Principal Investigator Grant

Project
«Cellular reprogramming to rescue memory in Alzheimer’s disease»

Granted amount  CHF 251’400
Starting date  1.9.2023
Duration  36 months

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Lay summary of the project
Counteracting neurodegeneration and dementia is one of the most important and urgent goals in regenerative medicine. This is particularly true for Alzheimer’s disease (AD), for which no satisfactory treatment exists to date. Recently, cells responsible for memory formation (i.e., engrams) have been shown to be specifically impaired in mouse models of AD, but no sustained means to rescue their function, and thereby mnemonic capacities are available to date.

In this project, we suggest epigenetic rejuvenation through molecular reprogramming in engram cells as a strategy to counteract the deleterious effects of AD on memory function. If successful, this strategy would provide a game-change in the fight against cognitive decline associated with AD.