

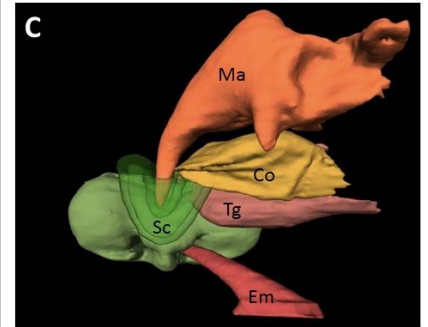
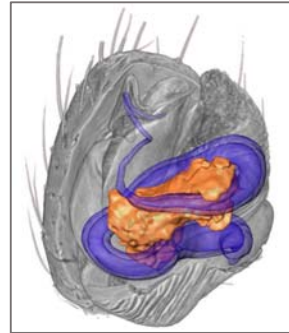


Ben-Gurion University of the Negev
Jacob Blaustein Institutes for Desert Research
The Swiss Institute for Dryland Environmental and Energy Research
Mitrani Department of Desert Ecology

Seminar

Gabriele Uhl

University of Greifswald,
Germany



Tuesday, March 19, 2019, 12:00

Seminar Room, Old Administration Building

Participants are invited to meet the seminar speaker at the MDDE meeting room immediately after the seminar (~ 13:00). Please bring your lunch; snacks will be provided.

Securing Paternity in Spiders: Plugging and Mutilating

Competition between males and their sperm over access to females and their eggs has resulted in manifold ways by which males try to secure paternity. Mechanisms range from physically guarding the female after mating to reducing her receptivity or her attractiveness to subsequent males by transferring manipulative substances or by mechanically sealing the female reproductive tract with a copulatory plug. Plugs can consist of an amorphous substance or of parts of male genitalia. Here, we present evidence for the efficacy of both types of plugs and present a novel mechanism for securing paternity that comes at little cost to males: the removal of coupling structures on female genitalia by males. Behavioural experiments in combination with in-depth morphological investigations provide a comprehensive picture of how plugging and mutilating are achieved. Using a modelling approach, we further explore the conditions under which these strategies can evolve and be maintained.

