1. Record Nr. UNINA9910350248503321 Biochemistry and cell biology of ageing: part i biomedical science // J. **Titolo** Robin Harris, Viktor I. Korolchuk, editors Pubbl/distr/stampa Singapore:,: Springer,, 2018 **ISBN** 981-13-2835-8 Descrizione fisica 1 online resource (X, 526 p. 62 illus., 54 illus. in color.) Subcellular Biochemistry, , 0306-0225 ; ; 90 Collana 612 Disciplina Cells - Aging Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia ROS, Mitochondrial Damage and ageing -- Protein homeostasis, protein Nota di contenuto aggregation and ageing -- Chronic inflammation and ageing --Metabolic changes in ageing -- Gene expression, epigenetics and ageing -- Antioxidant Vitamins and ageing -- Vitamin B Complex, folic acid and ageing -- Vitamin D, Osteoporosis and ageing -- Cellular DNA damage and ageing -- Telomere Length, telomerase and ageing --Signal transduction pathways in ageing -- Creatine, Creatine Kinase and ageing -- Cellular senescence -- Autophagy and ageing --Extracellular matrix proteins and ageing -- Stem cells and ageing -mTOR and Ageing -- Nutrition and ageing -- Microbiome and ageing -- Cholesterol and Ageing. Sommario/riassunto This volume of the Subcellular Biochemistry series, Biochemistry and Cell Biology of Ageing: Part I is devoted broadly to Biomedical aspects of Ageing. The 17 chapters included in the book, contributed by knowledgeable authors, review many important topics at an advanced level. Ageing in relation to reactive oxygen species (ROS) and the importance of Antioxidant Vitamins and Antioxidant Enzymes are given prominent coverage. Consideration is also given to Vitamin D and the B Vitamins. Chapters on Nutrition, Nutrient Sensing, the Microbiome and Signal Transduction appear, along with Cholesterol Metabolism, Creatine and Creatine Kinase, Extracellular Matrix, Stem cells, Nuclear

> DNA Damage, Teleomere Length, Gene Expression and Epigenetics, Autophagy and protein Glycosylation. The book is primarily directed to advanced biomedical science and medical students, postgraduates,

researchers and academics in the field of Ageing. A further supplementary volume of the Subcellular Biochemistry series, Biochemistry and Cell Biology of Ageing: Part II, covering the more Clinical Science aspects of ageing, will be published soon. Prof. J. Robin Harris is an Honorary Professor of the University of Mainz, he has broad biomedical science and electron microscopical experience and is actively involved in scientific publishing. Dr. Viktor I. Korolchuk is a Reader in Molecular Cell Biology at Newcastle University and is actively involved in cellular autophagy studies. .