

Special Issue

Interactions between the Nervous System and Gastrointestinal Motility

Message from the Guest Editor

Motility of gastrointestinal tracts, such as the esophagus, stomach, small and large intestines, is regulated by the central nervous system and the enteric nervous system. The peristaltic movement is induced by the activation of intrinsic sensory neurons, which are coupled via modulatory interneurons to excitatory and inhibitory motor neurons projecting into the smooth muscle layer. The central nervous system is also involved in gastrointestinal motor regulation. For example, esophageal motility is controlled by the vago-vagal reflex, and the supraspinal defecation center in the brain stem accelerates or suppresses the spinal defecation center, which controls the enteric nervous system in the colorectum. Impairment of the interactions between nervous system and gastrointestinal motility is closely related to the development of gastrointestinal disorders such as the irritable bowel syndrome (IBS). We cordially invite researchers to submit original or review papers addressing the morphology, physiology, pathophysiology, pharmacology, biochemistry, and molecular biology of the interactions between the nervous system and gastrointestinal motility.

Guest Editor

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