

**Profile of a graduate of the 3rd degree of the pharmacology study program, Pharmacy,  
the Jessenius Faculty of Medicine in Martin,  
Comenius University Bratislava**

The graduate applies scientific methods of basic and applied research in the relevant field of general medicine, anatomy, histology and embryology, normal and pathological physiology, internal medicine, epidemiology, hygiene, public health, surgery, radiology and radiology, gynecology and obstetrics, pediatrics neurology, dermatovenerology, ophthalmology, oncology, otorhinolaryngology, sports medicine, toxicology, nuclear medicine, anesthesiology and intensive care medicine, pathological anatomy and forensic medicine, orthopedics, urology, physiatry, balneology and medical rehabilitation biology, biomediology and medical rehabilitation, medical neurosciences and microbiology. He has extensive expertise in many areas of the field of study, which enables him to carry out research and development in areas of his professional interest to contribute to the expansion and creation of new knowledge in the fields of diagnostics, therapy and disease prevention.

The graduate formulates new hypotheses and strategies for further research and development in the field of general medicine. He applies his own findings of theoretical analysis and a comprehensive scientific approach in solving scientific problems in various areas of medical knowledge. Implements advanced bioinformatics processes. It analyses its findings and compares them with the achieved results of other experts and, based on them, designs, verifies and implements new research, working, diagnostic, treatment, and preventive procedures usable in clinical diagnostic medical practice.

The graduate is characterized by independent, critical, and analytical thinking, which he applies in changing conditions. It uses the legal aspects of experimental and clinical research, including the introduction of new professional and scientific knowledge applicable in diagnostics and intervention to solve problems of clinical practice. The work considers the ethical and social aspects of scientific work. The graduate independently presents the results of research and development in publication and lecture form in front of the professional community in the Slovak Republic and abroad. It determines the focus of the research and can coordinate the team in the relevant scientific field.

The graduate has theoretical knowledge based on the current state of scientific knowledge in biochemistry, physiology, the pathophysiology of diseases, clinical pharmacology to the extent necessary for implementing a PhD. studies in the field of pharmacology. The graduate has a deep theoretical knowledge of drug effects on the molecular, cellular, organ level and the whole organism. Based on the interaction between the active substance and the living organism, the graduate defines the mechanism of action of the drugs. The graduate studied the pharmacokinetic process concerned with drug absorption, distribution, and elimination. He masters prophylactic, diagnostic and therapeutic use of drugs to the extent necessary for the realization of PhD. studies. The graduate is capable of independent scientific work and brings his solutions to problems in the field of pharmacology. The masters research methods in the field of pharmacology, especially with a focus on experimental research methods.