Neuropharmacology

Course contents:

- Scientific basis of neurology: biological, social and psychological aspects
- Neuropathology, diagnostics and classification, imaging and laboratory examination methods
- Demonstration techniques and their application in neurological research
- Innovative methods of molecular biology and genetics, application of functional genomics in neuropharmacology
- Clinical neurology with a focus on the possibilities of neuropharmacology
- Development and evaluation of new drugs in neurology: Neurotransmitters, signal transduction, gene expression regulation, ethical and legal aspects of neurological research, issues of clinical trials

Learning outcomes:

Integration of the scientific basis of neurology (biological, social and psychological aspects) and pharmacology. Mastering the issue of treatment of specific neurological diseases and syndromes. Implementation of the latest knowledge of neurology, neuropsychiatry, genetics in the field of neuropharmacology with their subsequent application in scientific and professional practice. The ability to formulate hypotheses, test them scientifically and assess the significance of their results with their subsequent publication. Mastering the full breadth of the field of neurology and frontier disciplines (neurology and pharmacology), relevant clinical experience, the ability to plan research in the context of the field.

Recommended literature:

1. Silberstein SD, Marmura MJ, Stah SM. Essential Neuropharmacology. The Prescriber's Guide. Cambridge University Press, 2015, 408 s., ISBN: 1107485541 2. Hyman SE, Malenka RC. Molecular Neuropharmacology: A Foundation for Clinical Neuroscience, Fourth Edition, McGraw-Hill 2020, 608 s., ISBN: 1260456900

Course language:

slovak language english language

Conditions for course completion:

oral exam