

## MAIN ACHIEVEMENTS

the method of determination of glutathione and its oxidation stage in erythrocytes was developed (O.H. Yavorsky, I.O. Pavlyk);

the method of creatine kinase activity evaluation was devised (O.H. Yavorsky);

the new syndrome of adrenomedullary insufficiency was described and its role in the tolerance to the physical activity was established (O.H. Yavorsky);

it was shown that the level of non protein thiol groups in blood can be used for estimation of the metabolic fatigue of an organism (O.H. Yavorsky);

it was demonstrated that an acid-base balance of the skin can mirror the metabolic processes in an organism (O.H. Yavorsky, L.V. Jushchik, L.P. Bets, O.V. Bevz, I.O. Pavlyk, Z.Ya. Havryliv);

two ways of a Student's T-test application for the statistical data evaluation in the biological experiment were described (N.A. Rugevych, P.L. Sverdan, O.H. Yavorsky);

it was established that even moderate intensity physical load can be hazardous in persons with low activity of antioxidant system (O.H. Yavorsky);

the method of the evaluation of the functional reserve of the liver was developed and possibilities of its correction were described (A.B. Hayduk);

the method of evaluation of the functional condition of the adrenal glands and cardiovascular system in healthy adults and patients with family history of ischemic heart disease during physical load was developed (M.R. Gzhegotsky, O.H. Yavorsky, O.V. Bevz, S.M. Kovalchuk);

The patent "The role of the appearance of the C reactive protein after physical load as an early marker of progression of the atherosclerosis was demonstrated" was obtained; (patent's authors – O.H. Yavorsky, Z.I. Krayinska, I.S. Dronyk);

the method of blood collection to evaluate the liver function was substantiated in the rats experiments (A.B. Hayduk);

the patent "Use of the test with the physical load for the evaluation of the antioxidant activity in human" was obtained (2008); (patent's authors – O.H. Yavorsky, I.S. Dronyk, Z.I. Krayinska);

the patent "Measurement of the total creatine kinase in blood plasma can be used to assess the activity of cardiac fraction of creatine kinase in blood plasma" was obtained (2009); (patent's authors – O.H. Yavorsky, O.V. Bulak, I.S. Dronyk).