

Special Issue

Perspective of Signal Transduction in Cancer and Inflammation

Message from the Guest Editors

Signaling pathways are fundamental regulatory networks that coordinate cellular communication and function in immune and cancer cells. By shaping the tumor microenvironment (TME), these programs can determine immunotherapy response or resistance. This Special Issue in *Biology* will highlight mechanistic and translational advances that define actionable signaling circuits across tumor, immune, and stromal compartments. We welcome original research and reviews on cytokine-driven pathways (e.g., JAK/STAT), NF- κ B and interferon signaling, innate sensing modules, inflammasome activation, and pathway crosstalk controlling antigen presentation, myeloid reprogramming, and immune exclusion. We also encourage submissions on checkpoint pathway wiring that regulates exhaustion, stem-like T-cell states, and reinvigoration, as well as crosstalk among TGF- β /Wnt/Notch/Hippo pathways driving immune exclusion or infiltration. Studies combining functional validation with modern approaches, are encouraged. Together, these contributions will provide a timely reference for researchers developing next-generation immunoncology strategies grounded in signaling biology. We look forward to your submissions.

Guest Editors

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Deadline for manuscript submissions

30 December 2026



Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/270931

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Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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