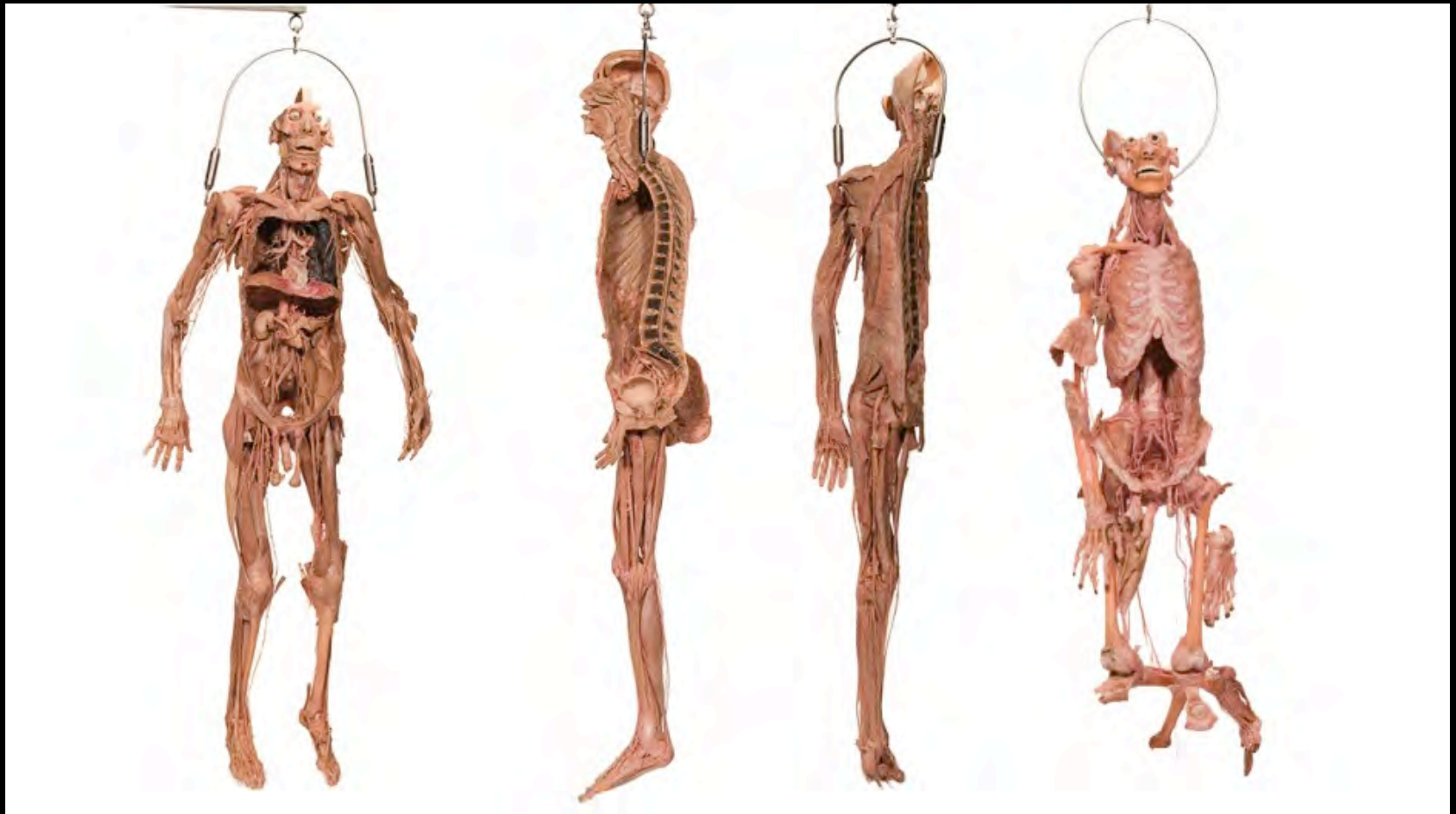


Specimens on Display

10 Oct. 2015

Body 1, Body2, Body3



Body 2 Hemisected

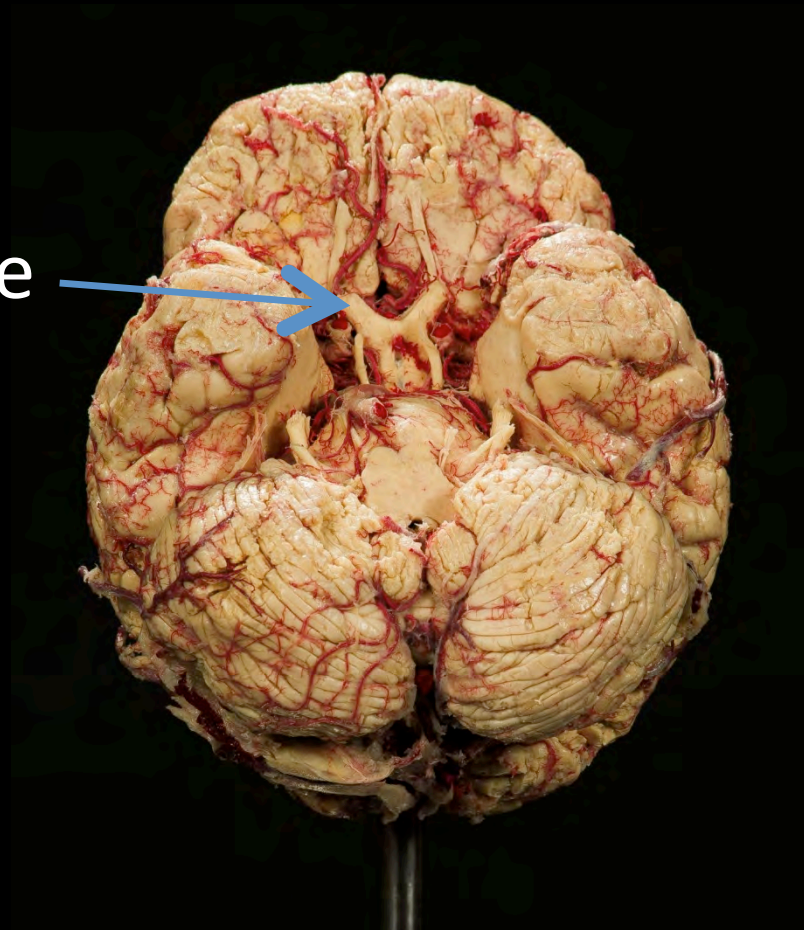
Brain - Cranial Nerves



Looks like a walnut and weighs 1500 g

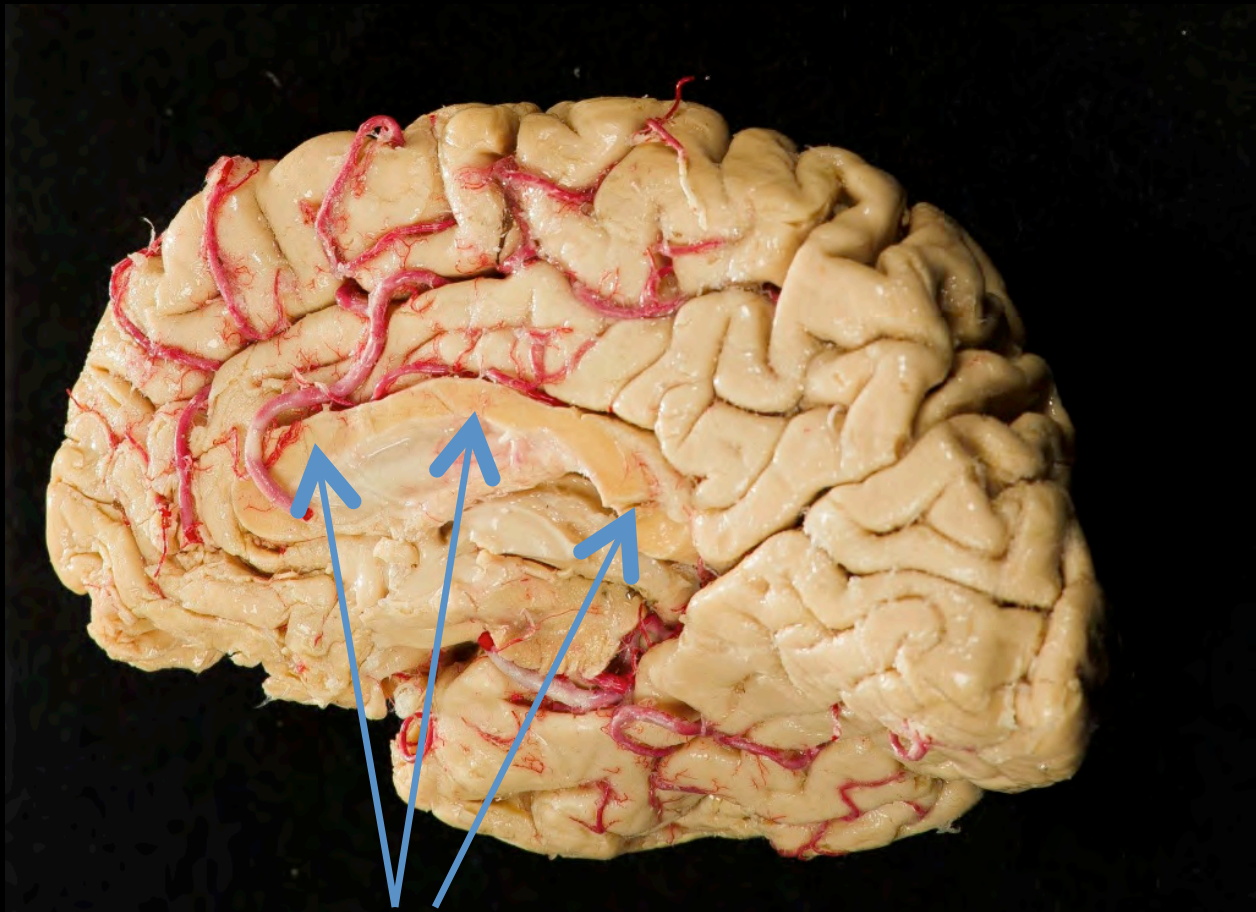
Brain Base

Optic nerve



Brainstem cut

Cerebral Hemisphere (right)



C shaped bundle of fibers connects the right
and left part of brain

Cerebral Hemisphere (left)



Part dissected to show insula

Brain – Ventricles



Choroid plexus produces CSF

Midbrain and Brainstem



Skull Cap



Protects the brain
Note the variation in thickness

Wear a Helmet



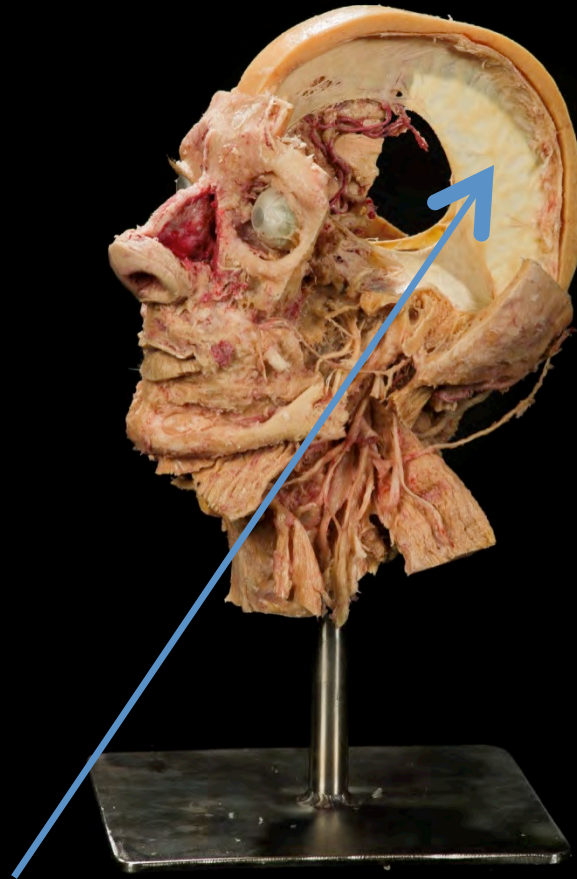
Protect your brain

Tongue, Pharynx



Look in to see the vocal cords

Head and Neck



Falx cerebri - partition between two lobes of brain

Ossicles



Hammer
(Malleus)



Anvil
(Incus)



Stirrup
(Stapes)

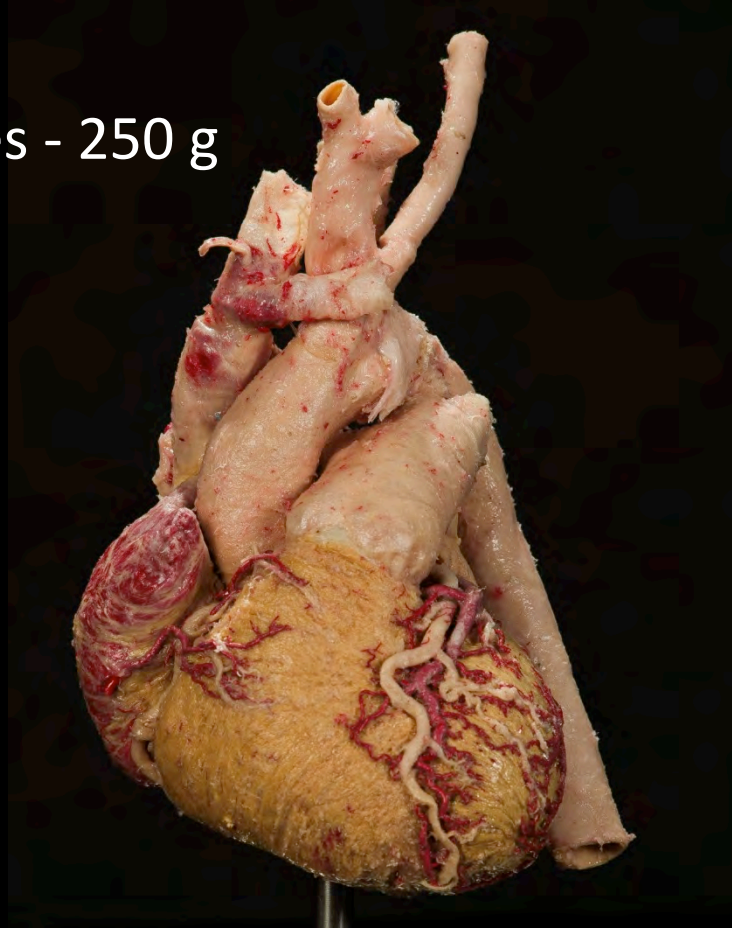
See the smallest bone in the body!

Heart External Features

Beats 100,000/day

Average weight:

males - 300 g, females - 250 g



Normal heart is size of owners fist

What is the most hard working muscle in the body?

Heart Internal Features

Hard working heart!

Heart (heart tube) starts beating at 21 days.

Fetal circulation is fully functional by 8.5 weeks.



How many holes in a heart?

Heart Valves

There are 11 holes in a heart!



Valves allow one way flow of blood

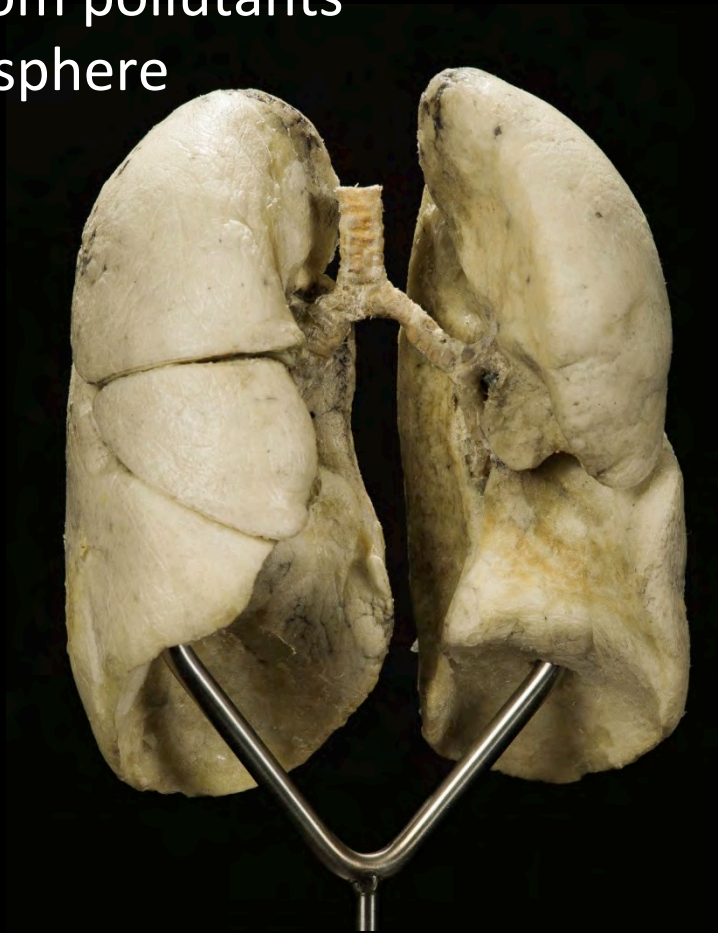
Cast of Coronary Arteries



Two coronary arteries
injected with dye
Heart muscle dissolved
Left with the cast –
dye where blood was!

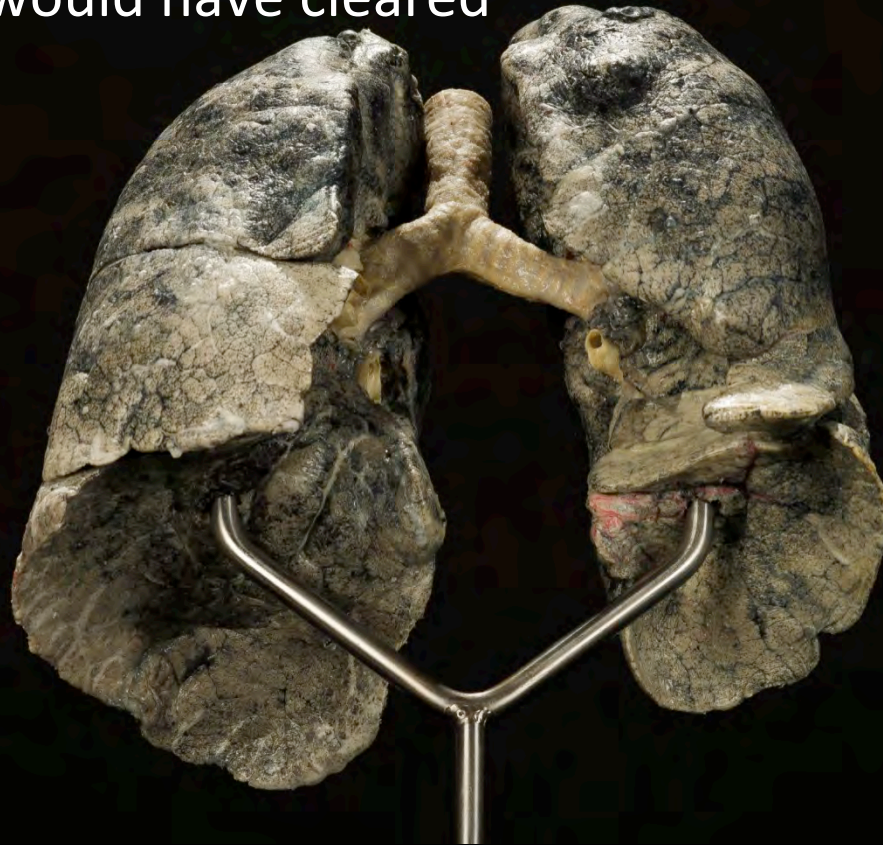
Lungs - Healthy

Few black spots from pollutants
in the atmosphere

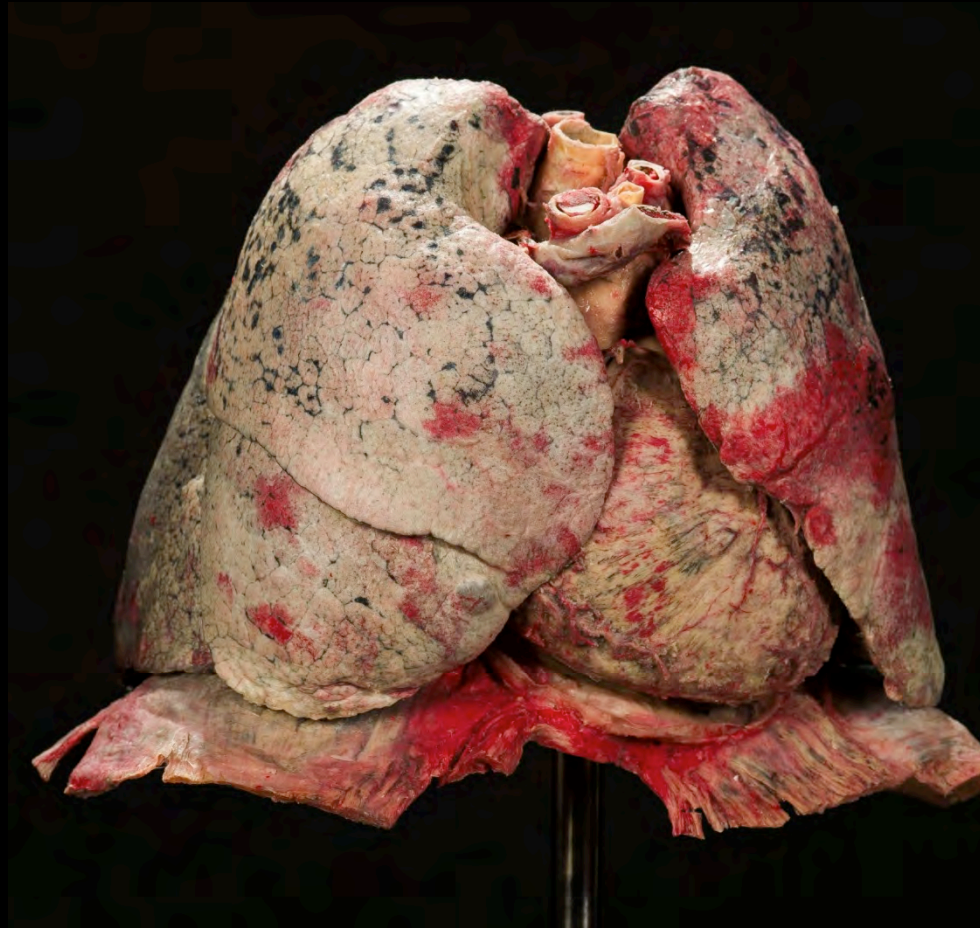


Lungs - Smokers

If this person had quit smoking for 5 years, chances are that lungs would have cleared



