

PhD position: Genetic incompatibility and mate choice in parasitoid wasps

A PhD position is available for 3 years (payment 50% TV-L E13) in the population ecology and evolutionary ecology group, headed by Prof. Dr. Thomas S. Hoffmeister, at the University of Bremen, Germany. The University of Bremen comprises 19,000 students and supports a broad range of academic disciplines. The ambition and success of its research strategy is reflected in its being one of eleven universities, selected within the German "Excellence Initiative".

Project outline:

Allelic incompatibility between individuals of the same species should select for mate choice based

on the genetic make-up of both partners at loci that influence offspring fitness. Therefore, mate

choice may be an important driver of allelic diversity. A complementary sex determination (CSD)

system is responsible for intraspecific allelic incompatibility in many species of ants, bees, and wasps.

CSD may thus favour disassortative mating and in this, resembles the MHC of the vertebrate immune

system, or the self-incompatibility (SI) system of higher plants. The aim of this project is to analyse

mate choice behaviour in the parasitic wasp *Bracon brevicornis* (Hymenoptera, Braconidae), thereby

disentangling the impact of indirect (kin recognition) and direct (allele recognition) influences of the

genetic composition of mating partners. The project will focus on proximate and ultimate cues of

mating preferences alike and consist of fieldwork as well as laboratory experiments and molecular

work.

There is flexibility in the programme and the precise direction and emphasis of the project will be

determined by collaboration between the student and the supervisors.

Applicants must have a master's degree, or equivalent, in a relevant subject, e.g. ecology, animal

behaviour, entomology and/or evolutionary biology. We expect an excellent knowledge of the

English language in both writing and speaking. The successful candidate will receive high quality

training in all relevant skills, conduct innovative research in a lively and active research group, and

participate in teaching activities at the BSc or MSc level.

The University of Bremen has received a number of awards for its diversity policies and offers a

family friendly working environment. We strive to increase the number of international researchers

and particularly solicit applications from suitably qualified candidates. Applications from female

candidates and applications of academics with a migration background are explicitly welcome.

Disabled persons with the same professional and personal qualifications will be given preference.

Applications should include a scan of the Master's diploma, a transcript of records, a CV, and

a short proposal explaining how the applicant would approach the project, including specific

hypotheses (maximum 1 page including references). Two potential supervisors should be mentioned

in the cover letter who are willing to supply letters of reference.

Applications should be sent by email in a single pdf to Mrs. Inae Kim ([inaekf@uni](mailto:inaekf@uni-bremen.de)
[bremen.de](mailto:inaekf@uni-bremen.de)) until 31.12.2014.

Informal inquiries to the position can be directed to Dr. Andra Thiel ([thiel@uni](mailto:thiel@uni-bremen.de)).