

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

<u>Seminar</u> Eran Tauber



Department of Evolutionary & Environmental Biology, University of Haifa

Tuesday, November 21, 2017, 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.

Latitudinal Clines and Molecular Evolution of Circadian Clock Genes

The circadian clock is an evolutionary conserved genetic network that drives daily rhythms in broad range of organisms. Molecular adaptations in circadian clock genes allow the clock 'ticking' at diverse environments. Furthermore, properties of the circadian and annual timing systems are expected to vary systematically with latitude on the basis of different annual light and temperature. Consequently, genetic variation associated with these adaptations may follow latitudinal clines. The seminar will review our research of three circadian clock genes, period (per), timeless (tim) and cryptochrome (cry) in Drosophila, which has been a major model system for studying the molecular basis of the clock.