

*Materials of Conferences***GENERAL PHYSIOLOGY
OF ONTOGENESIS**

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Today there is no generally accepted conception about physiology (mechanic) of ontogenesis. I propose the following scheme of it. Any organism consists of proteins and their complexes with another substances, including nucleic acids. Such complexes are formed as (ultra)structures, which unite into cells, tissues, organs. Proteins are constituents of individual biosystems because exactly proteins organize all processes of life on the molecular level. Primary structure of all proteins of the individual is programmed in its genome and thus all ontogenesis is determined. Another proteins and their complexes cannot be in normal organism. But own proteins and their complexes can allocate in organism and its parts in different ways. In ontogenesis these proofs change, including by uneven production of different proteins and uneven proliferation of different cells, and allometric

growth of different tissues and organs too. In result of uneven accumulation of definite proteins and their complexes, including cells, in the definite part of the body and another proteins and their complexes in the another parts morphologic differentiation, functional specialization and autonomization of the parts (organs) pass. Constant (re)integration of them leads organism on new level of vital activity. Differently say, the main mechanic of development of organism in its ontogenesis (particularly pronounced in embryogenesis) is intermittent, polyfocal growth of organism on its extent: «multiplied» centres of intensive growth (usually – proliferative epithelial anlagen) alternate with intermediate parts (it is possible with mesenchyma), which grow slowly and narrow between isolated, increasing anlagen of organs, including the epitheliomesenchymal anlagen.

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