



100th Anniversary of Insulin: Insulin Receptor Signaling in Health and Disease

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Deadline for manuscript
submissions:

31 August 2022

Message from the Guest Editors

Dear Colleagues,

Several signaling molecules have been identified as critical players in the regulation of insulin-induced IR activation. G protein-coupled receptors (GPCR) have recently been implicated in intracellular crosstalk pathways with IR. The integration of GPCR and receptor tyrosine kinase (RTK) signaling is eloquently reviewed. Other reports have also shown that IR can interact with G α i subunits upon receptor activation. The gaps in our knowledge regarding how these metabolite consumptions are implicated in host metabolism via GPCR receptors reinforce the importance of research needed to understand the mechanistic action of these drugs on the body as promising metabolic candidates.

Collectively, these findings uncover a unique mode of control for IR activation and present an innovative approach to targeting insulin signaling via GPCR complexes. This research has the potential to uncover (a) novel mechanism(s) of metabolite-induced metabolic changes, epigenetic reprogramming, insulin resistance and diabetes.

Original manuscripts and reviews dealing with any aspect of insulin receptor and related pathophysiology are welcome.





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Message from the Editor-in-Chief

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