

Special Issue

The Role of Lipids in Cardiovascular and Neurodegenerative Diseases

Message from the Guest Editors

Lipid molecules, such as glycerolipids, glycerophospholipids, and sterol lipids, are essential for both physiological processes and disease mechanisms. In cardiovascular diseases, dysregulated lipid metabolism drives atherosclerosis, leading to heart attacks and strokes. The balance between LDL and HDL cholesterol and the inflammatory responses triggered by lipid accumulation underscore the complexity of lipid involvement in cardiovascular health. Similarly, in neurodegenerative diseases like Alzheimer's and Parkinson's, lipids play key roles in maintaining neuronal structure. Dysregulation of lipid homeostasis, particularly involving cholesterol, contributes to pathological aggregates, neuroinflammation, and oxidative stress, accelerating disease progression. This Special Issue compiles the latest research on the roles of lipids in these diseases, offering insights into mechanisms and potential therapeutic targets. We welcome original research and reviews in areas including lipid biology, lipidomics, cardiovascular disease, and neurodegeneration

Guest Editors

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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