
SECTION 2.1

Some Background Concepts

OUTLINE

Introduction to Biology and Medicine—Key Concepts in the Use of Biomaterials in Surgery and Medical Devices

Adsorbed Proteins on Biomaterials

Cells and Surfaces in Vitro

Functional Tissue Architecture, Homeostasis, and Responses to Injury

The Extracellular Matrix and Cell–Biomaterial Interactions

Effects of Mechanical Forces on Cells and Tissues