

## Special Issue

# cGMP Signaling: From Bench to Bedside

### Message from the Guest Editor

Soluble guanylyl cyclase (sGC) was originally discovered as a cellular receptor for gaseous secondary messenger Nitric Oxide (NO). Upon binding of the NO molecule to sGC heme, the sGC enzyme activates the conversion of GTP to ubiquitous secondary messenger cGMP thereby multiplying and propagating downstream signaling of the cascade. Since the original discovery of sGC's role in vascular regulation, NO/cGMP-signaling importance was demonstrated in a multitude of physiological and pathophysiological processes. The critical role sGC plays in the homeostasis of the cardiovascular, pulmonary, gastrointestinal, renal and neuronal systems established this enzyme as a prominent therapeutic target. Currently, a growing number of sGC-targeting drugs to combat various diseases has been identified and tested in various disease models or clinical trials. This Special Issue will explore emerging applications of sGC targeted therapeutics to modulate NO/cGMP signaling activity to tackle an array of new diseases such as ischemia, fibrosis and cancer proliferation, to name a few. Research articles/reviews related to this topic are welcome in this issue.

### Guest Editor

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### Deadline for manuscript submissions

closed (20 July 2025)



## International Journal of Molecular Sciences

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

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