

## 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 adrenocorticotrophic hormone (ACTH) from the anterior pituitary. ACTH stimulates the secretion of glucocorticoids 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.

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### Guest Editors

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### Deadline for manuscript submissions

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## International Journal of Molecular Sciences

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