Faculty of Biology
Keynote Lecture

JOHANNES GUTENBERG UNIVERSITÄT MAINZ

JG|U

Invitation to the Keynote Lecture Faculty of Biology

Prof. Dr. Christian Klämbt

Drosophila axon wrapping glia: from development to behavior

Abstract:

Every complex nervous system contains two main cell types: neurons and glial cells. Neurons detect, compute and transmit information. Glial cells provide metabolic support, perform immune surveillance, modulate synaptic transmission, and are involved in controlling the speed of information transmission.
The relatively simple structure of the Drosophila nervous system has allowed for unprecedented analysis of glial cell function, revealing surprising evolutionary similarities to vertebrate glia. In my presentation, I will focus on the glial cells that surround axons in the larval and adult central nervous systems (CNS) of the fly. During the larval stage, a subset of glial cells bear a resemblance to non-myelinating Schwann cells. However, glial cells capable of forming myelin-like structures are present in the adult. I will discuss the role of these glial cells in organizing the localization of voltage-gated ion channels, as well as the surprising similarities in the molecular mechanisms that control the development and function of glial cells in Drosophila and mammals.

Thursday, 9 October 2025, 14:00 pm

Host: Prof. Dr. Marion Silies

The keynote lecture will be presented at the
Biozentrum 1, HS BZ1, 00.187, Hanns-Dieter-Hüsch-Weg 15, Ground Floor

Please note! Would you like to receive invitations to future lectures? Your registration is required!
Please register for the talks-sympalist at: https://lists.uni-mainz.de/sympa/info/talks_fb10