Laboratory of neurodegenerative disorders is focused on investigation of cerebellar degenerations. Functional impacts of cerebellar damage on motor function as well as cognitive and emotional processes are studied in several mouse models of hereditary cerebellar degeneration. The next research area is investigation of experimental neurotransplantation and regenerative therapy of neurodegenerative diseases. This research includes «in vitro» and «in vivo» studies of the effect of trophic and morphogenetic factors on proliferation and development of neural stem cells.

MEMBERS

- Jan Cendelin, M.D., Ph.D. – Research Group Leader
- Jan Tůma, Ph.D., MSc.
- Pavel Ostašov, Ph.D., MSc.
- Yaroslav Kolinko, Ph.D., MSc.
- Assoc. Prof. František Vožeh, M.D., Ph.D.

WE OFFER

- Tests of effects of chemical substances including pharmaceuticals on neural function.
- Design of the experimental protocol.
- Motor and behavioural tests in laboratory mice.
- Analysis and statistical processing of the data.
- Application of stem cells and chemical substances directly into mouse brain.
SELECTED PUBLICATIONS


COST ACTION MEMBERSHIP

- BM0901 – European systems genetics network for the study of complex genetic human diseases using mouse genetic reference populations (SYSGENET).
- BM1001 – Brain Extracellular Matrix in Health and Disease (ECMNet).