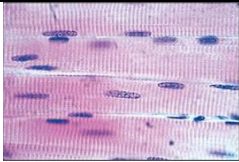
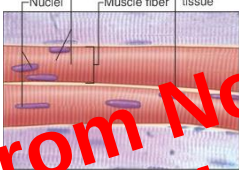
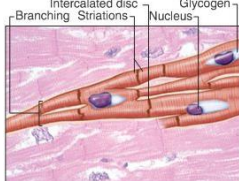
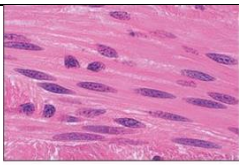
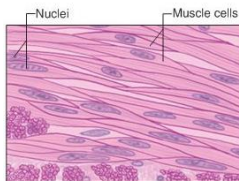


Muscle tissue

Introduction

- Cells in muscle tissue are differentiated to optimize contractility
- Most are **mesodermal** origin – undergo gradual differentiation by lengthening and generation of myofibrillar proteins
- Three types of muscle tissue: **skeletal, cardiac, smooth**
- Some organelles in muscle cells named slightly differently to other cell types
 - **Sarcoplasm**
 - **Sarcoplasmic reticulum**
 - **Sarcolemma**

Name	Cell morphology		Cross-striations	Contraction type	Control
Skeletal	Long, cylindrical, multinucleated cells	 	Yes	Quick, forceful	Voluntary
Cardiac	Elongated, branched, individual cells, lie parallel to each other	 	Yes	Vigorous, rhythmic	Involuntary
Smooth	Fusiform cells	 	No	Slow	Involuntary

Images taken from Mescher, Junqueira's Basic Histology: Text and Atlas, Twelfth Edition.