

Master Project



Evolution von Clock Genen bei Insekten Evolution of Clock genes in insects



Betreuer / Advisors

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Animals have to adjust their behavior and physiology to daily and seasonal changes. **Clock genes** control the rhythm of animals by controlling the expression of downstream behavioral and physiological genes. Next to a 24h endogenous rhythm, some clock genes are able to respond external "**Zeitgeber**" such as changes in light or temperature. In this project, we compare the sequences and protein structures of clock genes of various insect species. We ask the question, whether **clock proteins** of species which adapted to seasonal or social changes or have to accurately measure time to schedule their mating or migration share **characteristic molecular traits**. In this **interdisciplinary** project, scientists from several fields (bioinformatics, protein structural biology, evolutionary biology) join forces to gain a deeper understanding. We are looking for **Master Biology or Master Bioinformatic students** who are interested to join our team.

Start: March – June 2017

We search for: Master of Biology or Master of Bioinformatics students **Contact:** and rade@uni-mainz.de; evawolf1@uni-mainz.de; foitzik@uni-mainz.de