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# Extracellular Matrix: The driving force of mammalian diseases

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## Abstract

Like the major theme of a Mozart concerto, the immense and pervasive extracellular matrix drives each movement and ultimately closes the symphony, embracing a unique role as the fundamental mediator for most, if not all, ensuing intracellular events. As such, it comes as no surprise that the mechanism of just about every known disease can be traced back to some part of the matrix, typically in the form of an abnormal amount or activity level of a particular matrix component. These defects considerably affect downstream signaling axes leading to overt cellular dysfunction, organ failure, and death. From skin to bone, from vessels to brain, from eyes to all the internal organs, the matrix plays an incredible role as both a cause and potential means to reverse diseases. Human malaises including connective tissue disorders, muscular dystrophy, fibrosis, and cancer are all extracellular matrix-driven diseases. The ability to understand and modulate these matrix-related mechanisms may lead to the future discovery of novel therapeutic options for these patients.

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