FUTURE PROGRESS IN THE FIELD OF EXPERIMENTAL BIOLOGY AND MEDICINE

The decree of the Central Committee of the CPSU and Council of Ministers of the USSR entitled "Measures to ensure the further development of biological science and to strengthen its practical application" evaluates the present state of all the various sections of biology, indicating where progress has been made and where it is needed, and defines the principal problems to be solved and measures to be adopted before other rapid advances can be made in this science. The decree outlines the valuable contributions made by biologists of the Michurin persuasion and the important role of Pavlov's theories in physiology and medicine. The ever increasing importance of biochemistry, biophysics, genetics, microbiology, virology, and immunology is emphasized. The principal tasks for the future include the study of the physics and chemistry of living matter and the development of methods of controlling vital processes. Theoretical and practical developments in the field of extending the human life span and prolonging the period of working ability are dependent on the concentrated efforts of medical science to master diseases such as cancer, virus infections, cardiovascular disorders, and so on, and on the introduction of effective drugs and antibiotics.

The decree stresses the importance of a close association between theoretical biological research and medical practice, and between biology and physics, chemistry, and mathematics, and the need to utilize modern techniques for investigating living objects. Measures to expand the designing and manufacture of scientific apparatus and to improve the training of research workers are envisaged.

Soviet scientists, biologists and doctors were well satisfied with the decree. Besides presenting them with problems of the highest importance for solution, it also provides the necessary ideological background for the concrete measures to be adopted. The study of the organism in relation to the conditions of its existence, the discovery of the physical and chemical basis of the structure and function of physiological systems and of metabolism, to recognize this basis so that it can be subjected to various influences and regulated in normal and pathological conditions, and to integrate research throughout the vast field stretching from work at the molecular and cellular level to investigation of the principles governing vital processes in man in health and disease – these are the main lines of the future development of experimental biology and medicine.

The journal "Byulleten' Eksperimental'noi Biologii i Meditsiny" exists for the purpose of reporting in its pages the results of research in those important branches of biology which were highly acclaimed in the decree of the Central Committee of the CPSU and Council of Ministers of the USSR. In it have been published many valuable papers, making a contribution to the solution of urgent problems. However, it must be admitted that some of the articles published in the journal have been lacking in originality and depth of scientific thought, have described researches carried out by obsolete methods, or have been unrelated to future practical needs.

The role of the journal, as seen by its Editorial College, in the realization of this decree is to ensure the speedy publication of important scientific papers, to raise the overall scientific level of its articles and to demand a higher standard from its contributors, enforced by a more thorough scrutiny of the material submitted.

The Editorial College is confident that as the decree of the party and government becomes operative the papers published in the journal will increasingly reflect the high standards of Soviet biological science in its present stage of development by being topical in their subject matter, up to date in their methods, original in their theoretical implication, and important in relation to medical practice.