeboom, Groningen, The Netherlands

➤ **Tentative titles and speakers:**

- 1) Sex determination in *Musca domestica*
Daniel Bopp, Zurich, Switzerland
- 2) The quest for the elusive male determiners
Leo Beukeboom, Groningen, The Netherlands
- 3) The transcriptome of hytrosavirus infected *Musca domestica*
Drion Boucias, Gainesville, USA
- 4) Insecticide resistance in the housefly
Xinghui Qiu, Beijing, China
- 5) Combining insecticide-susceptible and -resistant housefly transcriptomes as well as induction of P450 genes by Spinosad
Michael Kristensen



- 6) Insecticide resistance, gene interaction and regulation in the house flies at a whole transcriptome level
Nannan Liu
- 7) The prospects for parasitoid-housefly interactions using genomic approaches
John Werren and Dave Wheeler

5-17. Development and evaluation of improved strains of insect pests for sterile Insect technique

- **Organizers:**
Gerald Franz, Food and Agriculture Organization/International Atomic Energy Agency
Kyeong-Yeoll Lee, Kyungpook National University, Korea (leeky@knu.ac.kr)



6. Behavior and Chemical Ecology

- **Dr. Le Kang**, Institute of Zoology, CAS Beijing, China (E-mail: lkang@ioz.ac.cn)
- **Prof. Dr. Meron P. Zalucki**, University of Queensland, Brisbane, Australia (m.zalucki@uq.edu.au)

6-1. The prospect of manipulating herbivore-induced plant volatiles to improve the biological control of pest insects

- **Organizers:**
Ted Turlings, Switzerland (ted.turlings@unine.ch)
Junji Takabayashi, Japan (junji@ecology.kyoto-u.ac.jp)
Yonggen Lou, China (yglou@zju.edu.cn)

6-2. Exploiting inducible plant defences in agriculture- possibilities and prospects

- **Organizers:**
Mike Furlong, Australia (M.Furlong@uq.edu.au)

6-3. Insect-host interactions: sensory and chemical profiles on host specificity

- **Organizers:**
Kye Chung Park, New Zealand (kpark@plantandfood.co.nz)
Chung Gyoo Park, Korea (parkcg@gnu.ac.kr)

6-4. Chemically-mediated host plant selection, a complex and challenging topic

- **Organizers:**
Silvia Dorn, Switzerland (silvia.dorn@ipw.agr.ethz.ch)
Jianghua Sun, China (sunjh@ioz.ac.cn)
- Potential titles and speakers:
 - 1) How fruit moths recognize host plant volatile mixtures
Silvia Dorn, ETH Zurich, Switzerland (silvia.dorn@ipw.agr.ethz.ch)
 - 2) Patterns of attraction of herbivore pests to plant volatiles
Cesar Rodriguez-Saona, Rutgers University, USA
(CRodriguez@RCE.Rutgers.edu)



- 3) Influence of mating on responses of *Helicoverpa armigera* moths to synthetic plant volatiles
Alice del Socorro, University of New England, Australia (adelsoc2@une.edu.au)
- 4) Shared signals: yeast links the fly to the fruit
Peter Witzgall, Swedish Agricultural University, Sweden (peter.witzgall@ice3.se)
- 5) Chemically-mediated host selection in the red turpentine beetle
Zhudong Liu, Chinese Academy of Sciences, China (liuzd@ioz.ac.cn)
- 6) Do novel fungal genotypes drive the success of an invasive bark/pine host fungus complex?
Min Lu, Chinese Academy of Sciences, China (lumin@ioz.ac.cn)
- 7) Role of host kairomones in the first step of the mating sequence of cerambycid beetles
Jacob D. Wickham, Chinese Academy of Sciences, China
(wickham@iccas.ac.cn)

6-5. Mechanisms of insect odorant detection

➤ **Organizers:**

Walter Leal, USA (wsleal@ucdavis.edu)
Chen-Zhu Wang, China (czwang@ioz.ac.cn)
Yukio Ishikawa, Japan (ayucky@mail.ecc.u-tokyo.ac.jp)

➤ **Speakers:**

- 1) Walter S. Leal (USA)-Open Remarks and Presentation (2 15-min blocks)
- 2) Chen-Zhu Wang, China
- 3) Yukio Ishikawa, Japan
- 4) Chuck Luetje, USA
- 5) Bill Hanson, Germany
- 6) Tom Baker, USA
- 7) Christer Lofstedt, Sweden
- 8) Neil Vickers, USA (tentative)
- 9) Toru Shimata, Japan

6-6. Semiochemical application: from sex to alarm

➤ **Organizers:**

Alex IL'ICHEV, Australia (alex.il'ichev@dpi.vic.gov.au)
Man-Yeon Choi, USA (MYChoi@ars.usda.gov)
Robert Vander Meer (Bob.Vandermeer@ARS.USDA.GOV)

6-7. New science of sustainable insect pest control based on chemical ecology

➤ **Organizers:**

John Pickett, UK (john.pickett@bbsrc.ac.uk)
Mike Birkett, UK (mike.birkett@bbsrc.ac.uk)

➤ **Speakers:**



- 1) John Pickett (key note speaker), UK
- 2) Consuelo de Moraes, USA
- 3) Andre Kessler, USA
- 4) Rob Glinwood, Sweden
- 5) Marcel Dicke, Netherland
- 6) Zeyaur Khan
- 7) Harro Bouwmeester, Netherland
- 8) Miguel Borges, Brazil
- 9) David Hall, UK
- 10) Ted Turlings
- 11) Emilio Guerrieri, Italy

6-8. Botanically-derived bioactive compounds: insecticides, repellents, attractants and antifeedants

➤ **Organizers:**

Robert Spooner-Hart, University of Western Sydney, Australia
(R.Spooner-Hart@uws.edu.au)

Young-Joon Ahn, Seoul National University, Korea (yjahn@snu.ac.kr)

6-9. TBA



7. Insect related Interactions at a Multi-trophic Ecosystem

- **Dr. Junji Takabayashi**, Kyoto University, Japan
(E-mail: junji@ecology.kyoto-u.ac.jp)
- **Dr. Jeremy McNeil**, Western Ontario Canada (E-mail: jnmcneil@gmail.com)

7-1. Evolutionary ecology and biosystematics of gall-Inducing arthropods and their associates

- **Organizers:**
Man-Mia Yang, National Chung Hsing University, Taiwan
(mmyang@dragon.nchu.edu.tw)
Makoto Tokuda, Saga University, Japan (tokudam@cc.saga-u.ac.jp)
- **Type:** Half or one day symposium

7-2. Phloemophagous insects; strategies and impacts on plants

- **Organizers:**
Philippe Giordanengo, Université de Picardie Jules Verne, France
(philippe.giordanengo@u-picardie.fr)
Christine Coustau, CNRS/INRA/UNSA, France (Christine.Coustau@sophia.inra.fr)
Charles Vincent, Agriculture Canada, Canada (charles.vincent@agr.gc.ca)
- **Type:** One day symposium

7-3. Multitrophic interactions under changing environmental conditions

- **Organizers:**
Jarmo Holopainen, Finland (jarmo.holopainen@uef.fi)
TBA
- **Type:** TBA

