

- Einladung zum Biologischen Kolloquium -

**Frau Dr. Martina Galikova**

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***In search of a fly glucagon:  
Hunger, thirst and energy metabolism  
in Drosophila***

**4.12.2018 um 17:00**

**im Hörsaal 28 Andreas-Schubert-Bau**



Weitere Details  
auf der Webseite  
von Frau Galikova

The fruit fly *Drosophila melanogaster* is an excellent model system to study metabolism and metabolic diseases, such as obesity and diabetes. In mammals, energy balance is maintained via two main hormones with antagonistic actions, insulin and glucagon. Whereas the insulin pathway is evolutionarily highly conserved, most invertebrates do not have a homolog of glucagon. In *Drosophila*, Adipokinetic hormone acts as a hyperglycemic peptide, and has been therefore considered as a fly analog of glucagon. However, Adipokinetic hormone fulfills only a small proportion of the functions of glucagon. Our recent experiments have shown that this hormone is part of a broader signaling via a neuropeptide called Ion transport peptide (ITP). ITP is a novel hyperglycemic hormone with glucagon-like functions including regulation of energy intake and expenditure, development and reproduction. In addition, ITP integrates energy balance with water homeostasis. Altogether, ITP acts as a master regulator of physiology, and can be considered as a fly analog of glucagon.

***Sprecherin treffen?***

Dienstag vor und nach dem Vortrag // (Bitte email an Professor Reinhardt)