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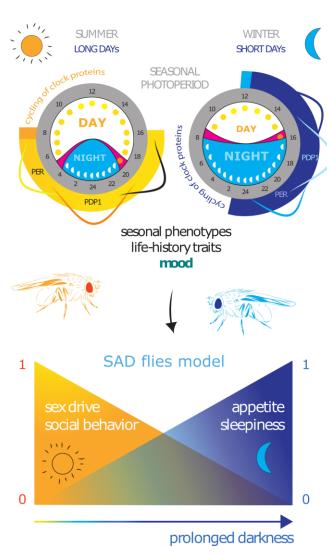
Bachelor and/or Master Thesis Projects available to study the effects of day length on flies "mood".

Würzburg Insect Research

Feeling sad and lazy and blaming it on the weather? Indeed, the environmental conditions we experience modulate our behavior, emotional state, and cognitive abilities. For instance, we might experience a seasonally recurrent state of depression in fall and winter, when we do not get enough sunlight over the course of a day. Seasonal Affective Disorder (SAD) is a mood disorder exacerbated by short day length in winter and it generally remits in summer.

SAD symptoms include sleep disturbances, increased anxiety, hyperphagia, attention deficits, reduced sex drive, and lower sociability. Most interestingly, susceptibility to SAD correlates with clock genes polymorphisms and life at high latitudes, hence exposure to extreme photoperiods.

Our preliminary data suggest that short days make even flies more aggressive, less interested in mating, and hungrier. In this context, we will aim at characterize the effects of changing day length on *Drosophila* behavior and to highlight analogies with SAD symptoms in humans. In particular, we will expose wild type and clock mutant flies to short and long days to test their feeding and social behaviors, sleep habits, as well as their anxiety-like behaviors.



Do you want to help us establishing a SAD fly model?

Contact me!