Lungs, Heart, Diaphragm



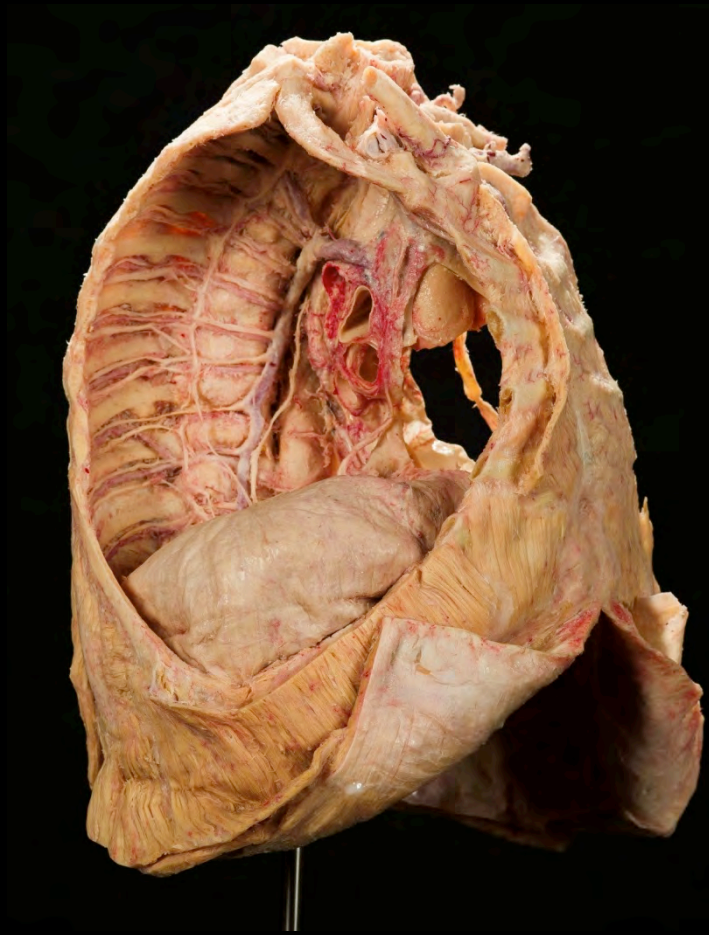
Red material is leaked dye

Diaphragm – Central Tendon, Apertures, Phrenic Nerves



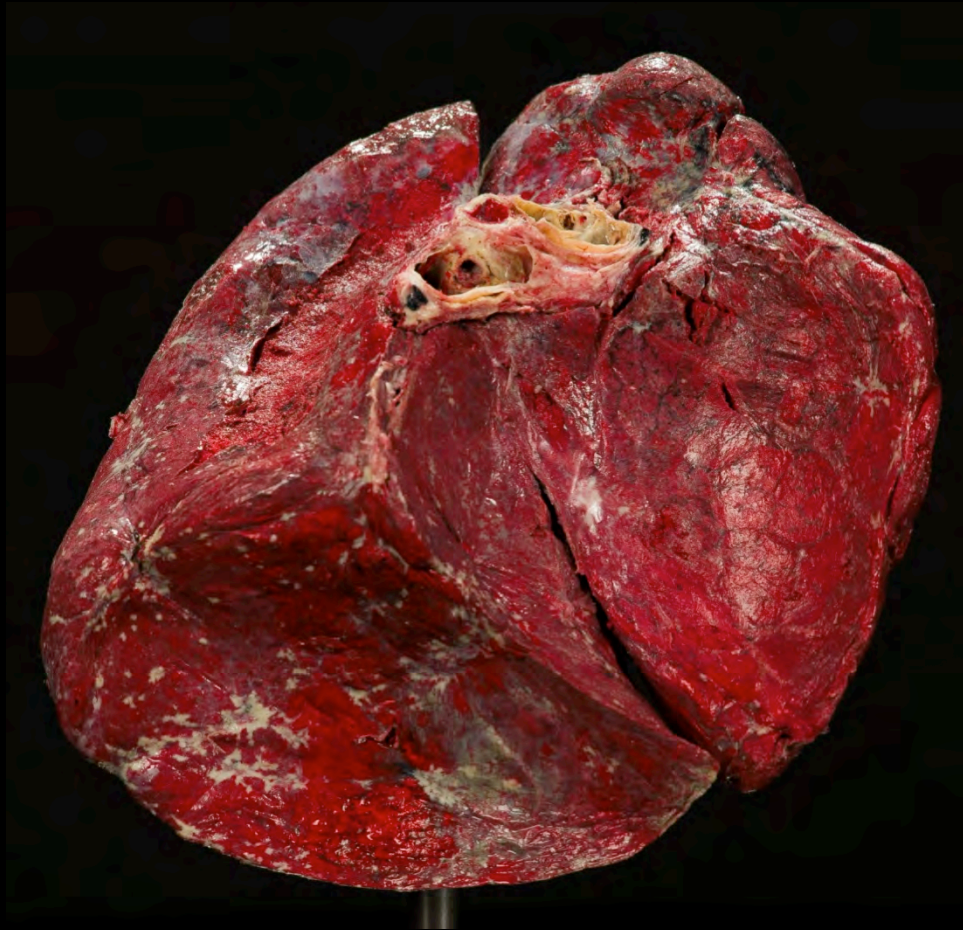
Thin sheet of muscle separates chest and abdomen

Chest Cavity



Lungs, heart removed

Lung Left



Note heart impression

Thoracic Wall



Thoracic Wall



Muscles connecting ribs -
intercostal muscles

Esophagus, Stomach, Liver, Bile Duct



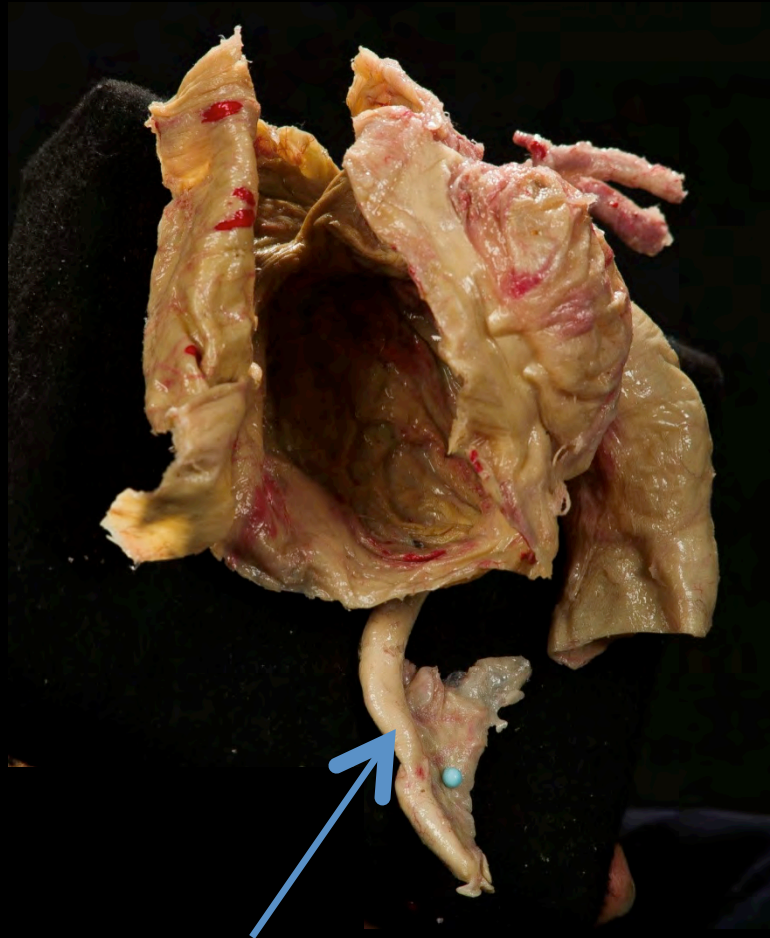
Everything one eats
goes down this narrow
tube

Intestine



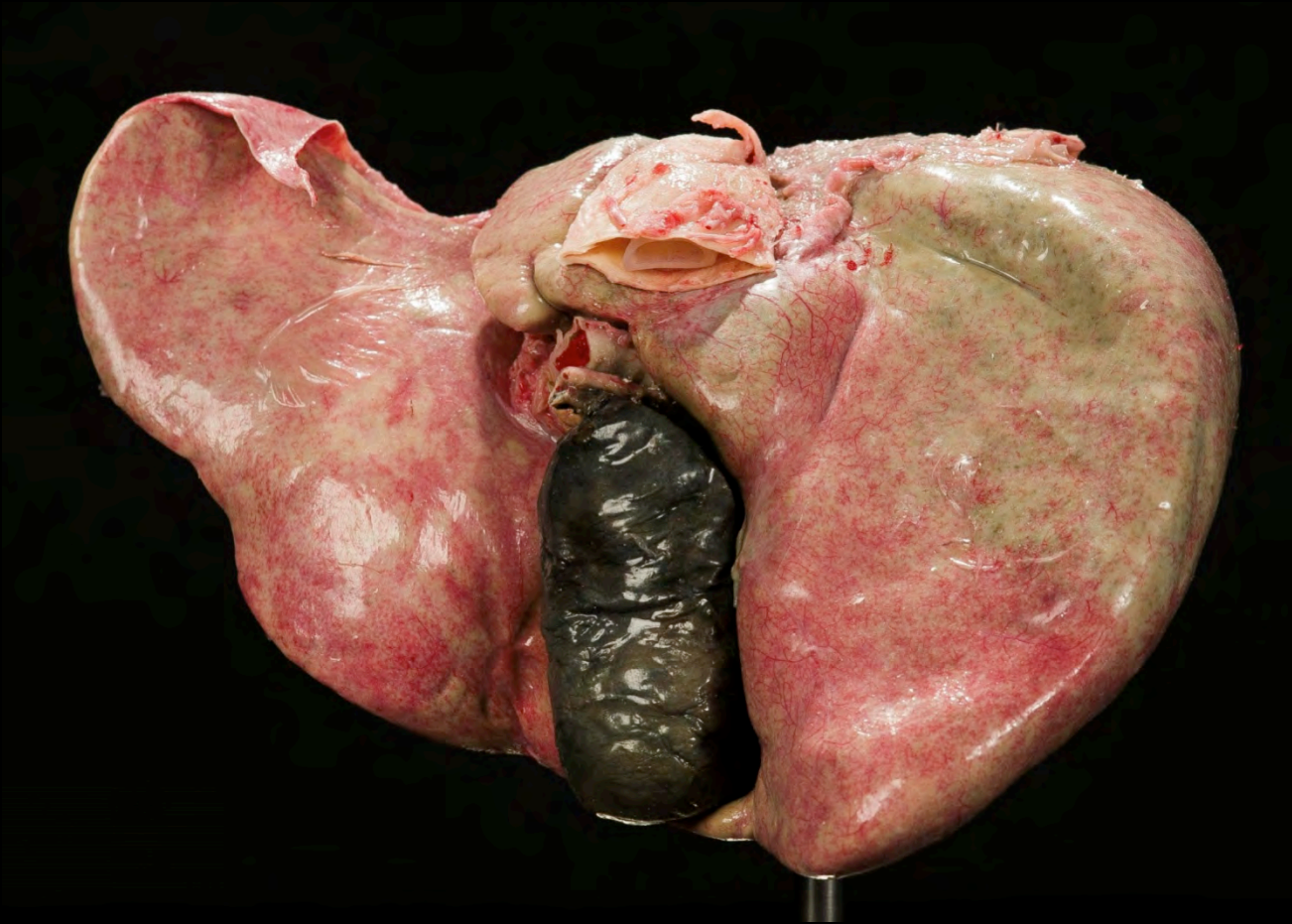
Jejunum, ileum and cecum

Cecum, Appendix



Appendix - finger like projection

Liver



Dark green sac is the gall bladder

Liver



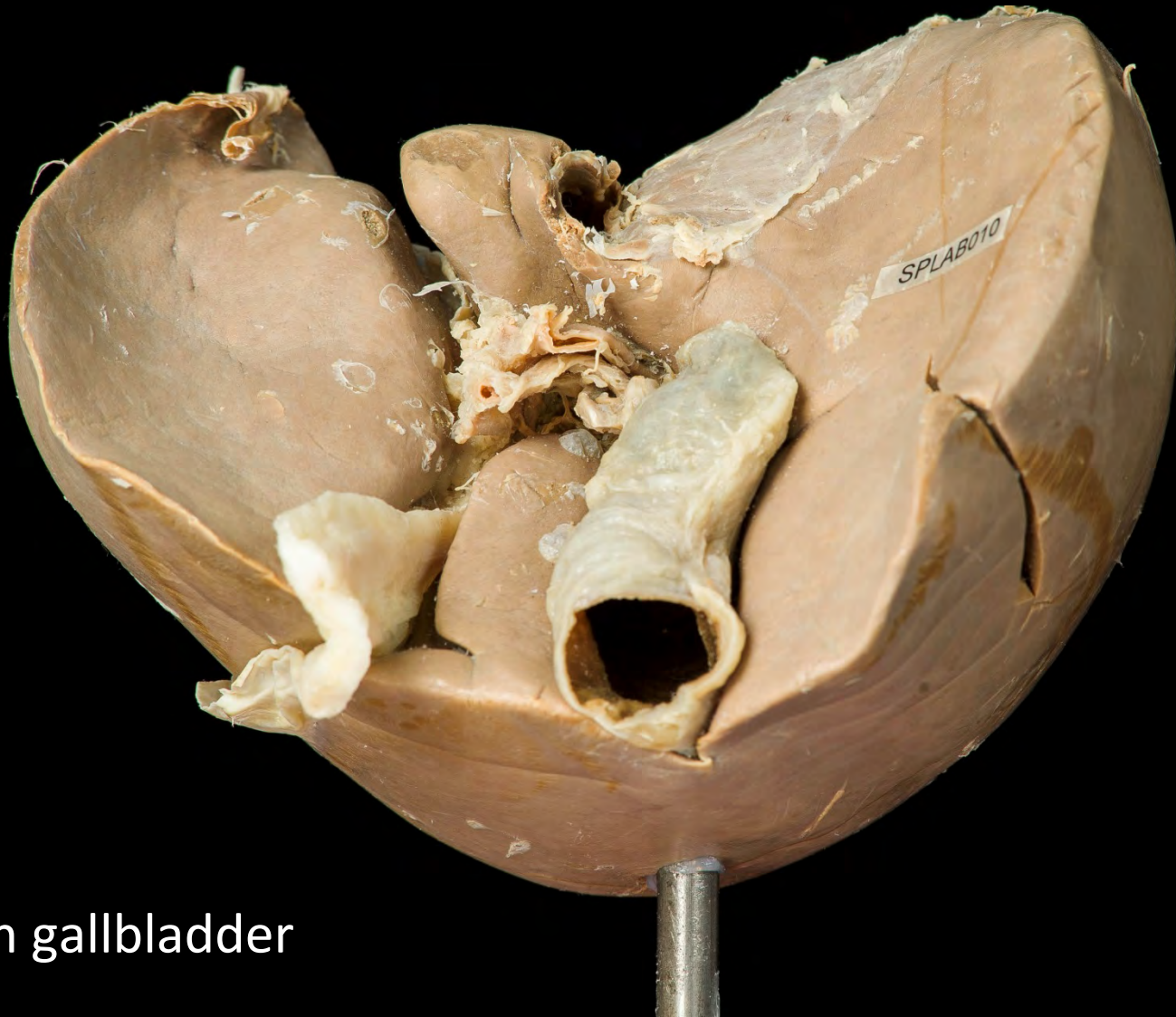
The hole on upper part is the inferior vena cava

Liver section, Gallbladder



Note bile duct, portal
vein and hepatic artery

Normal Liver



Hole in gallbladder

Cirrhotic Liver



If you are old enough to have alcohol
and would like to –
have some but not too much

Pancreas, Spleen



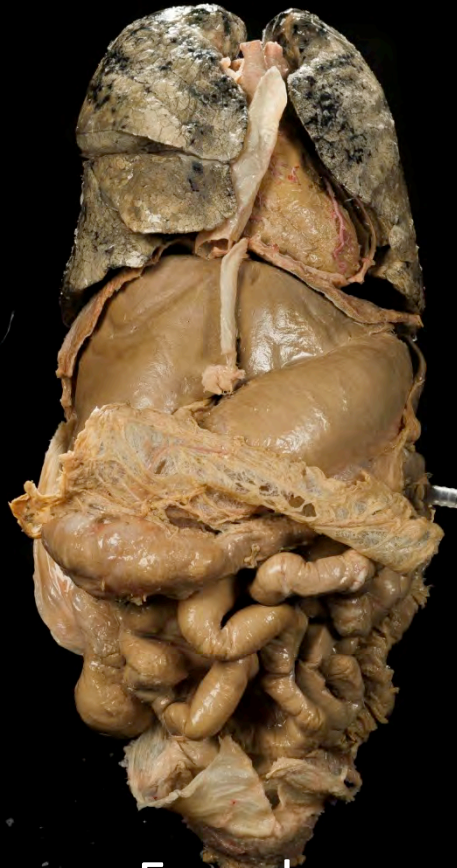
Red material is leaked silicone that was injected into an artery

