1. Record Nr. UNINA9910557460503321 Autore Julia Thom Oxford (Ed.) **Titolo** Extracellular Matrix in Development and Disease MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa **ISBN** 3-03897-571-0 Descrizione fisica 1 electronic resource (356 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The extracellular matrix in development and disease deals with the molecular and cellular aspects of development and disease. Cells exist in three-dimensional scaffolding called the extracellular matrix. The matrix holds together the millions of cells that make up our blood vessels, organs, skin, and all tissues of the body. The matrix serves as a reservoir of signaling molecules as well. In bacterial cultures, biofilms form as an extracellular matrix and play essential roles in disease and drug resistance. Topics such as matrix structure and function, cell attachment and cell surface proteins mediating cell-matrix interactions, synthesis, regulation, composition, structure, assembly, remodeling, and function of the matrix are included. A common thread uniting the topics is the essential nature that the matrix plays in normal development and pathophysiology. Providing new knowledge will lead us to improved diagnostics, the preventions of disease progression, and therapeutic strategies for the repair and regeneration of tissues. Topics such as the extracellular matrix in hereditary diseases. reproduction, cancer, muscle, and tissue engineering applications, and

diverse roles for integrins, are included in this collection.