7-4. Next generation study of multitrophic interactions

- **Organizers:**
Wilhelm Boland, Max Plank Institute for Chemical Ecology, Germany
(boland@ice.mpg.de)
Gen-ichiro Arimura, Kyoto University, Japan (garimura@ecology.kyoto-u.ac.jp)
- **Type:** Half day symposium



7-5. Plant-mediated effects on the ecology and evolution of multitrophic interactions

➤ **Organizers:**

Raul Medina, Texas A&M University, USA (rfmedina@tamu.edu)

Betty Benrey, Université de Neuchâtel, Switzerland (betty.benrey@unine.ch)

David Giron, Université F. Rabelais, France (david.giron@univ-tours.fr)

➤ **Type:** TBA

7-6. Insects in forest litter and woody debris

➤ **Organizers:**

John Spence, University of Alberta, Canada (john.spence@ualberta.ca)

Anne Oxbrough, University of Alberta, Canada (anne.oxbrough@ales.ualberta.ca)

➤ **Type:** One day symposium



8. Pesticides, GM Crops, Resistance and Toxicology

- **Dr. Si Hyeock Lee**, Seoul National University, Korea
(E-mail: shlee22@snu.ac.kr)
- **Dr. Isaac Ishaaya**, Agricultural Research Organization, Israel
(E-mail: vpisha@volcani.agri.gov.il)

8-1. Advanced technologies for managing insect pests

➤ **Organizers:**

Isaac Ishaaya and Murad Ghanim, Department of Entomology,
Agricultural Research Organization, The Volcani Center, Bet Dagan 50250, Israel,
(E-mail: vpisha@volcani.agri.gov.il, ghanim@volcani.agri.gov.il)

8-2. Insecticide resistance: Mechanism and management

➤ **Organizers:**

Dr. Ian Denholm, Department of Plant and Invertebrate Ecology, Rothamsted, UK
(ian.denholm@rothamsted.ac.uk)
Dr. Ralf Nauen, Bayer CropScience AG, Germany (ralf.nauen@bayer.com)

8-3. The effects of GM crops on non-target organisms

➤ **Organizers:**

Jörg Romeis, Agroscope ART, Switzerland (joerg.romeis@art.admin.ch)
Richard L. Hellmich, USDA-ARS & Iowa State University, USA
(Richard.Hellmich@ARS.USDA.GOV)
Anthony M. Shelton, Cornell University/NYSAES, USA (ams5@cornell.edu)

8-4. RNAi: Applications and considerations

➤ **Organizers:**

Dr. William J. Moar, Monsanto Company, USA
(William.moar@monsanto.com)

8-5. Botanical Insecticides: Biological, biochemical and agricultural aspects

➤ **Organizer:**

Murray B. Isman, Faculty of Land and Food Systems, University of British



Columbia, 2357 Main Mall, Suite 248, Vancouver BC, Canada V6T 174,
Vancouver, BC, Canada V6T 1Z4 (murray.isman@ubc.ca).

8-6. Pesticides: ecotoxicology and effect on non target arthropods

➤ **Organizers:**

Sylvia Blumel, Institute of Plant Health (PGH), Austria (Sylvia.blumel@ages.at)
Nicolas Desneux, French National Institute for Agricultural Research (INRA),
France (Nicolas.desneux@sophia.inra.fr)

8-7. Countermeasure Strategies for Insect Resistance to Insecticides

➤ **Organizers:**

Tetsuo Saito, Nagoya University, Japan



9. Conservation, Biodiversity and Climate Change

- **Dr. Ke Chung Kim**, Pennsylvania State University, USA (kck@psu.edu)

9-1. Insect biodiversity in the changing world

- **Organizers:**
TBA

9-2. Insect biodiversity and ecosystem services

- **Organizers:**
Wolfgang Weisser, Technische Universität München, Germany
(wolfgang.weisser@tum.de)

9-3. Insect biodiversity and global IPM challenges

- **Organizers:**
Hari C. Sharma, (H.SHARMA@CGIAR.ORG)

9-4. Invasive insects and insect biodiversity

- **Organizers:**
TBA

9-5. Insect biodiversity conservation

- **Organizers:**
Michael Samways, USA



10. Integrated Pest Management

- **Dr. Yoo Han Song**, Gyeongsang National University, Korea
(E-mail: ysong@gsnu.ac.kr)
- **Dr. Babara Ekbohm**, Swedish Agricultural University
(E-mail: babara.ekbohm@ekol.slu.se)

10-1. Ecological approaches to pest management/Landscape level pest management

➤ Organizers:

Dr. Megha N. Parajulee, Texas A&M University System AgriLife Research, USA
(E-mail: Megha.Parajulee@agnet.tamu.edu)
Hong-Hyun Park, National Academy of Agricultural Science, Korea (hhpark@korea.kr)

10-2. Chemical ecology and crop protection

➤ Organizers:

Silvia Dorn, Switzerland (silvia.dorn@ipw.agrl.ethz.ch)
Maya Evenden, Canada (mevenden@ualberta.ca)

➤ Tentative titles and speakers

- 1) Pheromone-based management of the red clover casebearer moth, an invasive pest of clover in Canada
Maya Evenden, University of Alberta, Canada (mevenden@ualberta.ca)
- 2) Semiochemical approaches for area-wide protection of forest stands from bark beetle attack
Nancy Gillette, USDA-ARS, USA (ngillette@fs.fed.us)
- 3) Semiochemical-based monitoring in the tropics
Gadi VP Reddy, University of Guam, USA (reddy@uquam.uog.edu)
- 4) Chemically-based monitoring of the brown marmorated stink bug in orchards
Tracy Leskey, USDA-ARS, USA (Tracy.Leskey@ARS.USDA.GOV)
- 5) Mating disruption of multiple species in horticulture
Alex Il'ichev, DPI, Australia (alex.il'ichev@dpi.vic.gov.au)
- 6) Plant volatiles attracting an invasive fruit moth: basic findings relevant for future monitoring
Silvia Dorn, ETH Zurich, Switzerland (silvia.dorn@ipw.agrl.ethz.ch)
- 7) Use of a plant-volatile moth attractant in resistance management for transgenic cotton
Peter Gregg, University of New England, Australia (pgregg@une.edu.au)
- 8) 'Attract and reward' as a contribution to pest management
Stephen Wratten, Lincoln University, New Zealand (Steve.Wratten@lincoln.ac.nz)
- 9) Root feeders induce volatiles attracting predators
Anne Marie Cortesero, University of Rennes, France (anne-marie.cortesero@univ-rennes1.fr)



10-3. GM crops and IPM

➤ **Organizers:**

Joerg Romeis, Switzerland (joerg.romeis@art.admin.ch)
Anthony Shelton, Cornell University, USA (ams5@cornell.edu)
Yunhe Li, China (yunheli@ippcaas.cn ; yunhe.li@hotmail.com)

10-4. Stink bugs: their expansion, pest status, and control tactics

➤ **Organizers:**

Kenji Fujisaki, Kyoto University, Japan (fujisaki@adm.kais.kyoto-u.ac.jp)
Un Taek Lim, Andong National University, Korea (utlim@andong.ac.kr)
Antonio Panizzi, EMBRAPA, Brazil (panizzi@cnpt.embrapa.br)

