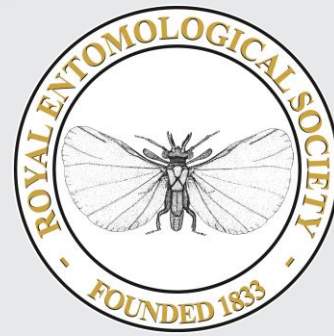




**23<sup>rd</sup> - 27<sup>th</sup> August 2021**



**11:00 BST Session 1 Introduction and posters**

Chair Dr Richard Harrington (Chair, Royal Entomological Society Meetings Committee, UK)

**11.00 – 11.10 Introductory announcements and welcome from the President Helen Roy**

**11.10 – 12.00 The conference website and brief introductions to posters**

12.00 – 12.30 Break

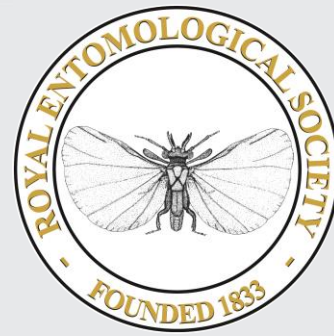
**12.30 – 13.15 THE PRESIDENT'S INVITED KEYNOTE LECTURE:**

**Prof. Claire Kremen (University of British Columbia, Canada)**

**Mainstreaming insect conservation: are we nearly there yet???**

13.15 – 13.50 Break

**13:50 Session 2 Grand challenges in entomology**



**23<sup>rd</sup> - 27<sup>th</sup> August 2021**

**13:50 BST Session 2 Grand challenges in entomology**

Convenor and Chair Dr Luke Tilley (Royal Entomological Society, UK)

**13.50 – 14.35 L KEYNOTE: Dr Sarah Luke (University of Cambridge, UK) Grand challenges in entomology**

**14.35 – 14.50 L Dr Luke Tilley (Royal Entomological Society, UK)**

**Next steps: how does the RES address grand challenges?**

14.50 – 15.00 Break

**15.00 – 16.00 Panel discussion: The future of entomology**

Dr Erin Cadwalader (Director of Strategic Initiatives, Entomological Society of America)

Dr Lynn Dicks (University of Cambridge, UK)

Dr Sarah Luke (University of Cambridge, UK)

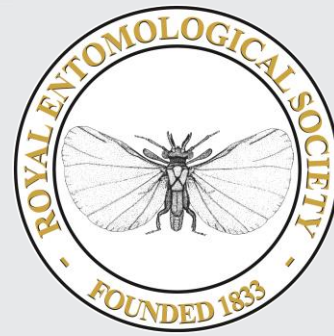
Prof. Helen Roy (UK Centre for Ecology & Hydrology; President, Royal Entomological Society, UK)

Chris Stelzig (Executive Director, Entomological Society of America)

Prof. Chris Thomas (University of York, UK; Previous President, Royal Entomological Society, UK)



23<sup>rd</sup> - 27<sup>th</sup> August 2021



## Session 5 Genomics in taxonomy and biodiversity

**Convenors & Chairs Amy Withers and Dr Philip Donkersley (Lancaster University, UK)**

11.10 – 11.40 R KEYNOTE: **Prof. Christiane Weirauch** (University of California Riverside, USA) From species discovery to the true bug tree of life: advances in heteropteran systematics (Hemiptera: Heteroptera)

11.40 – 12.00 L Dr **Gabriela P. Camacho** (Museum für Naturkunde, Berlin, Germany) Diversity and endemism of Malagasy ants: a phylogenomic approach

12.00 – 12.10 Break

12.10 – 12.30 L Prof. **Alfried Vogler** (Imperial College London and Natural History Museum, UK) Biodiversity genomics and the phylogeny of Coleoptera

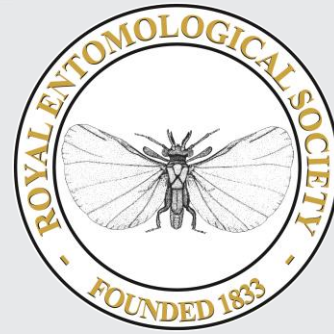
12.30 – 12.50 L Dr **Jennifer Rowntree** (Manchester Metropolitan University, UK) Of microbes and insects: tales of symbiosis in bees and aphids

12.50 – 13.10 L Dr **Philip Donkersley** (Lancaster University, UK) Insect biodiversity monitoring: landscape scale pollinator ecology through metabarcoding

**13:50 Session 6 “Blue skies” entomology**



23<sup>rd</sup> - 27<sup>th</sup> August 2021



**13:50 BST Session 6 “Blue skies” entomology**

**Convenor Prof. Stuart Reynolds (University of Bath, UK)**

**Chair Dr Richard Harrington (Chair, Royal Entomological Society Meetings Committee)**

13.50 – 14.10 L **Prof. Nina Wedell** (University of Exeter, UK)

Do endosymbionts affect sexual ornament expression in butterflies?

