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Titolo Models, Molecules and Mechanisms in Biogerontology [[electronic

resource]]: Physiological Abnormalities, Diseases and Interventions //

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Soggetti Biomedical engineering

Geriatrics

Molecular biology Human genetics Metabolism

Regenerative medicine Tissue engineering

Biomedical Engineering/Biotechnology

Geriatrics/Gerontology Molecular Medicine Human Genetics Metabolomics

Regenerative Medicine/Tissue Engineering

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Livello bibliografico Monografia

Nota di contenuto Part I Alterations in Nervous System, Genes, Hormones and Immunity

during Aging. - Neurological problems of the Elderly -- Molecular marker and therapeutic regimen for neurodegenerative diseases -- Neurodegeneration during Aging: Role of Oxidative Stress through Epigenetic Modifications -- Polyglucosan Bodies in Aged Brain and

Neurodegeneration: Cause or Consequence? -- Signaling of

Nociceptors and Pain Perception: Impact of age -- Association between Ageing and REM sleep loss: Noradrenaline acting as a mediator -- Age

related changes in the human retina: a role for oxidative stress. -

Ageing: Influence on Duchenne muscular dystrophy (DMD) and Becker muscular dystrophy (BMD) -- Mitophagy, Diseases and Aging -- Genetics, Ageing and Human Health -- Genetic Syndromes and Aging -- Role of Stress and Hormones of the Hypothalamic-Pituitary-Adrenal (HPA) Axis in Aging -- Sex Steroids, Cognate Receptors and Aging -- Immunosenesence, Inflammaging and their implications for Cancer and Anemia -- Bone Marrow Stem Cells, Aging and Age-related Diseases -- Part II Interventions for Healthy Aging -- Infantile radiation and Aging Stresses: Effects of Calorie and Dietary Restrictions -- Mechanisms and Late Life Intervention of Aging -- Healthy Ageing and Cancer in Humans -- Nutrition for elderly -- Care of older persons in India: scope of policy and technology tools.

Sommario/riassunto

This book examines the basic cellular and molecular mechanisms associated with aging. It comprehensively describes the genetic, epigenetic, biochemical and metabolic regulation of aging, as well as some important age-related diseases. Divided into two major sections, it takes readers through the various aspects of aging in a story-like manner and suggests various interventions for healthy aging, such as dietary restriction, regular exercise, nutrition and maintaining a balanced and a non-stressful lifestyle. It describes the implications of aging on the nervous system, metabolism, immunity and stem cells as well as care for the elderly. The book is an ideal companion for both new and established researchers in the field and is also useful for educators, clinicians and policy makers.