Gastrointestinal Tract, Liver



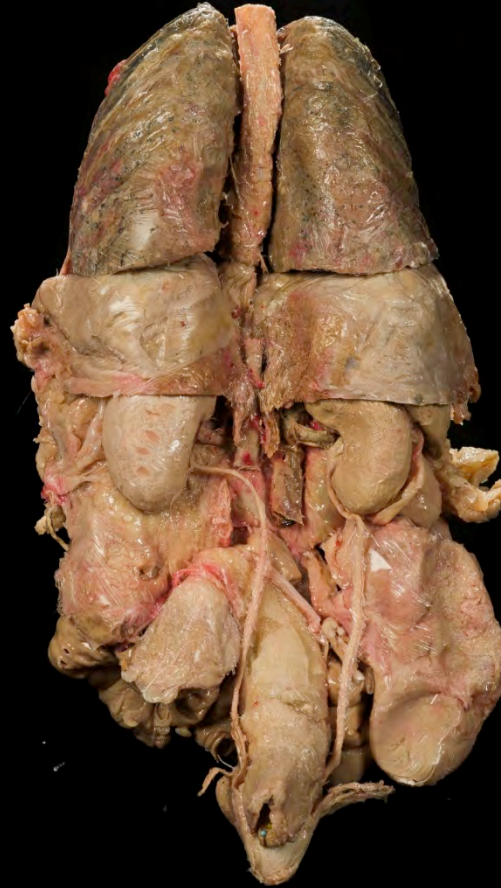
GI tract is 9 m long

Thoracic, Abdominal, Pelvic Viscera



Female
Note uterus,
ovaries

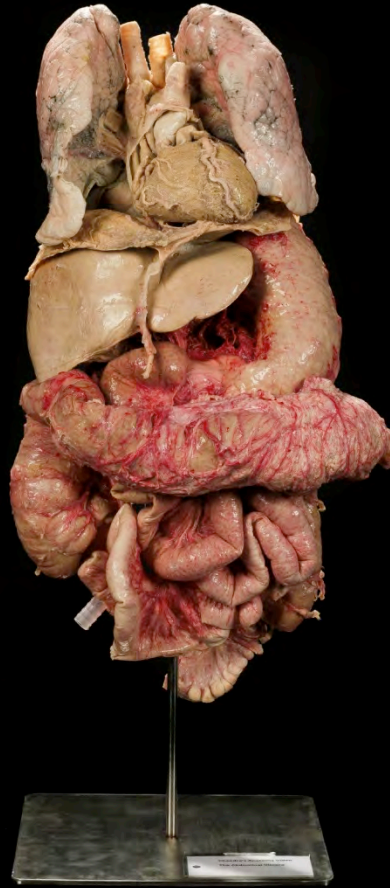
Thoracic, Abdominal, Pelvic Viscera



Back view

Male – note kidneys, ureter,
rectum and prostate

Thoracic, Abdominal Viscera



Kidneys, bladder, uterus
were dissected separately

Front view

Kidneys



Note 3 openings in bladder

Male Urinary System



Note aorta, bladder and prostate

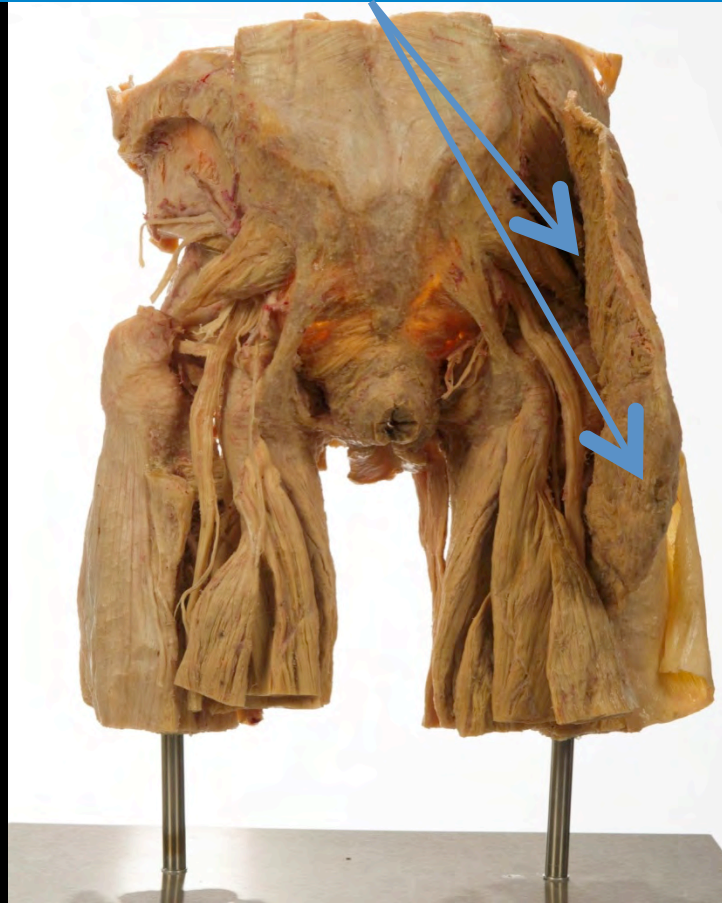
Pelvis, Thigh



Front view

Pelvis, Thigh

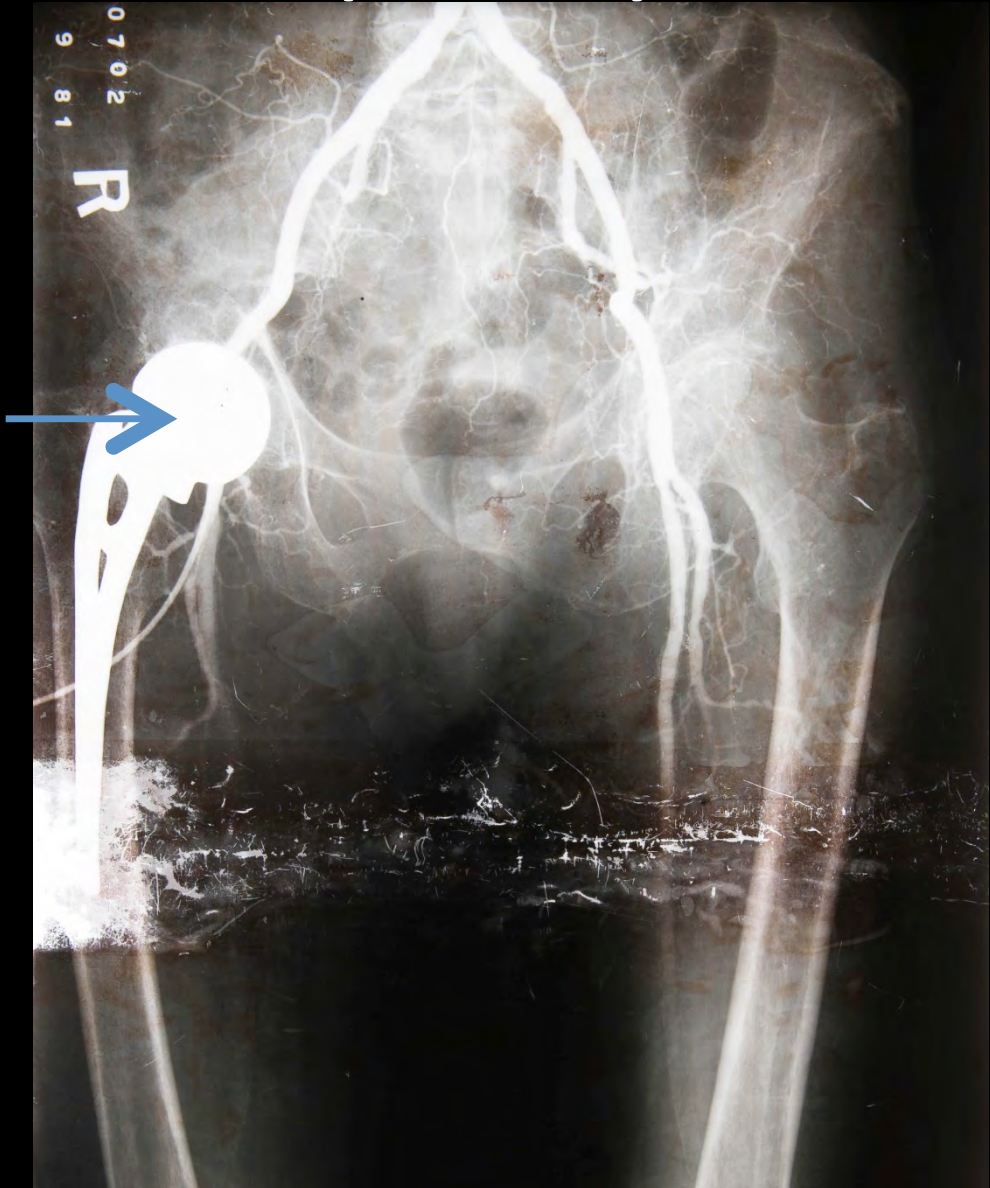
You can see the largest muscle in the body (gluteus maximus)



From behind

Artificial Hip X-ray

This piece of metal weighs 500 g



Left Knee



From behind

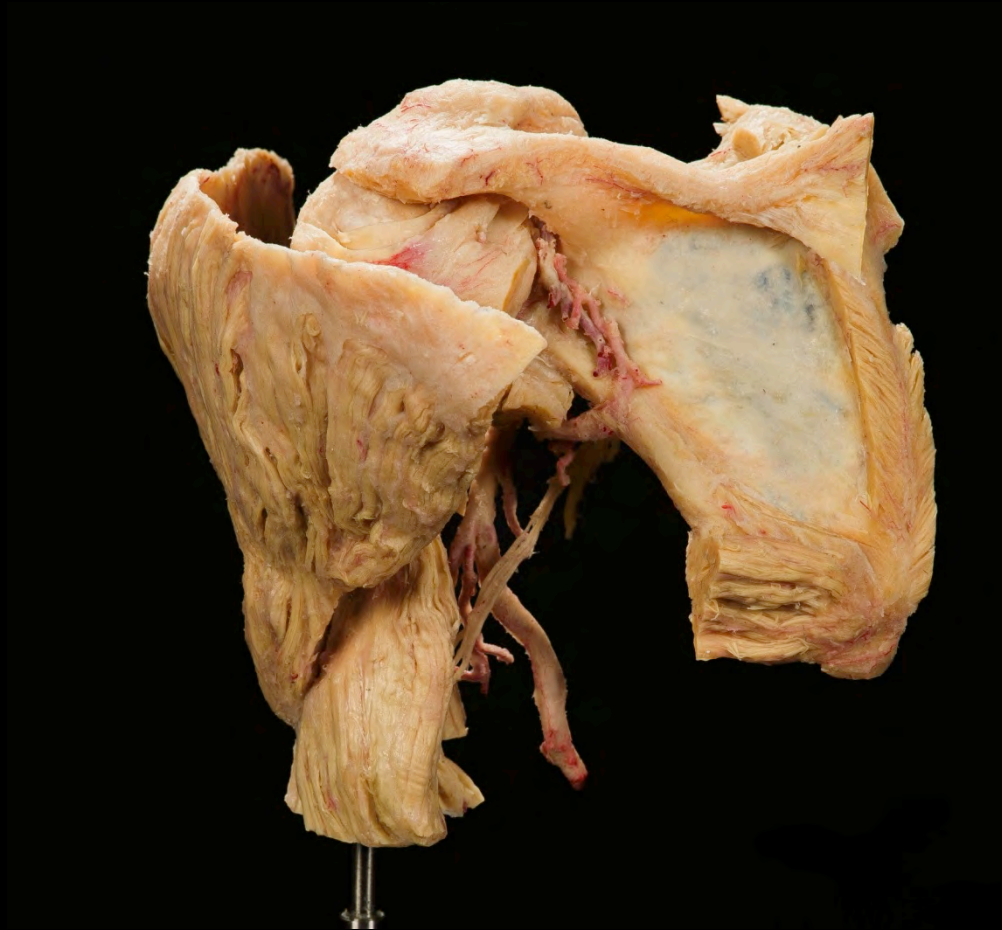
Right Knee

Note ligaments (ACL, PCL) and meniscus



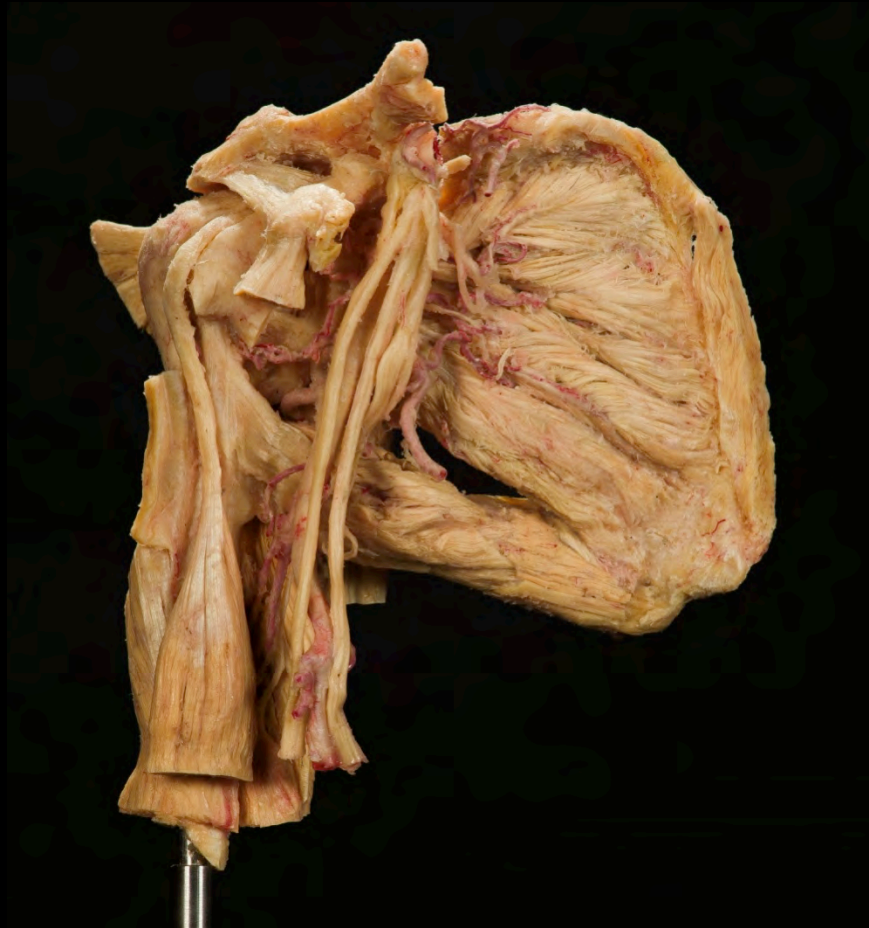
Front view

Left Shoulder



From behind

Right Shoulder



Front view

Left Upper Limb



Nerves and deep muscles

Elbow, Forearm

A membrane connects the two bones



Anterior = Front



Posterior = Back

Hand Skin Removed



Artery



Hand Tendons

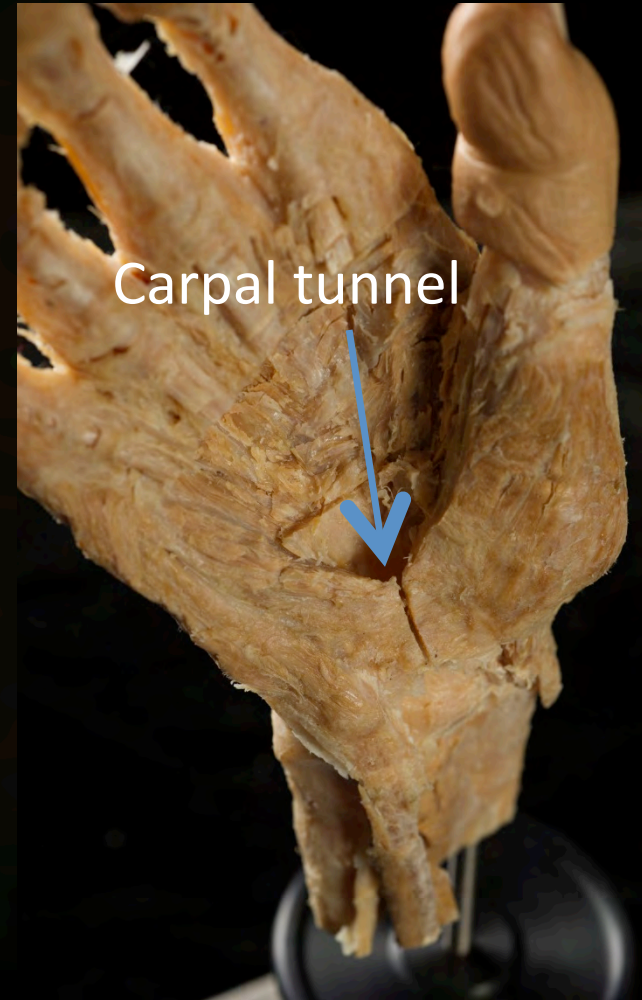


Hand Tendons, Nerves

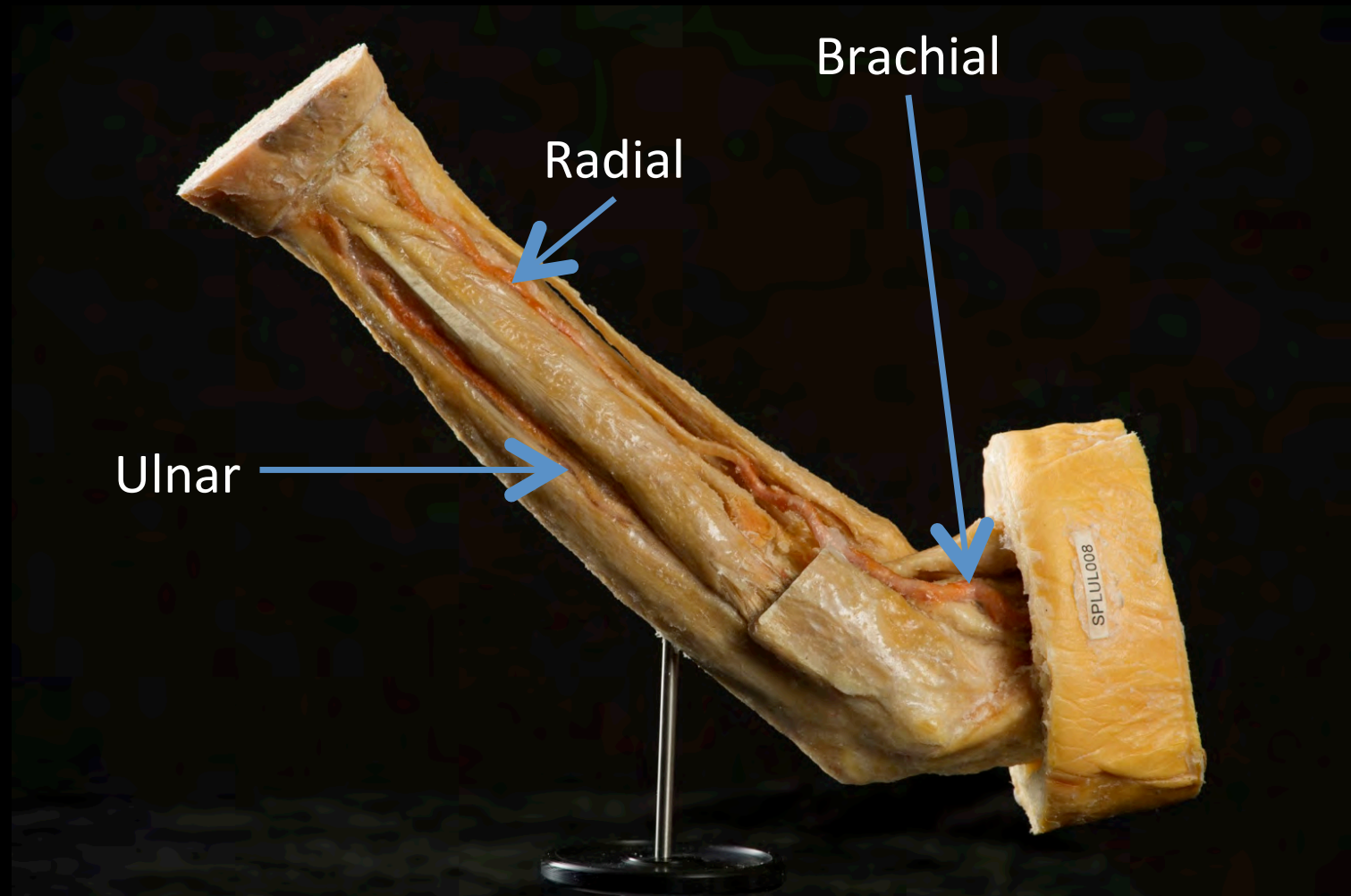
One nerve goes through tunnel,
The other outside.
Hence in carpal tunnel syndrome
pain is more on one side.



