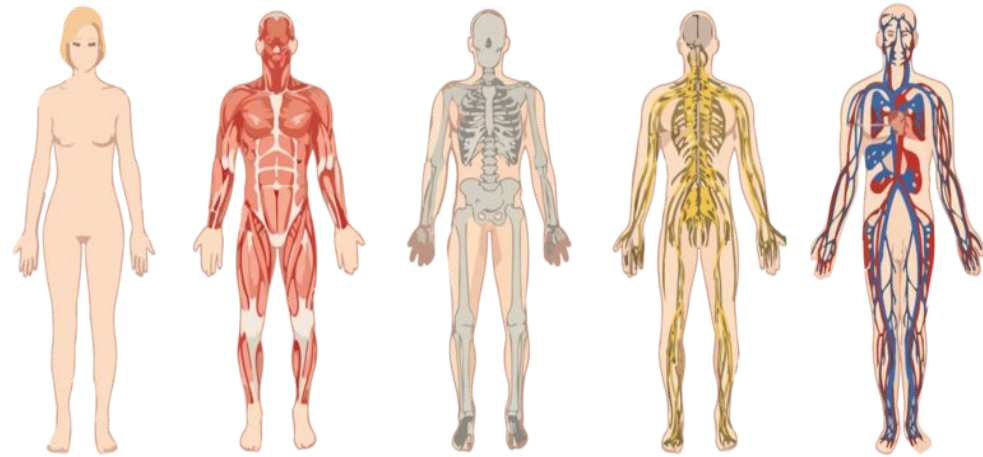
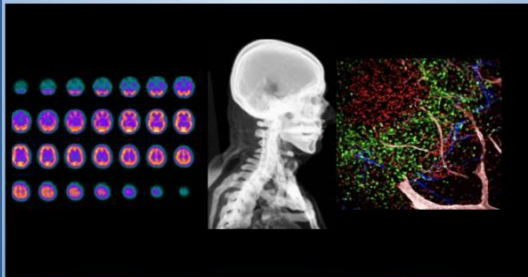


# Organization and Homeostasis of the Human Body: Anatomical Terminology

## Introduction to Human Anatomy & Physiology: A Multilingual Approach

### An Open Educational Resource

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Ann DeChenne, Kiana Pigao, Zach  
Ellsworth



[Figure 1.4](#) by OpenStax A&P

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# Lesson 3: Anatomical Terminology Learning Outcomes

## Learning Objectives:

- Locate various organs in the body using the basic anatomical terms for:
  - body position (anterior/posterior, supine/prone)
  - direction (superior/inferior, lateral/medial, proximal/distal, superficial/deep)
  - plane (sagittal/frontal/transverse)
  - compartments (dorsal/ventral)
  - body regions
- Identify the major body cavities, their membranes, and membrane layers

# See the Body Organization & Homeostasis Wordlist!

- Can be found in accompanying materials to this lecture
- Materials are available in Spanish, Russian, Vietnamese, Filipino, East African French, Kiswahili (Swahili) and Chinese.

## Module 1 Body Organization and Homeostasis Word List

### Body Planes/Sections

Coronal  
Oblique  
Sagittal  
Transverse

### Directional Terms

Anterior vs Posterior  
Deep vs Superficial  
Distal vs Proximal  
Dorsal vs Ventral  
Inferior vs Superior  
Lateral vs Medial

### Body Regions

Abdominal  
Acromial  
Antecubital  
Axillary  
Brachial  
Buccal  
Carpal  
Cephalic  
Cervical  
Coxal  
Crural  
Cranial  
Digital  
Facial  
Femoral  
Fibular  
Frontal  
Genital  
Gluteal  
Hallux  
Inguinal  
Lumbar  
Mammary  
Mental  
Nasal  
Occipital  
Oral  
Orbital/Ocular

Otic  
Palmar  
Patellar  
Pectoral  
Pedal  
Pelvic  
Perineal  
Plantar  
Popliteal  
Pollex  
Pubic  
Sacral  
Sternal  
Tarsal  
Thoracic  
Umbilical  
Vertebral

### Cavities

Dorsal Cavity  
Cranial Cavity  
Spinal Cavity  
Ventral Cavity  
Thoracic Cavity  
Mediastinum  
Pericardial Cavity  
Pleural Cavity  
Abdominopelvic Cavity  
Abdominal Cavity  
Pelvic Cavity

### Membranes

Visceral vs Parietal  
Peritoneum

### Body Systems (general function)

Cardiovascular System  
Digestive System  
Endocrine System  
Integumentary System  
Lymphatic/Immune System

Muscular System  
Nervous System  
Reproductive System  
Respiratory System  
Skeletal System  
Urinary System

### Homeostasis

Control Center  
Homeostasis  
Effector  
Negative Feedback  
Positive Feedback  
Receptor  
Set Point

### General Terminology

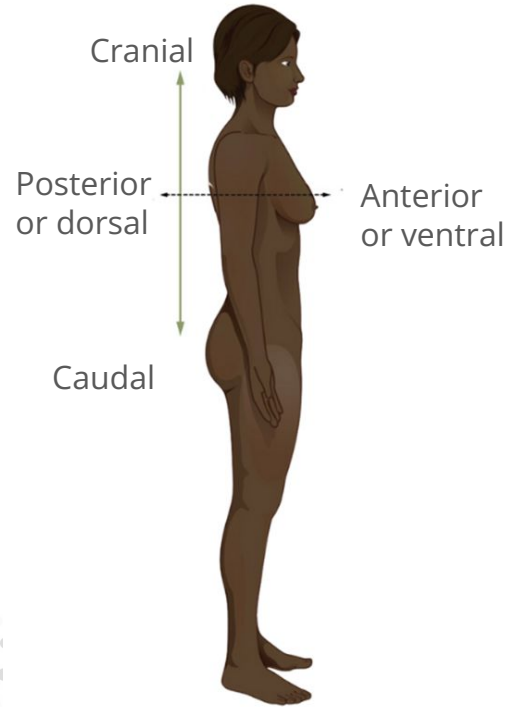
Anatomy  
Gross Anatomy  
Microscopic Anatomy  
Regional Anatomy  
Systemic Anatomy  
Physiology

