

Muscle Tissue

- Vascular tissue responsible for most types of body movement
- The cells (muscle fibers) contract in response to stimulation

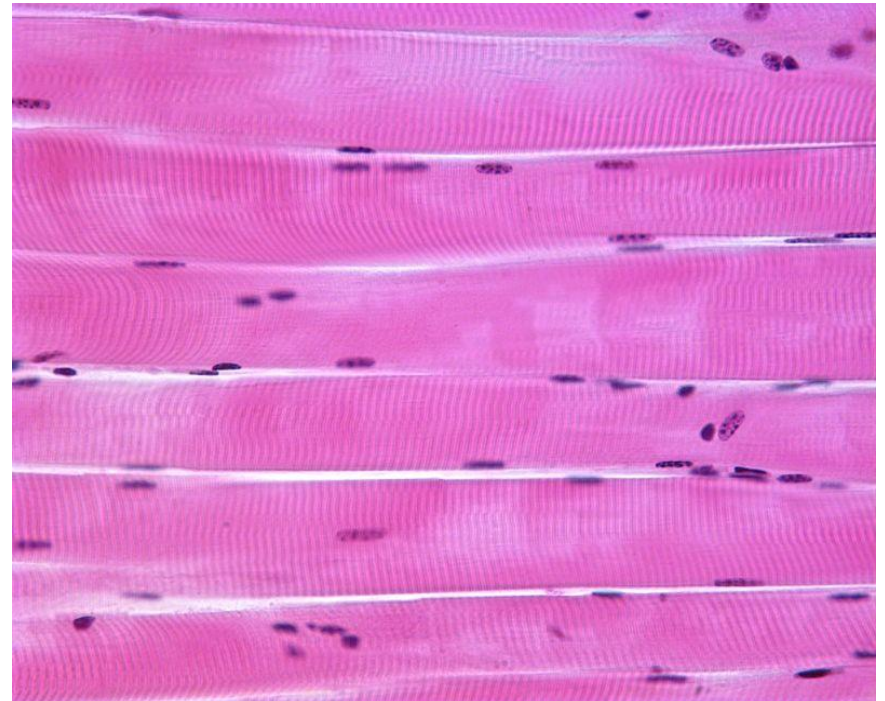
? 3 Types ?

Skeletal muscle

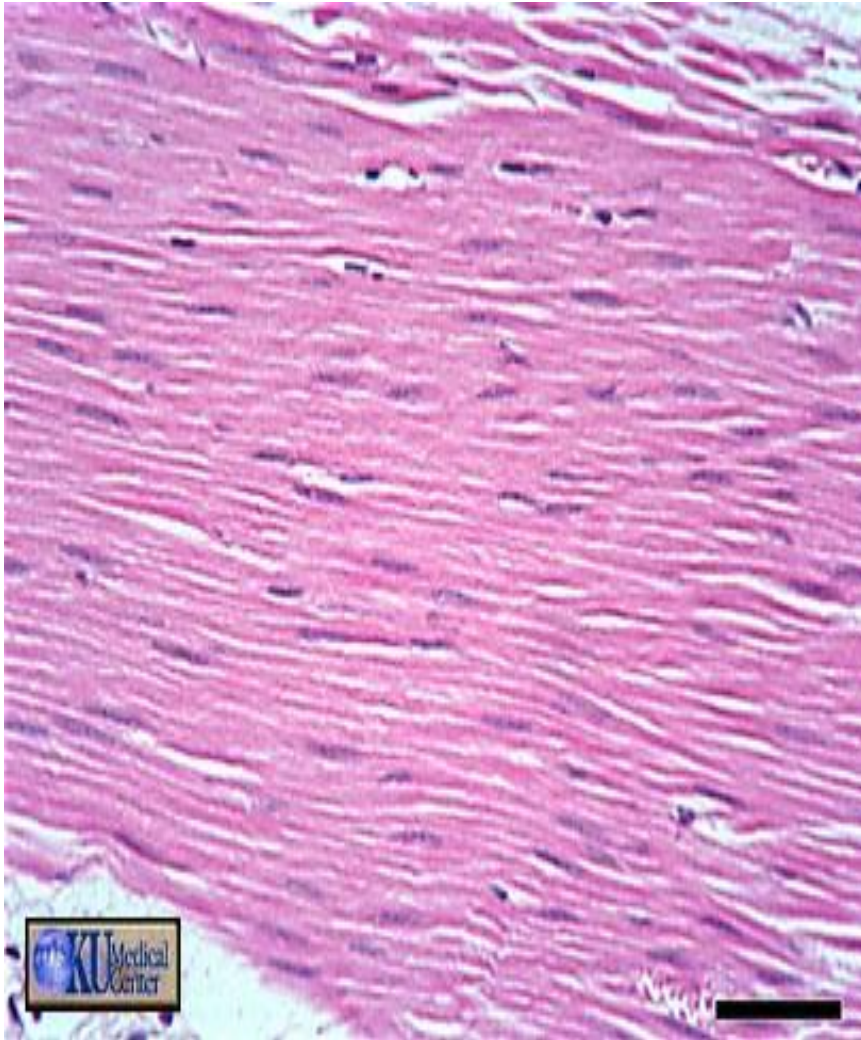
- **Description:** Long striated cells with multiple nuclei
- **Location:** Skeletal muscles
- **Function:** Contraction for voluntary movements

