



biomolecules

IMPACT
FACTOR
4.8

Indexed in:
PubMed

CITESCORE
9.2

Special Issue Reprint

Biomolecular Approaches and Drugs for Neurodegeneration

www.mdpi.com/books/reprint/12077

Edited by
Giovanni N. Roviello
Caterina Vicidomini

ISBN 978-3-7258-6193-4 (Hardback)
ISBN 978-3-7258-6194-1 (PDF)



This reprint presents a collection of recent contributions addressing the urgent challenges posed by neurodegenerative diseases. In more detail, it explores therapeutic convergence through natural products, drug repurposing, and biomolecular targets, while also examining specific topics like the selective vulnerability of neuronal populations in Alzheimer's disease (AD), cholesterol metabolism in microglia, and innovative approaches to prion inhibition. We also report on studies highlighting mitochondria as key modulators of neurodegeneration. The work also presents nutraceutical strategies in Parkinson's disease (PD) models and investigates anti-inflammatory compounds able to regulate microglial activity. The reprint further expands on the neuroprotective potential of plant-derived molecules, adrenergic receptor signaling in AD, immune system involvement in multiple sclerosis, and therapeutic strategies for spinocerebellar ataxia. Collectively, the different topics discussed in this work emphasize the multifaceted nature of neurodegeneration research, demonstrating how molecular insights, pharmacological innovation, and translational approaches converge to pave the way for future neurotherapies.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/12077

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.