



### **Fund “Nauka” Project № 16008 Resume**

“Analysis of subpopulations of microglia during the development of the human pallium”

**Project leader:** Prof. Anton Tonchev, MD, PhD, DSc

**Project Aim:** Investigation of microglial cells at different stages of human fetal telencephalon development, including their regional localization, density, and phenotypic expression. Different microglial subpopulations will be determined by immunohistochemistry. The statistical relationship between each microglial subpopulation and neural progenitor cells will be evaluated in the fetal germinative zones. A key aim is the within- and between region comparison of findings, as well as, comparison between different stages of development.

**Planned equipment acquisition:** An additional software module, which will improve subsequent processing and analysis of bioimages acquired using the current multichannel fluorescent microscopy system.

**Expected results:** The project will support the PhD thesis of Dr. Marin DImov Zhelezov from the Dept. of anatomy and cell biology, Medical University of Varna. Dr. Zhelezov’s work aims to determine microglial subtypes and their differential distribution in human fetal telencephalon.

We expect at least one publication in an international journal with impact factor.