



METADATA

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Abstract

Knowledge of biochemistry, molecular biology, physiology, pathophysiology-pathology, analytical chemistry, toxicology, and biostatistics are all combined in the scientific field of Clinical Biochemistry. Its goals include identifying appropriate biomarkers for disease differential diagnosis and researching the metabolic abnormalities that underlie the various diseases. Clinical Biochemistry also addresses the creation of suitable methods for the identification and measurement of these biomarkers as well as their use in prognosis and diagnosis of various diseases. Lastly, the goal of Clinical Biochemistry is to develop and implement suitable analytical techniques for tracking the efficacy and/or adverse effects of pharmacological treatments for a range of diseases. The target audience for this textbook, "Clinical Biochemistry-Diagnostics," is medical practitioners who operate in biochemistry labs of hospitals and diagnostic centers. Additionally, university students in the departments of Chemistry, Biology, Medicine, and other biomedical

fields are targeted; these students should have a foundational understanding of organic, inorganic, and analytical chemistry as well as biochemistry and molecular biology. The book's content is organized in a way that gives readers up-to-date knowledge on pathological biochemistry and physiology as it relates to the human body's systems and organs, as well as the biomarkers that are currently used to predict the prognosis of various diseases. Furthermore, the content covers fundamental concepts related to the setup and maintenance of a clinical chemistry laboratory, including quality control. The fundamentals of biostatistics and their uses in clinical biochemistry are covered, along with laboratory techniques for identifying different biomarkers that are employed in routine clinical practice. We believe that professionals working in the field of clinical biochemistry as well as students who choose to study the scientific field of clinical biochemistry in the framework of their coursework will find this book especially helpful.

