Record Nr. UNINA9911019748903321 Autore Unsicker Klaus Titolo Cell Signaling and Growth Factors in Development: From Molecules to Organogenesis Pubbl/distr/stampa [Place of publication not identified], : John Wiley & Sons Incorporated, 2005 **ISBN** 3-527-61968-2 Descrizione fisica 1 online resource (liv, 991 pages) Disciplina 571.81 Soggetti Developmental biology Cytology **Growth factors** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Stem cells -- Germ cells -- Implantation and placentation -- Cell movements during early vertebrate morphogenesis -- Head induction -- Anterior-posterior patterning of the hindbrain: integrating boundaries and cell segregation with segment formation and identity -- Neurogenesis in the central nervous system -- Generating cell diversity -- The molecular basis of directional cell migration -- Cell dealth in organ development -- Dorso-ventral patterning of the vertebrate central nervous system -- Novel perspectives in research on the neural crest and its derivatives -- Eye development -- Mammalian inner ear development: of mice and man -- Limb development --Skeletal development -- Musculature and growth factors -- Skin development -- Tooth development -- Gastrointestinal tract -- Cell signaling and growth factors in lung development -- Molecular genetics of liver and pancreas development -- Molecular networks in cardiac development -- Vasculogenesis -- Inductive signaling in kidney morphogenesis -- Molecular and cellular pathways for the morphogenesis of mouse sex organs. Sommario/riassunto This is the first handbook structured according to organ systems to cover both embryogenesis and organ development. It addresses the

functions of developmental signaling pathways and growth factors with

a focus on cell division, cell migration, and cell differentiation. A

uniform article structure throughout the book facilitates easy comparison of data. Applications in molecular medicine are highlighted with chapters on developmental disorders and related novel therapeutic strategies.