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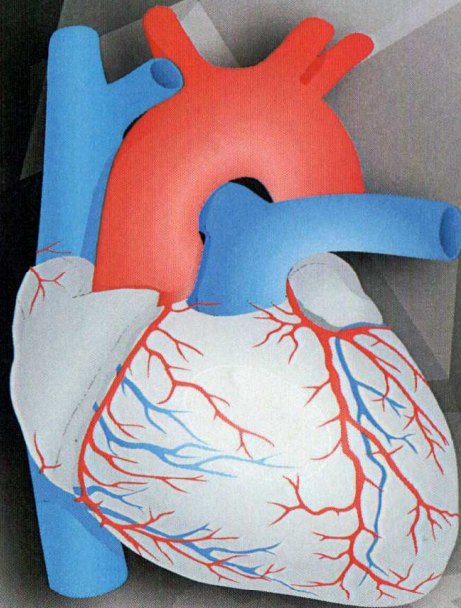


7th ISCAA
Bratislava 2015



7th International Symposium
of Clinical and Applied Anatomy (ISCAA)

Bratislava, Slovakia September 17–20, 2015



BOOK OF ABSTRACTS
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Comenius University in Bratislava
Faculty of Medicine
Institute of Histology & Embryology

ISCAA 2015

The 7th International Symposium of Clinical and Applied Anatomy

BOOK OF ABSTRACTS

Under the Auspices of

prof. RNDr. Karol Mičieta, PhD.
Rector of Comenius University in Bratislava

prof. MUDr. Juraj Šteňo, DrSc.
Dean of Faculty of Medicine, Comenius University in Bratislava

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POSTER RESENTATION

**THE INDEX OF THE DISPERSION OF STRUCTURES AS CRITERIA
OF THE DEGREE OF THE ORDER AND OF THE SPATIAL
ORGANIZATION OF ANIMAL TISSUES**

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In the process of the histogenesis to assess the degree of the order and the spatial organization of the tissue structures are commonly used qualitative criteria of the appropriate of stages, of the absolute size and (or) of developing structures form to the reference sample or model. However, these criteria suffer a high degree of subjectivity, evaluate only local processes and make it impossible to judge the degree of order and the spatial organization of the tissue as a whole of sample. A quantitative criterion for this type of the assessment in the modern histology is virtually absent. The purpose of research is developing the universal quantitative criteria for assessing the degree of order and the spatial organization of normal and pathological tissues. The material of the study is based on animal epithelial tissue in normal development and cancer. As a quantitative criterion for the assessing the degree of the order and the spatial organization of tissue structures served as indicators of the diversity of their number in the n-number of fields of the same slide to determine the absolute and relative value of extremums. Thus calculated index is a quantitative measures of the degree of the diversity (of the distribution in two-dimensional space of a tissue sample) any tissue structure. As software tool was used specialized computer program. The results of applying the proposed index, which called the index of the dispersion of tissue structures showed its high efficiency for solving a number of problems in the normal and pathological morphology.

Keywords; Animal tissues, Morphometry, Histogenesis

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