Harvard-MIT Division of Health Sciences and Technology HST.523J: Cell-Matrix Mechanics Prof. Myron Spector Prof. Ioannis Yannas

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CELL-MATRIX MECHANICS

Homework #3

Effects of mechanical forces on bone in vivo.

The figure below shows the stress-strain behavior of bone and the range of maximum stresses applied during the activities of daily living (ADL). How would the stress-strain behavior change in an astronaut who has been in space for a prolonged time? Draw the new curve on the graph. Explain why this change in mechanical properties of the bone has taken place.

