Compact Course II: 24.09.2021 9 a.m. - 11 a.m.

Ageing neurons - insides from cell culture models

Course Description:

You are interested in cell cultures and ageing? You want to know how to avoid stumbling blocks while dealing with cell cultures? In this workshop, we will talk about different cell cultures and their application in neuroscience and give you helpful tips to solve your problems.

Instructors and key topics:

- 1. Dr. Peter Landgraf (Institute of Pharmacology and Toxicology, Medical Faculty, OVGU)
 - general explanation about cell culture models in the lab
 - applications: FUNCAT, BONCAT, 3D Cultures, SILAC
 - FISH, Ca²⁺-Imaging
 - advantages/disadvantages of different cell lines/cell strains
- 2. Dr. Anke Müller (Institute of Pharmacology and Toxicology, Medical Faculty, OVGU)
 - focus on ageing cell cultures
 - tests to identify aged cells in cell cultures
 - advantages/disadvantages of aged cell cultures
 - Differences young vs old cell cultures
- 3. Dr. Carolina Montenegro(Institute of Pharmacology and Toxicology, Medical Faculty, OVGU and Leibniz Institute for Neurobiology Magdeburg)
 - hippocampal, cortical and dopaminergic primary cells in mice and rats
 - How to solve problems that come along with practice?
 - cryopreservation, including advantages/disadvantages
 - culture conditions
- 4. Open Discussion and FAQs

