

The Mouse in the Supermarket

Initiative: Kurswechsel – Forschungsneuland zwischen den Lebenswissenschaften und Natur- oder
Technikwissenschaften

Ausschreibung: Qualifizierungskonzepte

Bewilligung: 01.02.2021

Laufzeit: 4 Jahre

A RFID tracking is used to monitor cohorts of mice to investigate the emergence of individuality when both genetics and environment are controlled. To model how lifestyle affects brain health across the lifespan the environmental enrichment paradigm has to be made individual, multivariate and longitudinal which calls for an entire new set of tools. The cooperation partner at the German Research Center for Artificial Intelligence uses RFID-based technology to support new concepts in the supermarket of the future integrating tracking data from goods and customers, with a particular view on how to use artificial intelligence to optimally obtain, store, process and analyze complex behavioral (and other) data. The cooperation partners at the Max Planck Institute for Human Development use test theories, develop advanced computational and mathematical methods, and explore research designs in data-rich human cohort studies. Studying the emergence of personality-like traits in mice, research will focus on the data science and modeling aspect of the underlying paradigm constantly relating it back to its neurobiological roots.

Projektbeteiligte

Prof. Dr. Gerd Kempermann

Deutsches Zentrum für Neurodegenerative
Erkrankungen
Standort Dresden
Arbeitsgruppe Adulte Neurogenese
Dresden