

1. Record Nr.	UNINA9910583344503321
Titolo	Epigenetics of aging and longevity // edited by Alexey Moskalev, Alexander Vaiserman
Pubbl/distr/stampa	London, England : , : Academic Press, , 2018 ©2018
ISBN	0-12-811083-X 0-12-811060-0
Descrizione fisica	1 online resource (546 pages) : illustrations
Collana	Translational Epigenetics Series ; ; Volume 4
Disciplina	572.865
Soggetti	Epigenetics Epigenesis Longevity Epigenesis, Genetic Aging - genetics Longevity - genetics Epigenomics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Aging epigenetics : changes and challenges / Duygu Ucar and Berenice A. Benayoun -- Defective DNA methylation/demethylation processes define aging-dependent methylation patterns / Michele Zampieri, Fabio Ciccarone, Paola Caiafa -- S-adenosylmethionine metabolism and aging / Wil A.M. Loenen -- The epigenetic clock and aging / Ken Raj -- The epigenetic regulation of telomere maintenance in aging / Huda Adwan-Shekhidem and Gil Atzmon -- Living long and aging well : are lifestyle factors the epigenetic link in the longevity phenotype? / Irene Maeve Rea and Ken I. Mills -- Epigenetic biomarkers for biological age / Arnold B. Mitnitski -- The role of non-coding RNAs in genome stability and aging / Igor Kovalchuk -- Intra-tissue DNA methylation heterogeneity in aging / Jan Vijg, Silvia Gravina, Xiao Dong -- Early-life nutrition, epigenetics and altered energy balance later in life / Clare M Reynolds, Justin M O'Sullivan, Stephanie A. Segovia, Mark H. Vickers --

Early nutrition, epigenetics and human health / Simon C. Langley-Evans and Beverly S. Muhlhausler -- Biological embedding of psychosocial stress over the life course / Helen Eachus and Vincent T. Cunliffe -- Epigenetics of longevity in social insects / Alexander M. Vaiserman, Oleh V. Lushchak and Alexander K. Koliada -- *Drosophila melanogaster* as a model for studying the epigenetic basis of aging / Ilya Solovyov, Mikhail Shaposhnikov, Anna Kudryavtseva, Alexey Moskalev -- Histone modification changes during aging : cause or consequence? What we have learned about epigenetic regulation of aging from model organisms / Xiaohua Cao and Weiwei Dang -- Epigenetics of brain/cognitive aging / Xiangru Xu -- The role of epigenetic modifications in cardiometabolic diseases / Kim V.E. Braun, Eliana Portilla, Rajiv Chowdhury, Jana Nano, Jenna Troup, Trudy Voortman, Oscar H. Franco, Taulant Muka -- Epigenetic mechanisms in osteoporosis / Barbara Ostanek, Tilen Kranjc, Nika Lovsin, Janja Zupan, Janja Marc -- Epigenetics of skeletal muscle aging / Adam P. Sharples, Robert A. Seaborne, Claire E. Stewart -- Healthy aging and epigenetic drugs for diabetes and obesity : a novel perspective / Sunitha Meruvu, John D. Bowman, Mahua Choudhury -- Epigenetic drugs for cancer and precision medicine / Mukesh Verma, Vineet Kumar -- Epigenetic drug discovery for Alzheimer's disease / Ramon Cacabelos, Oscar Teijido -- Epigenetics of aging and longevity : challenges and future directions / Axel Schumacher.

Sommario/riassunto

"Epigenetics of Aging and Longevity provides an in-depth analysis of the epigenetic nature of aging and the role of epigenetic factors in mediating the link between early-life experiences and life-course health and aging. Chapters from leading international contributors explore the effect of adverse conditions in early life that may result in disrupted epigenetic pathways, as well as the potential to correct these disrupted pathways via targeted therapeutic interventions. Epigenetic drug discovery, and the role of epigenetic mechanisms in regulating specific age-associated illnesses, including cancer and cardiovascular, metabolic, and neurodegenerative diseases, are explored in detail."--
