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Nota di contenuto	The Cell: Structure, Function, and Molecular Biology -- Pathophysiology and Mechanisms of Radiopharmaceutical Localization -- Inflammation -- Musculoskeletal System -- Thyroid Gland -- Parathyroid Gland -- Adrenal Gland -- Genitourinary system -- Oncology 1: Basic Principles of Tumor Pathology and Biology -- Oncology 2: Tumor Imaging: Scintigraphic and Pathophysiologic Correlation -- Respiratory System -- Cardiology 1: Myocardial Contractility and Assessment of Cardiac Function -- Cardiology 2: Basis of Myocardial Perfusion, Metabolism, Infarction and Receptor imaging -- Digestive system 1: Gastrointestinal Tract -- Digestive system 2: Liver and Biliary Tract -- Central Nervous System -- Nuclear Hematology -- Lymphoscintigraphy -- Basis of Therapeutic Nuclear Medicine -- Biological Effects of Ionizing Radiation.

Sommario/riassunto

This book, now in its third edition, aims to promote a deeper understanding of the scientific and clinical basis of nuclear medicine and the new directions in medical imaging, which will lead to better utilization of nuclear medicine techniques in patient management and to further modifications and innovations in the field. The new edition has been revised and updated to reflect recent changes and to ensure that the contents are in line with likely future directions. The book starts by providing essential basic information on general pathophysiology, cell structure, and cell biology as well as the mechanisms of radiopharmaceutical localization in different tissues and cells. The clinical applications of nuclear medicine are then presented in a series of chapters covering every major organ system. These chapters relate the basic relevant knowledge of anatomy, physiology, and pathology to the clinical utilization of various scintigraphic modalities. The therapeutic applications of nuclear medicine, including recent advances, are discussed in a separate chapter. The final chapter is devoted to the biologic effects of ionizing radiations, including radiation from medical procedures. A glossary at the end of the book has been expanded with clear explanations of certain terms and uncommon disease conditions that will help students and trainees in understanding pertinent concepts. It is hoped that this book will continue to help nuclear medicine practitioners, trainees, students, and researchers, as well as professionals in various other medical fields.