

## Special Issue

# Advancements in Reproductive Medicine: Unlocking the Secrets of the Ovary and Sperm for Fertility and Beyond

### Message from the Guest Editors

The Special Issue aims to highlight the critical roles of metabolites in reproductive health and fertility. This issue will highlight novel research that investigates the ways in which metabolic processes affect oocyte and sperm formation, function, and dysfunction, and how these processes affect both normal fertility and reproductive diseases. This Special Issue will focus on the regulation of ovarian and sperm biology while encompassing a wide range of topics at the intersection of biology and reproductive medicine. We invite original research articles, reviews, and perspectives that address the following themes: Oocyte and sperm development, Fertility and metabolic disorders, Biomarkers in reproductive health, Reproductive aging, Metabolic interventions in reproductive medicine, Enhanced reproductive metabolomics technologies, and Cross-talk between reproductive and systemic metabolism. The goal of this special issue is to bring together interdisciplinary research that increases our knowledge of the metabolic regulation of reproductive cells and develops new therapeutic applications for reproductive health and fertility treatment.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 July 2025)



## Metabolites

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## About the Journal

### Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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### Editor-in-Chief

Dr. Amedeo Lonardo

Internal Medicine, Ospedale Civile di Baggiovara, Azienda Ospedaliero-Universitaria, 41126 Modena, Italy

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.4 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the first half of 2025).