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Nota di contenuto	POSTIMPLANTATION DEVELOPMENT IN THE MOUSE; Contents; Introduction; Clonal analysis of cell fate during gastrulation and early neurulation in the mouse; Establishment and organization of germ layers in the gastrulating mouse embryo; General discussion I : Problems with cell markers and embryo cultures; Three-dimensional representation of gastrulation in the mouse; Use of chimeras to study gene function in mesodermal tissues during gastrulation and early organogenesis; Action of the Brachyury gene in mouse embryogenesis; Molecular mechanisms of pattern formation in the vertebrate hindbrain General discussion II : Developmental abnormalities in tetraploid mouse embryosMyogenesis in the mouse; Development of the skeletal system; Development of the left-right axis; The role of Sry in mammalian sex determination; Epithelial-mesenchymal interactions in murine

organogenesis; The Wnt family of cell signalling molecules in postimplantation development of the mouse; The TGF-B-related DVR family in mammalian development; General discussion III Compiling information on developmental gene expression Use of embryonic stem cells to study mutations affecting postimplantation development in the mouseGenetic manipulation of the mouse via gene targeting in embryonic stem cells; The gene trap approach in embryonic stem cells: the potential for genetic screens in mice; Final discussion : Functional redundancy; When does an embryo become a fetus?; Summary; Author index; Subject index

Sommario/riassunto

Examines the establishment of the germ layers and other cell lineages in the early embryo including details of cell movements during the beginning stages of primitive streak formation. Discusses patterns of gene expression during the development of such tissues as the limb bud, skeletal, muscle and the central nervous systems placing special emphasis on commitment to particular cell types. Although it concentrates on the mouse as an example of mammalian development--chick, amphibian and *Drosophila* embryogenesis are employed whenever these organisms are more applicable to the study of a particu
