

ANU Seminar

EVOLUTION, ECOLOGY, & GENETICS RESEARCH SCHOOL OF BIOLOGY

Thursday, 17 November 2011, 1pm

Ant queen pheromones and ultimate causation in honest signalling



Dr Luke Holman
Postdoctoral Fellow
Evolution, Ecology and Genetics
Research School of Biology
ANU

Signalling costs and evolutionary constraints have both been invoked as ultimate causes of honesty in biological signals. I will argue that both factors are important, and that variation in signal costs arises from variation in evolutionary constraints. I will then discuss the proximate and ultimate mechanisms behind honest signalling in the ant genus *Lasius*, using a newly-discovered queen pheromone that keeps worker ants sterile and signals queen. The talk covers modelling, analytical chemistry, behaviour, quantitative genetics and phylogenetic analysis.

For further info please contact:

Dr Janine Deakin, 02 6125 4902, Janine.Deakin@anu.edu.au



**Seminars are held in the Gould Wing Seminar Room, Building 116 Daley Rd, ANU
ALL STAFF AND STUDENTS ARE WELCOME TO ATTEND**