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Nota di contenuto	Preface -- About the Editor -- Introduction: Enigmas of Sphingolipids -- Prokaryotic and Mitochondrial Lipids: A Survey of Evolutionary Origins -- Ceramide Channels -- A Stroll Down the CerS Lane -- The Role of Ceramide 1-Phosphate in Inflammation, Cellular Proliferation, and Wound Healing -- Ceramide Domains in Health and Disease: a Biophysical Perspective -- Sphingolipids as Biomarkers of Disease -- Inflammatory Ocular Diseases and Sphingolipid Signaling -- Index.
Sommario/riassunto	This book is about the various roles of bioactive ceramides and other sphingolipids in cellular biology. The enigmatic biophysical and biochemical properties of ceramides and their propensity to influence membranes whether as rafts or protein-permeable channels are heavily discussed. Metabolism of ceramides and their metabolites is also focused with ceramide synthase family of proteins being a target of extensive review. Ceramide 1-phosphate and other sphingolipids are

also presented in cellular physiology and pathophysiology. Prokaryotic origins of mitochondria at the level of membranes and the occurrence of apoptosis in bacteria are presented. Many aspects of ceramide and sphingolipid biology are addressed in this book. Its focus is the metabolism of ceramide in normal and diseased states and the biophysical and biochemical mechanisms governing the bioactivity of these molecules. Sphingolipid research has surged over the past thirty years and this book gathers the recent findings of various aspects of sphingolipid biochemistry. World-renowned scientists from the field of lipid biology, specifically sphingolipid biochemistry, were gathered to write this book. Scholars from most continents of the globe committed to write diligently about their expertise and the newest findings in the relevant fields. This book came to fruition after almost a year and a half of laborious preparation and diligent writings. This book is targeted to the experienced reader who is looking to read about the various aspects of bioactive ceramide signaling, as well as to the newcomer into the field, as the topics are explained in concise yet very informative manner. The authors and editor wish all readers a pleasant time reading this volume, and are adamant that this book will meet all expectations. .