



**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

### **David Eilam**

School of Zoology,  
Tel-Aviv University



Tuesday, March 20, 2018, 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.

## **Group Formation and Spatial Behavior in Rats**

How unfamiliar individuals come together and form a group? This question has been dealt mainly in social psychology, whereas in biology the focus was not on the dynamics of group formation but mainly on the pros and cons of living in a group and on collective behavior. In this presentation we will first see the increased complexity involved in social compared with lone spatial behavior. We will then see how unfamiliar rats in groups of up to 8 individuals form a group and become oriented together in time and space. Rats prefer to be in companionship over remaining alone, gradually shifting to share the same location as a resting place. Starting with seemingly independent traveling, the rats then converge to share the same location as a terminal for roundtrips in the area. However, despite huddling together, the rats continue to travel alone or in duos throughout three hours of testing. We suggest that this social structure of resting together but traveling alone or in dyads enables the maintenance of communal relationship while reducing the complexity involved in traveling in groups.