

## Formularium - Biomechanics

# Contents

<b>1</b>	<b>BioFluidMechanics</b>	<b>2</b>
1.1	section one . . . . .	2
<b>2</b>	<b>Soft Tissue Engineering</b>	<b>3</b>
2.1	Stress & strain in large deformations . . . . .	3
2.1.1	Kinematics . . . . .	3
2.1.2	Strain . . . . .	3
2.1.3	Stress . . . . .	3
2.2	Constitutive modeling . . . . .	3
2.3	Mechanical testing & parameter fitting . . . . .	3
2.4	In vivi wall stress estimation . . . . .	3
2.5	Other biomechanical applications . . . . .	3

# Chapter 1

# BioFluidMechanics

## 1.1 section one

first block of the lectures

## Chapter 2

# Soft Tissue Engineering

### 2.1 Stress & strain in large deformations

#### 2.1.1 Kinematics

#### 2.1.2 Strain

#### 2.1.3 Stress

### 2.2 Constitutive modeling

### 2.3 Mechanical testing & parameter fitting

### 2.4 In vivo wall stress estimation

### 2.5 Other biomechanical applications