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Nota di contenuto	Cell Migration in Development and Disease; Contents; Preface; List of Contributors; Color Plates; I Cell Shape Modulations and Cell Surface-Nucleus Connections: Prerequisites for Cell Migration; 1 Functional Phases in Cell Attachment and Spreading; 1.1 Introduction; 1.2 Fibroblast Spreading on Matrices; 1.3 Summary of Spreading Process; 1.3.1 Steps in Cell Spreading; 1.3.1.1 Basal Motility Phase (Cells in Suspension); 1.3.1.2 Adhesion to the Surface; 1.3.1.3 Initiation of Actin Assembly and Spreading (Rate-limiting Step); 1.3.1.4 Continued Spreading; 1.3.1.5 Transition to Fully Spread State 1.3.2 Binding to Rigid Matrices Causes Strengthening of Cytoskeleton-Integrin Linkages 1.3.2.1 Initial Binding of Fibronectin Multimers at the Leading Edge and Over Actin Cables; 1.3.2.2 Force-dependent Activation of the ECM-Integrin Complexes; 1.3.2.3 Additional Steps in the Spreading Process; 1.3.3 MTs and Motility; 1.3.4 Conclusion; 1.4 References; 2 Polarized Cell Motility: Microtubules Show the Way; 2.1 Introduction; 2.1.1 The Vasiliev Conundrum; 2.1.2 Cell Polarity and Adhesion; 2.2 Microtubules Meet the Actin Cytoskeleton at Focal Adhesions

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Sommario/riassunto

Cell Migration matches nearly all research areas in cell and developmental biology, genetics, and biomedicine. The field shows radical progress powered by the combination of new genomic tools, cell labeling techniques and the incorporation of new model systems. This is the first book to comprehensively cover cell migration from the identification of molecular mechanisms to the understanding of certain pathological disorders and cancer development.
