Although the effects of exercise and mechanical forces on musculoskeletal and cardiovascular systems have been well documented, the actual mechanisms by which mechanical forces act at the cellular level are not well understood. At present, studies of the interaction of mechanical forces with cells encompass many different cell types in various tissues. This volume draws together these seemingly disparate observations and makes comparisons between the nature of the cellular responses in different tissues. Studies of cells derived from skeletal muscle, bone and cardiovascular tissue are considered, providing a comprehensive synthesis and review of recent work. The volume will be of interest to all those working in musculoskeletal and cardiovascular biology, as well as those taking courses in exercise and sports science, biomechanics and orthopaedics.

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