### МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ ВИЩИЙ ДЕРЖАВНИЙ НАВЧАЛЬНИЙ ЗАКЛАД УКРАЇНИ «БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»



## МАТЕРІАЛИ

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#### Popovych V.B.

# SEASONAL DYNAMICS OF BIOLOGICAL RHYTHMS OF MICROBIOTA OF THE LARGE INTESTINE CAVITY CONTENT OF INTACT WHITE RATS

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Virtually all pathological processes in the human and animal body are accompanied by disturbances and disorganization of biological rhythms of normal physiological functions, which is associated with desynchronosis. Knowledge of the state of the seasonal organization of the biological system in norm and at desynchronosis is a key point in the search for ways and methods of purposeful correction of disregulatory disorders in these systems.

Microgranisms, which form a normal microbiota, are among themselves in various interrelationships (neutrality, competition, mutaulism, synergism, commensalism, parasitism, etc.). Lack or excess of one or another substrate or metabolite, as well as a change in the qualitative or quantitative composition of microorganisms in the corresponding biotope serves as a signal for adaptive or irreversible changes in the appropriate link of the microecological system.

The purpose of our study is to establish the seasonal dynamics of biological rhythms of microbiota content of the colon cavity of intact white rats. For the study, 55 intact white rats weighing 220-250 g were taken in different seasons of the year. Studies on animals were conducted on a monthly basis. The digital research results were processed in accordance with the known statistical methods.

Summing up the results of our studies of the qualitative composition of the intestinal cavity microbiota in intact animals, it has become known that autochthonous bonds of anaerobic bifidobacteria, lactobacilli, bacteroids, aerobic transient gram-positive streptobacilli and aerobic optional intestinal sticks are stably detected. All anaerobic, aerobic and optional anaerobic bacteria are constantly revealed in 80.0-100.0% in each season of the year and they are constant organisms. Additional and residual microflora is subjected to seasonal dynamics.

Species composition, index of constancy and frequency of occurrence of autochthonous obligate bifidobacteria of lactobacillus are not the subject to changes in seasonal biological rhythms.

Quantitative indices of autochthonous obligate bifidobacteria, lactobacillus, autochthonous facultative anaerobic fusobacteria, bacteroids, predominates, aerobic and optionally anaerobic enterobacteria, streptobacillus and yeast-like fungi of the genus *Candida*, as well as the quantitative dominance factor and the coefficient of significance are subjected to significant changes in biological rhythms.

Detection of seasonal biological rhythms of microbiota is the basis for studying the lunar biological rhythms of the microflora of the colon of intact white rats of each season.

# Sydorchuk I. I. IMMUNE STATUS OF PATIENTS WITH SUPERFICIAL STAPHYLODERMIA

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Significant progress in the study of immunobiology and immunopathology of the skin in recent decades has led to changes in traditional views on both the nature of dermatoses and their etiology. The doctrine of lymphoid clusters associated with the skin, establishment the role of keratocytes, and Langerhans cells, dendritic cells in the regulation of the immune response and apoptosis, the discovery of cytokine mechanisms of the relationship between lymphocytes and antigen presenting cells, revealed pathogenesis of majority of skin disease. The study of the impact of separate taxons (staphylococci, streptococci, etc.) on the immune status of patients requires further fundamental and clinical laboratory studies.