

PhD position: communication and decision-making in social insects, University of Lausanne (Switzerland)

We invite applications for a 3-year SNSF (Swiss National Science Foundation) funded PhD position at the University of Lausanne, Switzerland. We are looking for a highly motivated student to study communication, learning and decision-making in ants and bees. In many social insect species, workers communicate about profitable food sources or nest-sites. Honeybees, for example, use the waggle dance to direct nest-mates to profitable resources. Many ants and tropical bees use pheromone trails. However, not all species communicate about foraging sites and even in species with communication foragers often search for food independently. The project investigates the circumstances that favour different information-use strategies and explores the relationship between flexible individual foraging strategies and colony fitness. The research will include experimental work in and around Lausanne, with a possibility to perform field work in Brazil and/or develop simulation models. The main study animals are honeybees, ants and stingless bees.

We are looking for a candidate with a Masters degree (or equivalent) in Biology and a strong background in behaviour, ecology or evolution. Good English skills and an ability to work independently are important. Experience with social insects, statistical or modelling methods and a basic knowledge of French are helpful but not a requirement.

Supervisors and laboratory: Dr. Christoph Grüter (principal supervisor) & Prof. Laurent Keller, Laboratory of Evolutionary Genetics and Ecology of Social Life, University of Lausanne, Switzerland.

Web Sites: www.socialinsect-research.com, www.unil.ch/dee/page6763.html

How to apply: applications include (1) a one-page cover letter describing your motivation, previous research activities and current research interests, (2) a CV, (3) two reference letters and (4) publications (if existing; e.g. MSc thesis). Send all documents except the publications in a single pdf file. Applications must be written in English and should be sent to christophgrueter77@gmail.com before the **15th July 2013**. Earliest possible start date is the 1st of September 2013.

Informal enquiries: christophgrueter77@gmail.com