

1. Record Nr.	UNINA9910350248503321
Titolo	Biochemistry and cell biology of ageing : part i biomedical science / / J. 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.)
Collana	Subcellular Biochemistry, , 0306-0225 ; ; 90
Disciplina	612
Soggetti	Cells - Aging
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	ROS, Mitochondrial Damage and ageing -- Protein homeostasis, protein 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. .

2. Record Nr.	UNINA9910824789803321
Autore	Hall Eric J
Titolo	Radiobiology for the radiologist / / Eric J. Hall, Amato J. Giaccia
Pubbl/distr/stampa	Philadelphia : , : Wolters Kluwer Health/Lippincott Williams & Wilkins, , [2012] ©2012
ISBN	1-4511-5418-6 1-4698-2163-X
Edizione	[Seventh edition.]
Descrizione fisica	1 online resource (556 p.)
Altri autori (Persone)	GiacciaAmato J
Disciplina	616.07/57
Soggetti	Radiotherapy, Medical Radiobiology Medical physics
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	Machine generated contents note: Section I: For Students of Diagnostic Radiology, Nuclear Medicine, and Radiation Oncology 1. Physics and Chemistry of Radiation Absorption 2. Molecular Mechanisms of DNA and Chromosome Damage and Repair 3. Cell Survival Curves 4. Radiosensitivity and Cell Age in the Mitotic Cycle 5. Fractionated Radiation and the Dose-Rate Effect 6. Oxygen Effect and Reoxygenation 7. Linear Energy Transfer and Relative Biologic Effectiveness 8. Acute Radiation Syndrome 9. Radioprotectors 10. Radiation Carcinogenesis

11. Heritable Effects of Radiation
12. Effects of Radiation on the Embryo and Fetus
13. Radiation Cataractogenesis
14. Radiological Terrorism
15. Molecular Imaging
16. Doses and Risks in Diagnostic Radiology, Interventional Radiology and Cardiology, and Nuclear Medicine
17. Radiation Protection Section II: For Students of Radiation Oncology
18. Cancer Biology
19. Dose-Response Relationships for Model Normal Tissues
20. Clinical Response of Normal Tissues
21. Model Tumor Systems
22. Cell, Tissue, and Tumor Kinetics
23. Time, Dose, and Fractionation in Radiotherapy
24. Retreatment after Radiotherapy: The Possibilities and the Perils.
25. Alternative Radiation Modalities
26. The Biology and Exploitation of Tumor Hypoxia
27. Chemotherapeutic Agents from the Perspective of the Radiation Biologist
28. Hyperthermia.

---

#### Sommario/riassunto

"The seventh edition is the most radical revision of this textbook to date and now includes color figures, a visual transformation over the sixth edition. However, we were careful to retain the same format as the sixth edition, which divided the book into two parts. Part I contains 17 chapters and represents both a general introduction to radiation biology and a complete self-contained course in the subject, suitable for residents in diagnostic radiology and nuclear medicine. It follows the format of the Syllabus in Radiation Biology prepared by the Radiological Society of North America (RSNA), and its content reflects the questions appearing in recent years in the written examination for diagnostic radiology residents given by the American Board of Radiology. Part II consists of 11 chapters of more in-depth material designed primarily for residents in radiation oncology. We live in an exciting time, but yet a dangerous time as well. The threat of nuclear terror rears its head way too often. If such an event occurs, those trained in the radiation sciences will be called on to manage exposed individuals. For this reason, we have included a new chapter on Radiologic Terrorism (Chapter 14). The translation of molecular imaging into the clinic is moving at a rapid pace. Therefore, we also included a chapter on fundamental concepts in molecular imaging that involves ionizing radiation such as CAT scans and PET imaging to reflect these new advances and describe the underlying biologic principles for each of these technologies (Chapter 15). The subject of retreatment with radiotherapy is not covered in most textbooks, and, because of this void, we have dedicated a new chapter to this subject (Chapter 24)"--Provided by publisher.

---