

1. Record Nr.	UNINA9910337955903321
Titolo	Bioactive Lipids in Health and Disease // edited by Andres Trostchansky, Homero Rubbo
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-11488-0
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (193 pages)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1127
Disciplina	612.01577 599.935
Soggetti	Human genetics Human physiology Neurochemistry Molecular biology Proteins Cardiovascular system Human Genetics Human Physiology Molecular Medicine Protein Science Cardiovascular Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Prelims -- Diffusion and transport of reactive species across cell membranes -- Characterization of hydroxy and hydroperoxy polyunsaturated fatty acids by mass spectrometry. Understanding Peroxisome Proliferator-Activated Receptors: from the structure to the regulatory actions on metabolism -- Diminishing Inflammation by Reducing Oxidant Generation: Nitrated Fatty Acid-Mediated Inactivation of Xanthine Oxidoreductase. Unfolded protein response: Cause or consequence of lipid and lipoprotein metabolism disturbances?- Arachidonic acid metabolism in macrophages: role of NADPH oxidases -- Lipid Metabolism and Signaling in Platelet Function -- Dyslipidemia

in ischemia/reperfusion injury -- Epicardial adipose tissue in cardiovascular disease -- Bioactive Lipids and the gut-brain axis: diet as a modulator of bioactivity and diversity of lipids in the brain -- Nitroalkylation of α -synuclein by nitro-oleic acid: Implications for Parkinson's disease -- Bioactive lipids in inflammation after central nervous system injury -- Index.

Sommario/riassunto

The purpose of this book is to introduce the readers on the perspective of the role that unsaturated fatty acids and complex lipids play on health and disease. Bioactive lipids can be modified affecting membrane composition, structure and fluidity in addition to changes in cell signaling associated to lipid-protein (membrane receptors) interactions, issues that are addressed by the authors. This book analyzes key topics involving bioactive lipids and their role in normal signaling and the mechanisms of disease. The book navigates from structural studies of oxidized and non-oxidized lipids to the reactions and cell signaling processes that bioactive lipids play in cardiovascular and neurodegenerative diseases. The book contains the recent advances reported in the literature about lipidomics as well as the role that lipid-derived compounds exert on unfolded protein response and lipid metabolism and disease. This book represents a state of the art introduction to lipid metabolism from a biochemical to an in vivo overview being an useful tool for students and investigators. We hope the mechanistic observations on the role of bioactive lipids in health and disease serve a perspective to improve the existing treatments or propose new lipid-based pharmacology.