### Techniques

Palpation  
Auscultation  
Percussion

# Body Position: Anterior and Posterior

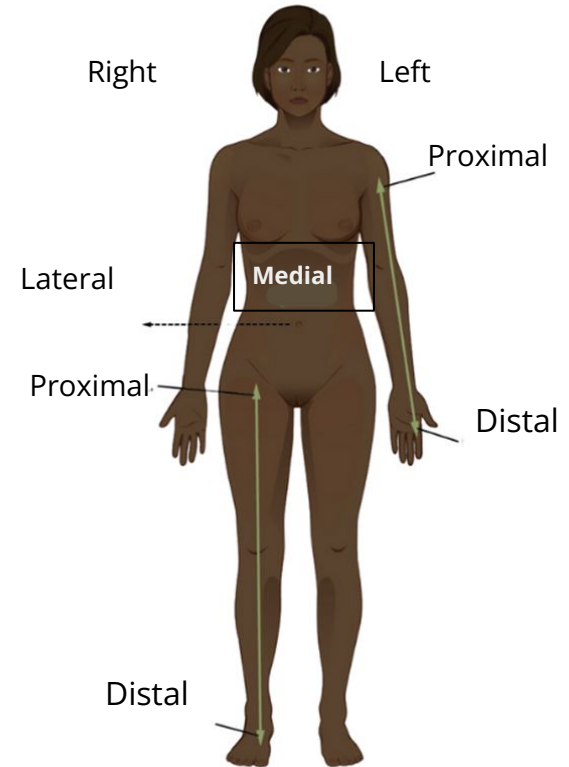
**Anterior**  
**Posterior**



# Directional: Superior & Inferior

**Superior**

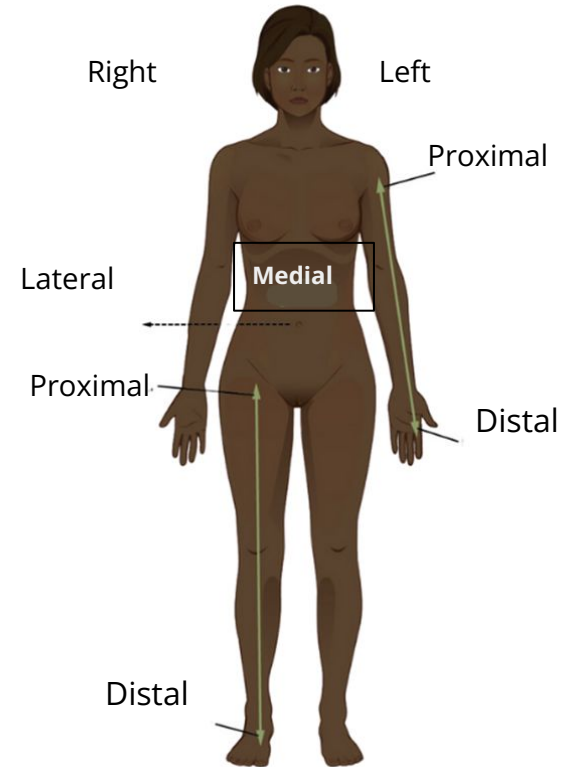
**Inferior**



# Directional: Proximal and Distal

**Proximal**

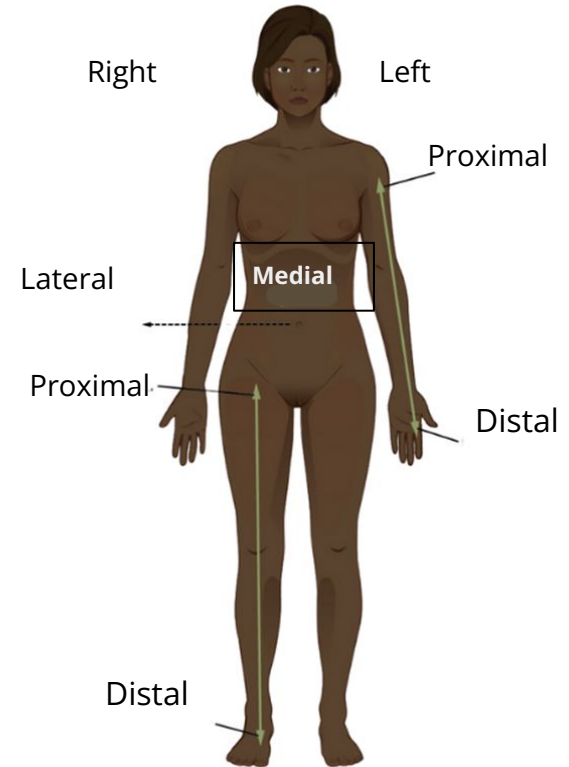
**Distal**



# Directional: Lateral and Medial

**Lateral**

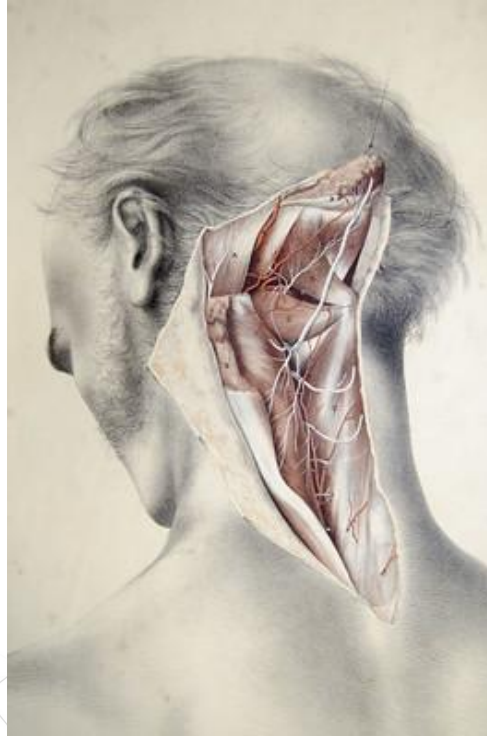
**Medial**



# Directional Terms: Superficial and Deep

**Superficial**

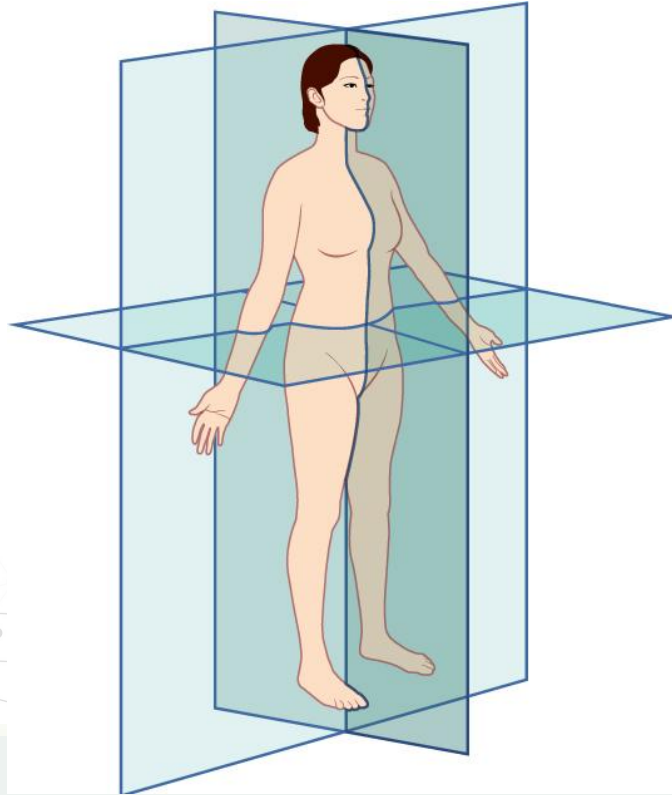
**Deep**



"[Deep view of the back of the neck](#)" by [liverpoolhls](#) is licensed under [CC BY-SA 2.0](#).

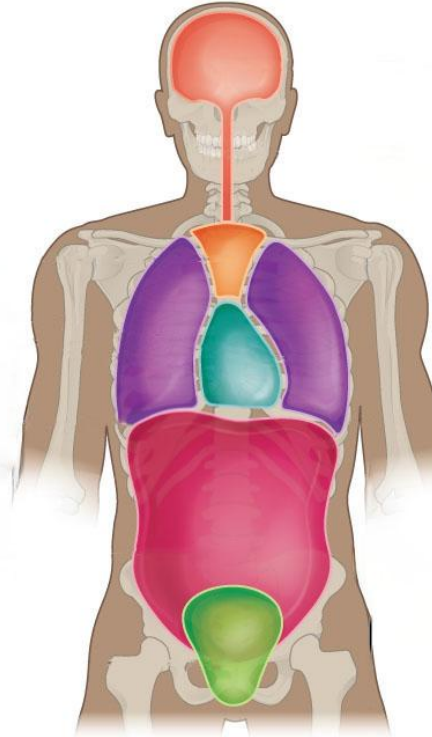
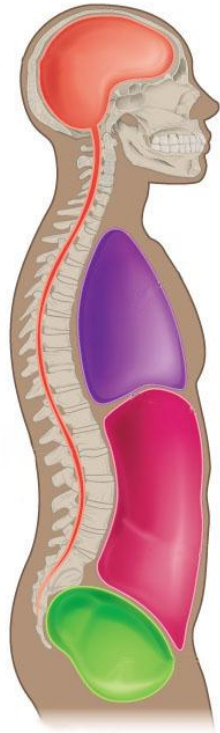
# Planes: Sagittal, Coronal, Transverse, Oblique

