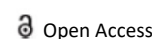




COMMENTARY



An Overview of Biochemistry and Its Types

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Description

Biochemistry is a discipline of biology that studies the chemical processes that occurs in living organisms. Biochemistry is concerned with discovering the chemical basis that allows biological substances to give rise to the actions that take place within and between living cells. Biochemistry is closely linked to molecular biology and which is the study of biological phenomena' molecular mechanisms. Biochemists can comprehend and address biological issues by applying chemical knowledge and procedures. All biological creatures and processes are governed by biochemistry. Biochemical processes manage the flow of information through biochemical signalling and the flow of chemical energy through metabolism, resulting in life's tremendous complexity. The biochemical changes relate to physiological changes in the body has grown thanks to biochemistry. It assists us in comprehending the chemical components of biological processes including digestion, hormone function, and muscular contraction-relaxation. Biochemical methods and study are being used to develop and expand almost every aspect of the biological sciences.

Biochemistry is the widest of the fundamental sciences, with several subspecialties like as Neurochemistry, bioorganic chemistry, clinical biochemistry, physical biochemistry, molecular genetics, biochemical pharmacology, and immunochemistry.

Neurochemistry is the study of the identities, structures, and functions of substances are produced by modulating the nervous system. Neurochemists study the biochemistry and molecular biology of organic chemicals found in the nervous system, as well as their roles in neurological processes such as cortical plasticity, neurogenesis, and differentiation.

Bioorganic chemistry is a branch of chemistry that blends organic and biological chemistry. It is the branch of biol-

ogy concerned with the use of chemical technologies to understand biological processes. These processes include protein and enzyme function. The mechanisms of action of enzymes, medications, the molecular mechanism of immunity, the processes of vision, respiration, and memory, as well as the real problem of molecular conductivity, are all areas where bioorganic chemistry plays a significant role.

Physical biochemistry is a discipline of biochemistry that studies the physical chemistry of biomolecules using theory, methods, and methodology. It also covers mathematical techniques to the investigation of biochemical reactions and biological system modelling.

Clinical biochemistry is a branch of laboratory medicine concerned with the detection of chemicals (both natural and synthetic) in blood, urine, and other bodily fluids. These test findings are helpful in diagnosing health issues, assessing prognosis, and directing a patient's therapy.

Molecular genetics is a branch of biology that studies how changes in DNA molecule architecture or expression show as variety across species. Molecular geneticists frequently use genetic screens to discover the structure and function of genes in an organism's genome, employing an "investigative method. Molecular genetics is a potent approach for correlating mutations to genetic problems, which might help researchers find therapies and cures for a variety of genetic diseases.

Biochemical pharmacology is concerned with the effects of drugs on biochemical pathways underlying the pharmacokinetic and pharmacodynamics processes and the subsequent therapeutic and the toxicological processes.

Immunochemistry is the study of the immune system's chemistry. The characteristics, roles, relationships, and creation of the chemical components of the immune system are antibodies, toxin, epitopes of proteins like antitoxins, chemokine's, antigens) are studied.