

*Special Issue Reprint*

## **A Themed Issue in Honor of Professor Raphael Mechoulam: The Father of Cannabinoid and Endocannabinoid Research**

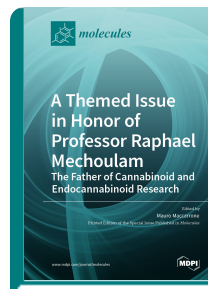
Edited By:

Mauro Maccarrone

[mdpi.com/books/pdfview/book/5372](http://mdpi.com/books/pdfview/book/5372)

ISBN 978-3-0365-3006-2 (hardback)

ISBN 978-3-0365-3007-9 (PDF)



During the last 60 years the relevance of cannabis (*Cannabis sativa* or *Cannabis indica*) ingredients, like the psychoactive  $\Delta^9$ -tetrahydrocannabinol (THC), cannabidiol, 120+ additional cannabinoids and 440+ non-cannabinoid compounds, for human health and disease has become apparent. Approximately 30 years after the elucidation of THC structure the molecular reasons for the biological activity of these plant extracts were made clearer by the discovery of endocannabinoids, that are endogenous lipids able to bind to the same receptors activated by THC. Besides endocannabinoids, that include several *N*-acylethanolamines and acylesters, a complex array of receptors, metabolic enzymes, transporters (transmembrane, intracellular and extracellular carriers) were also discovered, and altogether they form a so-called “endocannabinoid system” that has been shown to finely tune the manifold biological activities of these lipid signals.

Both plant-derived cannabinoids and endocannabinoids were first discovered by the group led by Prof. Dr. Raphael Mechoulam, who has just celebrated his 90<sup>th</sup> birthday and clearly stood out as a giant of modern science. The many implications of his seminal work for chemistry, biochemistry, biology, pharmacology and medicine are described in this special issue by the scientists who reached during the last 20 years the highest recognition in the field of (endo)cannabinoid research, receiving the Mechoulam Award for their major contributions. I thank them for having accepted my invitation to be part of this honorary issue of *Molecules*, and Raphi for continuing to illuminate our field with his always inspiring investigations and new ideas.



Order Your Print Copy

Print copies (170x244mm, Pbk) can be ordered at:

[www.mdpi.com/books/pdfview/book/5372](http://www.mdpi.com/books/pdfview/book/5372)

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.