



## Molecular Mechanisms of Stress in Autoimmunity and Psychiatric Disorders

Guest Editors:

### Prof. Alon Monsonego

Department of Microbiology and Immunology, Faculty of Health Sciences, Zlotowski Neuroscience Center, Regenerative Medicine and Stem Cell Research Center, National Institute for Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

### Prof. Amit Bar-Or

Department of Neurology and Center for Neuroinflammation and Experimental Therapeutics, University of Pennsylvania, Philadelphia, PA, USA

Deadline for manuscript submissions:

**closed (30 July 2020)**

### Message from the Guest Editors

Dear Colleagues,

It has been well-established that stress can substantially affect the homeostatic regulation of the immune system via the activation of the hypothalamic–pituitary–adrenal (HPA) axis and the release of glucocorticoids (GCs) into the circulation. In turn, GCs act to regulate the activation, proliferation, and trafficking of leukocytes and are thus often used as immunosuppressors in the clinical treatment of inflammatory and autoimmune disorders.

Whereas several molecular mechanisms underlying the dysfunction of glucocorticoid receptors due to persistent inflammation or genetic defects have recently been described, further insights into these mechanisms may help to unveil regulatory roles of GCs, to elucidate the etiology of diseases with strong inflammatory components, and to identify therapeutic strategies to overcome GC resistance in a variety of inflammatory diseases.

This Special issue of *Biomolecules* invites manuscripts and reviews which provide molecular and cellular mechanisms underlying the impact of chronic stress on autoimmune and psychiatric disorders.

*Keywords:* autoimmunity; psychiatric disorders; HPA; stress; inflammation





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