**Sagittal**  
**Coronal**  
**Transverse**  
**Oblique**



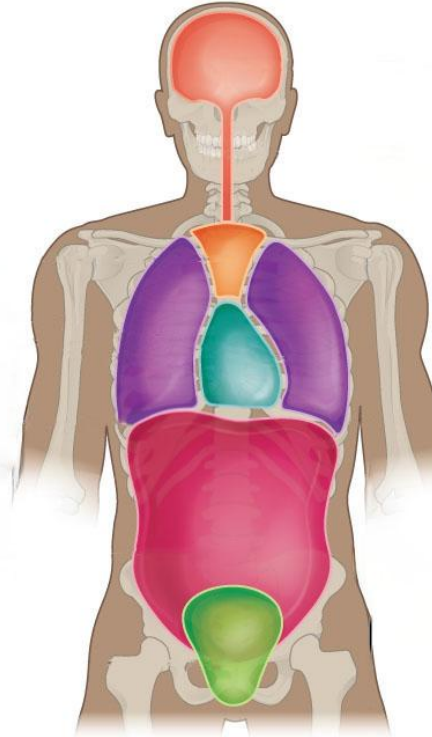
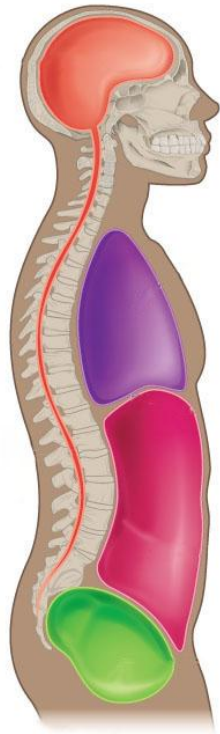
# Body Cavities: Dorsal and Ventral

**Dorsal**  
**Ventral**



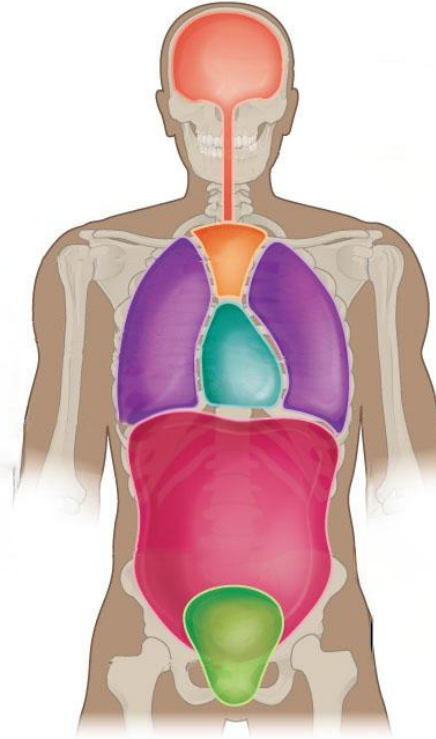
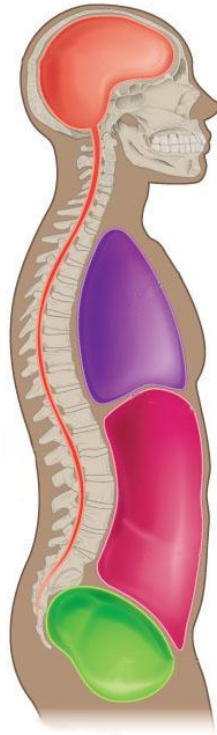
# Dorsal Body Cavities: Cranial and Spinal

**Cranial**  
**Spinal**



# Ventral Body Cavities: Thoracic Cavity

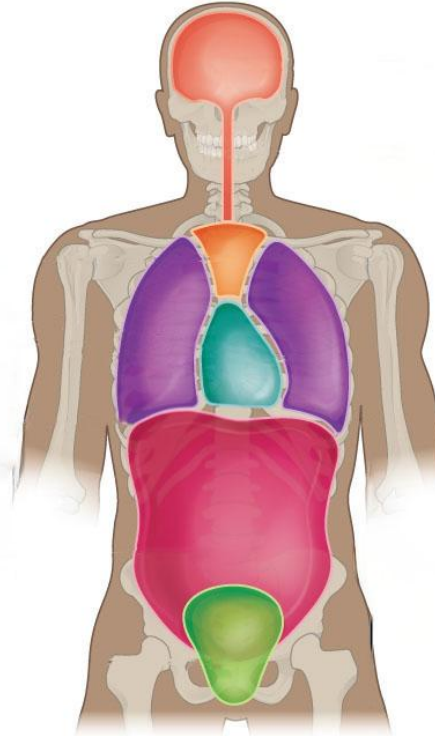
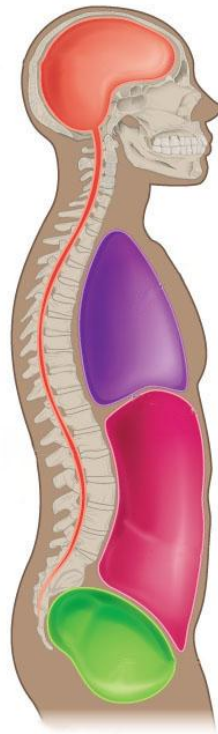
**Thoracic Cavity**  
**Mediastinum**  
**Pleural Cavity**  
**Pericardial Cavity**



# Ventral Body Cavities: Abdominal and Pelvic Cavities

**Abdominopelvic  
Cavity**

**Abdominal  
Pelvic Cavity**



# Membranes:

## Epithelial Membranes

**Mucous membrane**

**Serous membrane**

**Cutaneous membrane**

**Connective Tissue Membrane**

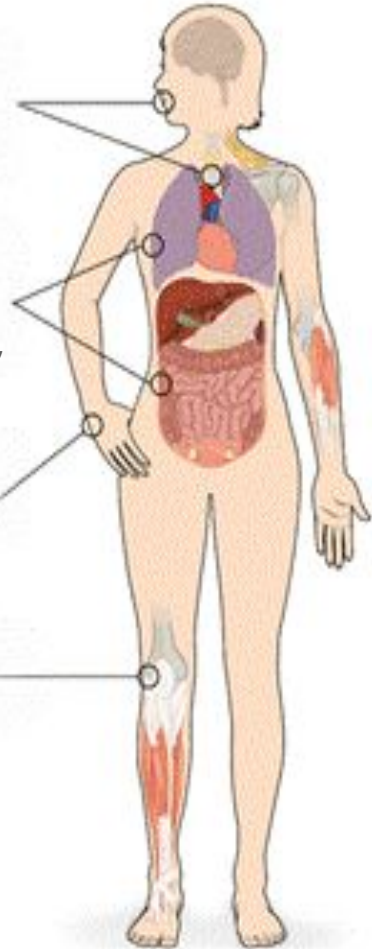
**Synovial membrane**

Mucous membranes line the digestive, respiratory, urinary, and reproductive tracts. They are coated with the secretions of mucous glands

Serous membranes line body cavities closed to the exterior of the body: the peritoneal, pleural, and pericardial cavities

Cutaneous membrane, or the skin, covers the body surface.

Synovial membranes line joint cavities and produce the fluid within the joint.



