Record Nr. UNINA9910720069203321 Biochemistry and cell biology of ageing . Part IV. : clinical science / / J. **Titolo** Robin Harris and Viktor I. Korolchuk, editors Pubbl/distr/stampa Cham, Switzerland: ,: Springer Nature Switzerland AG, , [2023] ©2023 **ISBN** 9783031265761 9783031265754 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (458 pages) Collana Subcellular Biochemistry, , 2542-8810 ; ; 103 Disciplina 612.67 Soggetti Aging - Molecular aspects Cells - Aging Clinical biochemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Chapter 1:Introduction: Historical Development and Progression of Nota di contenuto Clinical Research on Ageing -- Chapter 2:Bone Cells Metabolic Changes Induced by Ageing -- Chapter 3: Chronic Inflammation as an Underlying Mechanism of Ageing and Ageing-related Diseases -- Chapter 4: Heart Disease and Ageing: The roles of Senescence, Mitochondria and Telomerase in Cardiovascular Disease -- Chapter 5: Chronic Kidney Disease and the Exposome of Ageing -- Chapter 6: Sarcopenia and Ageing -- Chapter 7: Tendon Ageing -- Chapter 8: Virus Infections in Older People -- Chapter 9: Models and Biomarkers for Ovarian Ageing -- Chapter 10: Ageing and the Autonomic Nervous System -- Chapter 11: Astrocytes in Ageing -- Chapter 12: Hearing and Ageing --Chapter 13: Melatonin and Ageing -- Chapter 14: Protein and Energy Supplements for the Elderly -- Chapter 15: Ageing, Metabolic Dysfunction, and the Therapeutic Role of Antioxidants -- Chapter 16: Clinical Ageing. This book provides an up-to-date overview of key areas of ageing Sommario/riassunto research and bridges the gap between the subcellular events and the reality of ageing as seen in clinical practice. To this end, the reader

learns about the historical development and progression of clinical

ageing research. All chapters address the biochemistry or cell biology of various ageing events (to the extent that the data are available) and work their way to the clinical understanding we have of ageing. The focus of this volume is on how dietary restriction, virus infection and chronic inflammation affect the ageing process. Additionally, this book discusses how phosphate metabolism and metabolic dysfunction contribute to ageing events and how various organs and tissues (e.g. tendons, ears, heart muscle, and the endocrine system) age. This book follows on from Parts I, II and III of Biochemistry and Cell Biology of Ageing within the Subcellular Biochemistry book series and aims to bring the subcellular and clinical areas into closer contact by including interesting and significant biomedical ageing topics that were not included in the earlier volumes. Comprehensive and cutting-edge, this book is a valuable resource for experienced researchers and early career scientist alike, who are interested in learning more about the fascinating and challenging question of why and how our cells age.