

THEO MURPHY INTERNATIONAL SCIENTIFIC MEETING

When senses take flight: the evolution, development, mechanisms and function of avian senses

Organised by Dr Hannah Rowland, Professor Innes Cuthill and Dr Tom Pike

Thursday 4 - Friday 5 September 2014

THE
**ROYAL
SOCIETY**

DAY 1			
SESSION 1: Introduction to bird sense Chair: Hannah Rowland		SESSION 3: Vision Chair: Tom Pike	
09.30	Welcome by the Royal Society and organisers	13.45	Innes Cuthill Using camouflage to investigate avian visual perception
09.40	Tim Birkhead FRS Bird sense	14.10	Discussion
		14.20	Graham Martin What drives avian vision? Trade-offs and compromises in foraging, predator detection, reproduction and flight
10.15	Coffee		
SESSION 2: Sensation		14.45	Discussion
10.45	Dorothy McKeegan Nociception in birds	14.55	Laura Kelley Visual illusions in bowerbirds: the importance of a perceptual perspective
11.10	Discussion	15.20	Discussion
		15.30	Tea
11.20	Susan Cunningham The sandpiper-type bill-tip organ in birds: who has it and why?	16.00	Esteban Fernandez-Juricic How visual configuration influences behaviour: mechanistic and evolutionary implications
11.45	Discussion	16.25	Discussion
11.55	Melissa Bateson Do birds have emotions?	17.00-18.30	Poster session and drinks reception
12.20	Discussion		
12.30	Lunch	18.30	Dinner

DAY 2

SESSION 4: Taste and olfaction Chair: Tim Birkhead FRS		SESSION 5: Olfactory navigation and geomagnetic sense Chair: Innes Cuthill	
09.00	Gary Beauchamp Taste perception and its relationships with diet	14.40	Anna Gagliardo Olfactory navigation in birds: from homing pigeons to wild species
09.25	Discussion	15.05	Discussion
09.35	Hannah Rowland Bitter-bugs: toxin perception and learning	15.15	Tea
		15.45	Henrik Mouritsen The magnetic senses of birds: neurobiological evidence and sensitivity to anthropogenic electromagnetic noise
10.00	Discussion	16.10	Discussion
10.10	Maude Baldwin The evolution of sweet taste perception in a nectar-feeding bird	16.20	Roswita Wiltschko The magnetic compass of birds
10.35	Discussion	16.45	Discussion
10.45	Coffee	16.55	Summary of meeting
11.15	Eugeni Roura Nutritional chemosensing and nutrient specific appetite in chickens: the taste of amino acids and calcium	17.15	Close of meeting
11.40	Discussion		
11.50	Aline Bertin Olfactory experience of chicken embryos influences food preferences after hatching		
12.15	Discussion		
12.25	Lunch		
13.30	Francesco Bonadonna Chemical communication in birds: petrel seabirds' olfactory make up		
13.55	Discussion		
14.05	Gabrielle Nevitt Avian olfaction in the context of global ocean health: Dimethyl sulfide facilitates a tritrophic mutualism between marine primary producers and top predators		
14.30	Discussion		

Draft programme – correct as of 28/08/2014 – subject to change