



Gonadotropin Cell Transduction Mechanisms

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Deadline for manuscript
submissions:

closed (30 November 2021)

Message from the Guest Editors

Gonadotropins act in concert in the regulation of the female and male reproductive systems. Through intricate endocrine communication routes, paracrine and autocrine communication along the HPG axis, they sustain the production of sex steroids by gonads. Different signaling cascades and transcriptional mechanisms are activated, depending on the variation in GnRH pulse frequency, after the synthesis and release of FSH and LH, whose biological effects are mediated directly by coupled receptors (FSHR and LHCGR) or indirectly through different mediators. The dysregulation of one or more of the transduction mechanisms evolves in reproductive disorders, such as infertility and cancer. Despite recent progress in understanding the mechanisms and signaling mediated by gonadotropins, their complex pathways in cells remain to be fully elucidated. Contributions to this Special Issue, of both original research articles and topical reviews, will provide new insights into the mechanisms of action of gonadotropins, deepen our understanding of their biological roles in health and disease, and reveal novel therapeutic opportunities in reproductive and regenerative medicine.





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Message from the Editor-in-Chief

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