

## ANATOMY LAB – LIST OF ANATOMICAL STRUCTURES (examples)

### VERTEBRAL COLUMN & THORACIC CAGE

- **vertebra:** body, arch, vertebral foramen, pedicle, lamina, spinous process (spine), transverse process, superior and inferior articular processes, superior and inferior vertebral notches, intervertebral foramen
- **atlas:** anterior and posterior arch, anterior and posterior tubercle, lateral mass, superior articular surface of lateral mass for occipital condyle, inferior articular surface of lateral mass for axis, articular facet for dens (fovea dentis), transverse process, transverse foramen, groove for vertebral artery
- **axis:** odontoid process (dens), apex, anterior articular facet (for anterior arch of atlas), posterior articular facet (for transverse ligament of atlas), superior articular facet for atlas, inferior articular process, spinous process, transverse process, transverse foramen
- **vertebra prominens** (= C7= 7th cervical vertebra)
- **cervical vertebra:** transverse foramen (foramen transversarium), anterior and posterior tubercle, groove for spinal nerve
- **thoracic vertebra:** superior costal facet, inferior costal facet, transverse costal facet
- **lumbar vertebra:** mammillary process, accessory process.
- **sacrum:** auricular surface, promontory, sacral canal, sacral hiatus, lateral part of sacrum, anterior (pelvic) and posterior (dorsal) sacral foramina, sacral cornu (horn), lumbosacral articular surface, median sacral crest, intermediate sacral crest, lateral sacral crest, sacral tuberosity
- **rib:** head (superior and inferior articular facets for vertebral body), tubercle of rib (articular facet for transverse process of vertebra), crest of head of rib, angle of rib, neck of rib, costal groove
- **1<sup>st</sup> rib** – scalene tubercle, groove for subclavian artery, groove for subclavian vein
- **2<sup>nd</sup> rib** – anterior serratus muscle tuberosity (tuberosity for serratus anterior)
- **sternum:** manubrium (jugular notch = suprasternal notch), clavicular notch = facet for clavicle, facet for first costal cartilage), angle, body (costal notches), xiphoid process.

### UPPER LIMB

- **clavicle:** acromial end, acromial articular facet, sternal end, sternal articular facet, nutrient foramen, impression for costoclavicular ligament, trapezoid line, conoid tubercle, subclavian groove, superior surface, inferior surface.
- **scapula:** acromion, coracoid process, supraglenoid and infraglenoid tubercles, subscapular fossa, lateral, medial and superior borders, superior, lateral and inferior angles, suprascapular notch, glenoid cavity, spine, supraspinous and infraspinous fossa, articular facet for clavicle, neck of scapula, groove for circumflex scapular vessels
- **humerus:** head, anatomical neck, surgical neck, greater and lesser tubercle, crest of greater and lesser tubercles, intertubercular sulcus, deltoid tuberosity, shaft, radial groove, medial and lateral epicondyles, trochlea, radial fossa, coronoid fossa, olecranon fossa, groove for ulnar nerve, capitulum, medial and lateral supracondylar ridge, nutrient foramen
- **radius:** head, neck, fovea of the head, articular circumference of the head, radial tuberosity (bicipital tuberosity), interosseous border, anterior border, posterior

border, anterior surface, posterior surface, lateral surface, radial (lateral) styloid process, ulnar notch, dorsal tubercle, inferior articular surface (area for scaphoid bone, area for lunate bone), groove for extensor digitorum and extensor indicis muscle, groove for extensor pollicis longus muscle, groove for extensor carpi radialis longus and brevis muscle

- **ulna:** olecranon, trochlear notch, coronoid process, radial notch, shaft, interosseous border, posterior border, anterior border, anterior surface, posterior surface, medial surface, supinator crest, supinator fossa, head of ulna, articular circumference of the head, ulnar (medial) styloid process, ulnar tuberosity)
- **bones of the hand:** scaphoid (tubercle of scaphoid), lunate, triquetral, pisiform, trapezium (tubercle of trapezium), trapezoid, capitate, hamate (hook of hamate); metacarpals (base, shaft, head) and proximal, middle, distal phalanges (distal phalanges – base, shaft, head, tuberosity)

