

Themes of the research work:

1. Neuroanatomical study of the cardiac endocrine myocytes in the mouse.
2. Neuroanatomy of the rabbit intrinsic cardiac ganglia.

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Students can be accepted: 2

Annotation

Rabbit and mouse are popular laboratory animals, which are used in the experimental cardiology. The aim of this research work is to determine the structural organization and morphometry of the intrinsic cardiac ganglia the total, non-sectioned rabbit and mouse hearts, histochemically stained by acetylcholinesterase (AChE) reaction. The neural structures visualized histochemically for AChE will be examined stereoscopically using a stereomicroscope Stemi 200 CS (Zeiss, Gottingen, Germany) applying a transient light from optic fiber illuminators (Zeiss, Gottingen, Germany). The stereoscopically observed ganglia will be taken for morphometry with digital camera AxioCam HRc (Zeiss, Gottingen, Germany) using AxioVision 4.7.1 software (Zeiss, Jena, Germany). The measurements of ganglia will be also measured using special measuring module of AxioVision 4.7.1 software. This research will be presented in the local students and international conferences. The detailed cardiac neuroanatomy will facilitate further functional experiments using the mouse and rabbit models as a cardiac model.