Cell Signaling During Mammalian Early Embryo Development [

Leese, Henry J.
Brison, Daniel R.

Springer New York,
2015

Monografía

The book considers signaling events from the zygote embryo through to the blastocyst with relevant data from embryonic stem (ES) cells, including dialogue with the extracellular environment and with the maternal tract during the implantation process. Application of the knowledge described to improve the success of human and animal assisted conception is considered where appropriate, but the focus is largely on fundamental rather than applied cell/molecular biology, as this is the area that has historically been neglected. While the general features of metabolism during preimplantation development are well established, especially in terms of nutrient requirements, uptake and fate, remarkably little is known about early embryo signaling events, intracellular or intercellular, between individual embryos in vitro or with the female reproductive tract in vivo. This contrasts with the wealth of information on cell signaling in somatic cells and tissues, as a glance at any textbook of biochemistry illustrates. This lack of information is such that our understanding of the molecular cell biology of early embryos -- a prerequisite to defining the mechanisms which regulate development at this critical stage of the life cycle -- is seriously incomplete. This volume is the first to address this issue by describing the current state of knowledge on cell signaling during mammalian early embryo development and highlighting priority areas for research

Título: Cell Signaling During Mammalian Early Embryo Development Recurso electrónico] edited by Henry J. Leese, Daniel R. Brison

Editorial: New York, NY Springer New York 2015

Descripción física: XII, 216 p. 21 il., 16 il. col

Mención de serie: Advances in Experimental Medicine and Biology 843 Springer eBooks

Detalles del sistema: Forma de acceso: World Wide Web

ISBN: 9781493924806

Autores: Leese, Henry J. Brison, Daniel R.

Entidades: SpringerLink

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es