# Serous Membranes have visceral and parietal layers

## **Pleura**

**Visceral pleura**

**Parietal pleura**

## **Pericardia**

**Visceral pericardium**

**Parietal pericardium**

## **Peritoneum**

**Visceral peritoneum**

**Parietal peritoneum**

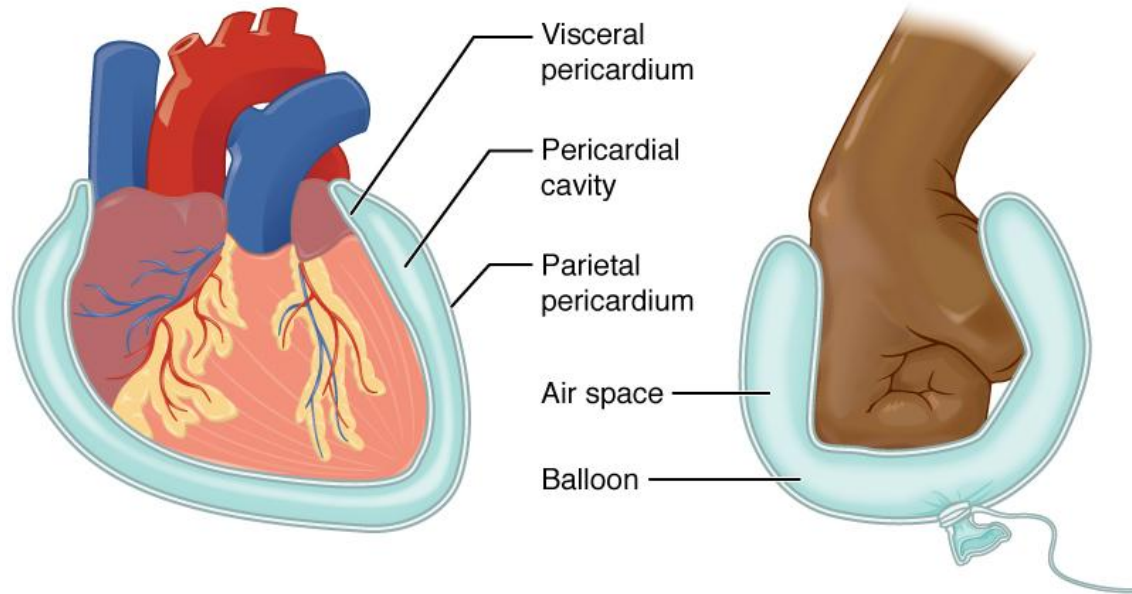
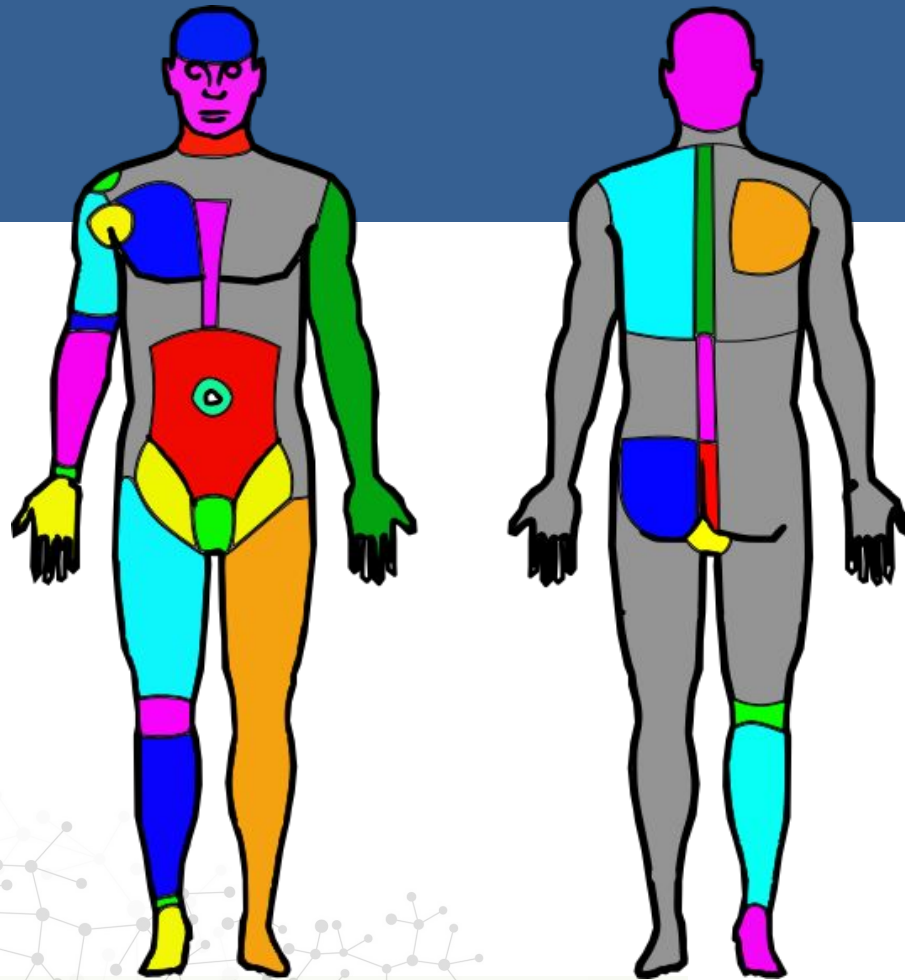


