

Postdoktorandenstipendium "Genome Evolution of Wolbachia: Modelling and Data Analysis of Symbiosis and Speciation"

Initiative: Evolutionsbiologie (beendet)

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Laufzeit: 3 Jahre

Among the most interesting questions in biology is to understand parasitism and symbiosis, and its role in adaptation and speciation. So far, most insights were gained on experimental evidence or mathematical modelling, which, however, do not always match. Due to the ever increasing amount of large-scale data from genomics, proteomics and other techniques it becomes possible to test hypothesis about adaptation, speciation, and symbiosis. In this project standard mathematical methods will be combined with modern bioinformatics to get a better understanding on evolutionary processes. The main theme of the proposal is the role of Wolbachia in eukaryotic evolution. Three main strands of Wolbachia research will be followed: (1) Wolbachia and Mitochondria, (2) Gene Flow Modification and (3) Genome evolution in the parasitic wasp *Nasonia*.

Projektbeteiligte

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