



#IUSSIYork17



North-west European Section



Winter meeting 2017

Programme

Monday 18th of December

8:30-9:30	Registration and put posters up
9:30-9:40	Welcome
9:40-10:40	Plenary: Chair Liz Duncan Professor Lars Chittka (Queen Mary University of London) <i>"Are bees conscious?"</i>
10:40-11:15	Morning tea break
11:15 – 12:15	Contributed session I: Chair Liz Duncan 1. Richard Gill (Imperial College London) <i>"Pesticide affects bee brain development resulting in adults becoming poorer learners"</i> 2. Hollie Marshall (University of Leicester)* <i>"The search for genomic imprinting in the social insect, <i>Bombus terrestris</i>"</i> 3. Ash Samuelson (Royal Holloway, University of London)* <i>"Urban land-use is linked to higher fitness in a key pollinator"</i> 4. Michael Bentley (University College London) <i>"Hamilton's rule and the recovery of inclusive fitness at the level of the individual"</i>
12:15-12:40	Poster session flash talks
12:40 – 1:45	Lunch and Poster session

* indicates presentations by student participants



1:45 – 3:00	<p>Contributed session II: Chair Eleanor Drinkwater</p> <p>5. Sophie Evison (University of Sheffield) <i>“Ecological effects of genetic diversity in host-parasite interactions”</i></p> <p>6. Gino Brignoli (Queen Mary University of London) <i>“Determining queen number in the ant <u>Lasius flavus</u> and considerations for possible causes of social polymorphism”</i></p> <p>7. Sophie Hedges (University of Exeter)* <i>“Population genetics and colony structure of island and mainland <u>Bombus terrestris</u> in the UK and France”</i></p> <p>8. Jacob Johansson (Lund University Sweden & Imperial College London) <i>“Eco-evolutionary modelling of bumblebee communities under environmental stress”</i></p> <p>9. Isabel Fletcher (Queen Mary University of London)* <i>“Effects of neonicotinoid pesticides exposure on gene expression in <u>Bombus terrestris</u> bumblebees”</i></p>
3:00 – 3:30	Afternoon tea break
3:30 – 4:30	<p>Contributed session III: Chair Sophie Evison</p> <p>10. Daisy Taylor (University of Bristol) <i>“Identifying and understanding innovations in social evolution”</i></p> <p>11. Sam Duckerin (University of Bristol)* <i>“Bumblebee social network analysis and the effects of pesticides on colony organisation”</i></p> <p>12. Stephanie Law (University of Liverpool)* <i>“Spatial stratification of tropical ant assemblages: do ground ants restrict the foraging distribution of arboreal ants?”</i></p> <p>13. Jack Howe (University of Copenhagen)* <i>“Horizontal transmission of vertically inherited fungal symbionts of <u>Acromyrmex</u> leaf-cutter ants”</i></p>
4:30 – 4:45	<p>Society Business Meeting <i>Could all members please stay for the business meeting. We will, among other things, cover plans for student travel grants for the International IUSSI meeting in Brazil for 2018</i></p>
4:45 – 7:30	<i>Free time</i>
7:30 – late	<p>Conference Dinner at Ask Italian <i>The Grand Assembly Rooms Blake Street, York YO1 8QG</i></p>

**Tuesday 19th of December**

9:30-10:30	Plenary: Chair Elva Robinson Professor Rebecca Kilner (University of Cambridge) <i>"How behaviour changes evolution: experiments with burying beetles"</i>
10:30-11:00	Morning tea break
11:00 – 12:15	Contributed session IV: Chair Dominic Burns 14. Christopher Pull (Royal Holloway, University of London) <i>"Co-founding ant queens prevent disease by performing prophylactic undertaking behaviour"</i> 15. Joanne Carnell (University of Sussex)* <i>"The spatial and temporal distribution of bumblebee pathogens in their hosts and wider environment"</i> 16. Gregoire Pasquier (Royal Holloway, University of London)* <i>"Individual learning performance and exploratory activity are linked to colony foraging success in a mass-recruiting ant"</i> 17. Victoria Blanchard (University of Exeter)* <i>"Assessing heterothermic fever response in individuals of model bee species across the social spectrum"</i> 18. Alessandro Cini (University College London) <i>"Sight in a clique, scent in society: plasticity in the use of nestmate recognition cues along colony development in the social wasp <i>Polistes dominula</i>"</i>
12:15 – 1:15	Lunch and Poster session
1:15 – 2:30	Workshops / Discussion Groups <i>There are two formal workshops/discussion groups running on epigenetics and social networks. We will also be running informal discussion groups based on participant interests.</i>
2:30 – 3:00	Afternoon tea break
3:00 – 3:45	Contributed session V: Chair TBA 19. Jonathan Shik (Centre for Social Evolution, University of Copenhagen) <i>"Stable isotopes nutritionally link leafcutter ants and their co-evolved fungal symbionts"</i> 20. Jacob Holland (Hebrew University of Jerusalem) <i>"Are bumblebees primitively eusocial? The complexity of social complexity"</i> 21. Felicity Muth (University of Nevada, Reno) <i>"Bees taste the pollen they collect"</i>
3:45-4:00	Conference closing and prize giving



Poster presentations

1. **Ryan Brock** (University of East Anglia)*
"Social organisation of the Tree Bumblebee (Bombus hypnorum)"
2. **Dominic Burns** (University of York)*
"Analysis of dynamic networks of ant nests"
3. **Eleanor Drinkwater** (University of York)*
"How does individual personality modulate colony level personality? A study in Myrmica rubra"
4. **Matthew Hasenjager** (Royal Holloway, University of London)
"Information flow through honeybee networks during collective foraging"
5. **Rosie Knapp** (University of Leeds)*
"Plastic male reproductive investment in the solitary megachilid, Osmia bicornis"
6. **Callum Martin** (Royal Holloway, University of London)*
"The effect of internal nectar reservoir concentration on commercial bumblebee foraging activity"
7. **Craig Perl** (University of Sussex)*
"Metabolic rate scaling and ventilation patterns in Formica rufa"
8. **David Prince** (University of East Anglia)
"The genetic basis of worker reproduction in Bombus terrestris"
9. **Christopher Pull** (Royal Holloway, University of London)
"Testing bee cognition using a radial arm maze"
10. **Jens Van Eeckhoven** (University of Leeds)*
"From reproductive control to reproductive constraint; studying honeybee worker sterility through comparison with a related solitary species"