Figure 1.17 by OpenStax A&P

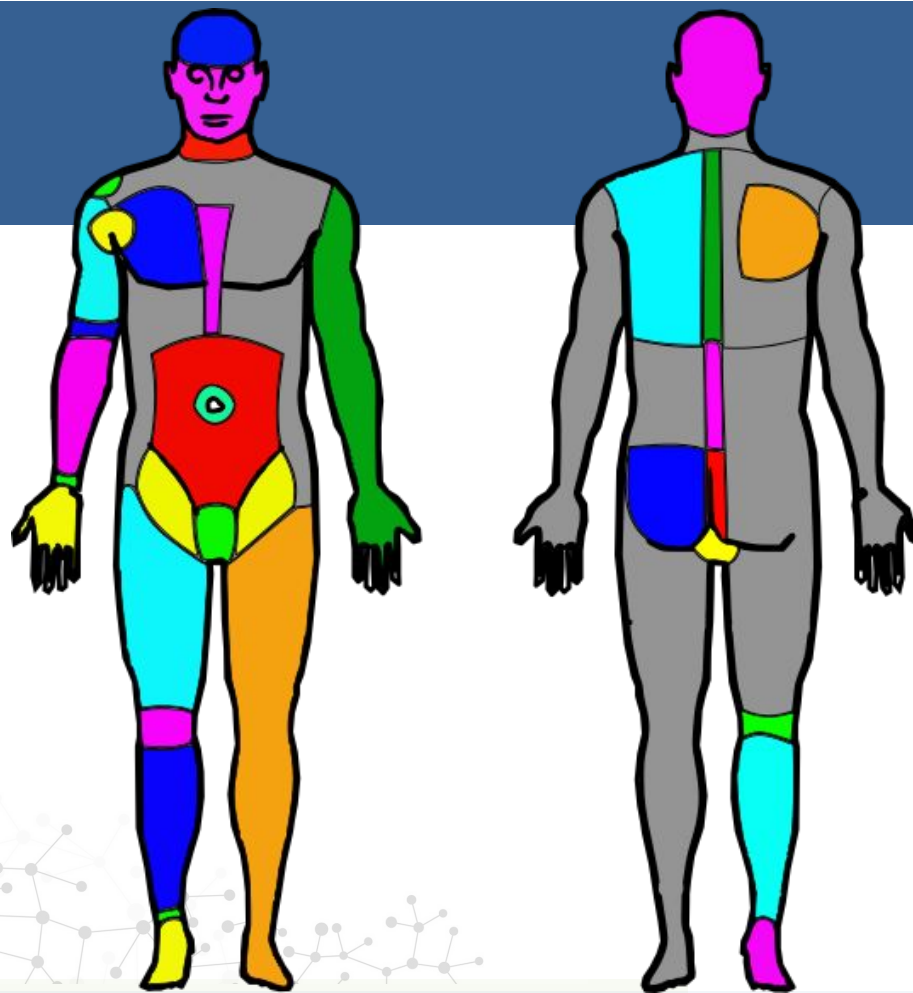
# Body Regions 1

Abdominal  
Acromial  
Antecubital  
Axillary



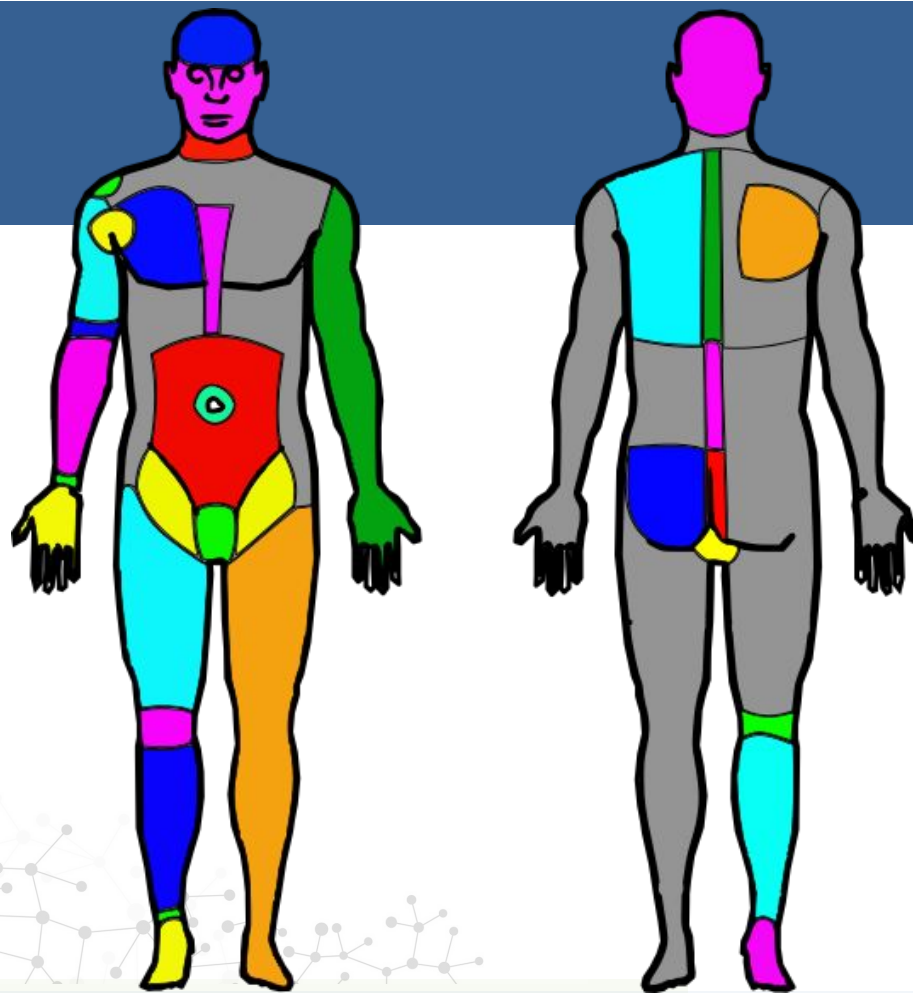
# Body Regions 2

Brachial  
Buccal  
Carpal  
Cephalic



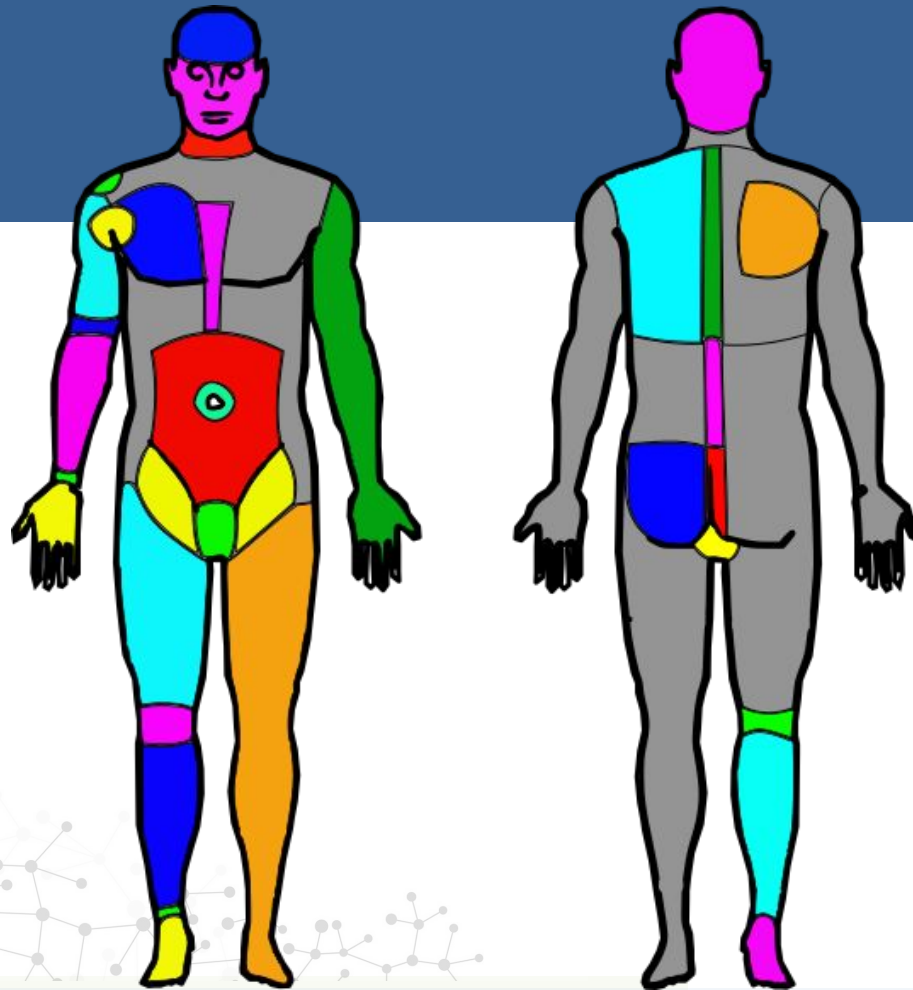
# Body Regions 3

Cervical  
Coxal  
Crural  
Cranial



# Body Regions 4

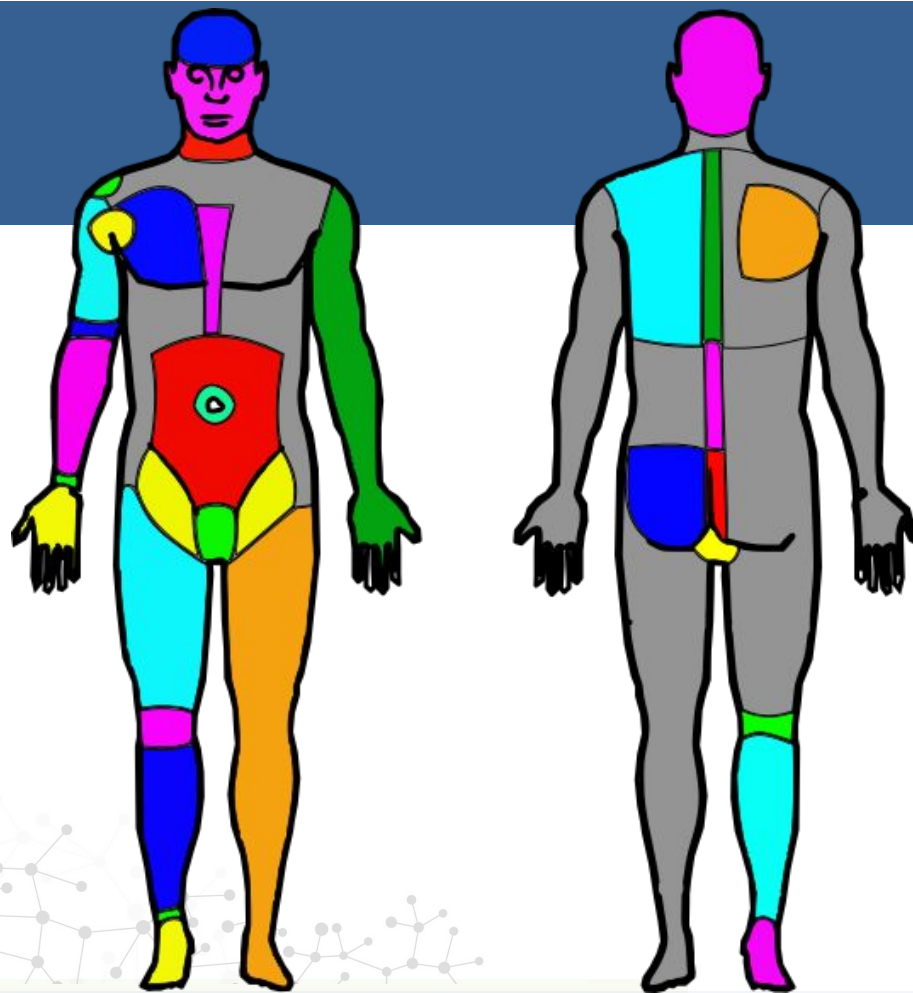
Digital  
Facial  
Femoral  
Fibular



**Body Regions** is adapted from [Regional Terminology](#) by Laird C. Sheldahl, Ph.D, Mt. Hood Community College, and is licensed [CC BY SA 4.0](#)

