

Extracellular matrix proteins are affected in a number of serious, common human diseases that are caused by mutations in genes that encode these proteins. These matrices provide cues to cells that greatly influence their behaviour, such as whether to proliferate, migrate, differentiate, or die by apoptosis. Thanks to numerous advances both in the identification of human disease genes and in targeted mutagenesis of genes encoding extracellular matrix components in the mouse, there has been an enormous amount of progress in our understanding of the roles of the extracellular matrix *in vivo*.

Volume 15 of **Advances in Developmental Biology** contains a compilation of reviews by experts in their respective fields. The chapters address the biology of a broad spectrum of extracellular matrix molecules and their functions in development and disease in a variety of biological systems. **Extracellular Matrix in Development and Disease** is an irrefutable testament to the importance of these proteins for fundamental developmental processes.

KEY FEATURES

- Discusses the potential of matrix components to be used as therapeutic tools for the treatment and prevention of cancer
- Offers a section on integrin signaling and the development of the central nervous system, detailing the migration of neurons and the glia
- Covers a diverse array of molecules, such as laminins, collagens, heparan sulfate proteoglycans, integrins, and more

The series **Advances in Developmental Biology** presents timely issues in the latest developments in biology. It provides annual reviews of selected topics, written from the perspectives of extraordinary leading investigators in the field of development biology.

Cover photo: Staining of E12.5 mouse lung with antibodies to elastin (green) and flk (red). Flk-positive endothelial cells were detected throughout the lung mesenchyme as interconnected strands associated with vasculogenic vessels that are forming during this period. Staining with the elastin antibody showed strong signal in airway smooth muscle and in well-developed blood vessels. Photograph courtesy of Sean E. McLean and Robert P. Mecham.



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