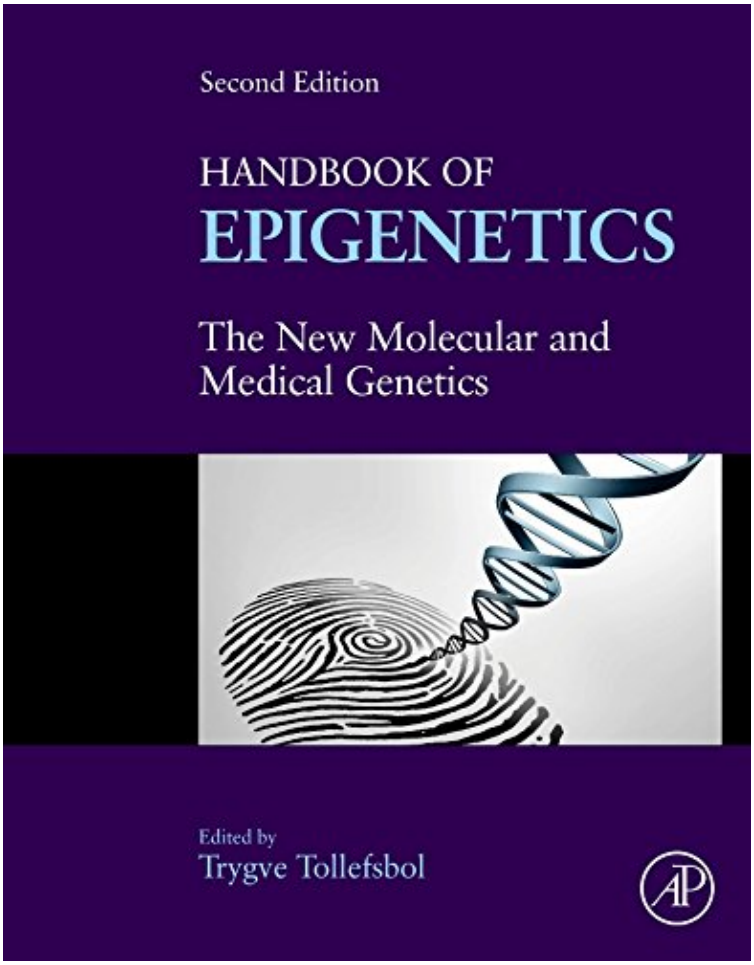
Handbook of Epigenetics: The New Molecular and Medical Genetics

From Academic Press
*ePub | *DOC | audiobook | ebooks | Download PDF*



#1574378 in Books 2010-10-01Original language:EnglishPDF # 1 10.90 x 1.30 x 8.70l, 3.90 #File Name: 0123757096638 pages | File size: 42.Mb

From Academic Press : Handbook of Epigenetics: The New Molecular and Medical Genetics before purchasing it in order to gage whether or not it would be worth my time, and all praised Handbook of Epigenetics: The New Molecular and Medical Genetics:

1 of 1 people found the following review helpful. InformativeBy Sandy LI bought this book for a class only to find out that it was available through the school online class. I basically paid for it twice. The book is informative.2 of 2 people found the following review helpful. Well Written textBy bulldogbuddyThis is a great text to bring one up to date on the exploding subject of epigenetics. I am an older physician and appreciate the update.3 of 4 people found the following review helpful. A MUST read to understand the frontiers in EpigeneticsBy Roberto SlepetysA very compreensive and also deep review of the last discoveries and the function of Epigenetics.Very organized book, from multiple authors expressing diferent research lines and perspectives from Epigenetics. The text is covered with references, average 150 per chapter with articles and review updated until 2009.Graduated understanding in Biology, Molecular Sciences, or Medicine will be wellcome to read it.