# Body Regions 5

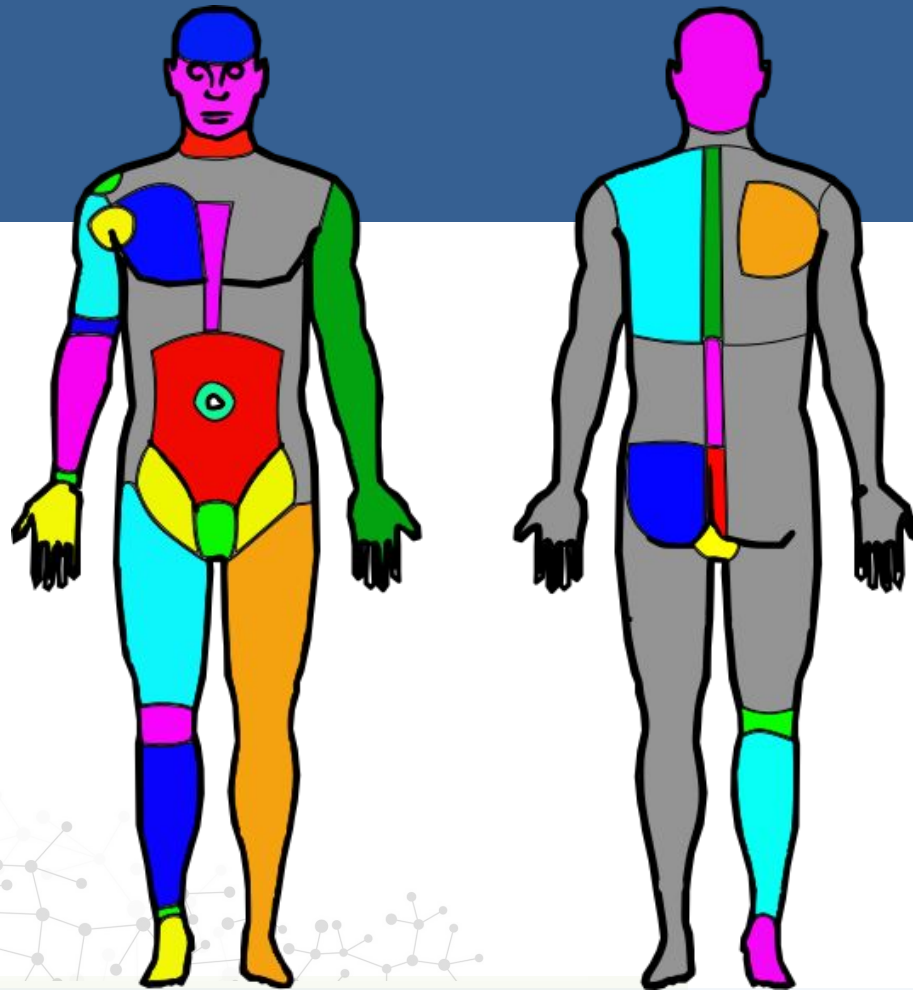
Frontal  
Genital  
Gluteal  
Hallux



**Body Regions** is adapted from [Regional Terminology](#) by Laird C. Sheldahl, Ph.D, Mt. Hood Community College, and is licensed [CC BY SA 4.0](#)