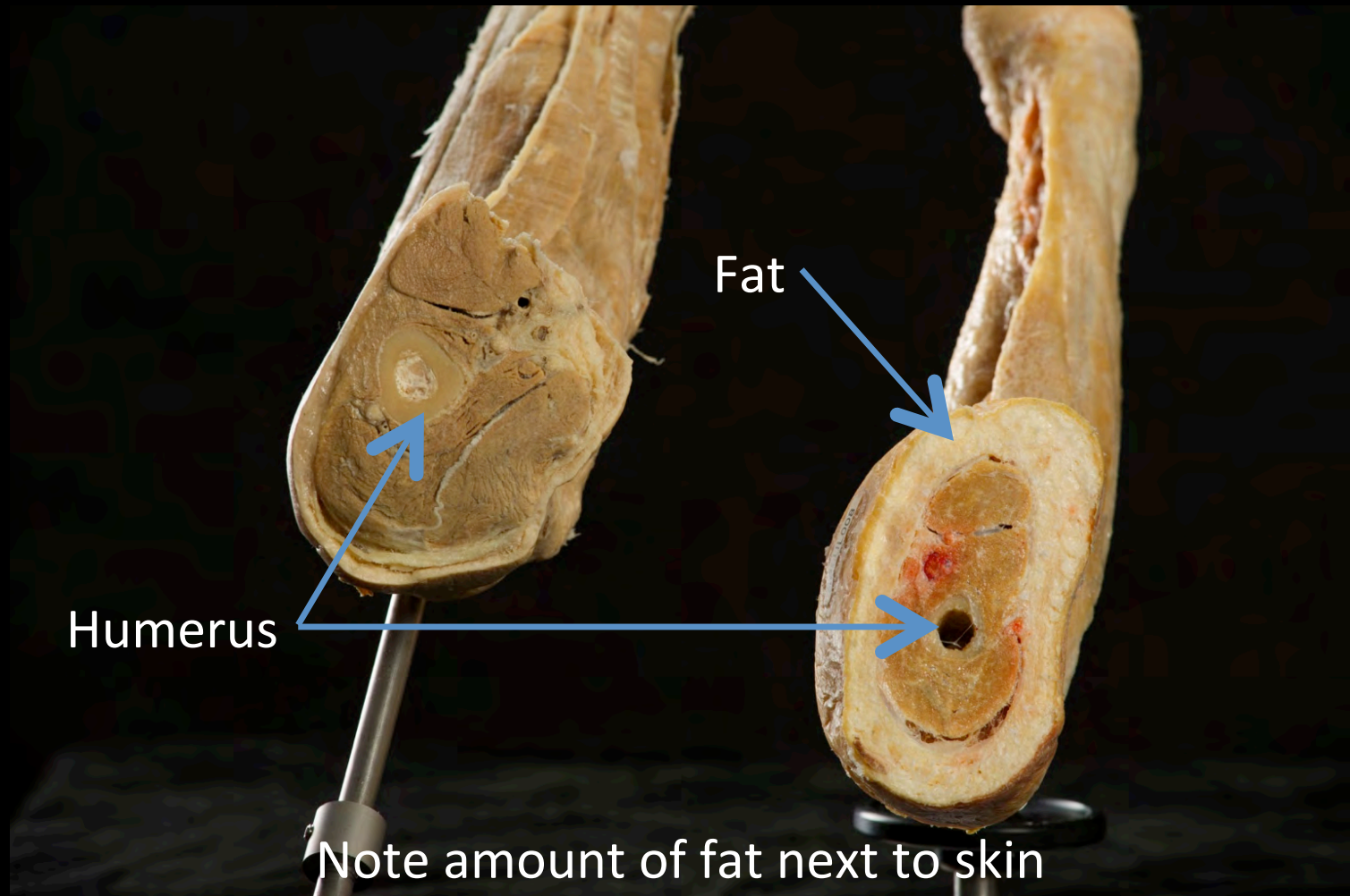
Hand – Finger Amputated



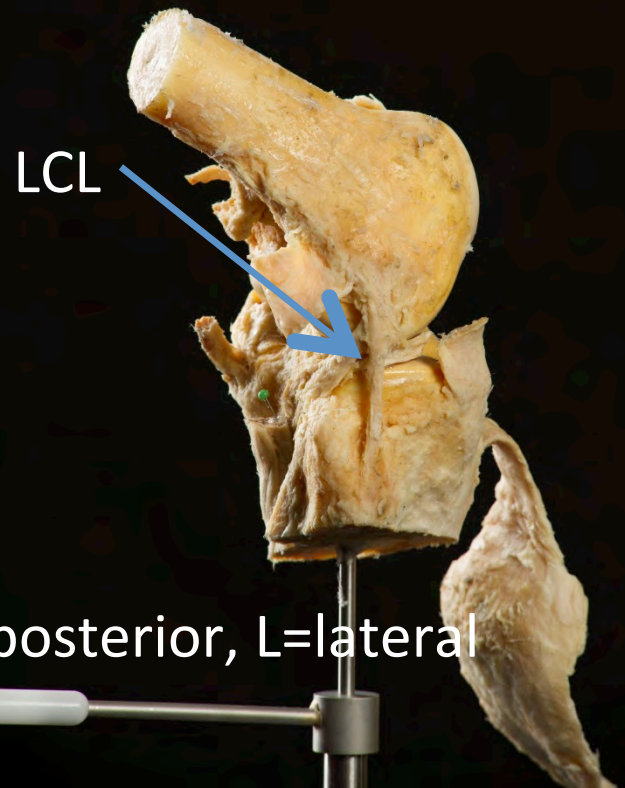
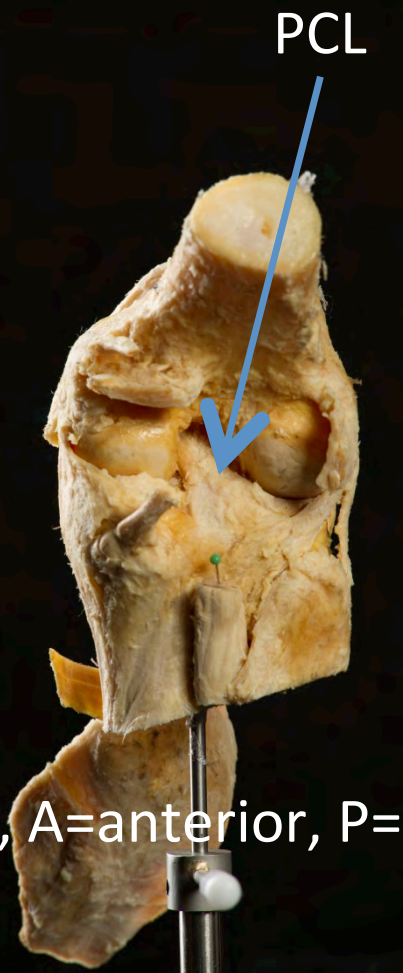
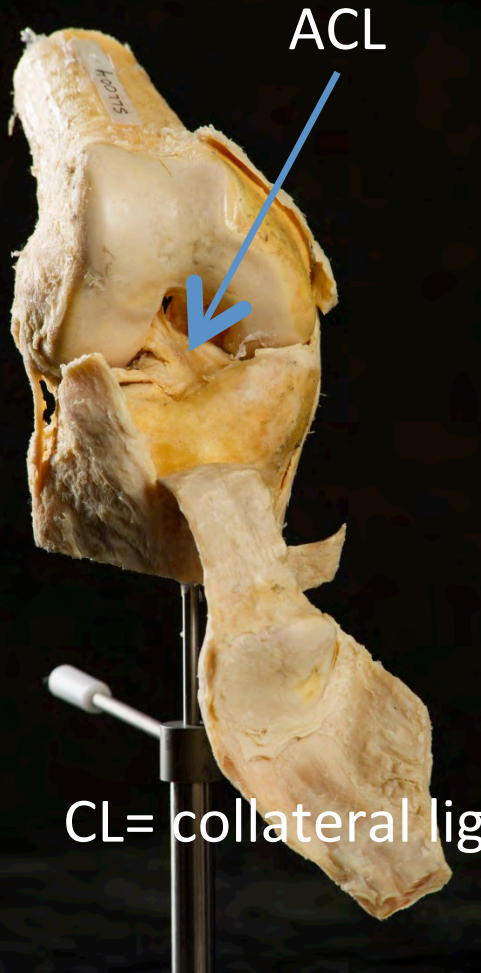
Brachial Artery Branches



Arms – Cross Section

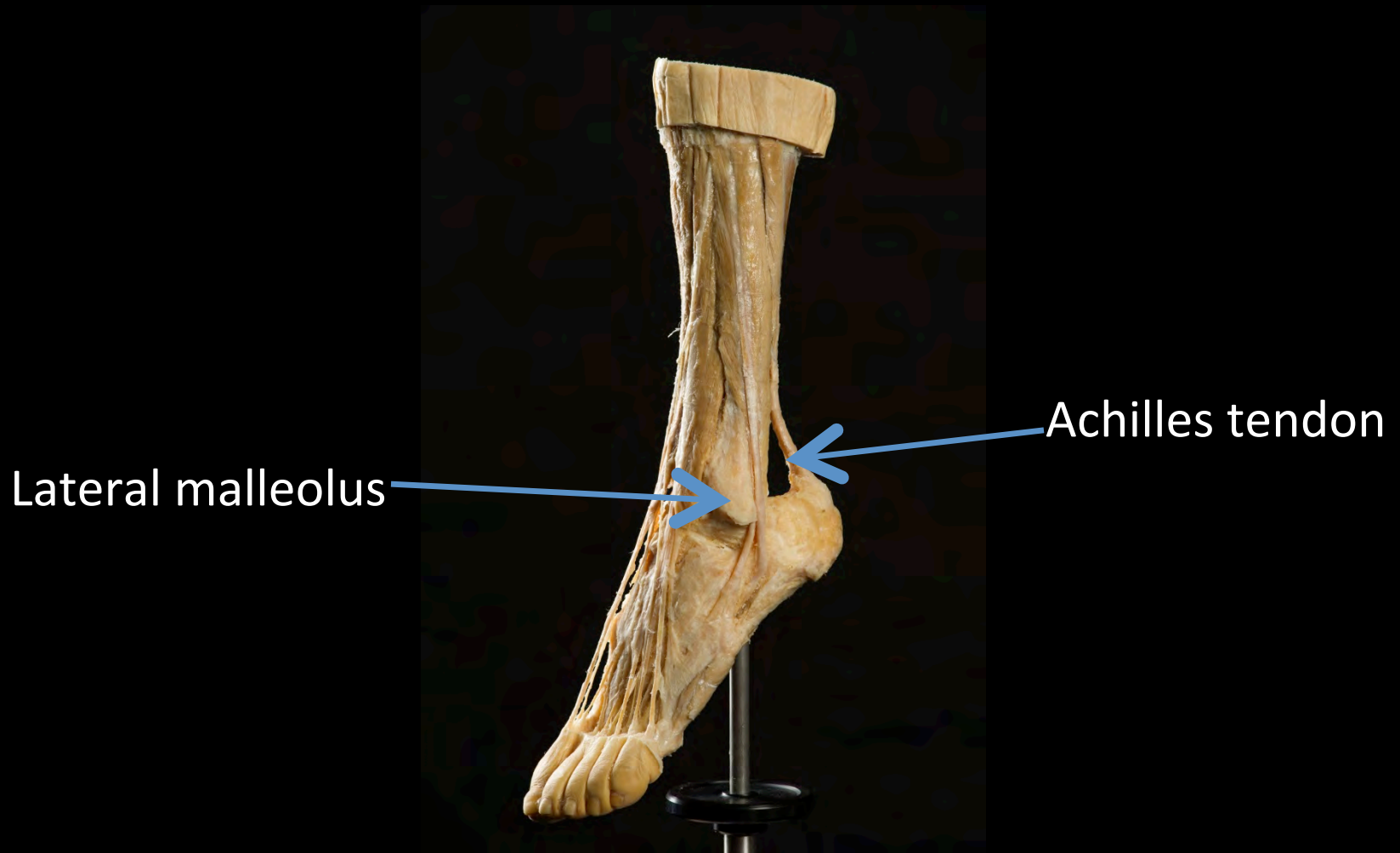


Knee Joint



CL= collateral ligament, A=anterior, P=posterior, L=lateral

Leg and Foot – Lateral View



Leg and Foot Medial View

Tibia = shin bone
Not covered by muscles



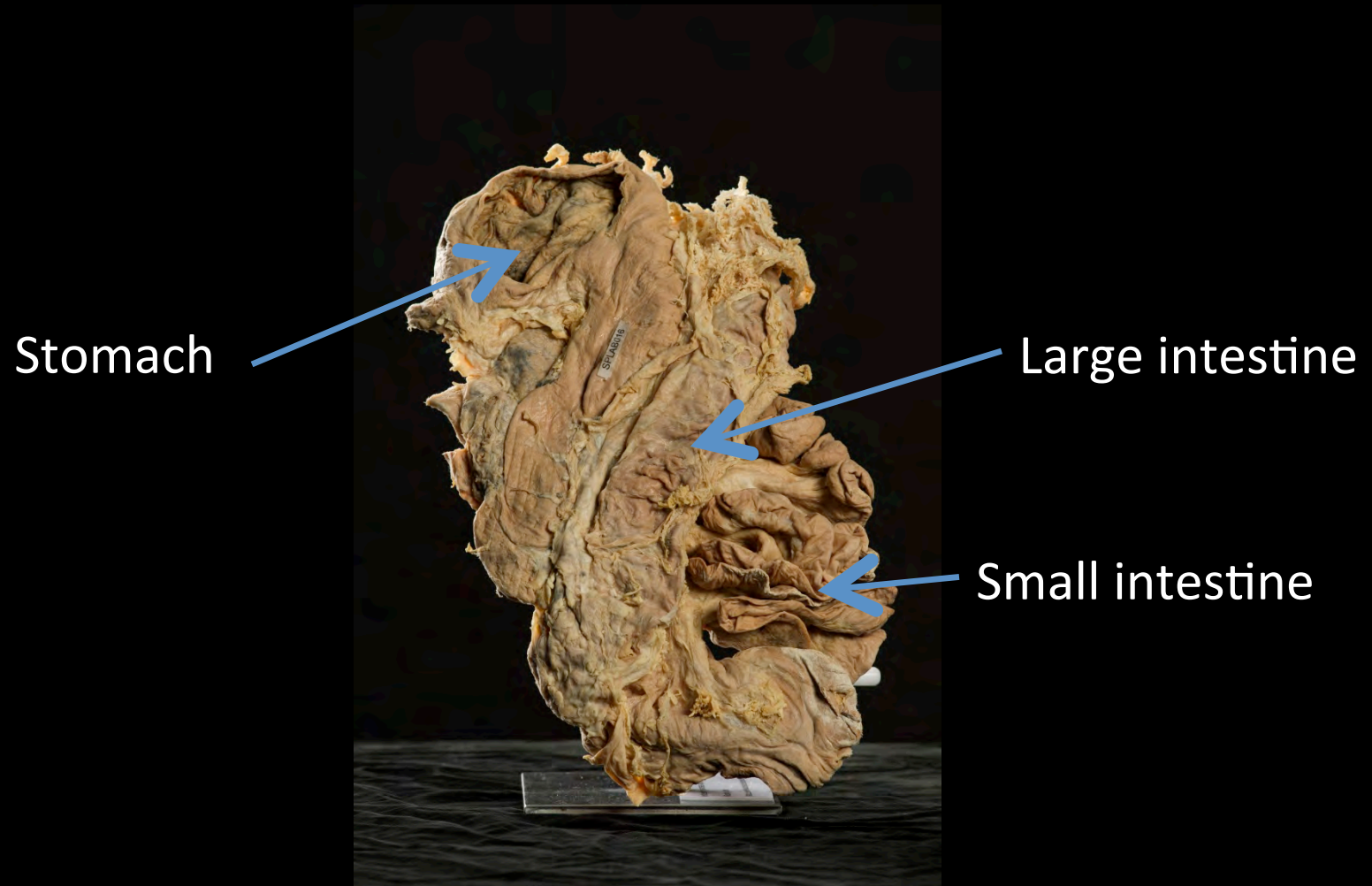
Foot

Ensure your shoes fit your feet perfectly.

