

Postdoktorandenstipendium "Interacting phenotypes: the effect of social environment and genetic constraints on the evolution of social traits"

Initiative: Evolutionsbiologie (beendet)

Ausschreibung: Postdoktorandenförderung

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Laufzeit: 5 Jahre

Many social traits have direct and often severe fitness consequences; yet these traits vary considerably, both, within and between individuals. The proposed project will explore two explanations: First, fixation of social traits can be constrained by the genetic architecture, e.g., when antagonistic selection acts on two pleiotropically linked traits. The project team will use long-term data from a wild, pedigreed population of house-sparrows - a classic model species - to quantify genetic correlations in a set of pleiotropically linked characteristics: social behaviour (dominance and parental care), sex-specific ornamentation and hormone levels. Secondly, social interactions with conspecifics can influence social behaviour itself. They expect that the social environment will affect an individual's social behaviour and physiology. The scientists will quantify the effect of the social environment in the wild population. Additionally, they will conduct experiments on captive sparrows to explore these effects and finally, they will use theoretical models to determine the soundness of our explanations.

Projektbeteiligte

Dr. Julia Schroeder

Max-Planck-Institut für biologische
Intelligenz / Standort: Seewiesen b.
Starnberg
Seewiesen