

Special Issue

New Insights into Embryonic Development

Message from the Guest Editor

Several research groups significantly improved early human embryo in vitro culture conditions, allowing observation and experimentation at developmental stages which had been, until recently, inaccessible to research. These new approaches promise huge progress in the acquisition of knowledge in the early human development field, remarkably different compared to the development of model mice, cattle, ovine, or rat embryos and fetuses. For this reason, the simple projection or direct transfer of information from model embryos and/or fetuses to human embryos is potentially misleading and, thus, controversial.

Despite the differences between human and model mammals, numerous molecular pathways involved in embryo development are common, or at least very similar, not only in different species of mammalian embryos but also in other vertebrates and even invertebrates. This is why this Special Issue will gather original and review articles clarifying all the molecular and cellular aspects of embryo development, starting from invertebrates and concluding with mammals—especially human embryos and fetuses.

Guest Editor

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Message from the Editor-in-Chief

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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