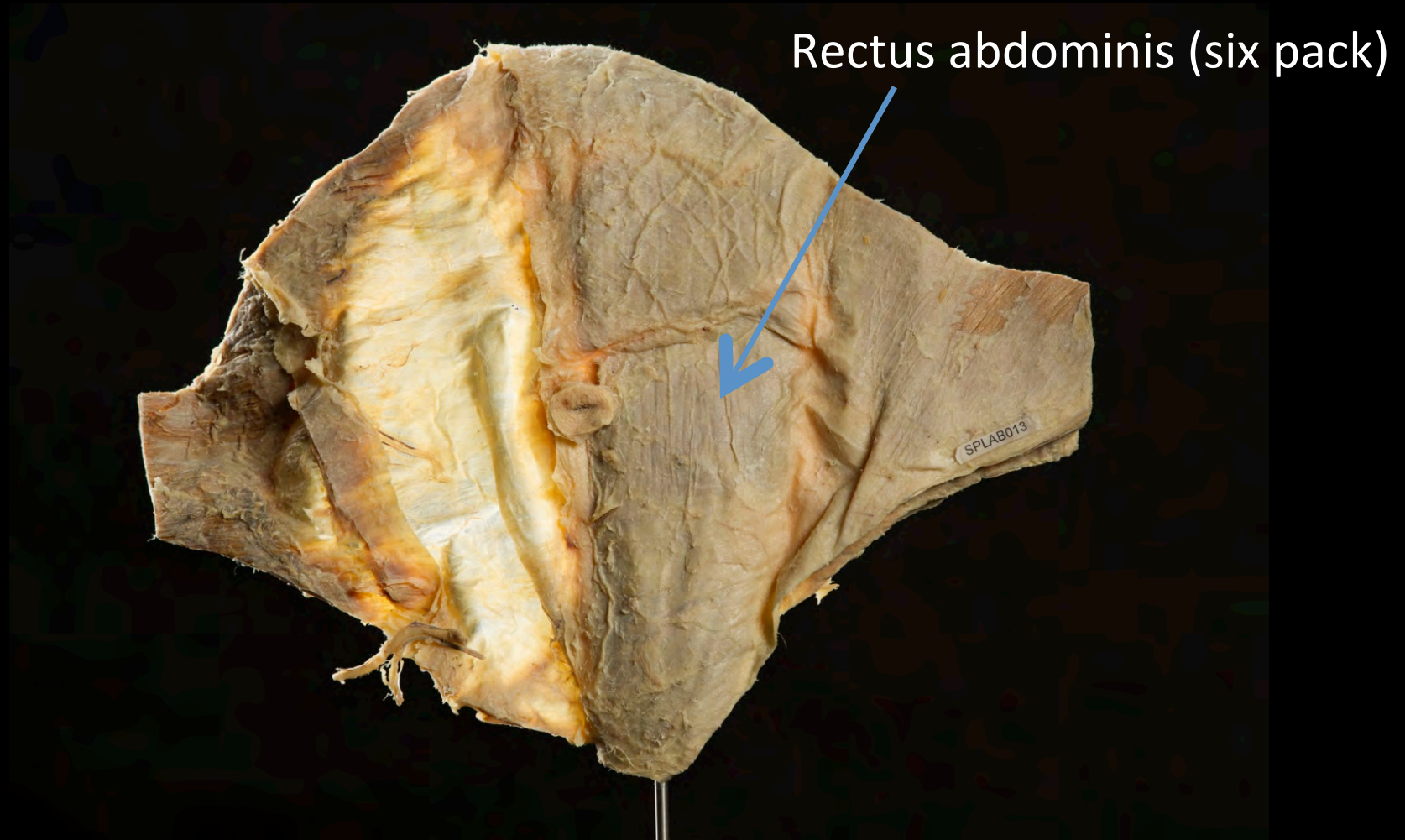


If it was not for the fat, walking would be painful

Abdominal Organs



Abdominal Wall

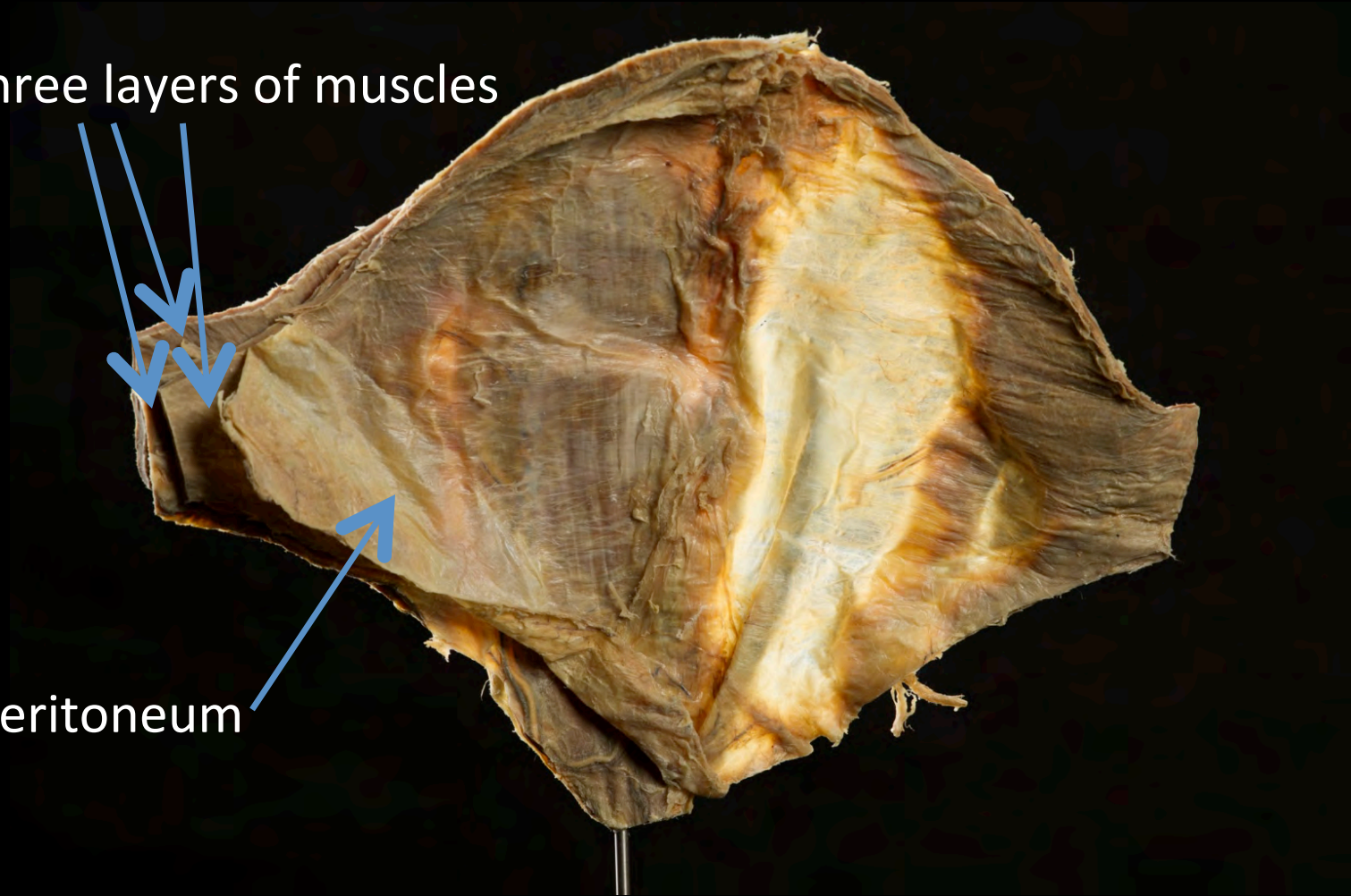


Abdominal Wall

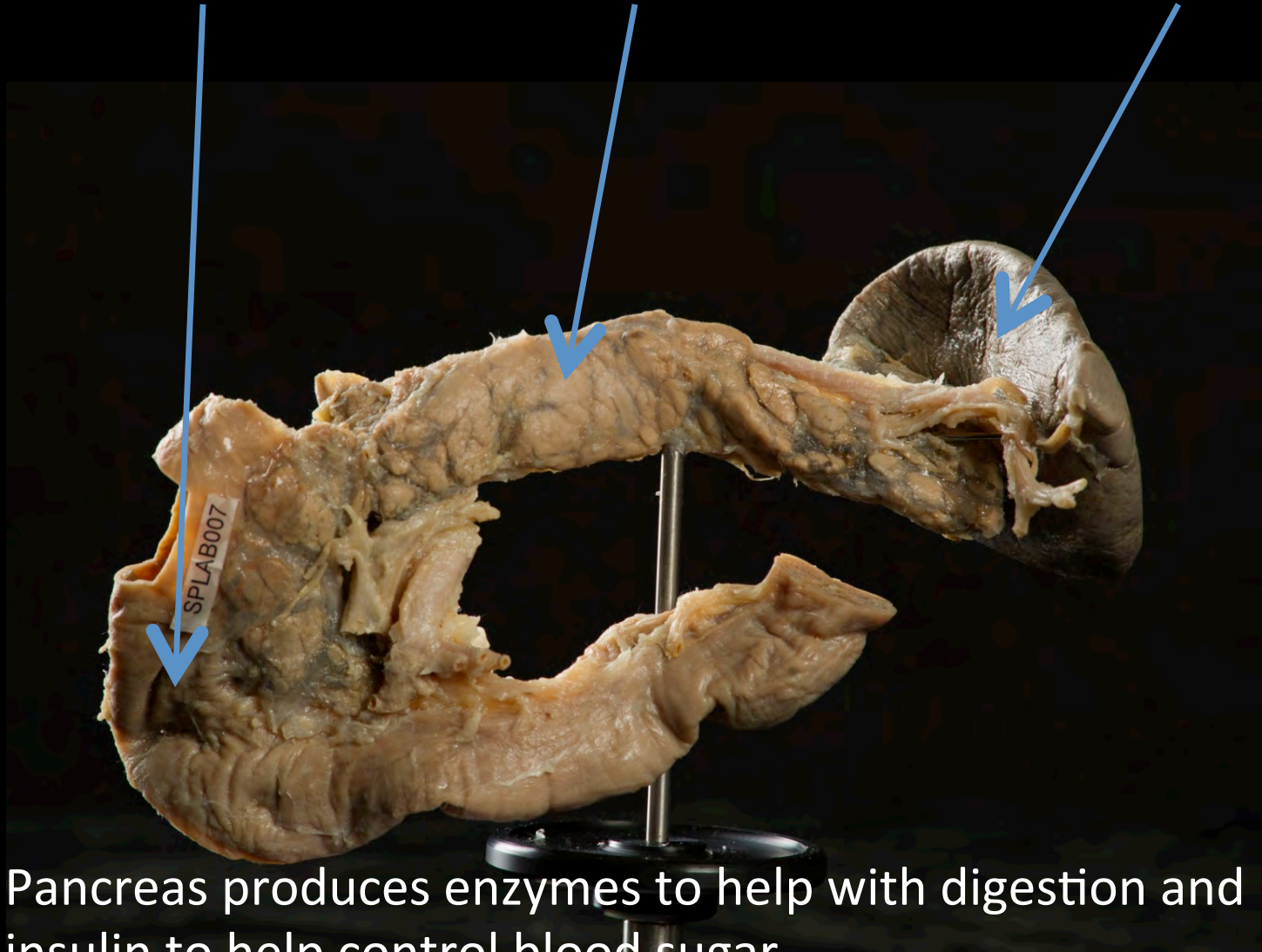
Three layers of muscles



Peritoneum

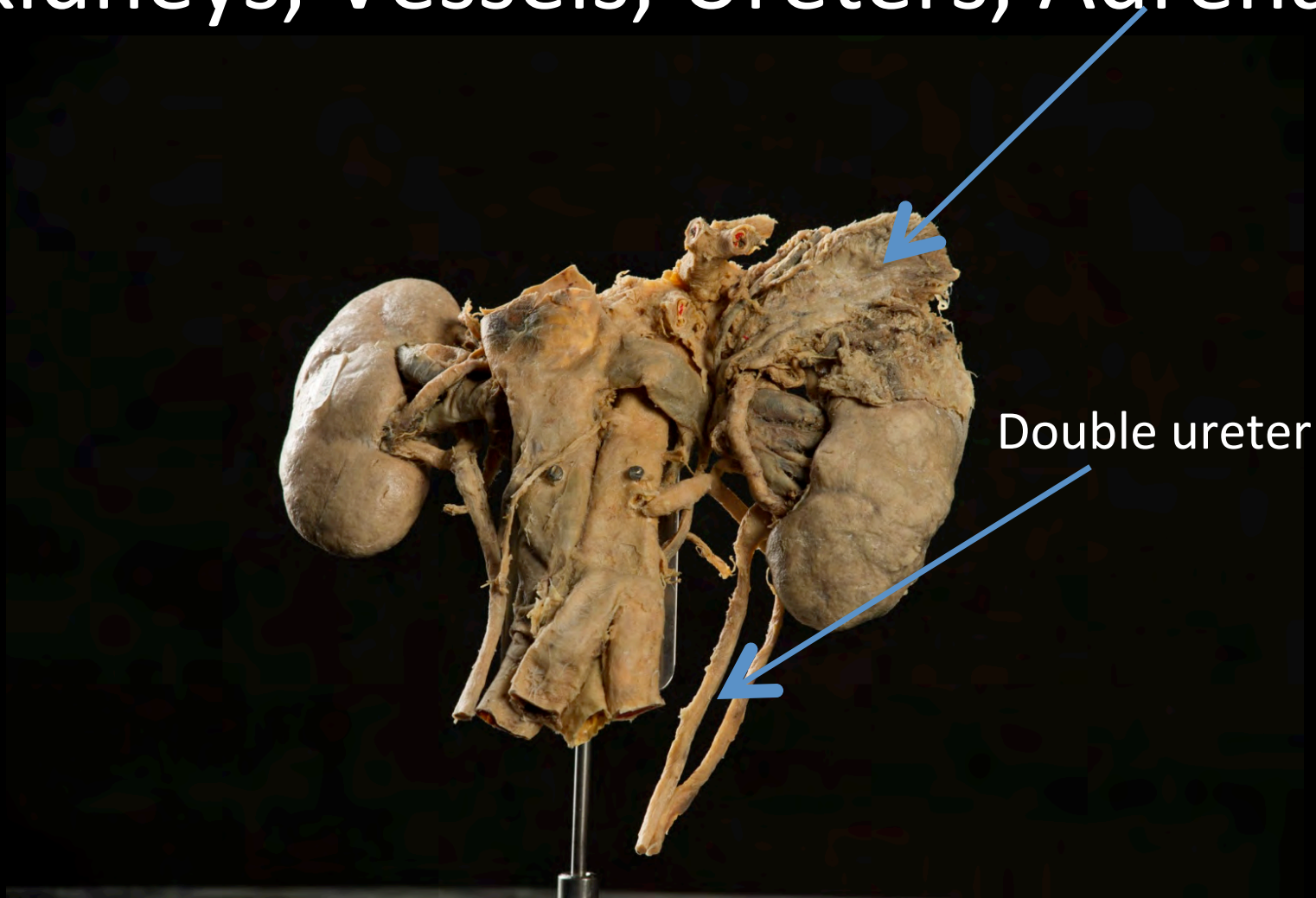


Duodenum, Pancreas and Spleen

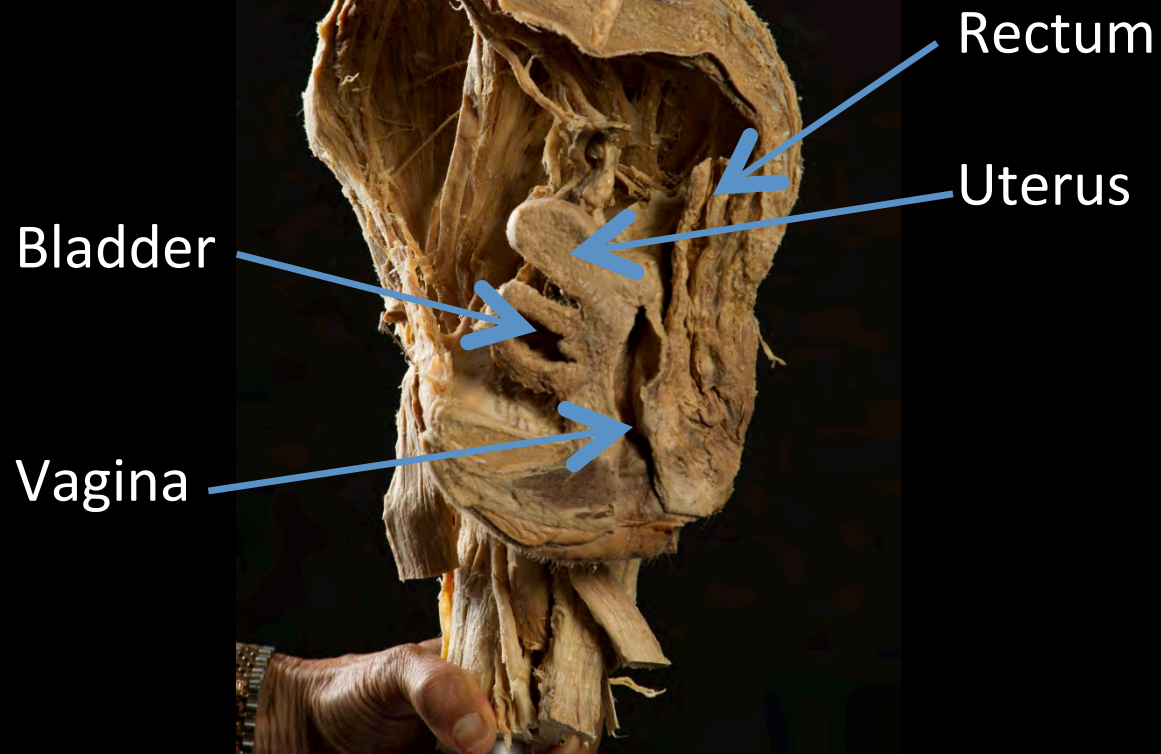


Pancreas produces enzymes to help with digestion and insulin to help control blood sugar.

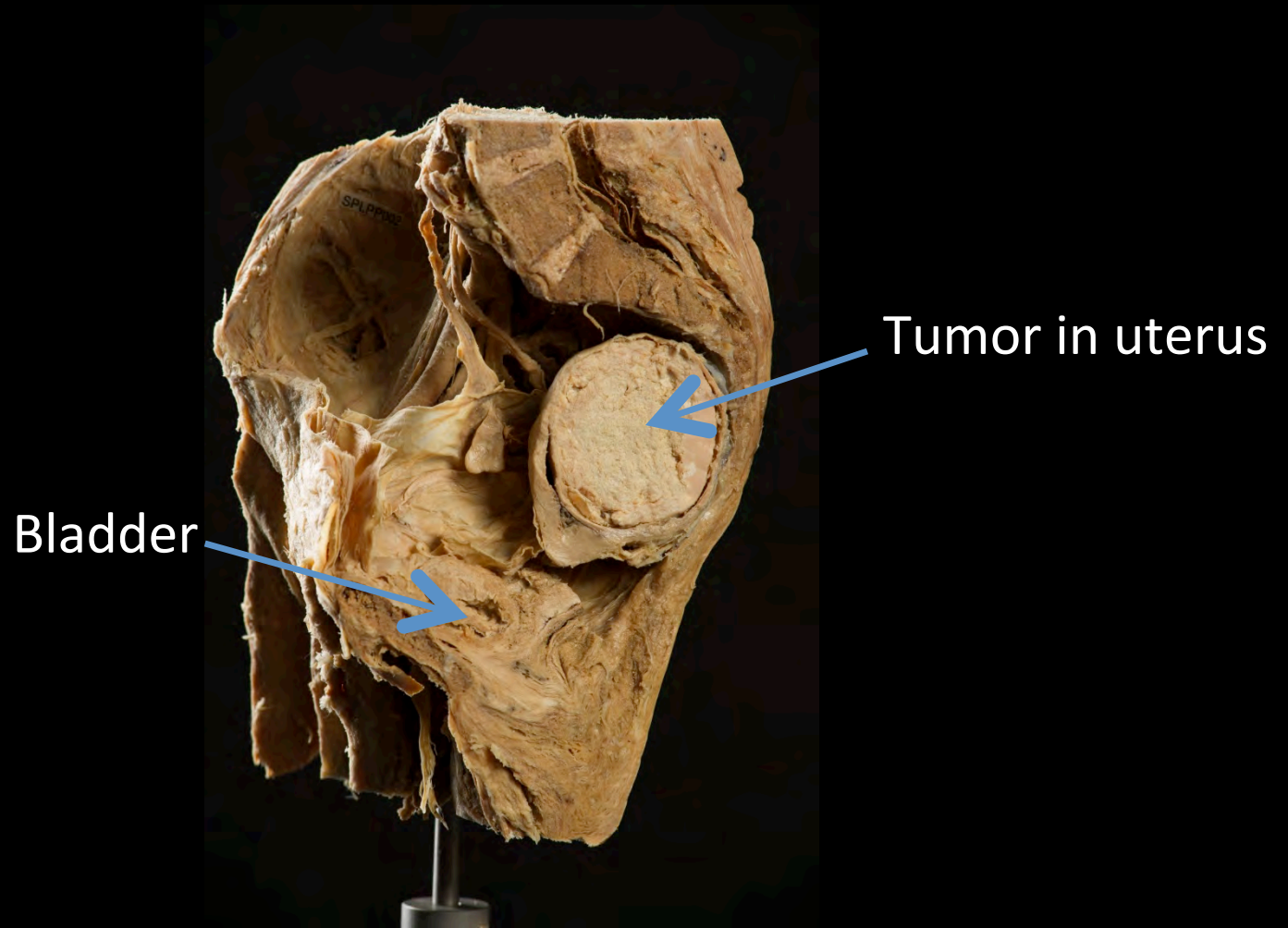
Kidneys, Vessels, Ureters, Adrenal



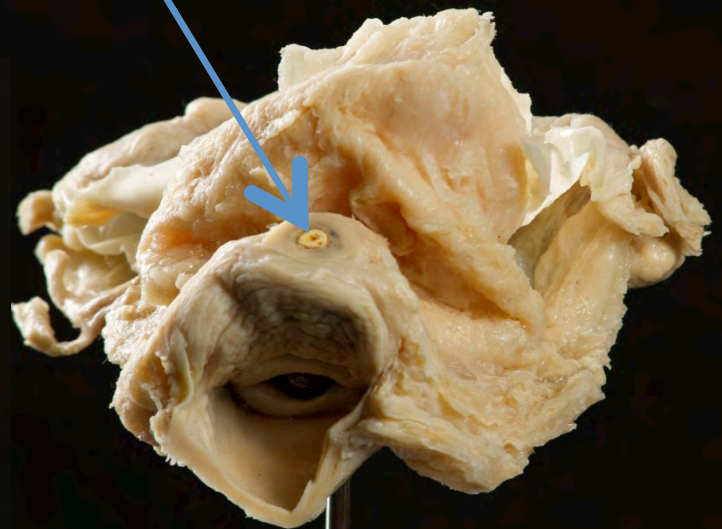
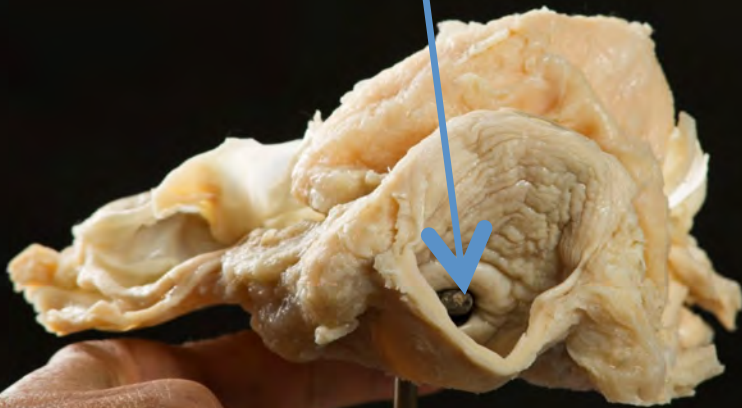
Female Pelvis - Sectioned in Midline



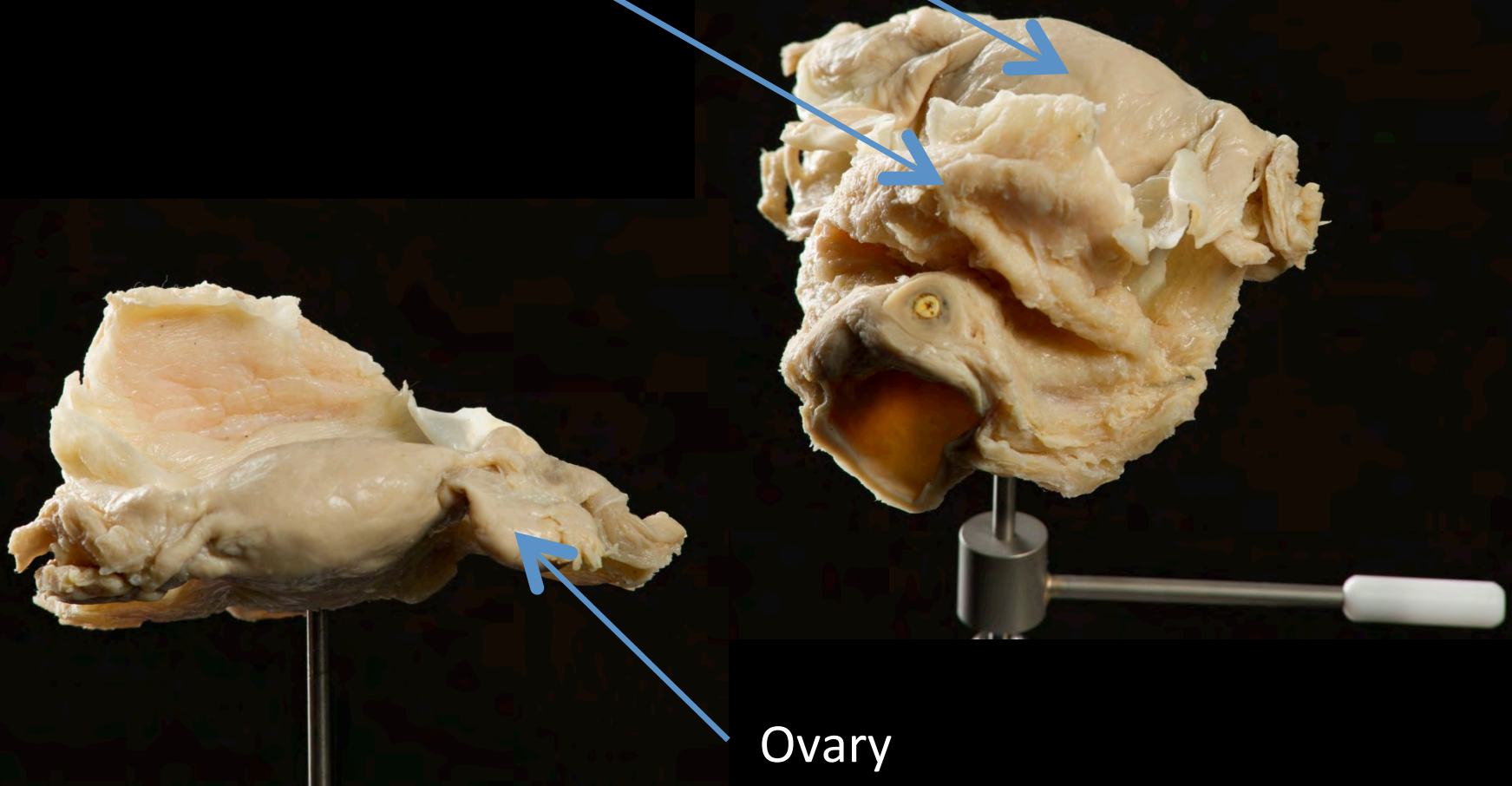
Female Pelvis - Sectioned



Tumor, Catheter



Bladder, Uterus, Ovaries



Skull Protects Brain



Brain in Skull

Normally there is no such space between the brain and skull.
This brain shrank during plastination.

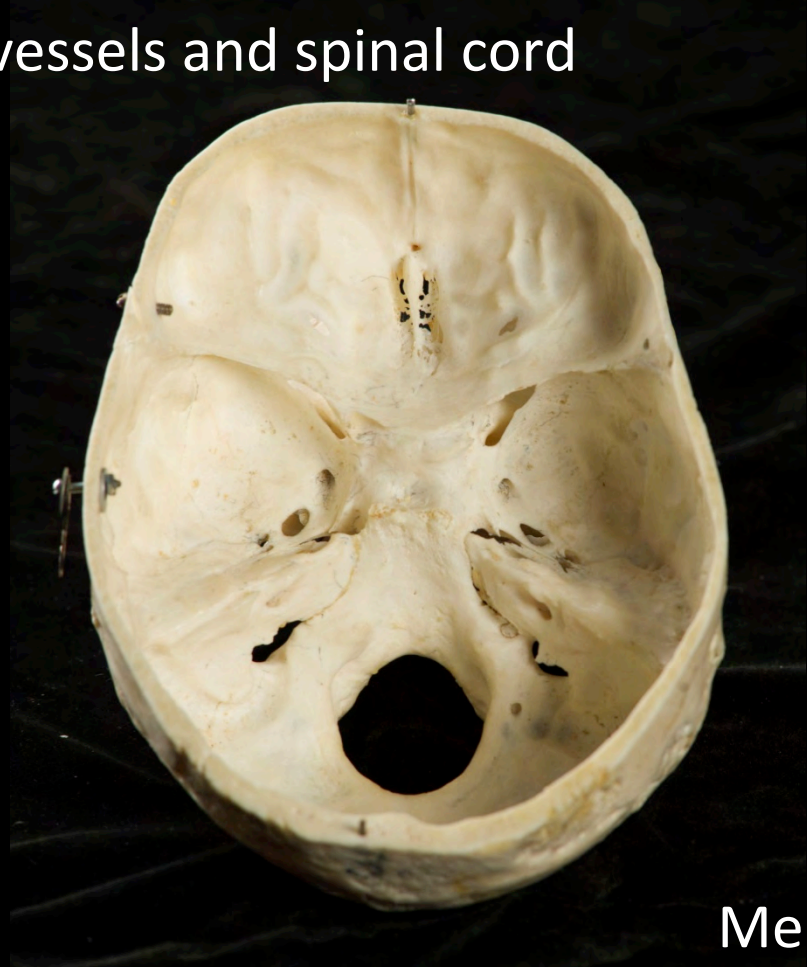


Cranial Cavity

Holes for nerves, vessels and spinal cord

Who has a thicker skull –
men or women?