➤ **Tentative titles and speakers:**

- 1) Expansion of the southern green stink bug in Japan
Kenji Fujisaki, Japan
- 2) Pecky rice problem in Japan
Hiroya Higuchi, Japan
- 2) Research status on stink bugs in Korea
Chung Gyoo Park, Korea
- 3) Recent advances on phytophagous stink bug feeding and damage in South America
Antonio Panizzi, Brazil
- 4) Pest status of *Halyomorpha halys* in USA
George Hamilton, USA
- 5) Stink bug pests in Europe: research status and control perspectives
Eric Conti, Italy
- 6) Provision of host eggs to increase field parasitism
Un Taek Lim, Korea
- 7) Detecting source habitat of the bean bug *Riptortus pedestris* and its egg parasitoid:
toward area-wide pest management using natural pest control
Ken Tabuchi, Japan
- 8) Habitat shifts of stink bug pests and their egg parasitoids in Japan: implications for
managing these mobile pests in diversified agroecosystems
Yoshimi Hirose, Japan
- 9) Attractiveness of stink bugs to trap types and its utilization in fields
Soon-Do Bae, Korea

10-5. Biology and control of spotted wing *Drosophila*, *Drosophila suzukii*

➤ **Organizers:**

Robert Van Steenwyk, University of California Berkeley, USA
(bobvanst@berkeley.edu)
Vaughn Walton



10-6. Ecological control of regional rice insect pests in integrated pest management protocol

➤ **Organizers:**

Jichao Fang, Institute of Plant Protection, National Agriculture Research Center for East-China Region & Jiangsu Academy of Agricultural Sciences, China
(fangic@jaas.ac.cn)

Masaya Matsumura, National Agriculture Research Center for Kyushu and Okinawa Regions, Japan

Michael Stout, Louisiana State University, USA

10-7. Recent challenges in IPM of cereal and sugarcane moth borers

➤ **Organizers:**

François-Régis Goebel, CIRAD unité de Recherche Systèmes de Cultures annuels, France (francois-regis.goebel@cirad.fr)

Des Conlong, South African sugarcane research institute (SASRI), South Africa
(dconlong@sugar.org.za)

Nader Sallam, BSES Limited, Australia (nsallam@bses.com.au)

Seelavarn Ganeshan, Mauritius Sugar Research Institute (MSRI),
(seelavarn.ganeshan@msiri.mu)

10-8. Biology of Chrysomelidae

➤ **Organizers:**

Michael Schmitt, Ernst-Moritz-Arndt-Universitaet, Allgemeine & Systematische Zoologie, Germany (michael.schmitt@uni-greifswald.de)

10-9. Spatial dynamics and movement of insect pests

➤ **Organizers:**

Yong-Lak Park, West Virginia University, USA (yopark@mail.wvu.edu)

Patrick C. Tobin, U.S.D.A. Forest Service, USA (ptobin@fs.fed.us)

10-10. Population genetics in the service of pest management

➤ **Organizers:**

Thomas W. Sappington, Corn Insects & Crop Research Unit, USDA-ARS, USA (Tom.Sappington@ars.usda.gov)

Lizhi Luo, Chinese Academy of Agricultural Sciences, China (lzluo@ippcaas.cn)

Xingfu Jiang, Chinese Academy of Agricultural Sciences, China
(xfjiang@ippcaas.cn)



10-11. Insect life tables and their application

➤ **Organizers:**

Hsin Chi, National Chung Hsing University, Taiwan
(hsinchi@dragon.nchu.edu.tw)

Aurang Kavousi, Zanjan University, Iran (akavousi@gmail.com)

Remzi Atlihan, University of Yuzuncu Yil, Turkey (ratlihan@yyu.edu.tr)

10-12. Ecological modeling for IPM

➤ **Organizers:**

Young-Seuk Park, Kyung Hee University, Korea (parkys@khu.ac.kr)

Chuleui Jung, Andong National University, Korea (cjung@andong.ac.kr)

10-13. Pattern recognition and sensing systems for IPM

➤ **Organizers:**

Tae-Soo Chon, Pusan National University, Korea (tschon@pusan.ac.kr)

Ryohei Kanzaki, University of Tokyo, Japan (kanzaki@rcast.u-tokyo.ac.jp)

10-14. Ecological genetics of crop plants in pest management: from traditional breeding to cisgenic and transgenic crops

➤ **Organizer:**

Xinzhi Ni, USDA-ARS, Crop Genetics and Breeding Research Unit, University of Georgia-Tifton Campus, (Xinzhi.Ni@ars.usda.gov)

10-15. The contribution of IPM to food security in the developing world

➤ **Organizer:**

Christian Borgemeister, ICIPE – African Insect Science for Food and Health, Kenya
(dq@icipe.org)

10-16. Growing potatoes: a tale of emerging and old pests

➤ **Organizers:**

Slvia Rondon, Oregon State University, USA (Slvia.Rondon@oregonstate.edu)

Joseph Munyaneza, USDA-ARS, USA (Joseph.Munyaneza@ars.usda.gov)

Rajagopalbabu Srinivasan, University of Georgia, USA (babusri@uga.edu)



10-17. Fruit pest management

➤ **Organizers:**

Elizabeth Beers, Washington State University, USA (ebeers@wsu.edu)

Dong-Soon Kim, Jeju National University, Korea (dongsoonkim@jeju.ac.kr)

10-18. Rice hoppers: Problems, surveillance, and management strategies

➤ **Organizers:**

Yoo Han Song, Gyeongsang National University, Korea (E-mail: ysong@gsnu.ac.kr)

K. L. Heong, International Rice Research Institute, Philippines

Jiaan Cheng, Zhejiang University and the National Key Laboratory of Rice Biology, China (jacheng@zju.edu.cn)

10-19. IPM and biocontrol of glasshouse pests

➤ **Organizers:**

Eizi Yano, Kinki University, Japan (yano@nara.kindai.ac.jp)

10-20. Forest Entomology

➤ **Organizers:**

Il-Kwon Park, Korea Forest Research Institute, Korea (parkik1@forest.go.kr)

Won-Il Choi, Korea Forest Research Institute, Korea



11. Insect Biological Control

- **Dr. Masami Takagi**, Kyushu University, Japan
(E-mail: mtakagi@gtr.kyushu-u.ac.jp)
- **Dr. Thomas Miller**, University of California, Riverside, USA
(E-mail: thomas.miller@ucr.edu)

11-1. Insect pathology

- **Organizers:**

Yeon-Ho Je, Seoul National University, Korea (btrus@snu.ac.kr)

Hyun-Woo Park, California Baptist University, Korea (hpark@calbaptist.edu)

11-2. Microbial pesticides

- **Organizers:**

Paulo Teixeira Lacava, Federal University of Alfenas, Brazil

(ptlacava@unifal-mg.edu)

João Lúcio Azevedo, University of São Paulo, Brazil (jazevedo@esalq.usp.br)