14.10 – 14.30 L **Prof. Judith Korb** (University of Freiburg, Germany)

Evolution of ageing in social insects

14.30 – 14.50 L **Prof. James Mallet** (Harvard University, USA)

The evolution of mimicry in butterflies

14.50 – 15.00 Break

15.05 – 15.25 L **Prof. H. Frederik Nijhout** (Duke University, USA)

The regulation of body size in insects

15.25 – 16.05 L KEYNOTE: **Prof. James W. Truman** (University of Washington, USA)

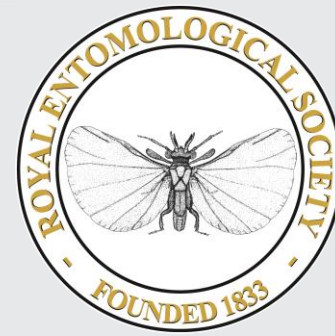
Insights into the molecular trinity underlying the evolution and control of insect metamorphosis

**17.00 BST Royal Entomological Society Annual General Meeting**

(separate registration link for Members & Fellows in conference website Schedule)



23<sup>rd</sup> - 27<sup>th</sup> August 2021



## Session 7 Vectors of human and animal pathogens

**Convenor and Chair Dr Marion England (The Pirbright Institute, UK)**

11.00 – 11.20 L **Priscilla Ankamaa Opare** (University of Cape Coast, Ghana) Incriminating *Culicoides* as vectors of *Leishmania* in Ghana and validation of standard light-traps against explicit human biting rates

11.20 – 11.40 L **Dr Eva Veronesi** (University of Zürich, Switzerland) Insights on the mechanical transmission of lumpy skin disease virus (LSDV) by the stable fly *Stomoxys calcitrans*

11.40 – 12.00 L **Dr Simon Carpenter** (The Pirbright Institute, UK) Epidemic within a pandemic: combating African horse sickness virus in Thailand from a distance

12.00 – 12.10 Break

12.10 – 12.30 L **Dr Stefanie Schäfer** (UK Centre for Ecology & Hydrology) MonkeyFeverRisk – a OneHealth collaboration to identify drivers of a tick-transmitted viral zoonosis in Southern India

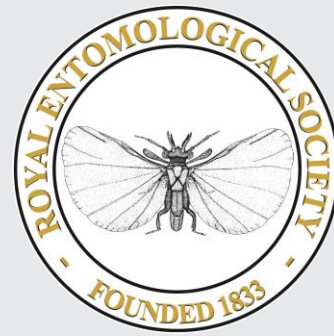
12.30 – 13.10 L **KEYNOTE: Dr Lee Cohnstaedt** (Agricultural Research Service, USDA) Benefits and issues of funding research based on the latest outbreak

13.10 – 13.50 Break

**13:50BST Session 8 Insects as inspiration for technology**



23<sup>rd</sup> - 27<sup>th</sup> August 2021



## Session 8 Insects as inspiration for technology

**Convenor and Chair Prof. Andreas Vilcinskas (JLU Gießen, Germany)**

13.50 – 14.30 L **KEYNOTE: Dr Tim Lüddecke** (Fraunhofer IME, Giessen, Germany) Many-legged assassins and master chemists: understanding arthropod venoms as a source for biomolecular innovation

14.30 – 14.50 L **Prof. Stanislav Gorb** (University of Kiel, Germany)  
Insect-inspired technology: an endless diversity of biomimetic solutions

14.50 – 15.00 Break

15.00 – 15.20 L **Dr Clemens Schaber** (University of Kiel, Germany) Adhesive setae of a spider: morphology, performance and biomimetic approaches

15.20 – 15.40 L **Dr Heiko Vogel** (Max-Planck Institute for Chemical Ecology, Germany)  
Combining host biology with potential applications of insect-associated microbes: the burying beetle example

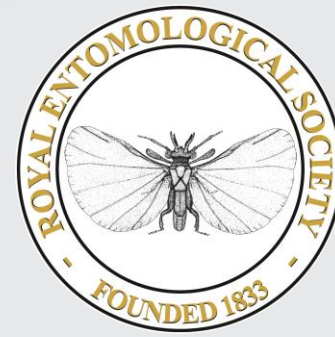
15.40 – 16.00 L **Prof. Andreas Vilcinskas** (Institut für Insektenbiotechnologie, JLU Gießen, Germany)  
Molecular basis of explosive defensive secretions in the Bombardier beetle

**16.30 ENTOLympics: A fun quiz for students and early career entomologists**





23<sup>rd</sup> - 27<sup>th</sup> August 2021



## Session 10 Insecticide issues

**Convenor and Chair: Dr Ralf Nauen (Bayer, Germany)**

13.50 – 14.10 L Prof. Chris Bass (University of Exeter, UK) The molecular innovations underlying resistance to natural and synthetic xenobiotics in the aphid *Myzus persicae*

14.10 – 14.30 L Prof. Guy Smagghe (Ghent University, Belgium)

RNAi as a novel technology to overcome insecticide resistance

14.30 – 14.50 L Prof. Lin Field (Rothamsted Research, UK)

Neonicotinoids: issues with both resistance and legislation

14.50 – 15.00 Break

15.00 – 15.20 L Prof. Emmanouil Roditakis (Hellenic Mediterranean University, Greece) and Dr Ralf Nauen (Bayer, Germany) Diamide insecticides as pest management tools: current status, problems and perspective

15.20 – 16.00 L KEYNOTE: Prof. Bruce Tabashnik (University of Arizona, USA)

Global patterns of resistance to Bt crops: what went right and wrong?

**16.00 – 16.10 Closing words**