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Soggetti Aging

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Gene expression

Geriatrics

Biogerontology

Developmental Biology

Gene Expression

Geriatrics/Gerontology

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Livello bibliografico Monografia

Nota di contenuto SECTION I OVERVIEW -- Introductory chapter -- SECTION II

EXPERIMENTAL STUDY OF DOHAD -- Early Life Programming of Aging in Genetically Long-Lived Mice -- Immunological Basis of In Utero

Programming of Adult Disease -- Developmental Programming of the

GH/IGF Axis and Long Term Health -- Programming of Stress

Responses -- Early-life Nutritional Programming of Adult Health Status

-- Effects of In-Utero Conditions on Adult Feeding Preferences -- IUGR-Related Programming of Metabolic Syndrome and Type 2 Diabetes -- Early-life Programming of Osteoporosis -- Developmental

Epigenetic Programming of Osteoporosis -- Developmental Epigenetic Programming of Skeletal Muscle Aging -- Effect of fetal and child health on kidney development and long-term risk of hypertension and kidney disease. -- Developmental Programming of Neuroimmune

Function -- Epigenetics and neurodegeneration: role of early-life nutrition -- SECTION III EPIDEMIOLOGICAL EVIDENCE -- Prenatal Undernutrition and Ageing and Longevity -- Influence of Maternal Obesity on the Long-Term Health of Offspring -- Early Life Predictors of Women's Health and Ageing -- Early-Life Predictors of Exceptional Longevity -- Prenatal Undernutrition and Effects on Physical and Mental Health -- Ancestral and early origins of adult mortality - a multigenerational approach -- SECTION IV PERSPECTIVES AND IMPLICATIONS -- Social Policy and Public Health Perspectives of DOHaD: Implications for Policy Advocacy, Cross-Sectorial Collaboration and Health Promotion -- Index.

## Sommario/riassunto

This book provides a comprehensive overview of the field of developmental programming of ageing phenotypes. Although gerontological research has traditionally focused on later stages of the life cycle, growing evidence indicates that both the rate of ageingassociated functional declines, and the risks of later-life chronic pathological conditions, can be traced to origins early in life. While other books in the field concentrate on the developmental origin of particular disorders, this volume offers a detailed guide to all important aspects of the role of early-life conditions in programming both chronic pathological conditions and the ageing process. Interest in the study of ageing and longevity had its beginnings in research on the fetal origins of adult disease. This has evolved into a hypothesis on the Developmental Origins of Adult Health and Disease (DOHaD), which postulates that adverse environmental exposures during critical inutero and early postnatal stages of development may permanently change physiological responses and cause functional impairments and disorders in adult life. In this book, the contributing authors and leading experts from around the world, describe research on mechanisms underlying the developmental programming phenomenon, as well as interventional strategies aimed at restoring developmentally disrupted epigenetic patterns. Early Life Origins of Ageing and Longevity benefits a wide audience of working scientists, clinicians, and advanced students, and will also interest scientifically curious general readers who wish to know more about current research in this rapidly evolving field.