Thickness of skull varies
from person to person and
in the same person



Men!

Skull Lateral View

Parts are very thin – can see the light coming through

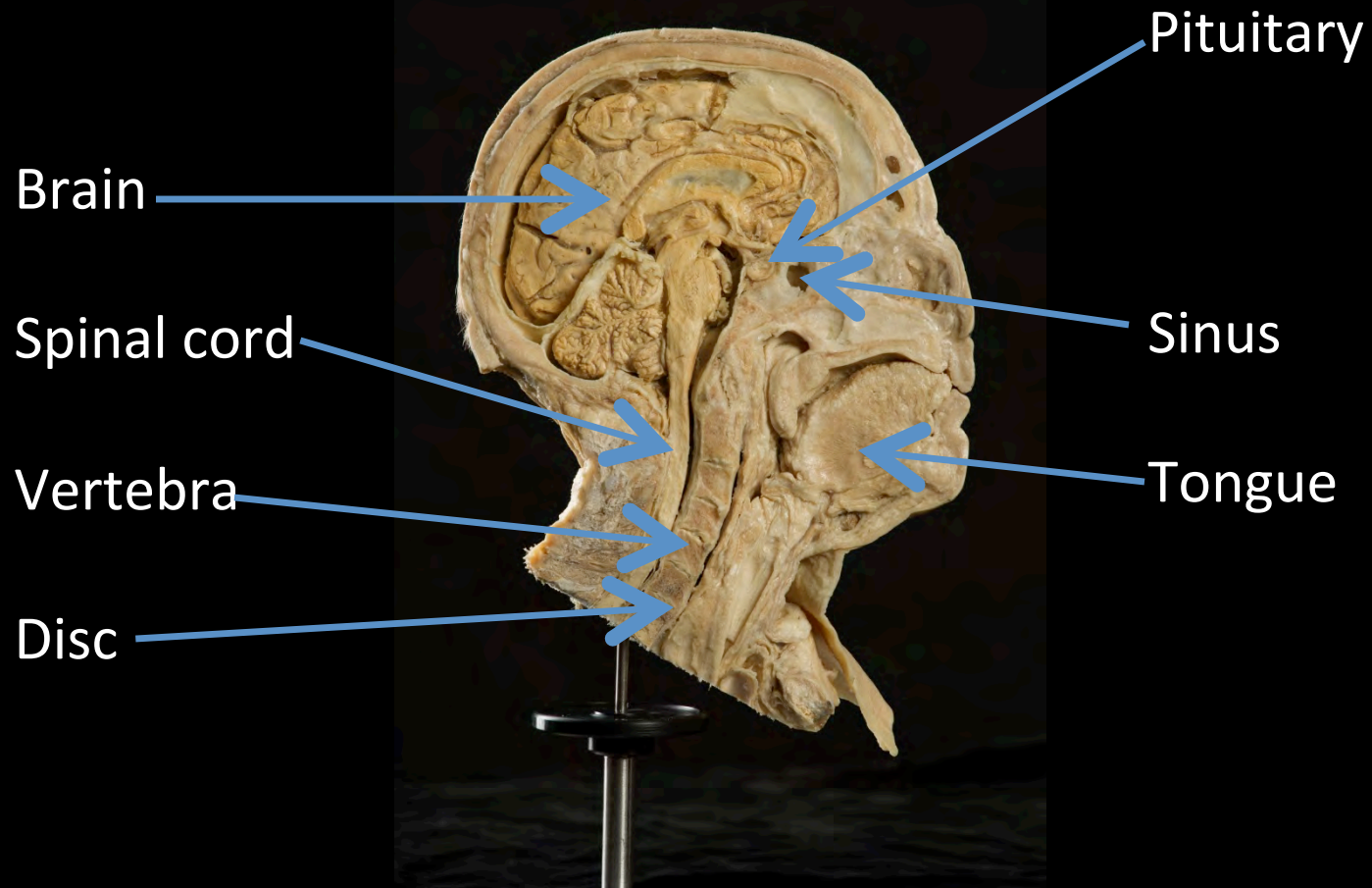


Half Brain in Skull

C shaped bundle of fibers connects the right
and left part of brain

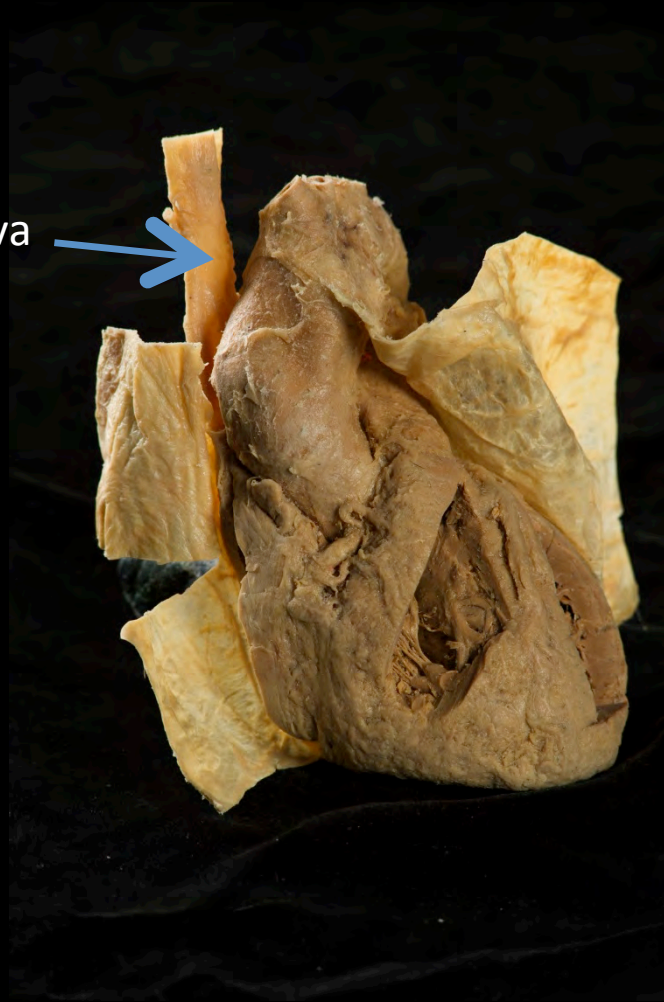


Half Head



Heart with Pericardium

SVC = superior vena cava

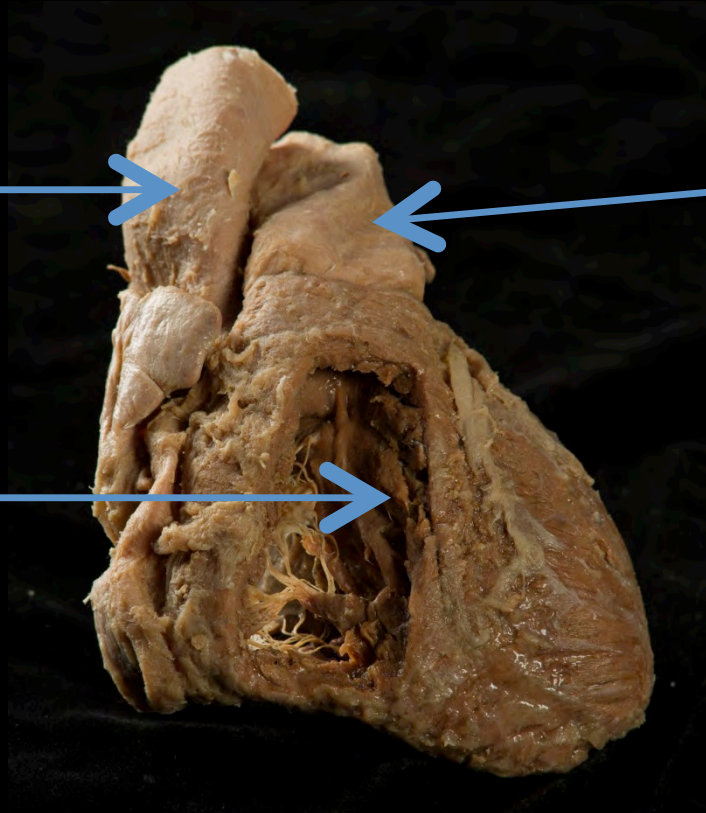


Heart

Aorta

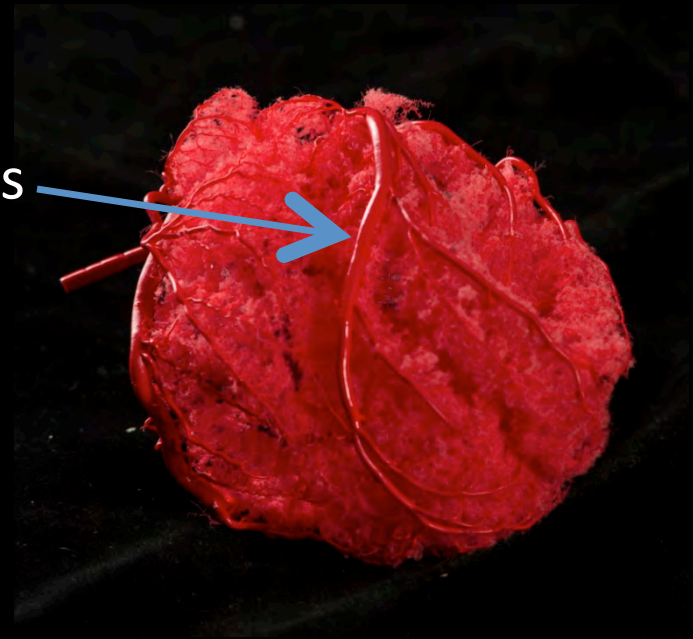
Pulmonary trunk

Right ventricle



Cast of Coronary Arteries

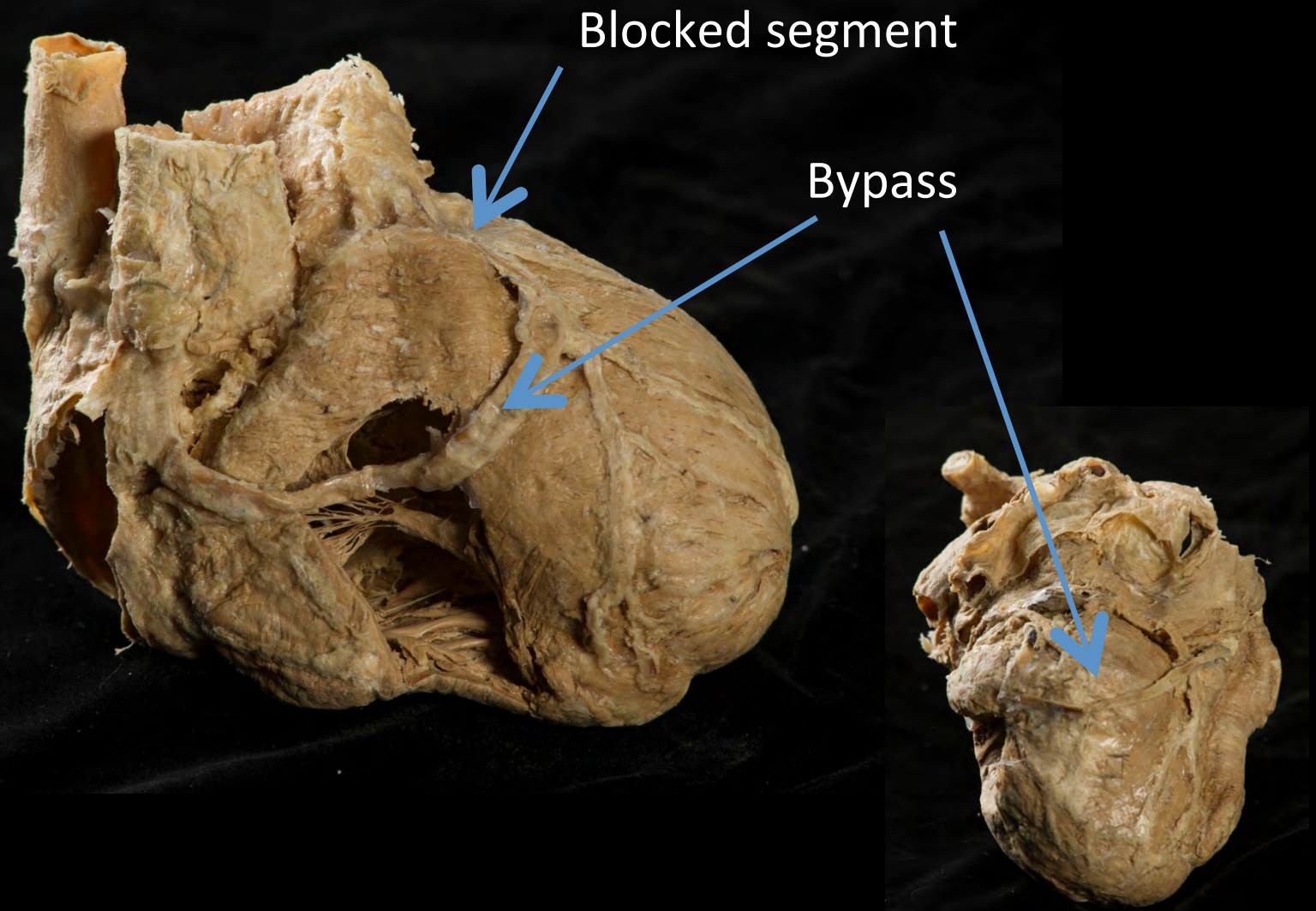
Largest branch of coronary arteries
Artery most commonly blocked



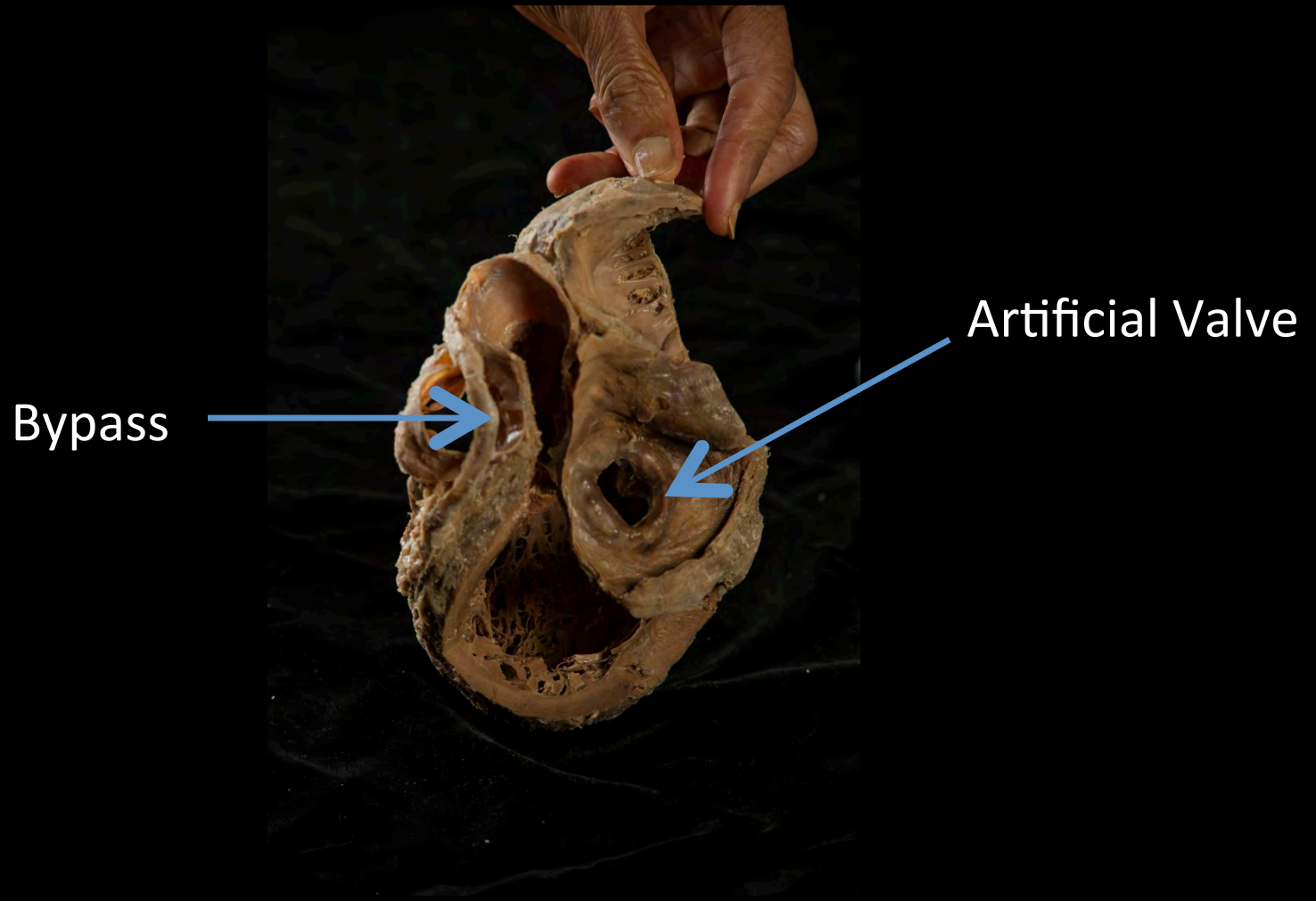
Heart and Coronary Cast



Heart with Coronary Bypass



Heart with Bypass and Artificial Valve



Healthy Lung

Black spots due to pollutants

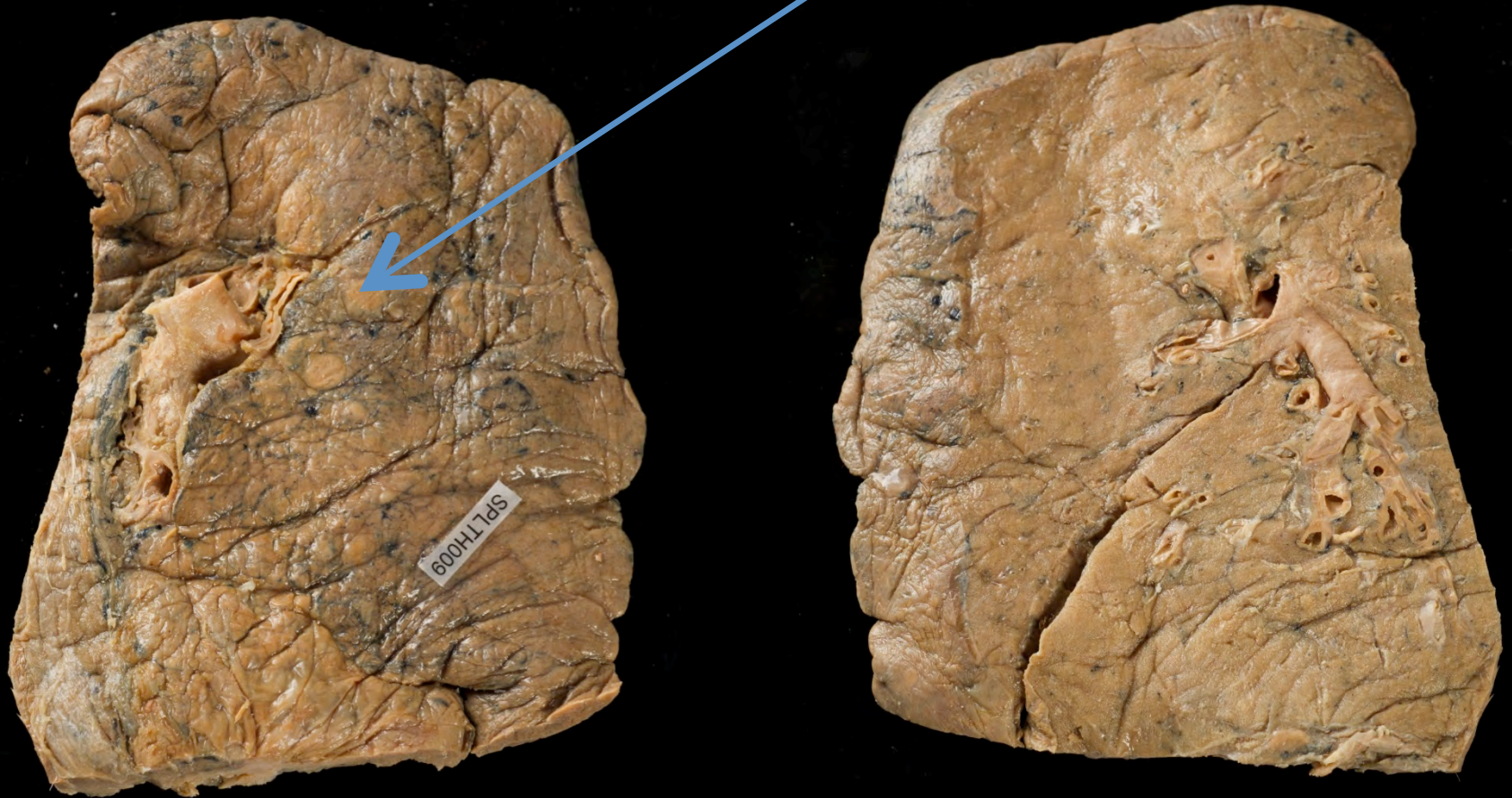


Smoker's Lung

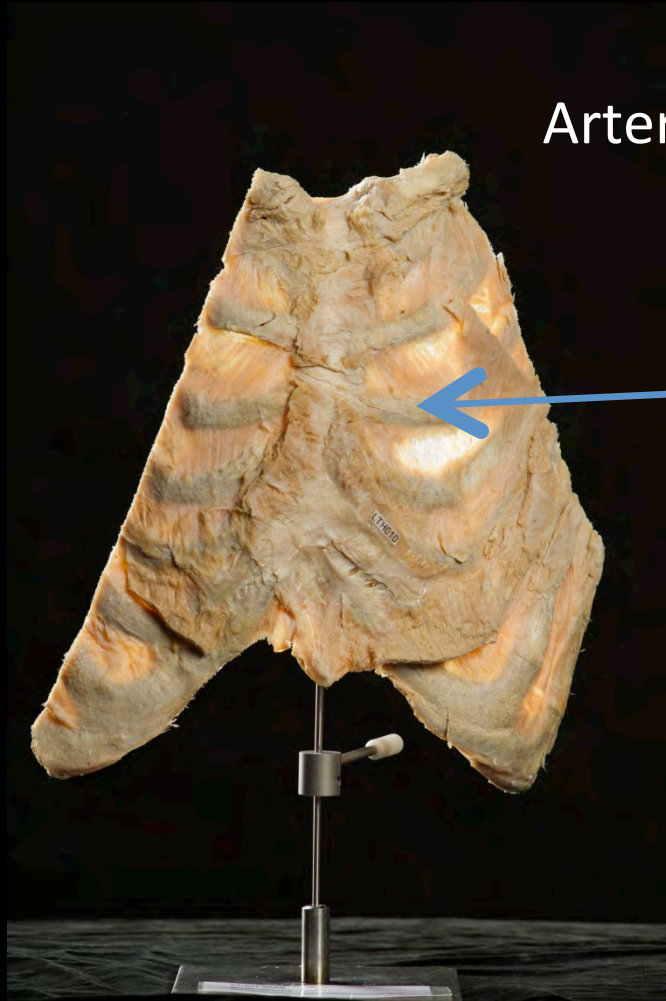


If this person had stopped smoking for 5 years,
chances are the lung would have cleared!
While there is life – there is hope!

