REPORT FOR JAMES RENNIE BEQUEST TRAVEL AWARD

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AWARD WAS USED TO ATTEND A SUMMER SCHOOL ENTITLED 'THE CAUSES AND CONSEQUENCES OF SOCIALITY' AT THE MAX-PLANK INSTITUTE, SEEWEISEN, GERMANY.

The aim of the summer school was to provide an opportunity for 25 students in the field of social evolution to come together and interact with a panel of prominent international researchers in the field. One hour talks were given by each lecturer with 15 minutes for questions afterwards. The format successfully allowed students ample opportunity to ask further questions or receive clarification in an unintimidating atmosphere.

The following lecturers contributed talks on their area of interest:

Susan Alberts, Harvard, USA
Genetic population structure and mating systems of the Hamadryas baboon.

Dam Blumstein, Macquarie, Australia
Social complexity in rodents social groups.

Rob Heinsohn, ANU, Australia
Cooperative breeding in birds.

Heribert Hofer, Berlin, Germany
Social stress and dominance in hyaenas.

Jan van Hooff, Utrecht, The Netherlands
Mating systems and ecology in primate societies.

Jan Komdeur, Groningen, The Netherlands

Facultative sex ratio manipulation in the Seychelles Warbler.

Hans Kummer, Zurich, Switzerland
The theory of mind.

Anne Rasa, Bonn, Germany
Parental care in mongooses and beetles.

Francis Ratnieks, Sheffield, UK
Mating systems, why mate multiply?

Jan de Ruiter, Winston-Salem, USA
Genetic population profile with microsatellites in macaques.

Lotte Sundstrom, Helsinki, Finland
Queen-worker conflict over sex allocation.

As well as 3 daily full-length talks, students were given the opportunity to present their own work and to obtain feedback and advice. One clear success of the meeting was an integration of researchers working on the same questions in different social taxa: from chimpanzees to wasps, see below.

As well as daily talk sessions, time was allotted, throughout the week, for small discussion groups. Each student was asked before the meeting to propose a workshop topic to be discussed in these groups with two lecturers. My proposal was one of those chosen and was run by Dan Blumstein and Lotte Sundstrom. The objective of these groups was to formulate a plan for a published paper on the given topic. Through the week, our workshop homed in on the following title:' Sociality in vertebrates and invertebrates: common principles and idiosyncratic differences'. We successfully formulated a decision tree common to all social animals and lists of trade-offs between each decision level which differed between taxa. In this way we defined a novel theoretical framework for thinking about how taxa differ from one another and what common principles may apply. For example, there is a need to explain why eusociality has radiated in ant species in a way not seen in other taxonomic groups. What unique features are associated with the naked mole rat that may have led to the evolution of a social system unique in mammals and with more in common with social insects?

The team of six in our workshop worked productively together and we plan to submit the results of our work to *TREE* or *Ecology Letters* in due course.

Overall, everyone felt that the summer school had been a huge success and a worthwhile venture for all participants. The location in Seeweisen is perfect for such events as it promotes close social cohesion throughout the week between delegates: often the most interesting discussions took place outside the sessions during breakfast or over a weis bier in the evenings. I thank the James Rennie Bequest for giving me the opportunity to attend. I am in the process of writing my PhD thesis and it is my feeling that it will be greatly improved as a direct result of my interactions in Seeweisen. Finally, I thoroughly recommend that you continue to fund applications for travel to meetings of this format.