

SPP 1757



## Functional diversity in *Drosophila* glial cells, the role of schlaflos and rumpel

### Speaker:

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### Funding period:

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### Project description:

Within the nervous system several classes of neuropil glia provide a range of functions for normal brain functionality. In the current proposal we aim to decipher the functional heterogeneity of the different *Drosophila* neuropil associated glial cells. We identified genes encoding membrane associated proteins that are required in distinct neuropil associated glial cells for normal locomotion of *Drosophila* flies. schlaflos (CG6927) encodes a predicted GABAA/glycine receptor and is needed for the activity behavior of the flies. The gene is expressed in only few of the neuropil-associated glial cells which will be further characterized. rumpel (CG9657) encodes a sodium-coupled monocarboxylat transporter homologous to the mammalian SLC5A family and is specifically expressed in a different subset of neuropil glial cells. The glial rumpel function is required to dampen neuronal activity upon noxious temperature stimuli. We will generate mutants of genes and will dissect their functions in glial physiology in the framework of the SPP1757.

### Quelle:

<https://gepris.dfg.de/gepris/projekt/254468921?language=en>