

UNIVERSITY OF BELGRADE
FACULTY OF MEDICINE
PhD STUDIES

NAME OF THE MODULE: Neurology

CONTENT OF THE PROGRAM: Topics that will be covered in the module are the following: Introduction to neurobiology; Development and shaping of the nervous system; Functional anatomy of the CNS; Physiological basis of signal transmission in the CNS; Biochemical basis of signal transmission in the CNS; Molecular basis of memory; Molecular basis of the process of neurodegeneration; Molecular basis of dementia; Immune-mediated damage to the nervous system; Trinucleotide repeats and their role in the pathogenesis of diseases of the nervous system; Molecular basis of psychiatric diseases; Molecular basis of peripheral nervous system diseases; Detailed neuroanatomy, skull and brain development and congenital anomalies, perinatal brain damage, normal myelination, demyelination and dysmyelination, phacomatosis, brain and skull trauma, white matter diseases, vascular diseases and malformations of the brain and spinal cord, interventional neuroradiology, brain infections, infections, spinal cord and spinal cord, neurodegenerative and neurometabolic diseases of the brain, tumors of the brain, spinal cord and spinal cord, congenital anomalies and degenerative diseases of the spine. The content of elective courses covers a wide range of different areas of neurology.

ADMISSION REQUIREMENTS: General requirements for admission: 1. average grade from all previous levels of study at least 8.00, 2. knowledge of the English language to the level of ability to communicate and follow scientific literature, 3. appropriate computer skills, 4. sense for scientific and research work in the appropriate field as evidenced by publications in which the candidate is an author (one paper in a journal cited in the Medline database in which the candidate is an author).

MEMBERS OF THE ADVISORY BOARD: 1. Prof. Dr. Jelena Drulović, head, 2. Prof. Dr. Dragoslav Sokić, 3. Prof. Dr. Marina Svetel, 4. Prof. Jasna Jančić, 5. Prof. Dr. Tatjana Pekmezović. Secretary of Advisory Board: Assist. Prof. Vladana Marković.

OBLIGATORY COURSES: Methodology of the scientific research, Research ethics, Informatics, Statistics for researchers in the field of biomedical sciences (basic course), Statistics for researchers in the field of biomedical sciences (advanced course), Neurobiology, Neuroimaging.

ELECTIVE COURSES: Vascular diseases of the nervous system, Degenerative diseases of the nervous system, Clinical neurophysiology (EEG and EP) with epileptology, Neuroimmunology and demyelinating diseases of the nervous system, Dementia, Neuromuscular diseases with EMNG, Child neurology, Pain in neurology.