



an Open Access Journal by MDPI

# Emerging Role of Mitochondrial Reactive Oxygen Species in Cellular Signaling

Guest Editors:

#### Prof. Dr. Hideyuki J. Majima

School of Allied Health Sciences, Walailak University, Nakhon Si Thammarat 80160, Thailand

#### Prof. Dr. Ken Itoh

Department of Stress Response Science, Center for Advanced Medical Sciences, Hirosaki University Graduate School of Medicine, 5 Zaifucho, Hirosaki 036-8562, Japan

Deadline for manuscript submissions: closed (6 December 2019)

## Message from the Guest Editors

Dear Colleagues,

Majima et al. were the first to report that reactive oxygen species (ROS) generated from mitochondria promote apoptosis (Majima et al., J Biol. Chem. 1998), while Itoh et al. described the function of the Nrf2-Keap1 intercellular signal for the first time (Itoh et al., Biochem. Biophys. Res. Commun. 1997, Itoh et al., Genes Dev. 1999). A recent study has described that ROS generated from mitochondria initiate cellular transduction in cytosol (Indo et al. Handb Exp Pharmacol. 2017). In this Special Issue, the further role of ROS and the subsequent intracellular signals, protein, and molecules' transport-change will be clarified. The aim of this Special Issue is the establishment of cellular signaling and metabolism change based on mitochondrial ROS augmentation. Thus, the Special Issue explores the physiological and pathological new function of mitochondrial ROS.

Prof. Dr. Hideyuki J. Majima Prof. Dr. Ken Itoh *Guest Editors* 



**Special**sue





an Open Access Journal by MDPI

# **Editors-in-Chief**

#### Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

#### Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

### Message from the Editorial Board

*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

# **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, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

# **Contact Us**

*Biomolecules* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/biomolecules biomolecules@mdpi.com X@Biomol\_MDPI