

**TRR 167**



## **Cellular and molecular mechanisms of microglia-mediated homeostatic synaptic plasticity (B14\*)**

**Funding Period:**  
since 2021

**Project Leader**

**Professor Dr. Andreas Vlachos**

Albert-Ludwigs-Universität Freiburg

Medizinische Fakultät

Institut für Anatomie und Zellbiologie

Albertstraße 17

79104 Freiburg

Telephone: +49 761 2035056

Fax: +49 761 2035054

E-Mail: [andreas.vlachos@anat.uni-freiburg.de](mailto:andreas.vlachos@anat.uni-freiburg.de)

**Project Description:**

Microglia activation in primary lesion sites has been reported in various brain diseases. Less understood, however, remains the relevance of activated microglia in denervated brain regions, which are not directly affected by the disease but lose part of their input in response to remote cell death. This project focuses on cellular and molecular mechanisms through which microglia mediate the ability of neurons to compensate for alterations in neural activity, as seen after denervation. In turn, the impact of neural activity-modulation on cellular and molecular properties of microglia will be determined in healthy and denervated brain tissue.

Reference: <https://gepris.dfg.de/gepris/projekt/452450653>