# **Special Issue**

## Molecular Insights into Development and Cancer

## Message from the Guest Editors

Normal embryonic development is governed by signaling pathways that control a myriad of processes, ranging from cell division, migration and differentiation to organ formation. These pathways are often co-opted and de-regulated in common diseases of adulthood. including the progression of cancer. Many parallels exist between the normal cellular process required for the establishment of an embryo (such as asymmetric cell division in stem cells, epithelial to mesenchymal transitions in organ establishment, and formation of the vascular system required) with identical pathways that drive tumor initiation and progression. In effect, tumor growth can, in many cases, be thought of as the aberrant establishment of a new "organ" (Gerlitz et al., EMBO Reports 9: 730-734), utilizing and corrupting precisely the same signaling pathways required for normal growth. This Special Issue is devoted to understanding these parallels; by determining the normal pathways of tissue and organ establishment, we can better understand the consequences of their deregulation in the context of cancer development.

#### **Guest Editors**

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Deadline for manuscript submissions closed (20 January 2025)



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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.

## Editor-in-Chief

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