- **Confirmed speakers and titles**

- 1) Endophytic bacteria: Potential of Biological and Symbiotic Control
Paulo Teixeira Lacava, Federal University of Alfenas, Brazil
(ptlacava@unifal-mg.edu)
- 2) Endophytic fungi: a review on insect control and recent advances on tropical plants
João Lucio Azevedo, University of São Paulo, Brazil (jazevedo@esalq.usp.br)
- 3) Microbial endophytes as source of genes related to biological control
Wellington Luiz Araújo, University of São Paulo, Brazil (wlaraujo@usp.br)
- 4) Fungal endophytes and their potential for biocontrol in cotton
Gregory Sword, Texas A&M University
- 5) Comparative genomics of insect pathogenic fungi
Chengshu Wang, Chinese Academy of Sciences
- 6) Identification and characterization of the spore wall proteins of *Antonospora locustae*
Long Zhang, China Agricultural University, China (locust@cau.edu.cn)



11-3. Entomopathogenic nematodes

➤ **Organizer:**

Ho Yul Choo, Gyeongsang National University, Korea (hychoo@gnu.ac.kr)

11-4. Artificial diets for entomophagous insects

11-5. Technology for automation of insect mass rearing for management and research

11-6. International exchange and risk assessment of biological control agents

➤ **Organizer:**

Joop van Lenteren, Wageningen University, The Netherlands
(Joop.vanLenteren@wur.nl)

11-7. Biological control of emerging pests on transgenic crops

➤ **Organizers:**

Robert Mensha, NSW Department of Primary Industries, Australian Cotton
Research Institute, Australia (robert.mensah@industry.nsw.gov.au)

Lewis Wilson, CSIRO Cotton Management and Improvement, CSIRO Plant
Industry, Australia (lewis.wilson@csiro.au)

11-8. Generalist predators, molecular biology and biological control: tracking predation with new technologies

➤ **Organizers:**

James Hardwood, USA (jharw2@email.uky.edu)

John Lundgren, USA (Jonathan.Lundgren@ars.usda.gov)

➤ **Type :** 3 hour symposium:

introduction to topic, keynote (30 mins), 5 contributions (15 mins),
remaining time is kept free for 5 volunteered contributions (15 mins).



11-9. Can we better select and manipulate biological control agents when we know their genomics?

➤ **Organizers:**

Leo Beukeboom, The Netherlands (L.W.Beukeboom@rug.nl)

Jack Werren, University of Rochester, USA (werr@mail.rochester.edu)

➤ **Type:** 3 hour symposium

symposium: introduction to topic, keynote (30 mins), 5 contributions (15 mins),

remaining time is kept free for 5 volunteered contributions (15 mins).

11-10. Conserving natural enemies in agroecosystems where pesticides are frequently used

➤ **Organizer:**

Marshall Johnson, USA (mjohnson@uckac.edu)

11-11. Biodiversity and biological control

➤ **Organizer:**

Stephen Wratten, New Zealand (steve.Wratten@lincoln.ac.nz)

11-12. Present status and future prospects of biological control in Asia

➤ **Organizers:**

Masami Takagi, Kyushu University, Japan (mtakagi@grt.kyushu-u.ac.jp)

Man Young Choi, National Academy of Agricultural Science, Korea
(choimyas@korea.kr)

11-13. Biological control using banker plant systems in protected culture

➤ **Organizers:**

Eizi Yano, Kinki University, Japan (yaano@nara.kindai.ac.jp)



12. Urban, Stored Product and Post Harvest Entomology

- **Dr. Yasuyuki Arakane**, Chonnam National University, Korea
(E-mail: arakane@chonnam.ac.kr)
- **Dr. Nan-Yao Su**, University of Florida, USA (E-mail: nysu@ufl.edu)

12-1. Current control practices, area-wide management projects and foraging behaviors of subterranean termites

➤ **Organizers:**

Nan-Yao Su, University of Florida, USA (E-mail: nysu@ufl.edu)

➤ **Tentative titles and Speakers:**

- 1) Economic impact of termite pests and current practices in the US.
M. Rust, University of California, Riverside, California, USA
- 2) Control practices in Japan.
K. Tsunoda and T. Yoshimura, Kyoto University, Kyoto, Japan
- 3) Control practices in SE Asia.
C-Y Lee, Malaysia Sain University, Penang, Malaysia
- 4) Control practices and recent IPM project in China.
S-J Tang, Chegndu Termite Control Station, China
- 5) Control practices and physical control in Australia.
T. Evans, National Singapore University, Singapore
- 6) Control practices in Taiwan.
H-F Li, Academia Sinica, Taipei, Taiwan
- 7) French Quarter project.
A. Lax, USDA-ARS, New Orleans, Louisiana, USA
- 8) Are-wide project and population recovery.
N-Y Su, University of Florida, Ft. Lauderdale, Florida, USA
- 9) Computer simulation of colony dynamics in a large area.
S-H Lee, National Institute for Mathematical Sciences, Daejeon, Republic of Korea
- 10) Community-based project in N. California.
V. Lewis, University of California, Berkeley, California, USA



- 11) Community-based project in New Orleans, Louisiana.
C. Riegel, New Orleans Mosquito and Termite Control Board, New Orleans, Louisiana, USA
- 12) Community-based project in Chile.
J. Smith, Terminator Systems, Santiago, Chile
- 13) DNA genotyping for area-wide population management project.
C. Husseneder, Louisiana State University, Baton Rouge, Louisiana, USA
- 14) Tunneling behavior of subterranean termites.
P. Bardunias, University of Florida, Ft. Lauderdale, Florida, USA
- 15) Foraging and attractants for subterranean termites.
M. Cornelli, USDA-ARS, New Orleans, Louisiana, USA
- 16) Computer modeling of termite tunneling behavior.
W. Jeon, National Institute for Mathematical Sciences, Daejeon, Republic of Korea

12-2. Ant pests in urban environment

- **Organizer:**
M. Rust, University of California at Riverside, USA
- **Potential speakers:**
A half day symposium of 8 speakers

12-3. Cockroaches

- **Organizer:**
C. Y. Lee, Universiti Sains Malaysia, Malaysia
- **Potential speakers:**
A half day symposium of 8 speakers



12-4. Bed bugs

➤ **Organizers:**

C. Wang, Rutgers University, USA

➤ **Potential speakers:**

A half day symposium of 8 speakers

12-5. Stored-product entomology

➤ **Organizers:**

James Throne, USA (james.throne@ars.usda.gov)

Jinjun Wang, China (jjwang7008@yahoo.com)

➤ **Tentative titles and Speakers:**

- 1) 9:00-9:30 Pest of stores and stored products - an archaeoentomological perspective Eva Panagiotakopulu, School of Geosciences, University of Edinburgh, Drummond Street, Edinburgh, EH8 9XP Scotland, United Kingdom (eva.p@ed.ac.uk)
- 2) 9:30-9:45 Evolution of grain pests Hiroki Obata, Faculty of Letters, Kumamoto University, Kumamoto City, Kumamoto Prefecture, Japan (totori@kumamoto-u.ac.jp)
- 3) 9:45-10:00 Invasive and synanthropic – updated aspects on the natural and cultural history of the webbing clothes moth *Tineola bisselliella* Rudy Plarre, Federal Institute for Materials Research and Testing, Unter den Eichen 87, 12205 Berlin, Germany (ruediger.plarre@bam.de)
- 4) 10:00-10:15 The practicality of using molecular techniques for identification of stored-product insect pests Zhihong Li, Department of Entomology, College of Agronomy and Biotechnology, China Agricultural University, 2 Yuanmingyuan, West Road, Beijing 100193, China (lizh@cau.edu.cn)
- 5) 10:15-10:30 Use of molecular methods for species diagnostics and to identify dispersal patterns of stored-product insects Katarina Mikac, University of Wollongong, Institute for Conservation Biology, Wollongong, Australia (kmikac@uow.edu.au)

