# МІНІСТЕРСТВО ОСВІТИ ТА НАУКИ УКРАЇНИ СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ МЕДИЧНИЙ ІНСТИТУТ



# АКТУАЛЬНІ ПИТАННЯ ТЕОРЕТИЧНОЇ ТА КЛІНІЧНОЇ МЕДИЦИНИ

**Topical Issues of Theoretical and Clinical Medicine** 

## ЗБІРНИК ТЕЗ ДОПОВІДЕЙ

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### STRUCTURE OF PERIPHERAL NERVES

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**Introduction.** The problem of a structure of peripheral nerves is one of the scientific directions in anatomy. The attention of scientists was drawn to this problem from 1912-1913 when doctrines about constancy of topography of bunches of nervous fibers in a nerve trunk moved forward. Further researches on a problem of a structure of peripheral nerves were directed to detection of regularities of the course of nervous conductors.

Work purpose. To investigate a structure of peripheral nerves.

Materials and methods of a research. There were conducted researches of complexes of nerves of the top extremity and intercostal nerves, and also backs of chest, lumbar and sacral departments of a spinal cord (524 nerves and the 780th backs). Medicines are made behind techniques of Veygertapalya and Renson with calculation of quantity of bunches of nervous fibers, measurement by means of an micrometer of their sizes.

**Results**. Studying of quantity and the sizes of bunches which contain in nervous trunks showed that even the nerves of the same name at the identical levels have different quantity of bunches of nervous fibers. Yes, in a median nerve the quantity of bunches of nervous fibers fluctuated at the level of an average third of a shoulder from 5 to 22, and at the level of an average third of a forearm - from 9 to 28. Similar differences in quantity and the sizes of bunches are noted rather intercostal nerves: from 1 - 3 to 15 - 18 bunches.

**Conclusions**. These data explain changeability of a clinical picture at damages and wounds of nerves at the identical levels. Therefore, data allow to conclude that the ratio of different axons peculiar to them is characteristic of certain nerves.

### REGIONAL MINERAL DENSITY OF THE BONE TISSUE

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**The objective** of this research was to define influence of a 6-month power training of all body (Century) from the general and regional mineral density of a bone tissue (MDBT) and the mineral maintenance of a bone (MMB) at groups of persons with different gender and century characteristics.

For carrying out a research were invited: young men (10) and girls (7) at the age of 20-29 years  $(25 \pm 1 \text{ years})$  elderly men (10) and women (10) at the age of 65-74 years  $(69 \pm 1 \text{ years})$  which within 6 months were engaged in progressive V. of all body. Forces top and lower body estimated behind a ratio to the number of the maximum repetitions, the general fat in an organism, the muscle bulk, MPKT of a neck of a hip, Ward's triangle, the big swivel and completely all body. MPKT of regions of the ridge L2 - L4 decided on the help of a x-ray absorbtsiometriya (DERA) to and then the 6th months a research.

As a result, a percentage ratio of fat in an organism decreased only at young men (r <0,05). Muscle bulk increased after the training at young men and women and elderly men (r &lt;0,05), but significantly did not change at elderly women. The number of the maximum repetitions in the lower and top parts of a body increased in all groups. In general, significant increase in MPKT in a hip neck, Ward's triangle and the big swivel, also as well as MOSCOW TIME all body, in particular MOSCOW TIME legs was observed/ MPKT of all body and L2 - L4 of the ridge did not change.

**Conclusion:** the 6-month program B. increases muscle bulk and improves MPKT of femoral area at young and healthy elderly men and women, significant growth is observed at persons of young age.