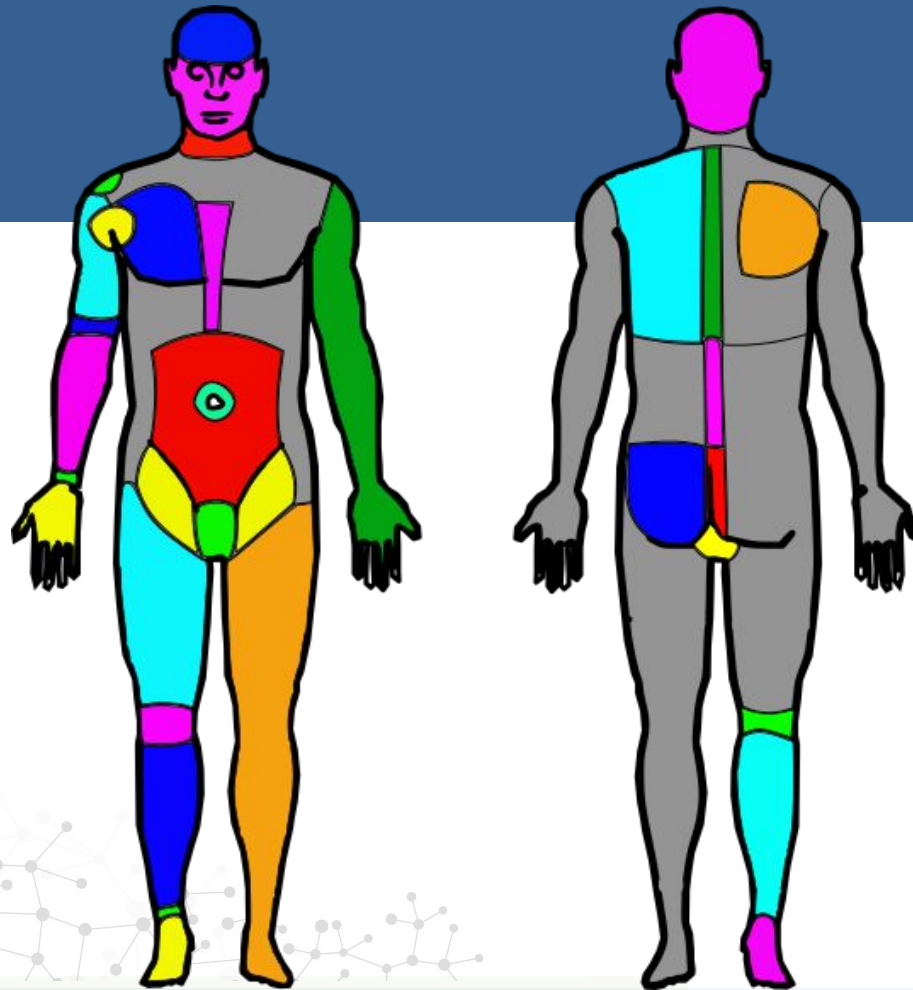
# Body Regions 6

Inguinal  
Lumbar  
Mammary  
Mental



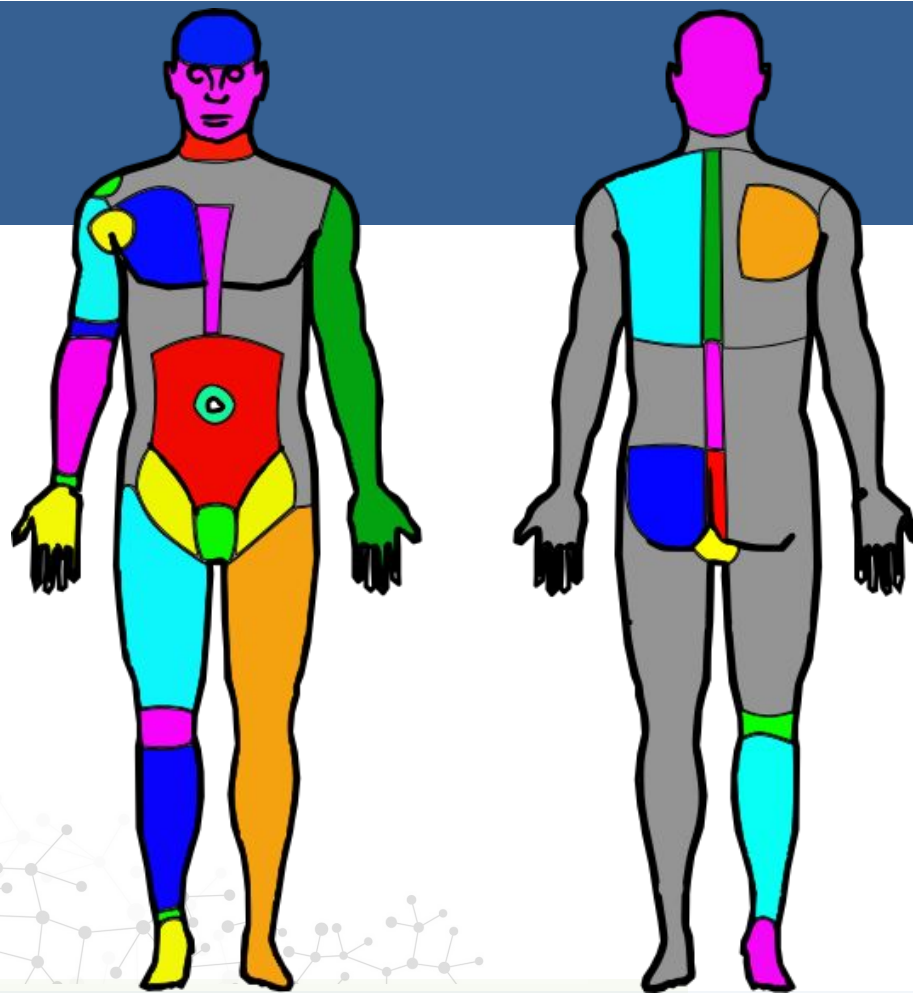
# Body Regions 7

Nasal  
Occipital  
Oral  
Orbital/Ocular



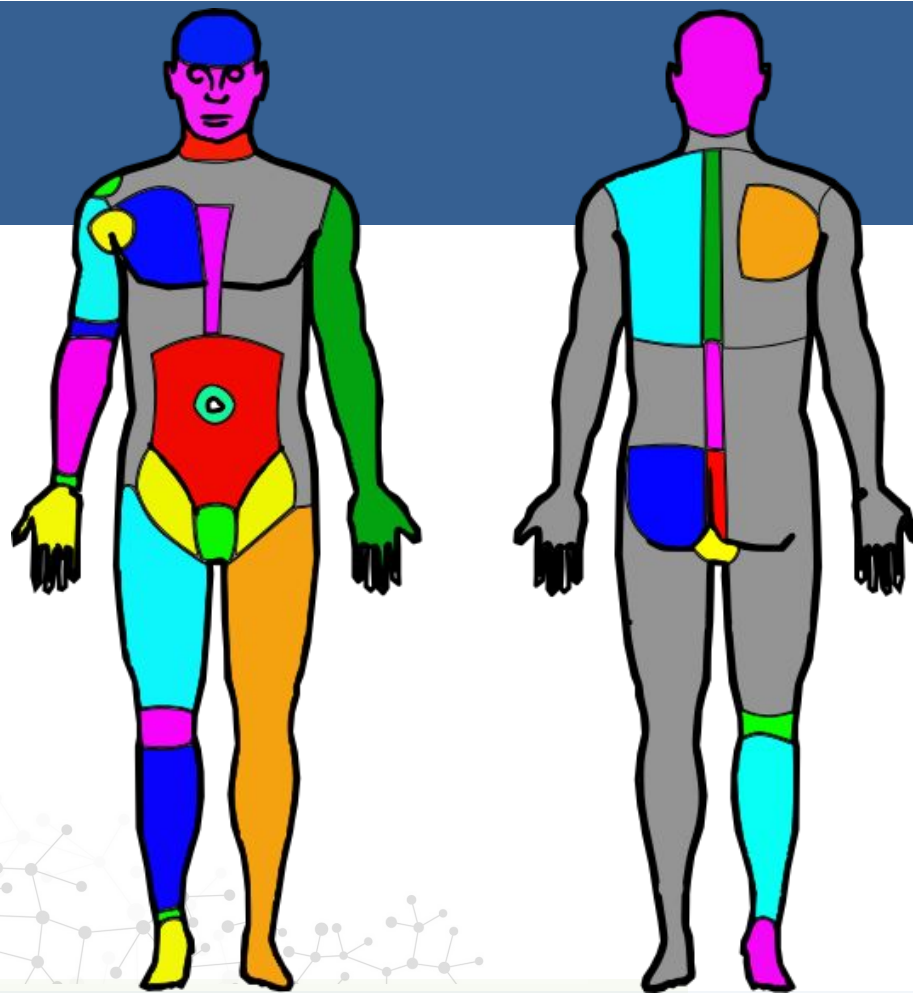
# Body Regions 8

Otic  
Palmar  
Patellar  
Pectoral



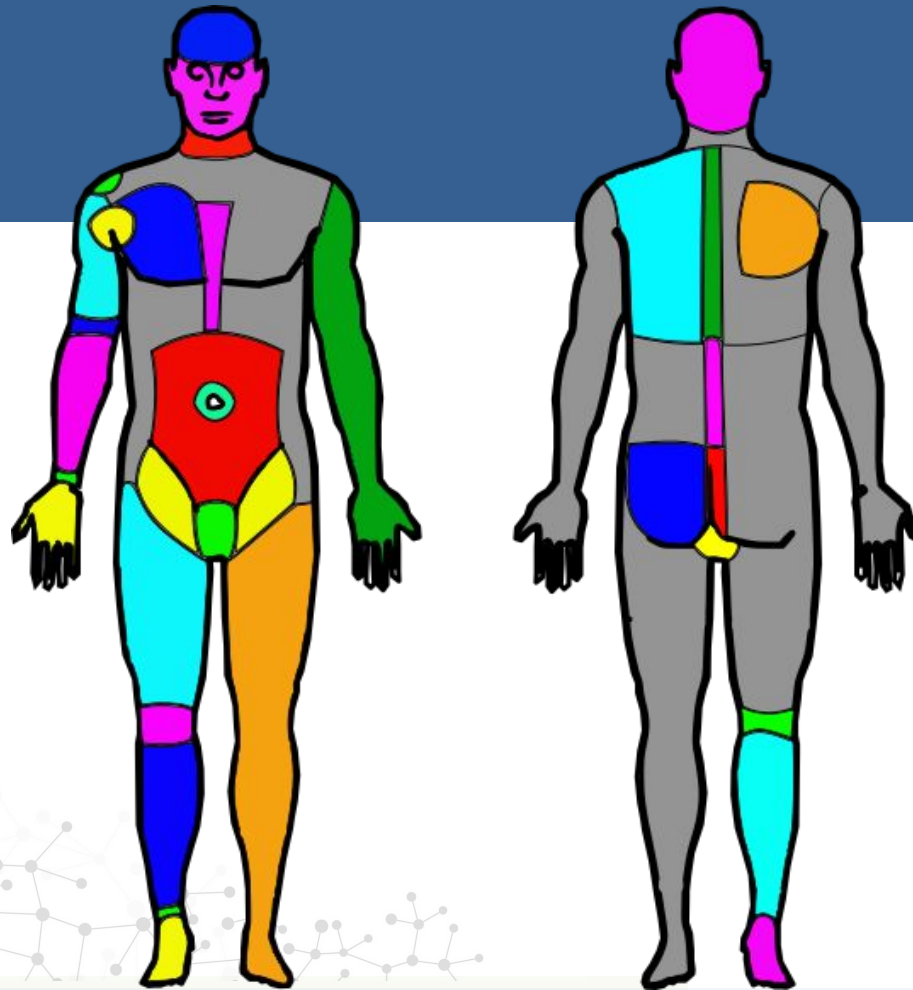
# Body Regions 9

Pedal  
Pelvic  
Perineal  
Plantar



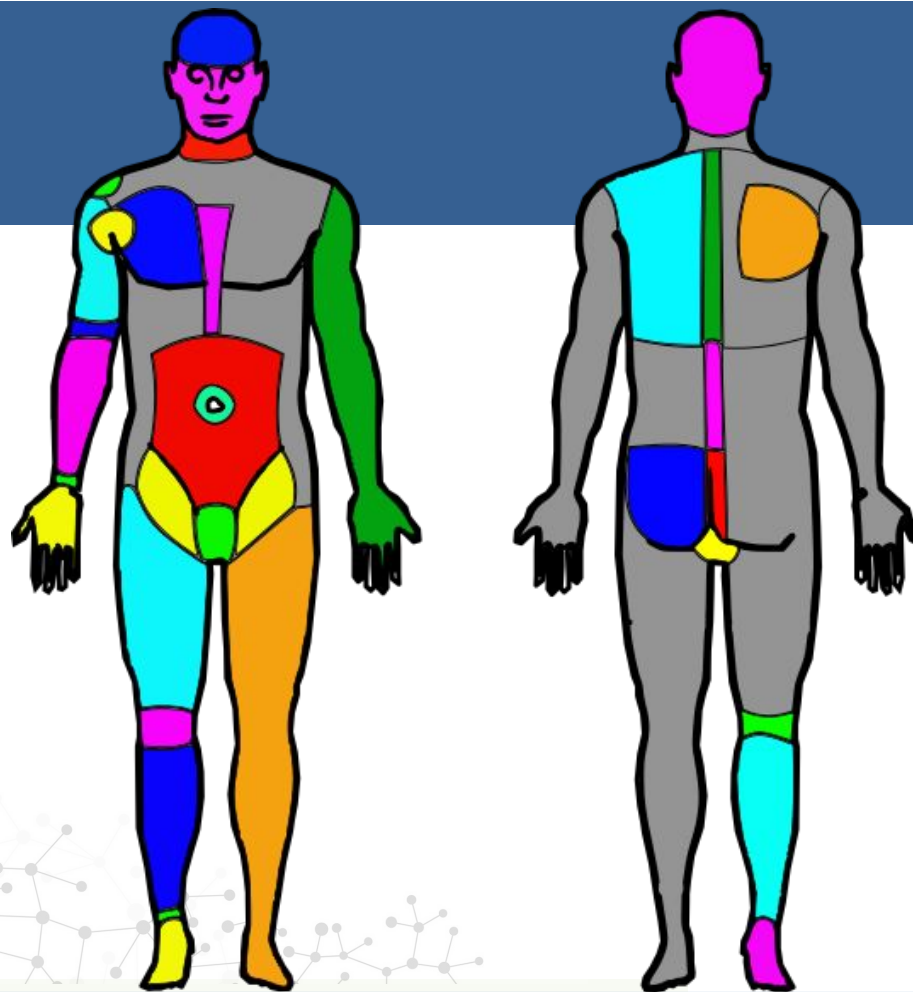
# Body Regions 10

Popliteal  
Pollex  
Pubic  
Sacral



# Body Regions 11

Sternal  
Tarsal  
Thoracic  
Umbilical  
Vertebral



# Allied Health Anatomy: Body Exams



Inspection



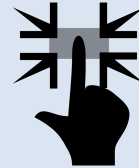
Dissection



Palpation



Auscultation



Percussion



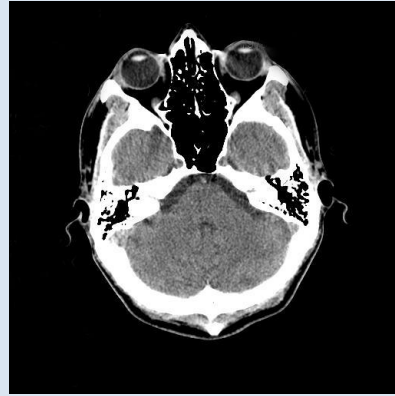
Medical imaging/  
Radiology

[Magnifying Glass](#) and [Knife](#) by Inkie30, [CC0 1.0 Universal](#), [Touch push finger 2](#) and [Zoom-in-finger](#) by Jammi Evil, [CC0 1.0 Universal](#), [Ear](#) by CCx, [CC0 1.0 Universal](#), [Simple Eye Line Art](#) by GDJ, [CC0 1.0 Universal](#)