10:30-11:00 Break

- 6) 11:00-11:15 Recent advances in stored-product psocid research in China Jin Jun Wang, Plant Protection College, Southwest University, No.1 Tiansheng Road, Beibei, Chongqing, China (jjwang7008@yahoo.com)



- 7) 11:15-11:30 Recent advances in stored-product psocid research in North America
Jim Throne, USDA-ARS, Manhattan, KS, USA
(james.throne@ars.usda.gov)
- 8) 11:30-11:45 Recent advances in development of attractants for stored-product insects
Tom Phillips, Department of Entomology, Kansas State University, Manhattan, KS, USA (twp1@k-state.edu)
- 9) 11:45-12:00 Mating disruption for control of stored-product insect pests
Christos Athanassiou, Laboratory of Entomology and Agricultural Zoology, Department of Agriculture, Crop Production and Rural Environment, University of Thessaly, Phytokou St., N. Ionia Magnisias, 38446, Greece
(athanassiou@agr.uth.gr)
- 10) 12:00-12:15 Influence of interspecific competition between stored product insect pests on biological control with parasitoids
Mun Il Ryoo, Division of Environmental Science and Ecological Engineering, College of Life and Environmental Sciences, Korea University, Seoul, Korea
(ryoomi@korea.ac.kr)
- 11) 12:15-12:30

12:30-14:00 Lunch and posters
- 12) 14:00-14:15 Practicality of using cold treatments for control of stored-product insect pests
Panagiotis Eliopoulos, Technological Educational Institute of Larissa, Department of Plant Production, 41 110 Larissa, Greece (eliopoulos@teilar.gr)
- 13) 14:15-14:30 Use of modified atmospheres for control of stored-product insect pests, with emphasis on modified atmosphere packaging for reducing injury to commodities
Jordi Riudavets, Entomology, IRTA, Ctra. Cabrils km 2, 08348 Cabrils, Barcelona, Spain (jordi.riudavets@irta.es)
- 14) 14:30-14:45 The molecular basis of phosphine resistance
David Schlipalius, Cooperative Research Centre for National Plant Biosecurity, Canberra, ACT, Australia (David.Schlipalius@deedi.qld.gov.au)
- 15) 14:45-15:00 Occurrence and level of phosphine resistance in stored-product insects in Oklahoma USA
George Opit, Department of Entomology and Plant Pathology, Oklahoma State University, Stillwater OK, USA (george.opit@okstate.edu), Thomas W. Phillips, Kansas State University; Michael J. Aikins, Kansas State University; Mahbub Hasan, Kansas State University



16) 15:00-15:15 Practical implications of insecticide resistance in stored-product insects
Raul Guedes, Departamento de Biologia Animal, Universidade Federal de Viçosa, Viçosa, MG, Brazil (guedes@ufv.br)

17) 15:15-15:30 Recent advances in fumigation for control of insect pests in stored grain
YongLin Ren, School of Biological Science and Biotechnology, Murdoch University, Western Australia (y.ren@murdoch.edu.au)

15:30-16:00 Break

18) 16:00-16:15 Recent advances in fumigation for control of insect pests in dried fruits and nuts
Spencer Walse, USDA-ARS San Joaquin Valley Agricultural Sciences Center, USA (spencer.walse@ars.usda.gov)

19) 16:15-16:30 Current status of non-chemical methods for control of insect pests in dried fruits and nuts
Judy Johnson, USDA-ARS San Joaquin Valley Agricultural Sciences Center, USA (judy.johnson@ars.usda.gov)

12-6. Novel approaches for urban pest management

- Organizer:
Dong-Hwan Choe, University of California, Riverside, USA
(donghwan.choe@ucr.edu)



13. Medical & Veterinary Entomology

- **Dr. Kyoko Sawabe**, National Institute of Infectious Diseases, Japan
(E-mail: sawabe@nih.go.jp)
- **Dr. Willem Takken**, Wageningen University and Research Centre, Netherlands
(E-mail: willem.takken@wur.nl)

13-1. Global change, arthropod pests and vector-borne diseases in humans and animals

- **Organizers:**

Mutsuo Kobayashi, National Institute of Infectious Diseases (NIID), Japan
(mutsuo@nih.go.jp)

- **Tentative titles and speakers:**

- 1) Mutsuo Kobayashi, NIID, Japan (mutsuo@nih.go.jp)
- 2) E-Hyun Shin, Korea CDC, Korea (ehshin@nih.go.kr)

13-2. Forensic entomology

- **Organizers:**

Eric Benbow, University of Dayton, USA (benbowme@notes.udayton.edu)
Jeff Tomberlin, Texas A&M University, USA (jktomberlin@tamu.edu)
Kabkaew (Likitvong) Sukontason, Chiang Mai University, Thailand
(klikitvo@mail.med.cmu.ac.th)

- **Speakers**

- 1) Introduction: Eric Benbow
- 2) Richard W. Merritt, Michigan State University, USA
- 3) Carlo Campobasso, University of Sao Paulo, Brazil
(carlo.campobasso@unimol.it)
- 4) James Wallman, University of Wollongong, Australia (jwallman@uow.edu.au)
- 5) Jens Amendt, Institut für Rechtsmedizin, Denmark (amendt@em.uni-frankfurt.de)
- 6) Martin H. Villet, Rhodes University, South Africa (M.Villet@ru.ac.za)



- 7) Sherah VanLaerhoven, University of Windsor, Canada (vanlaerh@uwindsor.ca)
- 8) Baharudin Omar, Universiti Kepangsaan Malaysia, Malaysia
- 9) Ratchadawan Ngoen-klan, Kasetsart University, Thailand
- 10) Krzysztof Szpila, Nicolaus Copernicus University, Poland
(Krzysztof.Szpila@umk.pl)
- 11) Kabkaew L. Sukontason, Chiang Mai University, Thailand
(klikitvo@med.cmu.ac.th)
- 12) Erick Benbow, University of Dayton, USA (benbowme@notes.udayton.edu)
- 13) Jeffrey Tomberlin, Texas A&M University, USA (jktomberlin@tamu.edu)
- 14) Closing Remarks & Open discussion

13-3. Emerging and re-emerging mosquito-borne viruses

➤ **Organizers:**

Annal-Bella Failloux, Institut Pasteur, France (anna-bella.failloux@pasteur.fr)

Alain Kohl, The Roslin Institute, University of Edinburgh, UK (Alain.kohl@ed.ac.uk)