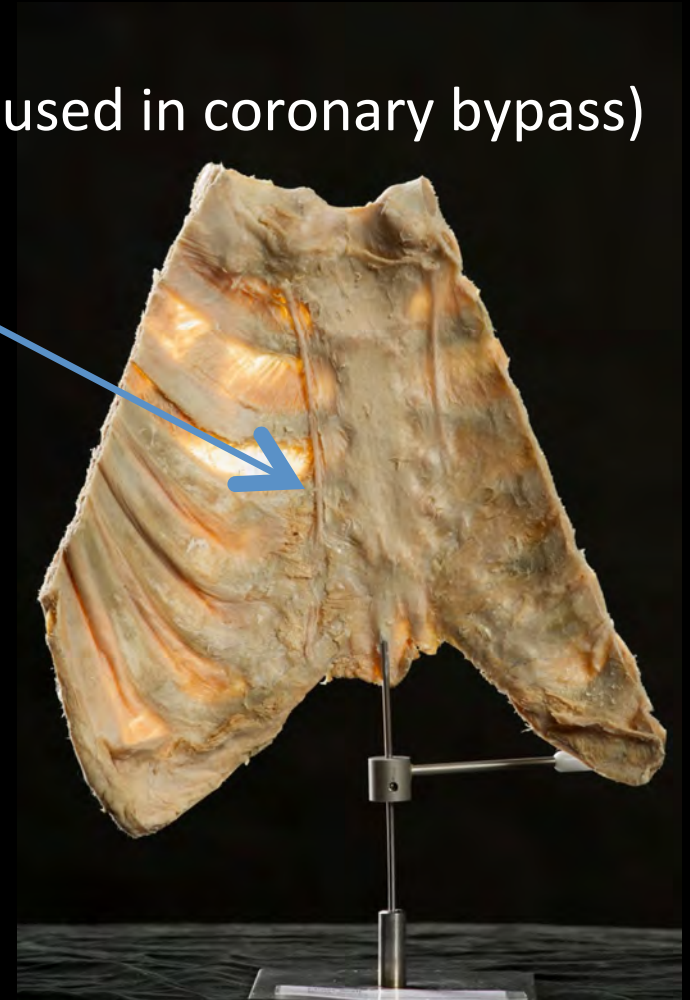
Lung Slice with Tumor



Chest Wall



Anterior = Front



Posterior = Back

Artery (sometimes used in coronary bypass)

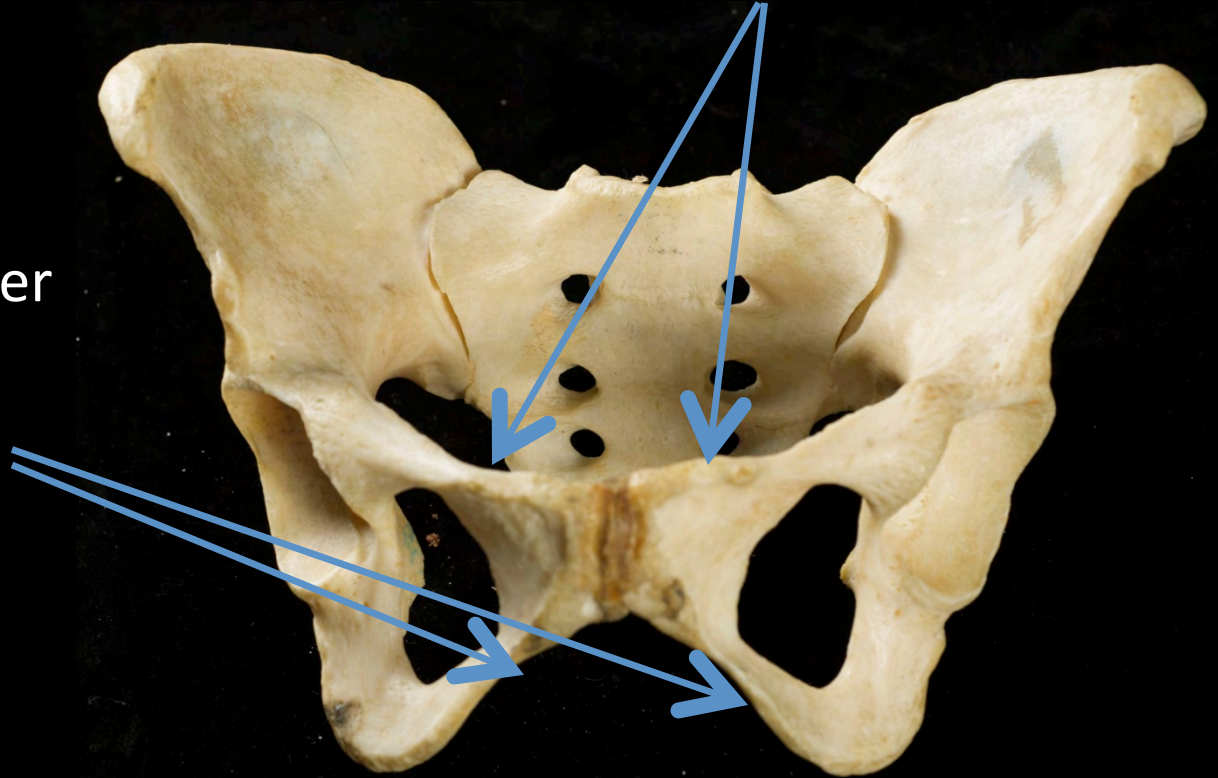
Cartilage

Bony Pelvis - Female

As compared to male: Distance between these two points is greater

Bones are lighter

Angle is wider



Vertebral Column

Cartilaginous disc separates most of the vertebrae



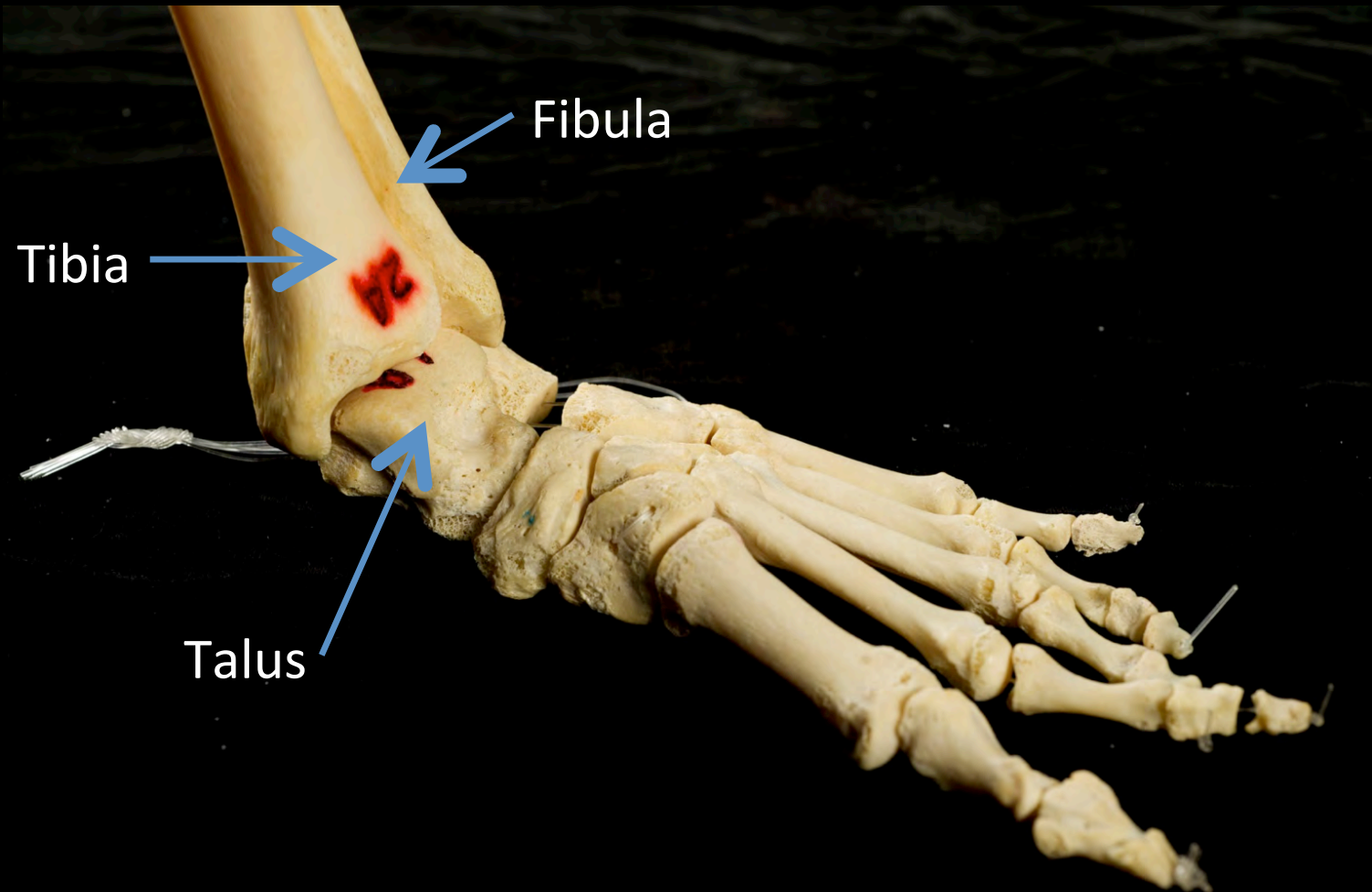
Holes for nerves and blood vessels

Bones of Foot and Ankle

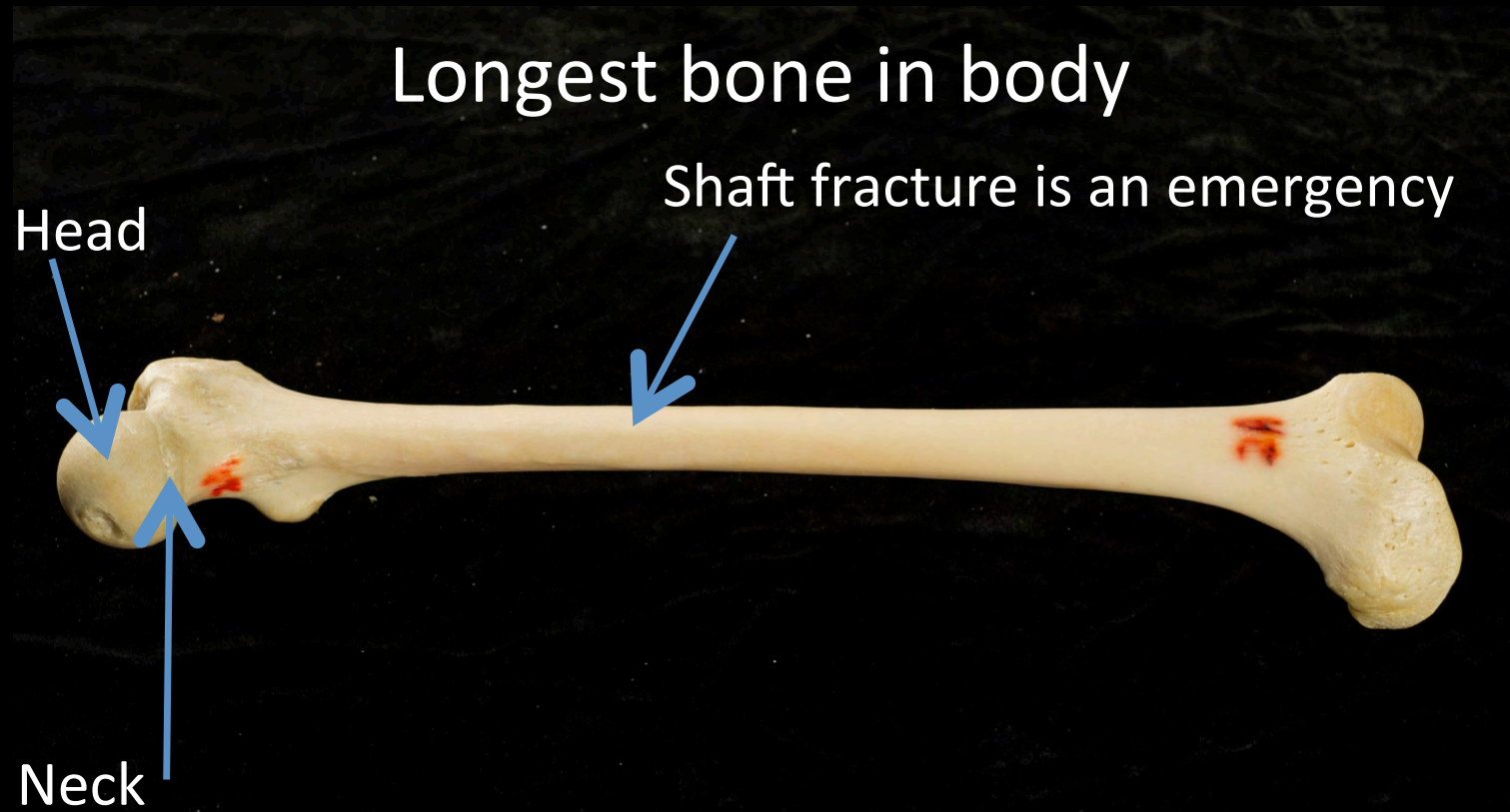
How many bones in one foot?



Ankle Joint



Femur



Hip Joint

Hip bone has a socket

Femoral head is like a ball

Ball and socket joint



Hand and Wrist

Which has more bones – hand or foot?



Hand – 8 wrist bones, Foot - 7 ankle bones

Radius and Ulna



Humerus



Front



Back

Shoulder Joint



Ball and socket joint

Scapula – Shoulder Blade



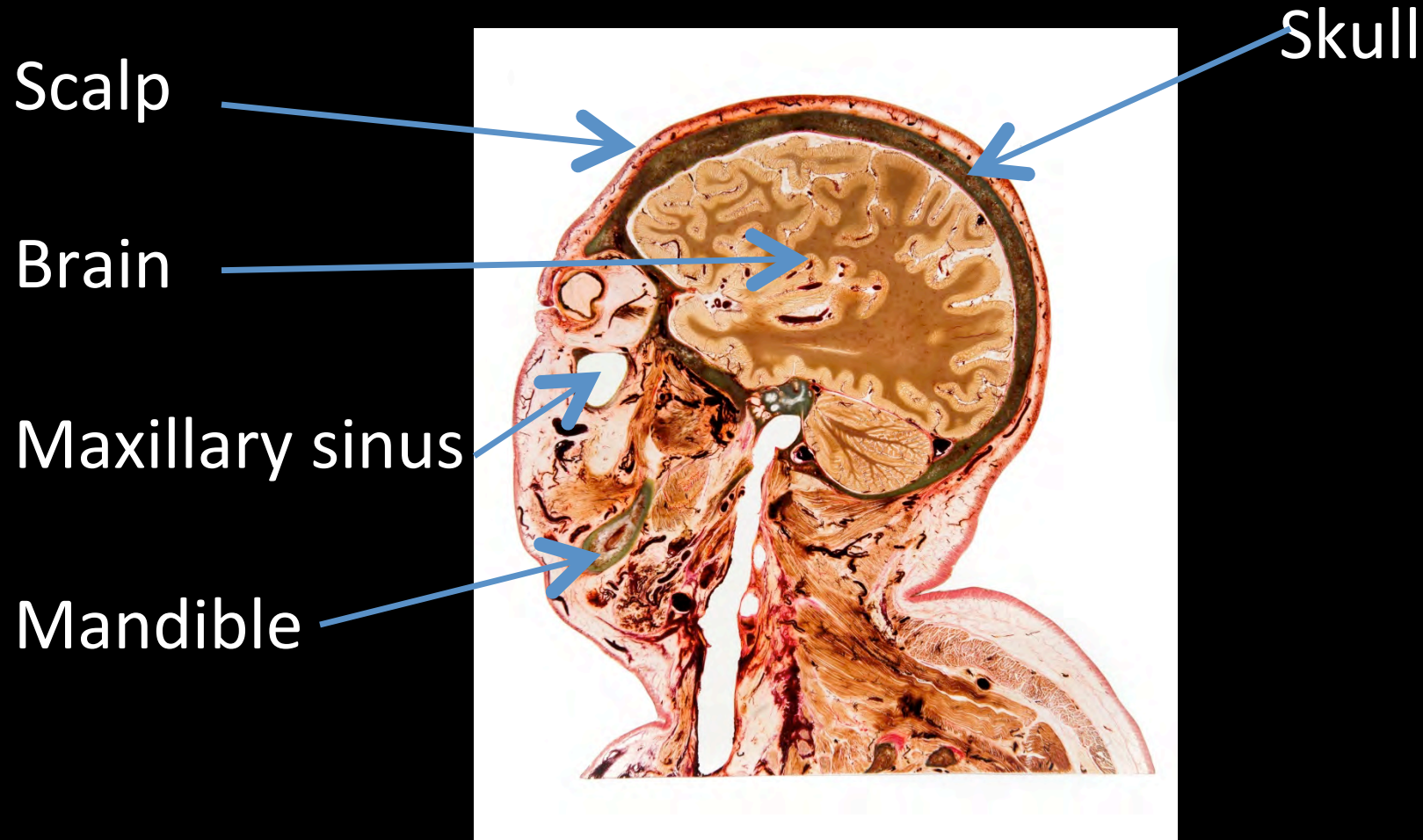
Clavicle = Collar Bone



Most commonly fractured bone in the body
The only bony connection between upper limb and thorax



