# **Special Issue**

# Molecular Mechanisms Underlying Stress Response and Resilience

# Message from the Guest Editors

A variety of stressors induce various physiological responses by stimulating sympathetic, neuroendocrine, and behavioral systems. While stress activates the hypothalamic-pituitary-adrenal (HPA) axis, it suppresses the hypothalamic-pituitary-gonadal axis. Stress also modulates the immune system. Corticotropin-releasing factor (CRF) in the hypothalamus plays a central role in regulating the stress response. CRF stimulates the release of adrenocorticotropic hormone (ACTH) from the anterior pituitary. ACTH stimulates the secretion of alucocorticoids from the adrenal glands. The activated HPA axis is suppressed by the negative feedback effect of glucocorticoids. Glucocorticoids are essential for stress coping, stress resilience, and homeostasis. The stressed state may be relieved or reduced by an action, medicine, or therapy. The molecular mechanisms underlying stress response and resilience, however, are not fully understood. This Special Issue is focused on stress response and resilience, and will include original research articles and reviews on aspects related to their molecular mechanisms.

# **Guest Editors**

# Dr. Kazunori Kageyama

Division of Diabetes, Metabolism and Endocrinology, Faculty of Medicine, Tohoku Medical and Pharmaceutical University, 1-15-1 Fukumuro, Miyagino-ku, Sendai 983-8536, Japan

# Dr. Takahiro Nemoto

Department of Bioregulatory Science (Physiology), Nippon Medical School, Tokyo, Japan

# Deadline for manuscript submissions

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

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# Message from the Editor-in-Chief

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# **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

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