➤ **Tentative titles and speakers**

- 1) TBA
Diana Fonseca, Rutgers University, USA (dinafons@rci.rutgers.edu)
- 2) TBA
Caro Blair, Colorado State University, USA (Carol.Blair@ColoState.EDU)
)
- 3) TBA
Luciano Moreira, Fiocruz, Barazil (luciano@cpqrr.fiocruz.br)
- 4) TBA
Laura Kramer, Arbovirus Laboratories Wadsworth Center, USA (kramer@wadsworth.org)
- 5) TBA
Haruhiko Isawa, National Institute of Infectious Diseases, Japan (hisawa@nih.go.jp)
- 6) TBA
Alain Kohl, University of Glasgow Centre for Virus Research, UK



(Alain.Kohl@glasgow.ac.uk)

- 7) TBA
Anna-Bella Failloux, Institut Pasteur, France (anna-bella.failloux@pasteur.fr)

13-4. Vector control

➤ **Organizers:**

Nina Alphey, University of Oxford, UK (nina.alphey@zoo.ox.ac.uk)
Mark Benedict, University of Perugia, Italy (mqbenedict@yahoo.com)
Luke Alphey, Oxitec Ltd & University of Oxford, UK (luke.alphey@oxitec.com)

➤ **Tentative titles and speakers**

- 1) Towards a SIT program for malaria vector control
Jeremie Gilles, IAEA, Austria (J.Gilles@iaea.org)
- 2) Global implementation activities for RIDL technology
Luke Alphey, Oxitec Ltd & University of Oxford, UK (luke.alphey@oxitec.com)
- 3) Brazilian experience in implementing RIDL mosquitoes
Margareth Capurro, University of Sao Paulo, Brazil (mcapurro@icb.usp.br)
- 4) Modelling resistance to genetic vector control
Nina Alphey, University of Oxford, UK (nina.alphey@zoo.ox.ac.uk)
- 5) Genetic control for malaria vectors
Mark Benedict, University of Perugia, Italy (mqbenedict@yahoo.com)
- 6) Fighting malaria with engineered symbionts of mosquito vectors: from bench to field
Marcelo Jacobs-Lorena, Johns Hopkins Bloomberg School of Public Health, USA
- 7) Community engagement practices and Genetically-Modified Mosquitoes
Tony James, University of California, Irvine, USA



- 8) Biosafety, risk assessment and international standards for applications of transgenic mosquitoes
John Mumford, Imperial College London, UK
- 9) Vector ecology and behaviour: key parameters in GM strategies
Paul Reiter, Institut Pasteur, France
- 10) *Wolbachia* technology to prevent dengue transmission
Scott Ritchie, Queensland Health & James Cook University, Australia
- 11) Fungal products against disease vectors
Bart Knols, K & S Consulting
- 12) New insecticidal products & treated materials for control of vector-borne disease
Graham White, University of Florida, Gainesville, USA

13-5. Molecular basis of vector-pathogen interactions

➤ **Organizers:**

Yeon Soo Han, Chonnam National University, Korea (hanys@chonnam.ac.kr)

13-6. Symbiotic microorganisms associated with medical, hygienic and veterinary pest arthropods

➤ **Organizers:**

Takema Fukatsu, National Institute of Advanced Industrial Science and Technology (AIST), Japan (t-fukatsu@aist.go.jp)

Claudio Bandi, The University of Milan, Italy (claudio.bandi@unimi.it)

➤ **Tentative titles and speakers:**

- 1) Introduction: Takema Fukatsu, National Institute of Advanced Industrial Science and Technology (AIST), Japan (t-fukatsu@aist.go.jp)
- 2) Tick and midichloria
Claudio Bandi, The University of Milan, Italy (claudio.bandi@unimi.it)



- 3) Mosquito immunology and microbiota
G. Dimopolus, 'ATTIKON' University Hospital, University of Athens Medical School, Greece
- 4) Lice symbiosis
Henk R. Braig, University of Wales, UK
- 5) Ecological mechanisms and transmission of Bartonella by fleas between rodents
R. J. Dillon, Liverpool School of Tropical Medicine, UK
- 6) Anopheles/Asaia
Guido Favia, University of Camerino, Italy
- 7) Tsetse endosymbionts
Rita V. M. Rio, West virginia University, USA
- 8) Tick and Cardinium
H. Noda, National Institute of Agrobiological Sciences, Japan
- 9) Mutualistic Wolbachia of bedbug
Naruo Nikoh, the Open University of Japan, Japan
- 10) Endosymbionts of hippoboscoid flies
Eva Novakova, Cˇeske´ Budeˇjovice, Czech Republic

13-7. Malaria vector mosquitoes in Asia and Africa

➤ **Organizers:**

Leopoldo M. Rueda, Walter Reed Army Institute of Research, USA
(ruedapol@si.edu)

Noboru Minakawa, Nagasaki University, Japan (minakawa@nagasaki-u.ac.jp)

➤ **Tentative titles and speakers**

- 1) Introduction
Leopoldo M. Rueda, Walter Reed Army Institute of Research, USA (ruedapol@si.edu)
Noboru Minakawa, Nagasaki University, Japan (minakawa@nagasaki-u.ac.jp)



- 2) Malaria vector surveillance and control program in China
Qiyong Liu, China CDC, China (liuqiyong@icdc.cn)
- 3) Chemical and biological control of malaria vectors in China
Tongyan Zhao, China (aedes@263.net)
- 4) Ecology of malaria vectors and their Plasmodium parasites in Malaysia
Indra Vythilingam, Malaysia (indra.vythilingam@gmail.com)
- 5) Border malaria in the Republic of Korea: A continuing threat to Korean populations and US Forces Korea
Terry A. Klein, Korea (terry.klein@us.army.mil)
- 6) Anopheles species diversity and malaria infection rates for mosquitoes collected at two villages located in and near the demilitarized zone, Republic of Korea
Heung-Chul Kim, Korea (hungchol.kim@us.army.mil)
- 7) Molecular identification and population structure of the malaria vector, *Anopheles sinensis* (Diptera: Culicidae) in China
Yajun Ma, China (yajunm@yahoo.com.cn)
- 8) Taxonomic status and distribution of *Anopheles Hyrcanus* Group vectors of malaria in Asia
Leopoldo M. Rueda, Walter Reed Army Institute of Research, USA (ruedapol@si.edu)
- 9) Malaria vector control in Thailand
Alongkot Ponlawt, Walter Reed Army Institute of Research, USA (alongkotp@afirms.org)
- 10) Surveillance and control of malaria vectors in Vietnam, Laos and neighboring countries
Sylvie Manguin, France (sylvie.manguin@ird.fr)
- 11) Distribution and molecular identification of *Anopheles* species (Diptera: Culicidae) in Liberia
Peter Obenauer, USA (peter.obenauer@med.navy.mil)
- 12) Surveillance, control and insecticidal resistance of malaria vectors in selected countries of Africa
Maureen Coetzee, South Africa (maureenc@nicd.ac.za)
- 13) Multimodal pyrethroid resistance in malaria vectors in western Kenya
Hitoshi Kawada, Nagasaki University, Japan (vergiss_mine_nicht@hotmail.com)
- 14) Exploiting the oviposition behavior of *Anopheles gambiae* for monitoring and control
Ulrike Fillinger, UK (ulrike.fillinger@lshtm.ac.uk)



- 15) Ecological and evolutionary determinants of host species choice in African malaria vectors
Heather Ferguson, UK (h.ferguson@bio.gla.ac.uk)
- 16) Use of various insecticide isomer and synergies: Implications and challenges in resource poor countries-case study of Malawi
Dylo Pemba, Malawi (pembadyl@yahoo.ie)
- 17) VectorMap, an online mapping resource for malaria vectors and related groups in Asia and Africa
Desmond Foley. USA (foleydes@si.edu)
- 18) Geographical distribution of malaria vectors in Kenya
Kyoko Futami, Japan (futami@nagasaki-u.ac.jp)
- 19) Characteristics of malaria vector breeding habitats in Kenya
Noboru Minakawa, Japan (minakawa@nagasaki-u.ac.jp)

13-8. Insecticide resistance in medically important insects (mosquitoes, bed bugs, lice...)

