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## Inter-organ Crosstalk in Energy Homeostasis

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Deadline for manuscript submissions:

**closed (31 July 2023)**

### Message from the Guest Editors

Dear Colleagues,

Metabolic disorders, including diabetes and obesity, are on the rise in modern societies despite research efforts to tackle what is now considered a pandemic. Energy homeostasis involves a wide range of mechanisms, tissues and organs. Interestingly, all these partners are interacting with each other to maintain energy balance in physiological conditions. The central nervous system plays a key role by being strongly involved in the coordination of all these mechanisms. The brain constantly receives various signals (nutrients, metabolites, hormones, neural inputs, etc.) from peripheral organs (gut, liver, pancreas, adipose tissue, etc.), providing information on the body energy status. In addition to the brain, the peripheral organs can also sense multiple circulating cues, neural cues, or both, which ultimately leads to metabolic adaptations. This complex communication is crucial: considerable evidence of disrupted crosstalk has been reported between the brain and the periphery, but also between peripheral organs themselves in the development and maintenance of metabolic diseases.



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