Zoophysiology Seminar at Aarhus University

Unique osmoregulatory strategies in insects – how insects conquered Earth?

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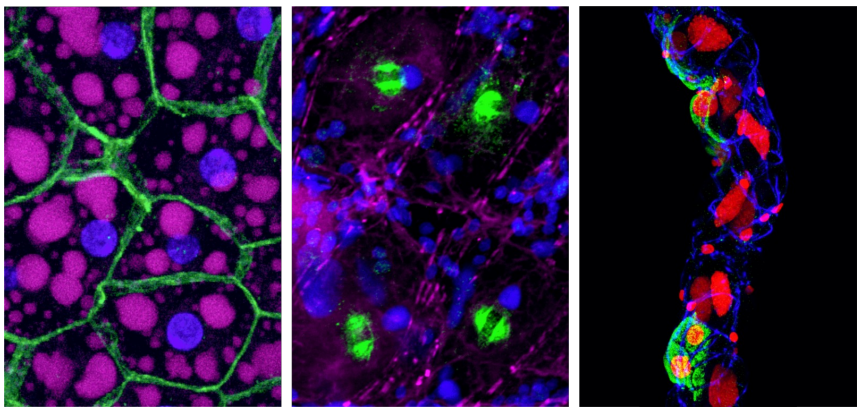
The evolutionary success of insects is intrinsically linked with their ability to osmoregulate, suggesting that they have evolved unique physiological mechanisms to maintain water balance. In our lab, we combine molecular genetics, functional genomics and classical physiology, to understand the mechanisms that mediate the systemic control of osmotic homeostasis in the genetic model *Tribolium castaneum*. In this talk, I will present some of our recent work uncovering how insect renal architecture has evolved, how a modified rectum enables the absorption of water directly from the atmosphere, and how metabolic water production is used to offset the effects of desiccation.



Friday, November 11th, 14.00
Zoophysiology Seminar Room (1131-127)