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## FORMATION AND DEVELOPMENT OF ANIMAL AND PLANT PHYSIOLOGY

Modern biology is a combination of many disciplines that study the structure and function of organisms, species and ecosystems, their spread, origin and evolution, the various relationships between them and the environment. In its own turn, the history of biology to which the proposed article is devoted, engages with forms, methods and content of scientific activity which is directed at acquiring knowledge about biological systems and the processes that take place in them.

The help is intended to give the researcher holistic view about the development of biology as branch of knowledge from the first stages of human development to the latest discoveries of the third millennium.

The author focuses on the history of biological ideas and concepts, which were created and developed by specially trained people in specific socio-cultural conditions within specific disciplines and institutes using specific methods, instruments and tools.

As an interdisciplinary science, the history of biology studies cognitive, including philosophical and methodological, as well as institutional, instrumental, socio-cultural, ideological, political and psychological factors in the development of biological knowledge. This approach gives a better understanding of the development of a complex process of knowing the living and allows us to consider modern theories as a certain stage of contradictory intellectual history. The solution of one problem in it puts dozens of others, prompting us to new comprehension in search of the eternal question about the essence of life.

The history of biology is a reconstruction of intellectual quests and misconceptions, clashes, discussions and struggles of different ideas and thoughts, the interaction of entire scientific schools and communities. Eventually, these searches led to the development of modern norms and values of biological knowledge. In the course of this reconstruction, it becomes clear how easy it is to make a mistake in the process of learning about life and how difficult it is to take every step forward. Studying the history of biology contributes to the development of intellectual honesty, independence from authoritarian coercion, the desire to test even the common postulates and dogmas. At the same time, history demonstrates the continuity of biological knowledge, the conditionality of each discovery of the work of many previous generations with their achievements and disappointments, findings and failures, discoveries and mistakes.

The history of biology enables biologists to look at their specialty as an interesting section of human culture, to find out about people who have dedicated themselves to finding the most difficult questions of wildlife and breaking the secrets of it, thereby making progress in the most essential areas of human practice: in medicine, in agriculture, environmental management, finally, in the creation of biotechnology – the foundations of modern civilization and industry. The historical process of the emergence, development, and change of theories controlled by experiment, critique, and social practice has never flowed evenly, but by the simple accumulation of proven knowledge.

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