

Special Issue

Molecular Mechanism Underlying the Developmental Potential of Mammalian Embryos

Message from the Guest Editor

After fertilization, the mammalian embryo begins to develop into the blastocyst. The blastocyst is implanted to give rise to offspring. The molecular mechanism of this process is still an enigma, and there is no guarantee that all embryos will develop to term and stay healthy throughout their life. In fact, many factors, including parental physical conditions, influence the reproductive success. In addition, current reproductive technologies allow us to produce offspring from in vitro produced embryos derived from not only mature gametes but also somatic cells and immature gametes. However, these success rates have been low. Further, recent research in the field of DOHaD (developmental origins of health and disease) has revealed that the environment of embryos even before implantation shows long-term effects on their health over the entire life course.

Guest Editor

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