



## The Physiological and Pathological New Function of Mitochondrial ROS and Intraorganellar Cross-Talks

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 (3 April 2023)**

### Message from the Guest Editors

Dear Colleagues,

Thijsj G. Rttema described “Mitochondria in the second act”, citing Pittis and Gabaldón (page 101), who provide evidence that the host cell from which eukaryotes evolved was already genetically chimaeric before the mitochondrial symbiosis, suggesting that mitochondria evolved later in eukaryotic evolution than was previously presumed (<https://www.nature.com/articles/nature16876>; Nature volume 531, pages 39–40 (03 March 2016)). This means that when mitochondria are established, it is possible to commence cross-talk between mitochondria and other organelles.

[...] 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 roles of mitochondria-generated ROS and the subsequent intraorganellar cross-talks, signal exchange, and protein import will be important to retain cellular networks and homeostasis. We aim to establish a new world of cellular functions.





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