



2nd Meeting of the Royal Entomological Society Special Interest Group in Insect Genomics

16th May 2017, [Rothamsted Conference Centre](#), Harpenden, AL5 2JQ
10 a.m. – 6 p.m.

Invited speakers: [Luke Alphey](#) (The Pirbright Institute), [Chris Bass](#) (University of Exeter) and [Nicola Nadeau](#) (University of Sheffield).

Full programme now available – see next page

The development of the new sequencing technologies has placed the field of genomics at the heart of biological research. Many genomes have already been published and many more are being generated. This abundance of genomic data is proving to be fundamental to a wide range of research areas including functional genomics, the evolution of diversity and insect management.

The purpose of this meeting is to discuss the latest developments in the field of genomics and how they are being applied in entomology. We will bring together researchers with different backgrounds to promote the exchange of ideas and explore collaborations that can further advance insect science.

We welcome presentations from researchers at all stages of their careers working on insect genomics and the development of bioinformatics tools, as well as from those applying these methods to study questions ranging from insect ecology and evolution to management and control.

REGISTRATION

If you wish to attend the meeting, please visit the [RES-SIG Insect Genomics](#) website and fill in a registration form.

Registration is £15 and this covers a buffet lunch, coffee / tea refreshments, and a drink reception to finish the meeting. Registration is free for the RES members not requiring lunch, refreshments and reception.

Deadline for registration is Tuesday 2nd May 2017. **Limited spaces available!**

Abstract submission for talks has now been closed. We are still accepting posters.

For any queries, please contact Ramiro Morales-Hojas (ramiro.morales-hojas@rothamsted.ac.uk) or Martin Williamson (martin.williamson@rothamsted.ac.uk).

Programme

9:45 - 10:15	Registration & Coffee		
10:15 - 10:45	Luke Alpey	The Pirbright Institute	Designing gene drives for population-level interventions
10:45 - 11:05	Kumar Singh	University of Exeter	Bioinformatic approaches for insect genome sequencing
11:05 - 11:25	Chris Clarkson	Welcome Trust Sanger Institute	The <i>Anopheles gambiae</i> 1000 Genomes Project phase 2: genome variation and insecticide resistance in 1142 mosquitoes
11:25 - 11:45	Kim Ferguson	Wageningen University and Research	Looking for that perfect fit: Overcoming roadblocks to an optimal sequencing strategy with biocontrol agent <i>Nesidiocoris tenuis</i> as a case study
11:45 - 12:05	Jorunn Bos	The James Hutton Institute	Comparative transcriptome analyses of the cereal pest <i>Rhopalosiphum padi</i> exposed to host and non-host plants
12:05 - 13:00	Lunch break		
13:00 - 13:30	Chris Bass	University of Exeter	The molecular innovations underlying resistance to natural and synthetic xenobiotics in the Aphid <i>Myzus persicae</i>
13:30 - 13:50	Ralf Nauen	Bayer AG	Bee toxicogenomics - an interdisciplinary approach to understand insecticide selectivity
13:50 - 14:10	Bruno Gomes	Liverpool School of Tropical Medicine	Characterization of detoxification genes in the sandfly <i>Phlebotomus argentipes</i>
14:10 - 14:30	Yazhou Chen	John Innes Centre	Aphid-specific expanded gene families are required for <i>Myzus persicae</i> colonisation of diverse plant species
14:30 - 14:50	Tom Walsh	CSIRO	The old world bollworm, <i>Helicoverpa armigera</i> : Bt resistance mechanisms, population genetics and genomics
14:50 - 15:10	Coffee Break		
15:10 - 15:40	Nicola Nadeau	University of Sheffield	How did the butterfly get its colour? Using the Heliconius genome to identify genes controlling wing colour and pattern
15:40 - 16:00	Carlos Martinez-Ruiz	Queen Mary University London	Understanding the evolution of a social chromosome: a gene expression approach
16:00 - 16:20	Joe Colgan	Queen Mary University London	Signatures of selection revealed by population analyses of bumblebee genomes across the United Kingdom
16:20 - 16:40	Varvara Fazalova	University of Oxford	Reproductive isolation and genomic patterns of divergence in pea aphids
16:40 - 17:00	Wee Tek Tay	CSIRO	Genomic insights into the European grapevine moth species status and New World incursion pathways
17:00 - 18:00	Reception		