1. Record Nr. UNINA9910298298003321 Autore Pavelka Margit Titolo Functional Ultrastructure: Atlas of Tissue Biology and Pathology / / by Margit Pavelka, Jürgen Roth Vienna:,: Springer Vienna:,: Imprint: Springer,, 2015 Pubbl/distr/stampa **ISBN** 3-7091-1830-1 Edizione [3rd ed. 2015.] Descrizione fisica 1 online resource (421 p.) Disciplina 570 570.282 571.6 612015 616.07 616.9041 Soggetti Cell physiology Microscopy Pathology Medical biochemistry Medical microbiology Cell Physiology Biological Microscopy

Cell Physiology Biological Microscopy Medical Biochemistry Medical Microbiology

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Introduction -- The Nucleus.- The Cytoplasm: The Secretory System --

The Cytoplasm: The Endocytic System -- The Cytoplasm: Lysosomes and Lysosomal Disorders -- The Cytoplasm: Autophagy -- The

Cytoplasm: Mitochondria and Structural Abnormalities -- The

Cytoplasm: Peroxisomes and Peroxisomal Diseases -- The Cytoplasm: Paraplasmic Inclusions -- The Cytoplasm: Cytoskeleton -- The Plasma Membrane and Cell Surface Specializations -- Membrane Contact Sites

-- Cell-Cell and Cell-Matrix Contacts and Disorders -- Secretory Epithelia -- Resorptive Epithelia -- Sensory Epithelia -- Stratified Epithelia -- Epithelium of the Respiratory Tract -- Urothelium -- Endothelia -- Glomerulus and Disorders -- Connective Tissue -- Adipose Tissue -- Cartilage -- Bone -- Skeletal Muscle and Dystrophies and Myopathy -- Cardiac Muscle -- Smooth Muscle -- Nerve Tissue and Disorders -- Peripheral Blood.

Sommario/riassunto

This atlas provides a detailed insight into the complex structure and organization of cells and tissues, highlights specific cellular and tissue functions, and the dynamics of diverse intracellular processes. Highly informative electron micrographs are complemented by explanatory texts, selected references and schemes. The concept that subcellular organelles provide the structural foundation for fundamental processes of living organisms is emphasized. The first part covers the cellular organelles and changes caused by experiments or occurring under pathological conditions. The second part illustrates by selected examples principles of functional tissue organization and typical changes resulting from experimental induction or pathological situations. The third edition of the atlas, revised and extended by 23 plates, thus provides an invaluable resource for scientists and students of medicine and biological sciences, particularly of histology, cell and molecular biology. Moreover, it will serve as a handy reference guide for diagnostic and research electron microscopy laboratories in clinical, industrial, and academic settings.