➤ **Organizers:**

Si Hyeock Lee, Seoul National University, Korea (shlee22@snu.ac.kr)

➤ **Speakers:**

- 1) Gao Xiwu (China)
- 2) Shen Bo (China)
- 3) Rodolphe Poupardin (United Kingdom)
- 4) Kentaro Itokawa (Japan) (itokawa@nih.go.jp)
- 5) Osamu Komagata (Japan) (komagata@nih.go.jp)
- 6) Deok Ho Kwon (Korea)
- 7) John Vontas (Greece)



13-9. Bartonella in arthropod vectors

➤ **Organizers:**

Michael Kosoy, CDC, USA (mck3@cdc.gov)

Qiyong Liu, China CDC, China (liuqiyong@icdc.cn)

➤ **Tentative titles and speakers**

- 1) Vector competence of hard ticks for Bartonella transmission
Muriel Vayssier-Taussat, Institute National de la Recherche Agronomique, France
(mvayssier@vet-alfort.fr)
- 2) Molecular evidence of *Bartonella quintana* in *Pediculus humanus capitis* (Pediculidae: Anoplura) infesting young people in selected villages in Laguna province, Philippines
Arlene U. Garcia-Bertuso, University of the Philippines, Philippines (augb8@hotmail.com)
- 3) Bartonella vector research in China
Qiyong Liu, China CDC, China (liuqiyong@icdc.cn)
- 4) Diversity of Bartonella in flea vectors - insights from studies in Israel
Shimon Harrus, Hebrew University, Israel (harrus@agri.huji.ac.il)
- 5) Competence studies of Bartonella transmission in *Xenopsylla ramesis* fleas
Danny Morick, Hebrew University, Israel (dannymorick@gmail.com)
Boris Krasnov, Ben-Gurion University, Israel (krasnov@bgu.ac.il)
- 6) Bat flies as vectors of Bartonella
Katharina Dittmar de la Cruz, SUNY Buffalo, New York, USA (mysid@me.com)
- 7) Identification of new Bartonella species in the soft ticks in Senegal
Oleg Mediannikov, Unité des Rickettsies, France (olegusss1@gmail.com)
- 8) Bartonella species in rodent fleas in Japan
Hidenory Kabeya, Nihon University, Japan (kabeya@brs.nihon-u.ac.jp)



14. Invasive Species and Quarantine

- **Dr. Fang-hao Wan**, Institute of Plant Protection, CAAS Beijing, China
(E-mail: wanfanghao@ieda.org.cn)
- **Dr. Ki-Jeong Hong**, National Plant Quarantine Service, Korea
(E-mail: stpeters@korea.kr)

14-1. Ecological impacts of invasive insects

- **Organizers:**
Marc Kenis, Switzerland (m.kenis@cabi.org)
Geoff M. Gurr, Australia (geoff.gurr@gmail.com)

14-2. Invasive species biology

- **Organizers:**
Helen Roy, Center for Ecology & Hydrology, UK (hele@ceh.ac.uk)
Sandy M. Smith, University of Toronto, Canada (s.smith.a@utoronto.ca)

14-3. Biotic interactions in the context of biological invasion

- **Organizers:**
Shu-Sheng Liu, Zhejiang University, China (shshliu@zju.edu.cn)
Marcel Dicke, Wageningen University, The Netherlands (marcel.dicke@wur.nl)
- **Type:** 3 hour symposium
introduction to topic, keynote (30 min),
3 invited contributions (20 min),
remaining time is kept free for 6 volunteered contributions (15 min)

14-4. Will new Access and Benefit Sharing procedures impede biological control of invasive insects?

- **Organizers:**
Jacques Brodeur, University of Montreal, Canada (jacques.brodeur@umontreal.ca)
Barbara Barratt, New Zealand (barbara.barratt@agresearch.co.nz)
- **Type:** 3 hour symposium
introduction to topic, keynote (30 mins),
5 contributions (15 mins),
remaining time is kept free for 5 volunteered contributions (15 mins).



14-5. Environmental benefits and risks of biological control

➤ **Organizers:**

Peter Mason, Canada (peter.mason@agr.gc.ca)

George Heimpel, University of Minnesota, USA (heimp001@umn.edu)

Helen Roy, Center for Ecology & Hydrology, UK (hele@ceh.ac.uk)

14-6. Biological invasions under global climate changes

➤ **Organizers:**

Davis Goulson, UK (dave.goulson@stir.ac.uk)

14-7. Pest quarantine issues and international trade

➤ **Organizers:**

Zhi-Hong Li, China Agricultural University, China (lizh@cau.edu.cn)

14-8. Recent issues on exotic insects travelling through the continents

➤ **Organizers:**

Seunghwan Lee, Seoul National University, Korea (seung@snu.ac.kr)

Kim Hoelmer, USDA-ARS, USA (Kim.Hoelmer@ARS.USDA.GOV)

14-9. Postharvest disinfestations

➤ **Organizer:**

Lisa G. Neven, USDA-ARS, Yakima Research Laboratory, USA
(lisa.neven@ars.usda.gov)

14-10. Biological control of invasive weeds

➤ **Organizer:**

TBA



15. Acarology

- **Dr. Hiroshi Amano**, Kyoto University, Japan
(E-mail: amano@kais.kyoto-u.ac.jp)
- **Dr. Terry Klein**, US Military Army in ROK (E-mail: terry.klein@us.army.mil)

15-1. Dispersal and behavior of the Acari

- **Organizers:**
Norihide Hinomoto, NARO-NARC, Japan (<mailto:hinomoto@affrc.go.jp>)
Chuleui Jung, Andong University, Korea (cjung@andong.ac.kr)

15-2. Seasonal adaptations of the Acari

- **Organizers:**
Dimitris Koveos, Aristotle University of Thessaloniki, Greece
(koveos@agro.auth.gr)
Takeshi Suzuki, Chiba University, Japan (suzuki@restaff.chiba-u.jp)

