

ASSOCIATION FOR THE STUDY OF ANIMAL BEHAVIOUR

ASAB WINTER MEETING 2003, Thursday 4th and Friday 5th December, 2003

Meeting Rooms (London Zoo), Zoological Society of London

HORMONES, BRAIN AND BEHAVIOUR: WHICH COMES FIRST?

Organized by
Jacques Balthazart (University of Liège)
&
Rui Oliveira (ISPA, Lisbon)

PRELIMINARY PROGRAMME

Thursday 4th December

9.30-10.30 **Registration and coffee**

Chair: Jacques Balthazart

10.30-11.20 **Greg Ball (John Hopkins, Baltimore)**

“Interaction between song performance and steroid hormones in the regulation of seasonal neuroplasticity in songbirds”

11.20-11.45 **Barry Keverne (Cambridge)**

“Brain evolution’s impact on hormones and behaviour”

11.45-12.00 **Mary Erskine (Boston)**

“Spacing of intromissions by the female rat during paced mating is encoded by glutamatergic neurotransmission within the medial amygdala”

12.00-12.15 **Charlotte Cornil, G.F. Ball & J. Balthazart (Liège & Baltimore)**

“Changes in brain estrogen synthase activity rapidly modulate male sexual behaviour in Japanese quail”

12.15-12.30 **Eduardo Rosa-Molinar, A. Rodriguez-Cortes, N.L. Rivera-Rivera, & J.L. Serrano-Velez (Puerto Rico)**

“Advances in optical microscopy, imaging techniques, and markers to elucidate sexually dimorphic spinal motor neurons essential for copulatory behaviour”

12.30-14.00 **Lunch**

Chair: Barry Keverne

14.00-14.50 **Norbert Sachser (Muenster)**

“The genesis of hormone-brain-behaviour relationships in wild, domestic and transgenic rodents”

14.50-15.15 **Annemie Vanderlinden (RUCA, Antwerp)**

“In-vivo Magnetic Resonance Imaging of songbird brain: a tool to study the interaction between Hormones, Brain and Behaviour”

15.15-16.15 **POSTER SESSION** (with Tea being served)

Chair: Greg Ball

- 16.15-16.40 **Manfred Gahr (Amsterdam)**
"Neural correlates of hormone-dependent vocal pattern of adult songbirds"
- 16.40-16.55 **Clive Catchpole, S. Leitner & R.C. Marshall (London & Seewiesen)**
"Song, brain and behaviour: the neurobiology of song and female choice in captive canaries"
- 16.55-17.10 **Kate L. Buchanan, K.A. Spencer, S. Leitner, A.R. Goldsmith & C.K. Catchpole (Cardiff, Bristol, Seewiesen & London)**
"The developmental stress hypothesis: song production and neural development"
- 17.10-17.25 **Virginie Canoine & E. Gwinner (Princeton & Andechs)**
"Does the male intruder or the male partner affect the hormonal response of female European Stonechats to a simulated territorial intrusion?"
- 17.25-17.40 **Leonida Fusani & B.A. Schlinger (Siena & Los Angeles)**
"Testosterone and the elaborate courtship of a tropical lekking bird"
- 17.40-17.55 **Wolfgang Goymann, I.T. Moore, A. Scheuerlein, A. Grafen & J.C. Wingfield (Andechs, Oxford & Seattle)**
"Testosterone in tropical birds: how high and why?"
- 18.00-... **Wine Reception sponsored by Wisepress**

Friday 5th December

Chair: Rui Oliveira

- 9.30-10.20 **Matthew Grober (Atlanta)**
"From Tinbergen's sticklebacks to Grober's gobies: How complex social regulation of brain and behaviour emerges from studies of 'simple' highly conserved behaviour"
- 10.20-10.45 **Svante Winberg (Uppsala)**
"Links between stress responsiveness and behavioural traits in rainbow trout"
- 10.45-11.05 **Coffee**

Chair: Norbert Sachser

- 11.05-11.30 **Melissa Hines (London)**
"Androgen, the human brain and human behaviour"
- 11.30-11.45 **Claude Fabre-Nys & H. Gelez (Tour)**
"Sexual behaviour in ewes: a complex interplay between hormones, brain and behaviour"
- 11.45-12.00 **Christopher Lowry, P.L. Johnson, P.J. Gasser, F.L. Moore, S.L. Lightman & M. Orchinik (Bristol)**
"The role of serotonergic systems in emotional behaviour"

12.00-12.15 **Zöe Hodgson, S. Meddle, M. Evans, K.L. Buchanan, M. Roberts, T. Sperry & S. Healy (Edinburgh, Stirling, Cardiff & Washington)**
“Do steroid hormones affect avian spatial learning and memory?”

12.15-12.30 **Brandon Aragona & Z. Wang (Tallahassee)**
“Nucleus accumbens dopamine regulation of pair bonding in the monogamous prairie vole”

12.30-14.00 **Lunch**

Chair: Felicity Huntingford

14.00-15.00 **Niko Tinbergen Lecture: Tim Clutton-Brock (Cambridge)**
“Cooperation in theory and practice”

15.00- 15.20 **Tea**

Chair: Kurt Kotrschal

15.20-15.45 **Bengt Silverin (Göteborg)**
“Brain aromatase activity and reproductive behaviours in birds”

15.45-16.00 **Albert Ros, R. Brintjes, N. Bouton, R.S. Santos, A.V.M. Canário & R.F. Oliveira (Lisbon, Faro & Horta)**
“Are aggressive fathers immunosuppressed? The role of androgens in the alternative reproductive tactics of the Azorean rock-pool blenny”

16.00-16.15 **Simone Meddle (Edinburgh)**
“Maternal aggression elicits immediate early gene expression in the rat brain”

16.15-16.30 **Corine Eising, W. Mueller & T. Groothuis (Groningen)**
“Avian mothers produce offspring of different phenotypes by differential maternal androgen deposition into the egg”

16.30-16.45 **L. Gilbert, K. Williamson & J. Graves (St. Andrews)**
*“Does maternal investment of yolk hormones due to mate attractiveness influence offspring development of the zebra finch, *Taeniopygia guttata*?”*

16.45-17.00 **Barbara Tschirren, H. Schwabl & H. Richner (Bern & Washington)**
“Ectoparasite-modulated deposition of maternal hormones in great tit eggs”

17.15-17.30 **Nanette Verboven, R. Nager & P. Monaghan (Glasgow)**
“Maternal condition, social interactions and yolk testosterone”

17.30-17.40 **Closing remarks**