## LOWER LIMB

- **hip bone:**
  - **ilium:** body, wing (ala) of ilium, iliac crest, outer lip, inner lip, intermediate zone, iliac fossa, anterior superior iliac spine, anterior inferior iliac spine, posterior superior iliac spine, posterior inferior iliac spine, tuberculum of ilium (iliac tubercle) auricular surface, iliopubic eminence, arcuate line (iliopectinate line), posterior gluteal line, anterior gluteal line, inferior gluteal line, iliac tuberosity
  - **pubis:** body, superior and inferior pubic rami, pubic tubercle, pubic crest, symphyseal surface, obturator crest, obturator groove
  - **ischium:** body, ramus of ischium, ischial spine, ischial tuberosity, greater sciatic notch, lesser sciatic notch, obturator foramen
  - **acetabulum:** acetabular fossa, acetabular notch, lunate surface, margin (limbus) of acetabulum
- **femur:** head, fovea for ligament of head, neck, greater and lesser trochanter, trochanteric fossa, intertrochanteric line, intertrochanteric crest, quadrate tubercle, calcar, shaft (linea aspera, medial and lateral lip of linea aspera, medial supracondylar ridge, adductor tubercle, lateral supracondylar ridge, gluteal tuberosity, pectineal line, popliteal surface, lateral and medial condyles, intercondylar fossa, medial and lateral epicondyles, patellar surface, nutrient foramen
- **patella:** base, apex
- **tibia:** lateral and medial condyles of tibia, superior articular surface of tibia (medial and lateral facet), anterior and posterior intercondylar area, intercondylar eminence, lateral and medial intercondylar tubercle, circular articular facet for the head of the fibula, shaft, tibial tuberosity, Gerdy's tubercle (insertion of the iliotibial tract), soleal line, medial border, interosseous border, anterior border, medial surface, lateral surface, posterior surface, medial malleolus, articular facet of medial malleolus, fibular notch, groove for tibialis posterior and flexor digitorum longus tendon, groove for tendon of flexor hallucis longus, nutrient foramen, inferior articular surface
- **fibula:** head (apex of fibula), neck of fibula, interosseous border, medial crest, lateral surface, medial surface, posterior surface, lateral malleolus (articular facet, malleolar fossa of lateral malleolus)
- **calcaneus:** calcaneal sulcus, anterior, middle and posterior talar surfaces, tuberosity (medial and lateral process of tuberosity), sustentaculum tali, fibular

(peroneal trochlea), articular surface for cuboid bone, groove for fibularis (peroneus) longus tendon

- **talus:** (head, neck, trochlea, sulcus tali - sinus tarsi, articular facet for articulation with the lateral and medial malleolus, groove for tendon of flexor hallucis longus muscle, posterior process (medial and lateral tubercle), anterior, middle and posterior calcaneal surfaces
- **other bones of foot:** navicular bone (tuberosity), cuboid bone (groove for fibularis (peroneus) longus muscle, cuneiform bones, metatarsal bones (base, shaft, head), tuberosity of 5<sup>th</sup> metatarsal and phalanges (proximal, middle and distal)

## SKULL

- **mandible:** body & ramus, oblique line, mylohyoid line, sublingual fossa, submandibular fossa, coronoid process, condylar process, pterygoid fovea, head, neck of mandible, lingula, mental spine, masseter tuberosity, pterygoid tuberosity, digastric fossa, mental foramen, mental tubercle, angle of mandible
- **maxilla:** zygomatic, frontal, alveolar, palatine processes, maxillary sinus, zygomaticoalveolar crest, infraorbital foramen, anterior lacrimal crest
- **sphenoid bone:** body, sella turcica, dorsum sellae, ant., middle & posterior clinoid processes, tuberculum sellae, prechiasmatic sulcus, ethmoid spine, carotid sulcus, lesser wing, greater wing (internal surface, orbital, maxillary, temporal, infratemporal), pterygoid process (medial & lateral lamina), scaphoid & pterygoid fossa, sphenoid sinus, hamulus, foramen rotundum, ovale, spinosum, lacerum, sulcus for middle meningeal artery
- **temporal bone:** articular tubercle, arcuate eminence, tegmen tympani, trigeminal impression, subarcuate fossa, jugular fossa, petrous fossula, styloid process, mastoid foramen, stylomastoid foramen, petrotympanic fissure, carotid canal, internal auditory meatus, sulcus for superior & inferior petrosal sinus, mastoid process, mastoid notch
- **occipital bone:** pharyngeal tubercle, clivus, occipital condyles, condylar fossa, jugular tubercle, jugular notch, ext. & int. occipital protuberance, sup., inf., supreme nuchal lines, hypoglossal canal, condyloid (condylar) canal, foramen magnum, jugular foramen, sulcus for occipital artery
- **ethmoid bone:** cribriform plate, perpendicular plate, crista galli, superior and middle nasal concha, orbital plate
- **frontal bone:** supraorbital notch & margin, frontal notch, glabella, superciliary arch, zygomatic process, frontal sinus, foramen cecum, frontal crest
- **parietal bone:** parietal foramen, frontal, sphenoidal, occipital & mastoid angles
- **palatine bone:** horizontal & perpendicular laminae, pyramidal process
- **zygomatic bone:** temporal, frontal, maxillary process, zygomaticofacial foramen
- **other structures:** greater & lesser palatine canal, incisive canal, optic canal, superior & inferior orbital fissure; coronal, lambdoid, sagittal, median palatine, transverse palatine sutures; superior sagittal, transverse, sigmoid, superior petrosal, inferior petrosal, cavernous sulci; lambda, bregma, pterion, asterion
- ...