15-3. Bioactive molecules of ticks

- **Organizers:**
Kozo Fujisaki, Kagoshima University, Japan (tick@ms.kagoshima-u.ac.jp)
Libor Grubhoffer, University of South Bohemia, Czech Republic
(liborex@paru.cas.cz)
- **Tentative titles and speakers**
 - 1) Lectins/FREPs; hemelipoglycoprotein; Tick glycosylation speciality
L. Grubhoffer, South Bohemia University, Chzech Republic
 - 2) Tick antimicrobial peptides/proteins
L. Grubhoffer, South Bohemia University, Chzech Republic
 - 3) Characterization of the immunosuppressive protein RH-p36 from the *Rhipicephalus haemaphysaloides* tick
J. Zhou, Shanghai Vet. Res. Inst., China
 - 4) Antiantigenic activities of tick troponin I-like molecule
Y. Myungjyo, Chonbuk National University, Korea
 - 5) Fate of blood meal iron in ticks
T. Tanaka, Kagoshima University, Japan
 - 6) The role of autophagy in the ard tick *Haemaphysalis longicornis*
R. Umemiya-Shirafuji, Kagoshima University, Japan



15-4. Current Issues of Tick Taxonomy and Identification and Distribution of Rickettsial Parasites

➤ **Organizers:**

- Richard Robbins, Armed Forces Pest Management Board, USA
(richard.robbins@osd.mil)
Allen Richards, Naval Medical Research Center, USA
(allen.richards@med.navy.mil)

15-5. Internal morphology and ultrastructure of mites

➤ **Organizers:**

- Shingo Toyoshima, NARO-NIVTS, Japan (toyosin@affrc.go.jp)
Antonella Di Palma, "Federico II" University, Italy (a.dipalma@unifg.it)

➤ **Tentative titles and speakers**

- 1) On some general aspects of internal anatomy of mites and ticks (Acari) (30 min)
Gerd Alberti, University of Greifswald, Germany (alberti@uni-greifswald.de)
- 2) Functional morphology of accessory structures involved in reproduction among gamasid mites (Acari, Anactinotrichida) (30 min)
Antonella Di Palma, University of Foggia, Italy (E-mail: a.dipalma@unifg.it)
Gerd Alberti, University of Greifswald, Germany (alberti@uni-greifswald.de)
- 3) Anatomy and ultrastructure of the prosomal salivary glands in water mites *Piona carnea* (Koch, 1836) and *Teutonia cometes* (Koch, 1837) (Acariformes: Hydarchnidia) (15 min)
Andrey Shatrov, Zoological Institute of the Russian Academy of Science, Russia
(chigger@mail.ru)
- 4) Presumed paternal genome loss during embryogenesis of predatory phytoseiid mites (15 min)
Shingo Toyoshima, NARO-NIVTS, Japan (E-mail: toyosin@affrc.go.jp)
Hirosi Amano, Kyoto University, Japan (E-mail: amano@kais.kyoto-u.ac.jp)

15-6. Ecology and behavior of soil-inhabiting mites

➤ **Organizers:**

- Naoki Mori, Kyoto University, Japan (mokurin@kais.kyoto-u.ac.jp)
Hirosi Amano, Kyoto University, Japan (amano@kais.kyoto-u.ac.jp)

15-7. Agricultural Acarology - invasion and expansion -

➤ **Organizers:**

- Hidenari Kishimoto, NARO- NIFTS, Japan (kisimoto@affrc.go.jp)
Muhammad Haseeb Baloch, Florida A&M University, USA
(muhammad.haseeb@famu.edu)
David James, Washington State University, USA (david_james@wsu.edu)



16. Social Insects

- **Dr. Kazuki Tsuji**, University of the Ryukyus, Japan
(E-mail: tsujik@agr.u-ryukyu.ac.jp)
- **Dr. Donat Agosti**, American Museum of Natural History, New York, USA
(E-mail: agosti@amrh.org)

16-1. Demographic, network, and behavioral trait analyses of sociality

- **Organizers:**
Raghavendra Gadagkar, Indian Institute of Science, India (ragh@ces.iisc.ernet.in)
James H. Hunt, North Carolina State University, USA (jim_hunt@ncsu.edu)
Jennifer Fewell, Arizona State University, USA (j.fewell@asu.edu)

16-2. Social insects

- **Organizer:**
Kazuki Tsuji, University of the Ryukyus, Japan (tsujik@agr.u-ryukyu.ac.jp)

16-3. Subsocial insects

- **Organizers:**
Lisa Filippi, Hofstra University, USA (Lisa.Z.Filippi@hofstra.edu)
Sumio Tojo
Shintaro Nomakuchi

16-4. Ants

- **Organizer:**
Seiki Yamane



17. Special Issues

17-A. Insect Industry

17-A-a. Apiculture

Dr. Peter Neumann, Swiss Bee Research Centre, Switzerland
(E-mail: peter.neumann@alp.admin.ch)

1) Honebee disease diagnostics

➤ **Organizers:**

Byoungsoo Yoon, Kyonggi University, Korea (bsyoon@kyonggi.ac.kr)
TBA

2) Current issues on apiculture

➤ **Organizers:**

Myounglyeol Lee, National Academy of Agricultural Science, Korea
(mllee6@korea.kr)
Peter Neumann, Swiss Bee Research Centre, Switzerland
(peter.neumann@alp.admin.ch)

17-A-b. Sericulture

Dr. Sang Mong Lee, Pusan National University, Korea
(E-mail: serilsm@pusan.ac.kr)

17-A-c. Insect Virus

Dr. Yu-Chan Chao, Academia Sinica, Taiwan
(E-mail: mbycchao@gate.sinica.edu.tw)

17-A-d. Biotechnology

Dr. Andreas Vilcinscas, University of Giessen, Germany
(E-mail: Andrea.Vilcinscas@agra.uni-giessen.de)

17-B. Utilization of Insects for Human Life

- **Dr. Wan-zhi Cai**, China Agricultural University, China (E-mail: caiwz@cau.edu.cn)
➤ **Dr. Marcel Dicke**, Wageningen University, The Netherlands
(Email: marcel.dicke@wur.nl)

1) Insects as Food

➤ **Organizer:**

Dr. Yupa Hanboonsong, Khon Kaen University, Thailand
(E-mail: yupa_han@yahoo.com)

2) Insects for Medical Use

3) Insect in History and Culture



17-C. Higher Education on Entomology

- **Dr. May Berenbaum**, University of Illinois at Urbana-Champaign, USA
(E-mail: maybe@uiuc.edu)

1) Women in Entomology—Challenges and Achievements in a New Era

- **Organizers:**

Ernest S. Delfosse, Michigan State University, USA (E-mail: delfosse@msu.edu)

Genet M. Tulgetske, University of California, Riverside, USA

(E-mail: gtulg001@ucr.edu)

2) Experiential Learning Opportunities for Undergraduate Students

3) Making Connections between Educational Theory and Teaching Practices in Entomology

4) Insect Science and the Changing Research and Development Landscape

5) From Field to Screen: Digital Imaging Technology in Entomology

17-D. Aquatic Entomology: Biodiversity, ecology and environment

- **Organizers:**

Dr. Yeon Jae Bae, Korea University, Korea (E-mail: yjbae@korea.ac.kr)

Dr. Kazumi Tanida, Osaka Prefecture University, Japan

(E-mail: tanida@b.s.osakafu-u.ac.jp)

