

Special Issue

The Role of Neuropeptides and Their GPCRs in the Neuroendocrine System

Message from the Guest Editor

The neuroendocrine system controls vital physiological functions, including homeostasis, growth, reproduction, and stress responses, through complex interactions between the nervous and endocrine systems. At the core of this sophisticated regulatory system are diverse neuropeptides and their target G-protein-coupled receptors (GPCRs). Neuropeptides are secreted by neuroendocrine cells, particularly in the hypothalamus, and participate in a wide range of physiological functions, including pituitary hormone release control, feeding behavior regulation, circadian rhythm maintenance, and emotional control. The actions of these bioactive substances are mediated through specific GPCRs via signal transduction pathways that activate diverse intracellular signaling cascades. This Special Issue will share the latest research findings and enhance our understanding of neuropeptide–GPCR systems in the neuroendocrine field, from the molecular to organismal level. We aim to offer innovative insights to help advance this field, from basic research to clinical applications.

Guest Editor

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