Epigenetics is considered by many to be the "new genetics" because of the overwhelming evidence of the contribution of non-genetic factors such as nutrition, environment, and chemical exposure on gene expression. The effects of epigenetics are vast, including tissue/organ regeneration, X-chromosome inactivation, and stem cell differentiation and genomic imprinting and aging. Aberrations of epigenetics influence many diseases for which clinical intervention is already in place, and many novel epigenetic therapies for cancer, immune disorders, neurological and metabolic disorders, and imprinting diseases are on the horizon. This comprehensive collection of reviews written by leaders in the field of epigenetics provides a broad view of this important and evolving topic. From molecular mechanisms and epigenetic technology to discoveries in human disease and clinical epigenetics, the nature and applications of the science will be presented for those with interests ranging from the fundamental basis of epigenetics to therapeutic interventions for epigenetic-based disorders. Contributions by leading international investigators involved in molecular research and clinical and therapeutic applicationsIntegrates methods and biological topics with basic and clinical discoveriesIncludes coverage of new topics in epigenetics such as prions, regulation of long-term memory by epigenetics, metabolic aspects of epigenetics, and epigenetics of neuronal disorders

"The Handbook of Epigenetics contains an impressive collection of 37 articles, mainly dealing with the biology of epigenetics. Covered topics range from molecular marks and mechanism, over model systems, epidemiology, aging and the brain to diseases. In summary, the Handbook of Epigenetics provides a unique and useful combination of information and it is a valuable addition to the bookshelf of scientists with experience in the field."--CHEMBIOCHEMAbout the AuthorProfessor of Biology, University of Alabama at Birmingham, Birmingham, AL. Dr. Tollefsbol is a Professor of Biology and a Senior Scientist in the Center for Aging, Comprehensive Cancer Center, Nutrition Obesity Research Center, and the Comprehensive Diabetes Center at the University of Alabama at Birmingham (UAB). He is Director of the UAB Cell Senescence Culture Facility which he established in 1999 and a Steering Committee Member of the UAB Center for Aging. Dr. Tollefsbol trained as a Postdoctoral Fellow and Assistant Research Professor with members of the National Academy of Science at Duke University and the University of North Carolina. He earned doctorates in molecular biology and osteopathic medicine from the University of North Texas Health Sciences Center and his bachelors degree in Biology from the University of Houston. He has received prior funding from the NIA, NCI, NHLBI, NIMH and other federal institutes as well as the Glenn Foundation for Medical Research, Susan G. Komen for the Cure, the American Federation for Aging Research (AFAR), and the American Institute for Cancer Research (AICR) among many other sources. The Glenn Foundation for Medical Research funding was unsolicited and was awarded to Dr. Tollefsbol for lifetime contributions to the field of aging. In 2006 Dr. Tollefsbol was selected and highlighted as part of the 25th anniversary of the AFAR for significant contributions to aging research. Dr. Tollefsbols research interests have covered a wide range of topics such as aging, epigenetics, nutrition, cancer, telomerase, and caloric restriction. Work from his laboratory has been featured in Womens Health magazine, Shape magazine, and the AICR Newsletter and Dr. Tollefsbol has been a Scientist in the Spotlight in ScienceNow. Currently he serves as an Associate Editor for Frontiers in Epigenomics and is on the Editorial Boards of the international journals Open Longevity Science, Epigenetics of Diabetes and Obesity, Molecular Biotechnology and Clinical Epigenetics. He is also a contributing Editor of Lewins GENES X classic textbook. Over 25 of the publications from Dr. Tollefsbols laboratory have received national or international accolades such as best paper award, selection for press release by the journal editors and featured on the journal homepage. Dr. Tollefsbol has been invited to give presentations on his research in many countries including Germany, China, Italy, Switzerland, France and The Netherlands as well as at various leading institutions in the US such as Harvard Medical School, Tufts University and the University of California at San Francisco. His research has received considerable media attention both nationally and internationally through television, newspaper and radio venues and has been highlighted in eScience News and ScienceDaily. He has ten books which have been published or are in progress and a recent book on Epigenetics of Aging that Dr. Tollefsbol co-authored and edited was highlighted in Nature.