TRR 167

Applications of advanced single-cell genomic technologies to characterize the role of microglia and their cellular interactions in neurodegenerative diseases (A03)

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Project description:

Microglia play important roles in life-long brain maintenance at steady state and in diseases, such as Alzheimer's disease (AD); yet the regulatory dynamics and the characterization of the immune 'cell types' have not been fully elucidated. Recently, we used massively parallel single cell RNA sequencing technology (MARS-seq) for ab initio characterization of immune cells in various tissues. Here, we propose to systematically study the transcriptional and epigenomic regulation of microglia throughout brain development and in AD models to uncover the immune cells and regulatory mechanisms involved in neurodegenerative diseases using single cell genomic technologies.

Quelle:
https://gepris.dfg.de/gepris/projekt/324643304