Special Issue

New Insights into the Role of the Renin-Angiotensin System in Disease

Message from the Guest Editor

Classically, the renin-angiotensin system (RAS) plays an important role in cardiovascular homeostasis. Insights gained from research into the RAS in the last two decades have revealed that several components of the RAS, most notably angiotensin II and angiotensinconverting enzymes (ACEs), serve to promote inflammatory pathways in several diseases, including hypertension, as well as mediating SARS-CoV-2 infection. Anaiotensin II, the main effector molecule of the (RAS), has been linked to increases in inflammatory cytokines, such as interleukin-6, thereby promoting and/or enhancing end-organ injury. In addition to its classical role in the enzymatic cleavage of angiotensin I to angiotensin II, ACEs also serve as the biological receptor for SARS-CoV-2. As the role that the RAS plays in disease processes has expanded, especially during the COVID-19 pandemic, the aim of this Special Issue is to enhance our knowledge and understanding of the role the RAS plays in immune signaling, cardiovascular disease, as well as SARS-CoV-2 infection. This topic is especially timely as we begin to enter the post-COVID-19 pandemic era.

Guest Editor

Dr. Sean P. Didion

- 1. Department of Pharmacology, The University of Mississippi Medical Center, Jackson, MS 39216, USA
- 2. Department of Neurology, The University of Mississippi Medical Center, Jackson, MS 39216, USA

Deadline for manuscript submissions

closed (20 April 2024)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/142881

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