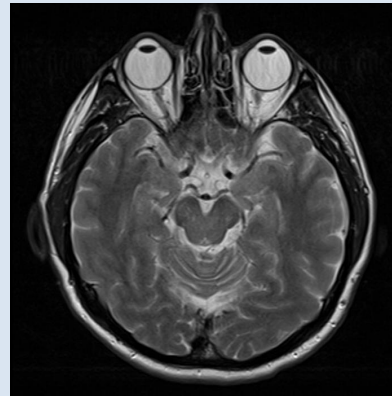
# Allied Health Anatomy: Medical Imaging



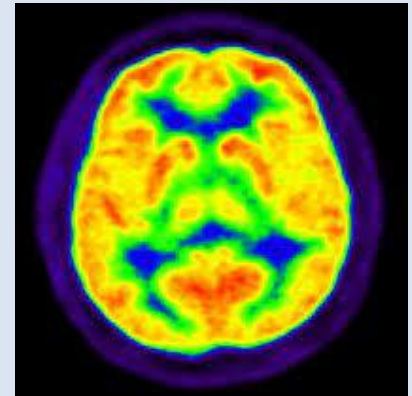
Radiography



Computed  
tomography  
(CT scan)



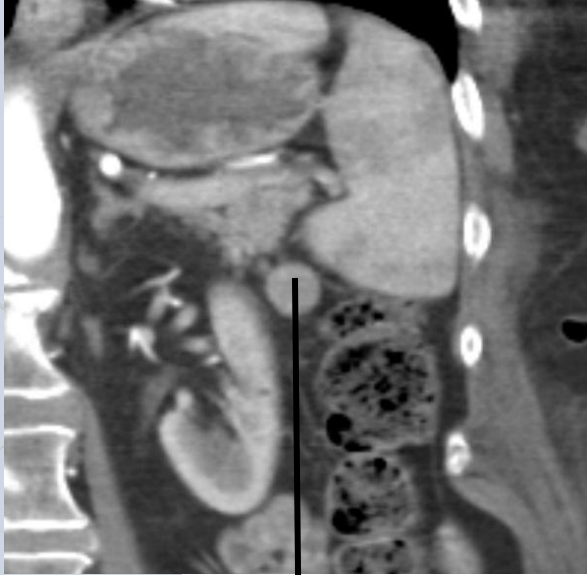
Magnetic  
resonance  
imaging (MRI)



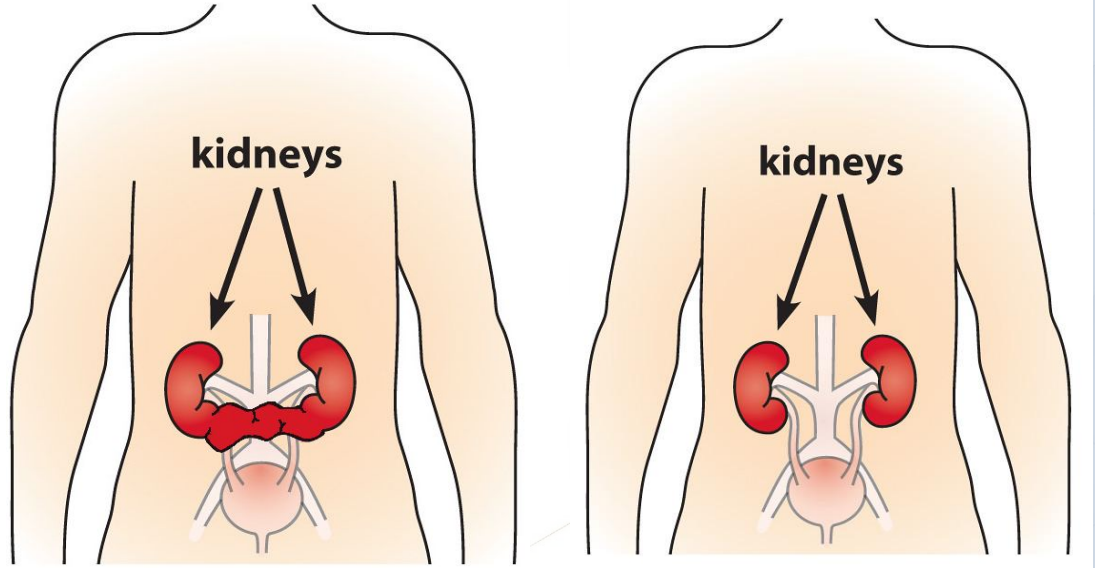
Positron  
emission  
tomography  
(PET scan)

["Skull X-ray lateral view"](#) by Aaron G. Filler, MD, PhD is licensed under [CC BY-SA 3.0](#), ["Head CT scan"](#) by Andrew Ciscel is licensed under [CC BY-SA 2.0](#), ["MRI Head Brain Normal"](#) by Ptrump16 is licensed under [CC BY-SA 4.0](#), ["PET scan of a brain using fluorideoxyguose"](#) by TRIUMF Lab is licensed under [CC BY-NC-SA 2.0](#)

# Anatomical Variation



Accessory spleen



# Physiology = Function

## Structure

determines  
what functions can occur

Even more variable than anatomy!

