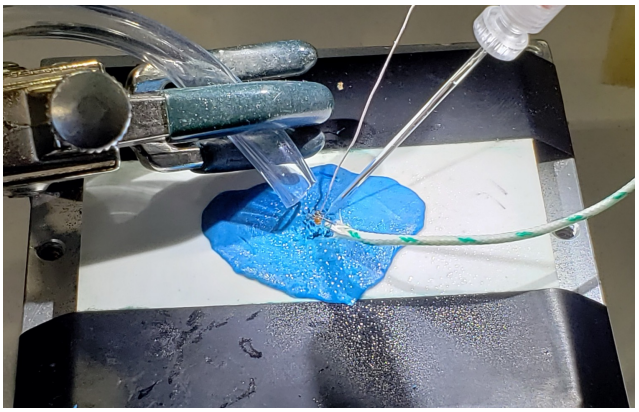
Zoophysiology Seminar at Aarhus University

Do fruit flies get migraines? Using comparative physiology to understand human pathology

Mads Kuhlmann Andersen

Zoophysiology, Aarhus University

Millions of people suffer from migraines, and it is therefore important to develop good model systems to help improve the lives of those afflicted. Migraines have been associated with a local arrest of neural function in the cortex, which is caused by an event known as a spreading depolarization. While it is well known that this compromise to neural function occurs due to a rapid disruption of ion gradients, the triggers and mechanisms of these events are unknown. Spreading depolarization events in insects are remarkably similar to those in humans and occur when they are exposed to sufficient abiotic stress. Here, I will present my recent work focussing on establishing fruit flies as a model system to understand the mechanisms underlying spreading depolarization by using a range of electrophysiological, pharmacological, molecular, and genetic techniques.



Friday, May 17th from 13.00 to 13.45 in the Zoophysiology Seminar Room (1131-127)