I-bands- light white

A-bands- dark.



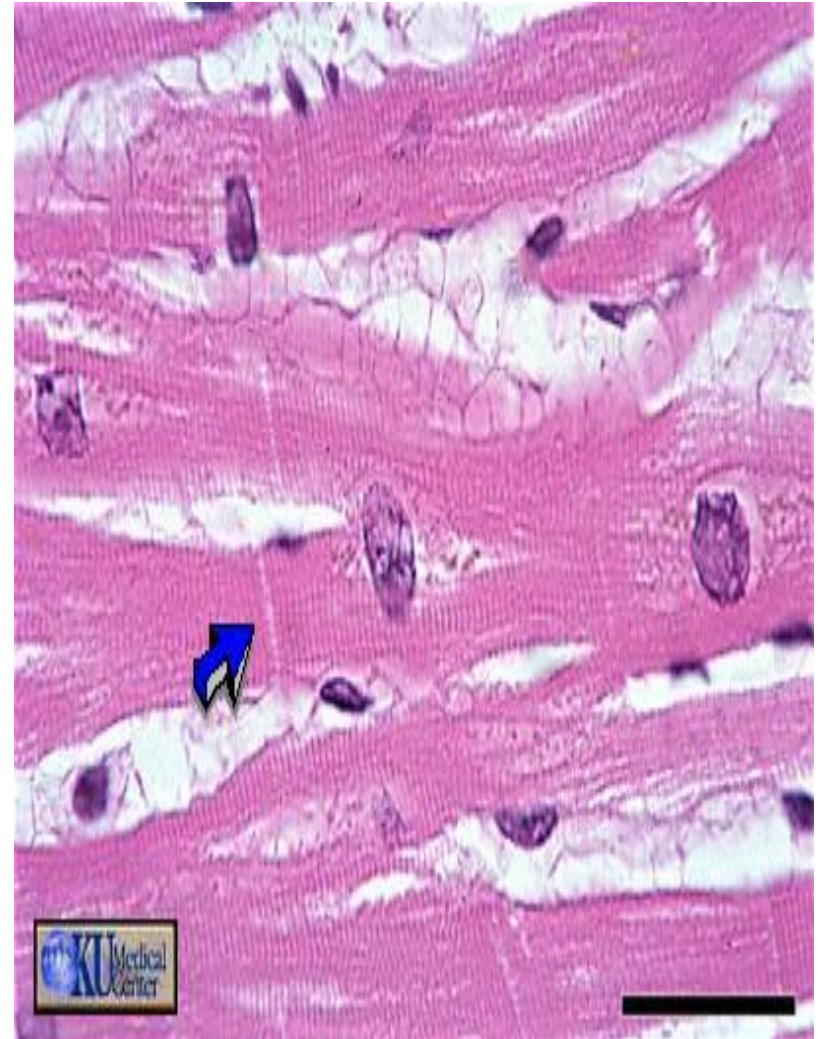
Smooth Muscle



- **Description**: Long spindle-shaped cells, each with a single nucleus
- **Location**: In hollow organs (stomach, bladder, uterus)
- **Function**: involuntary coordinated contraction

Cardiac Muscle

- **Description:**
Branching striated cells fused at plasma membranes
- **Intercalated disks:**
regions where Gap junctions bind adjacent cells
- **Location:** Heart wall
- **Function:** Pump blood



Nervous Tissue

- Control over the body's responsiveness to changing conditions

Composed of 2 major cell Types

1. Neurons: nerve cell
2. Supporting cells: support insulate and protect neurons

Neurons

Description: highly specialized branching nerve cells

Location: Brain, spinal cord, and nerves

Function: Generate and conduct nerve impulses