Head Sagittal Section

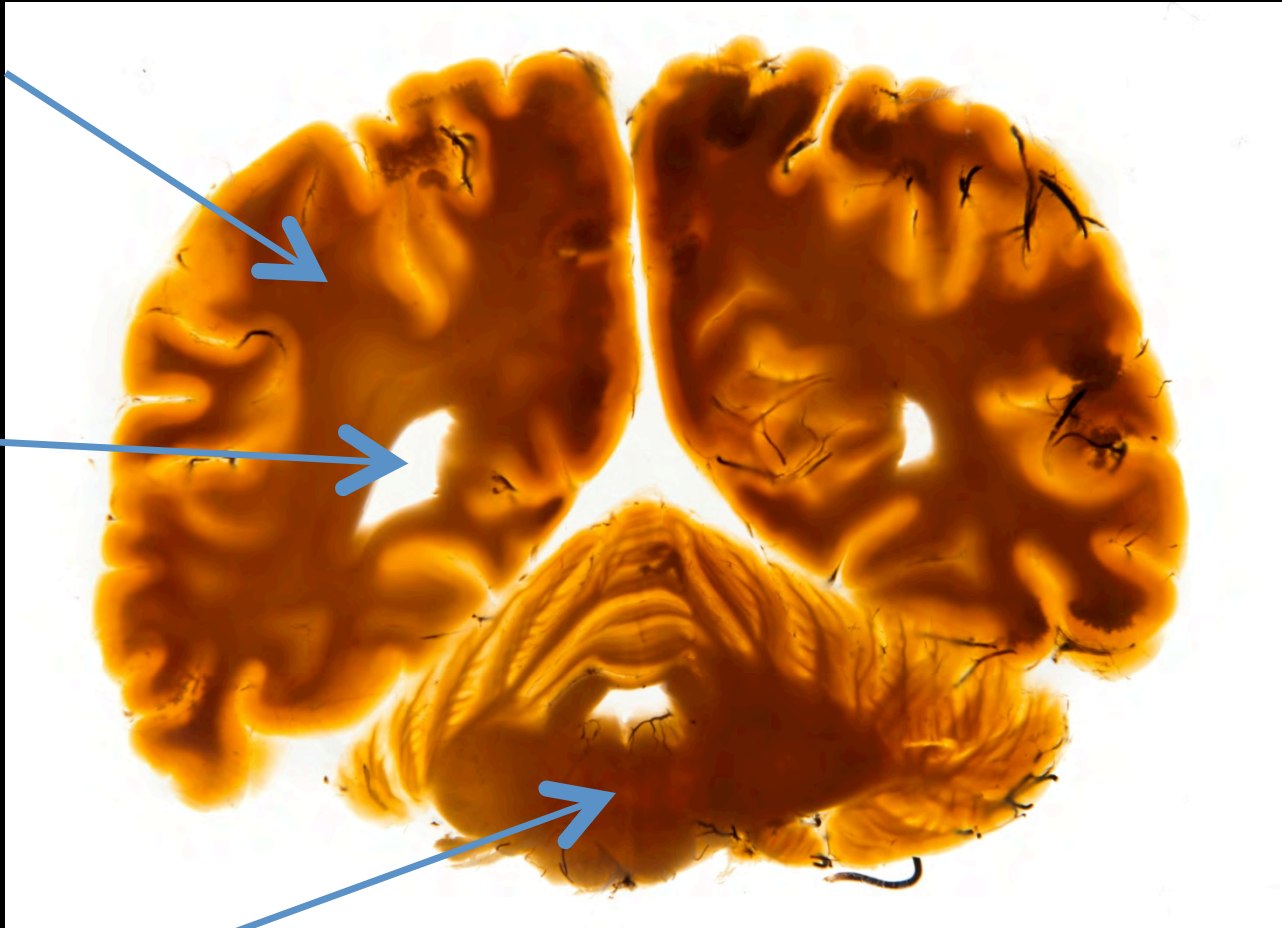


Coronal Section Brain

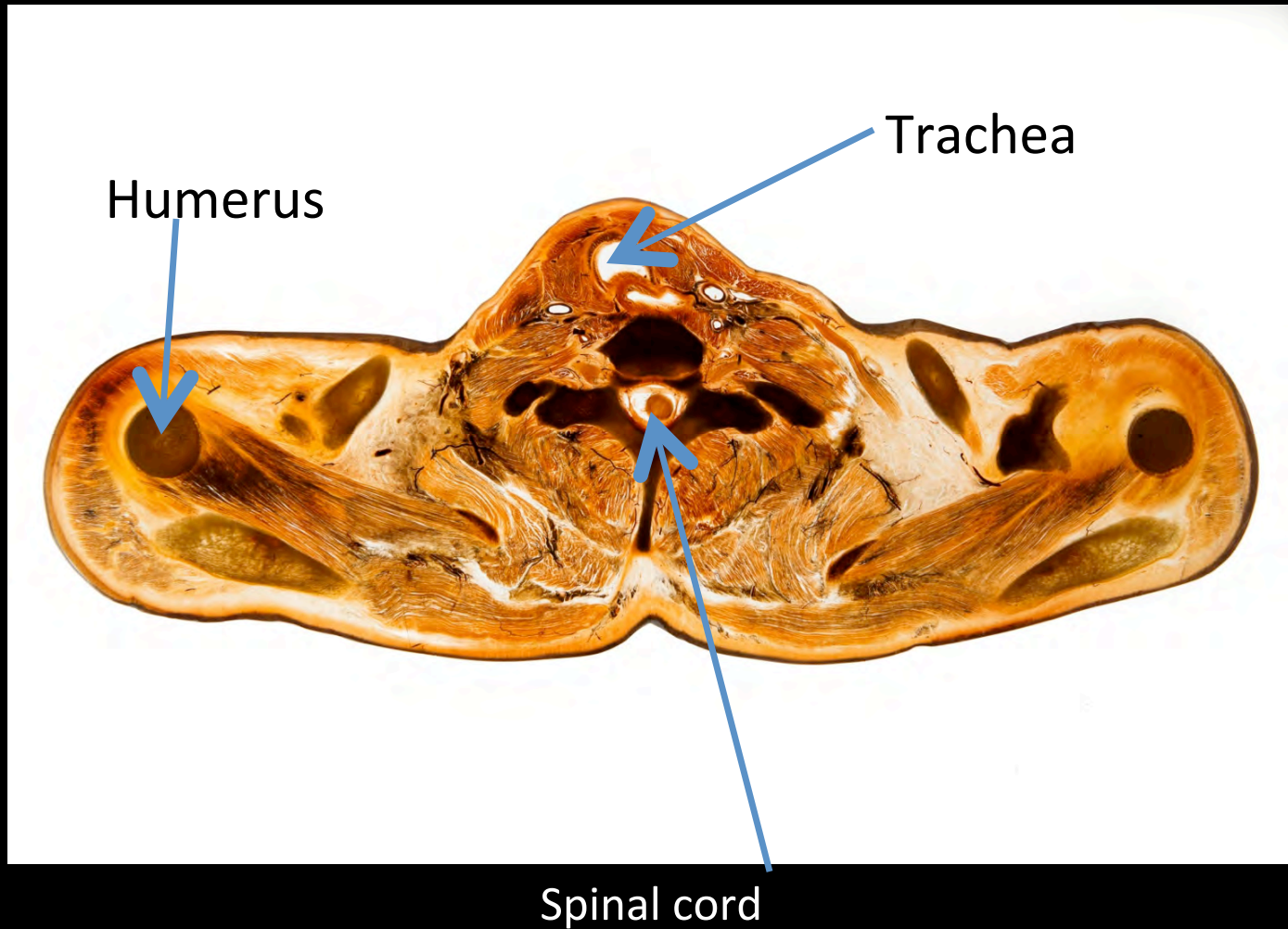
Cerebrum

Ventricle

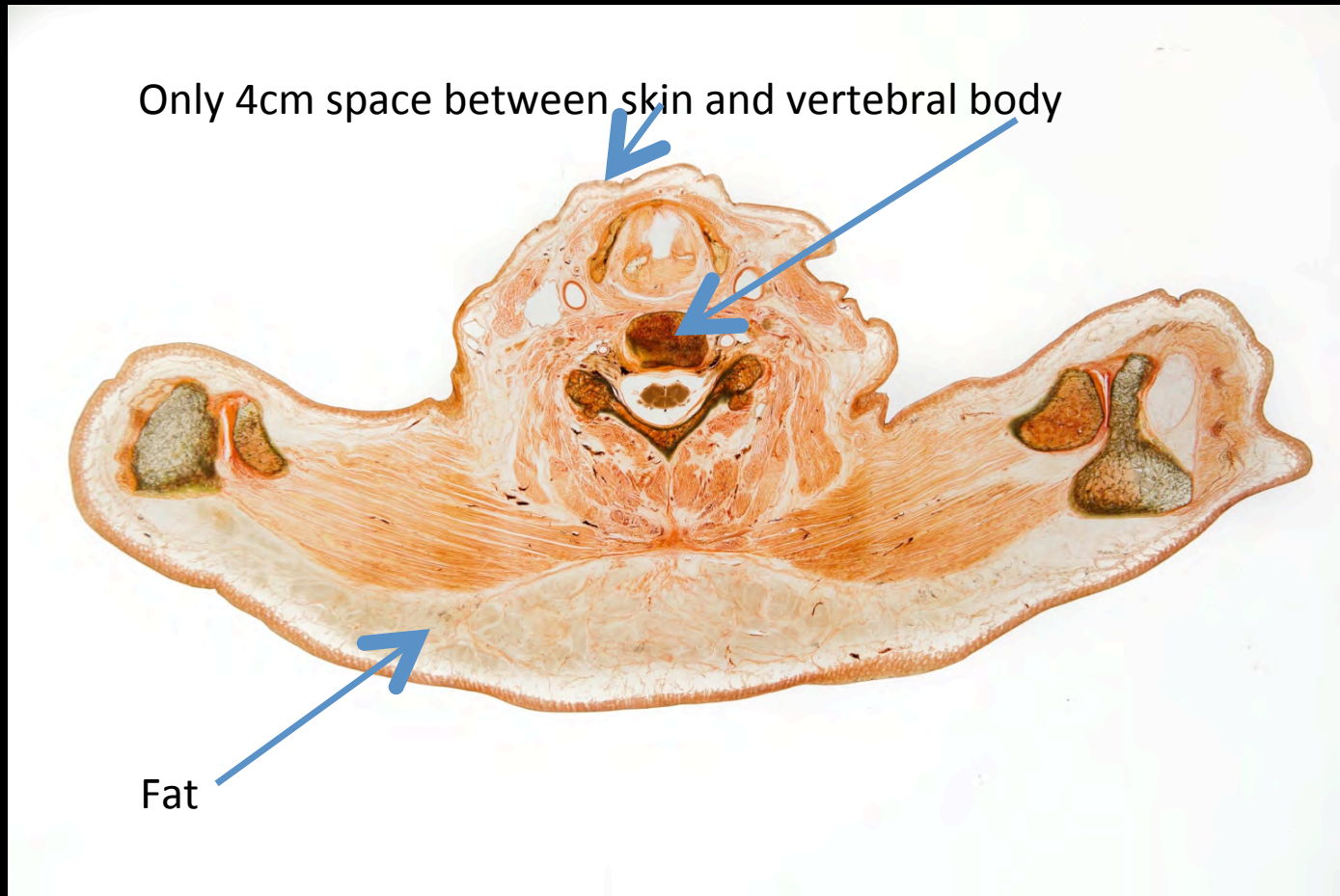
Cerebellum



Shoulders and Neck

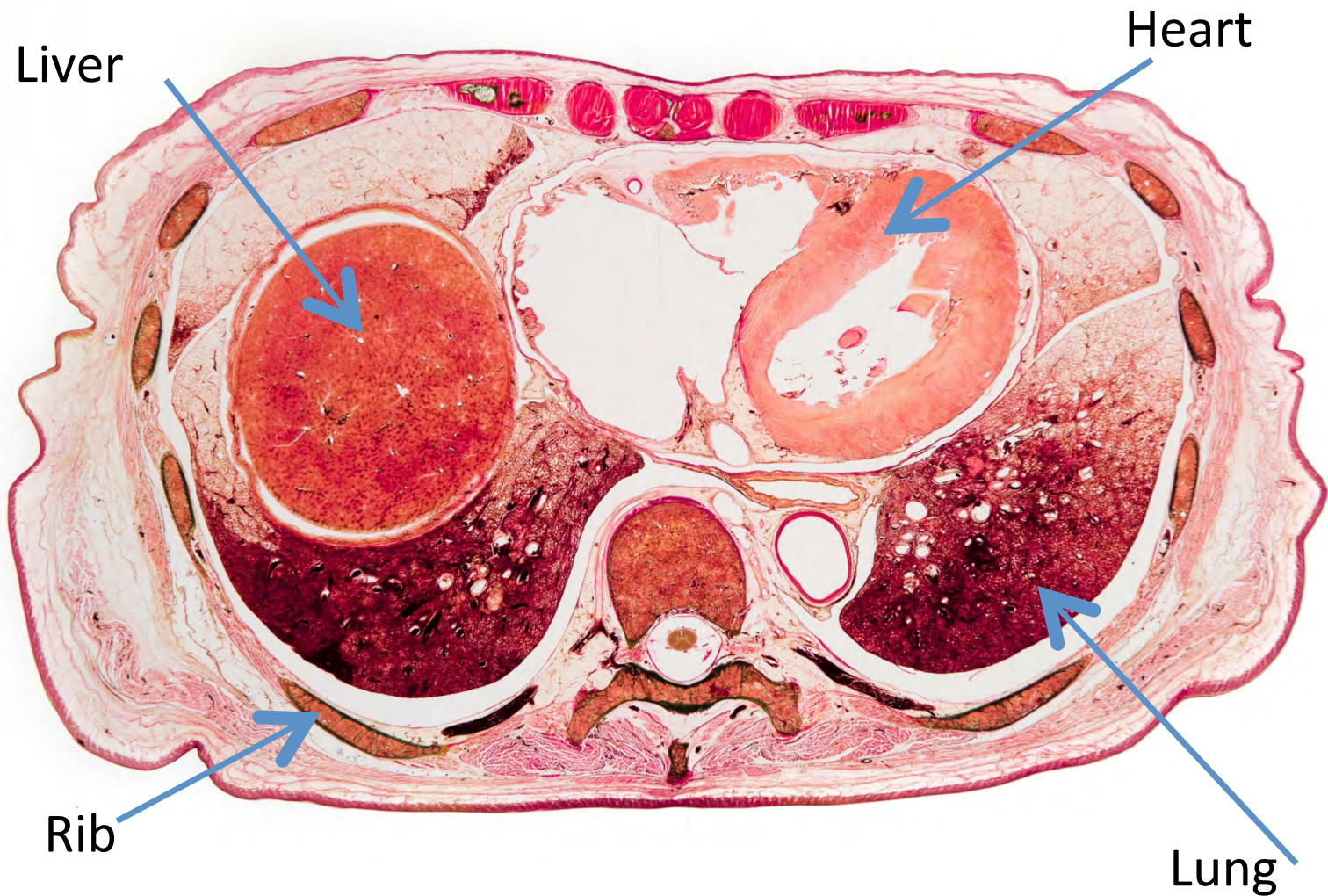


Shoulders and Neck

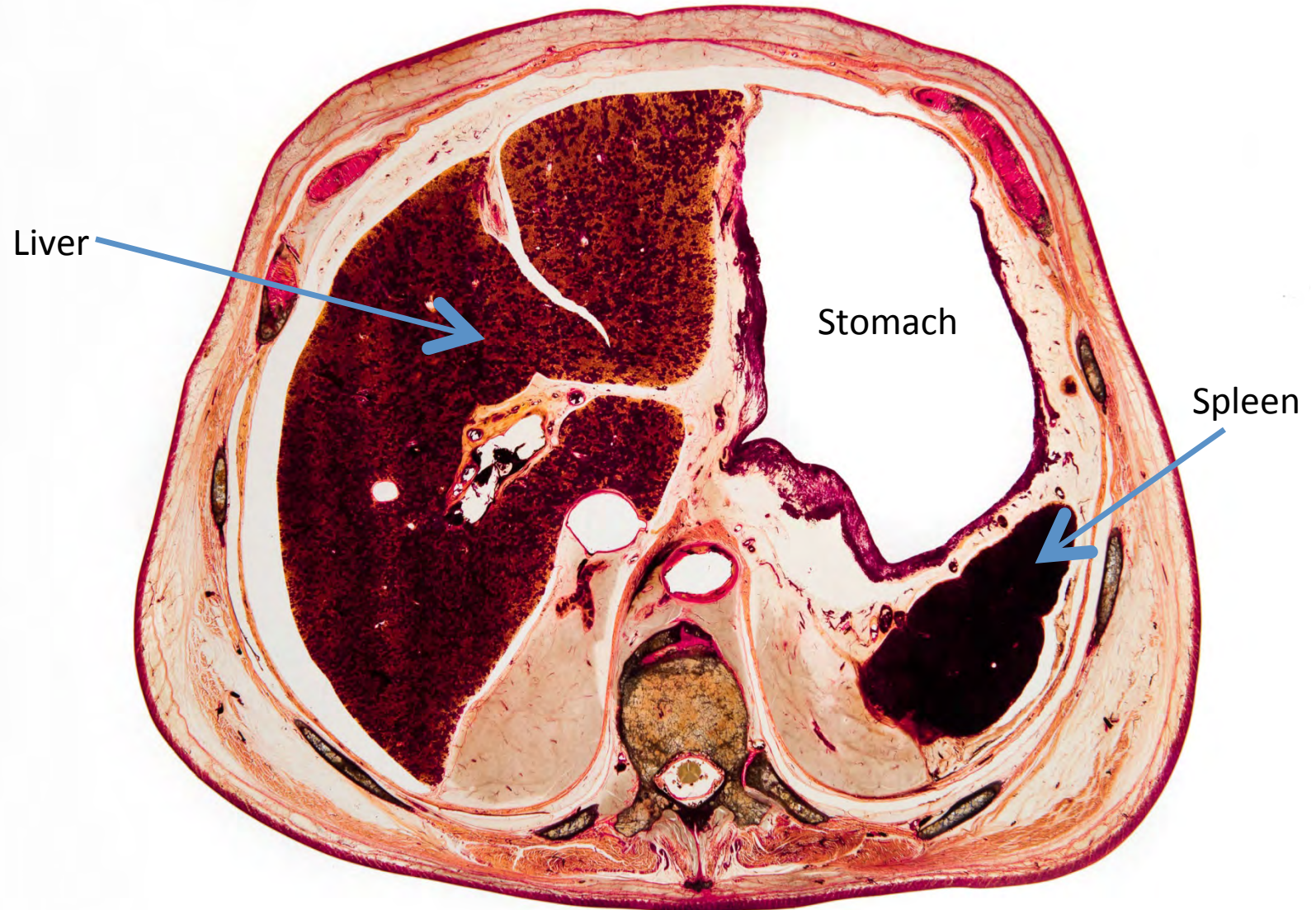


Note the amount of fat as compared to the previous one

Thorax



Abdomen

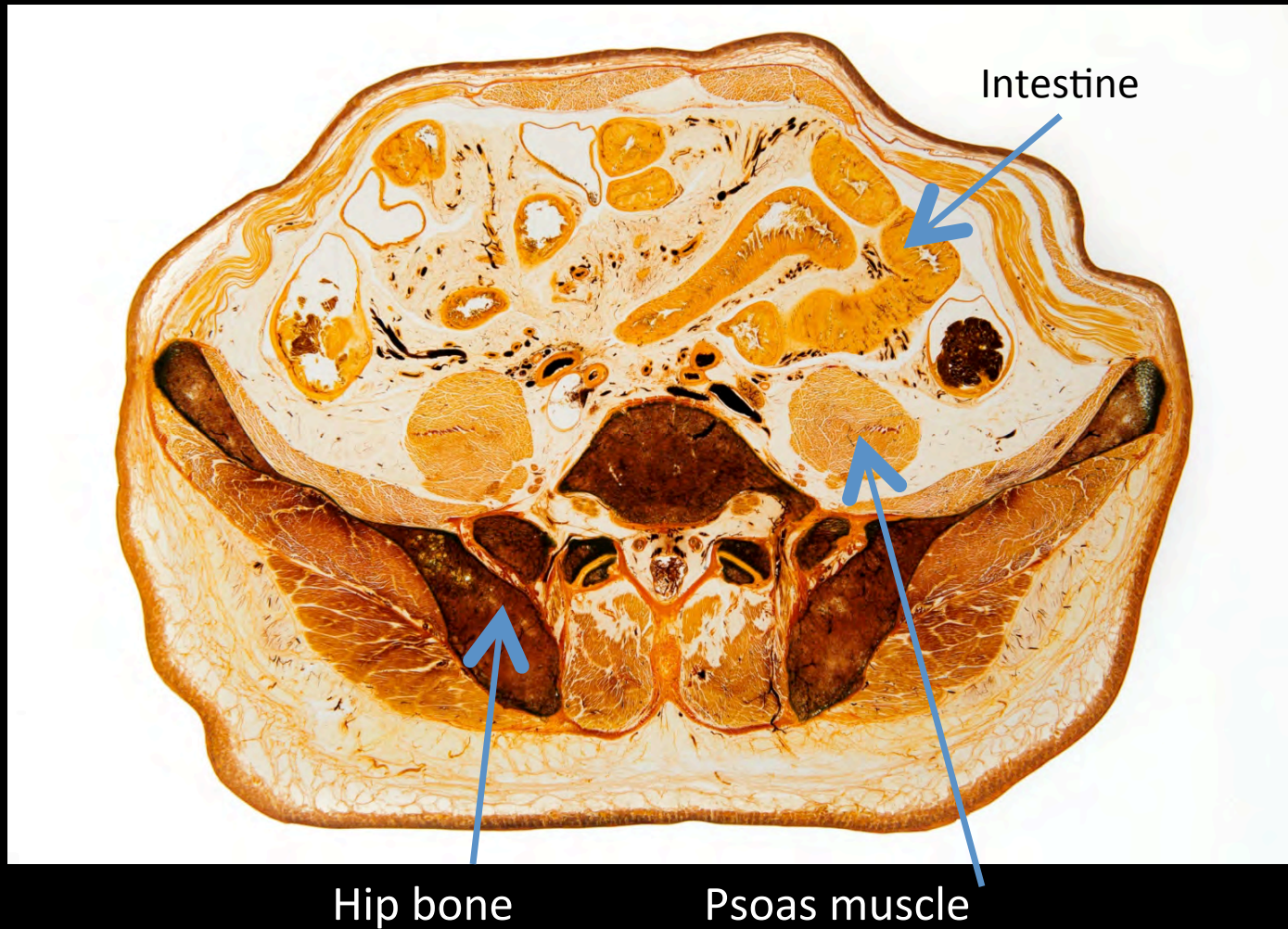


Abdomen Horizontal Section



Liver (L), Kidneys (K), Intestine (I)

Horizontal Section Abdomen

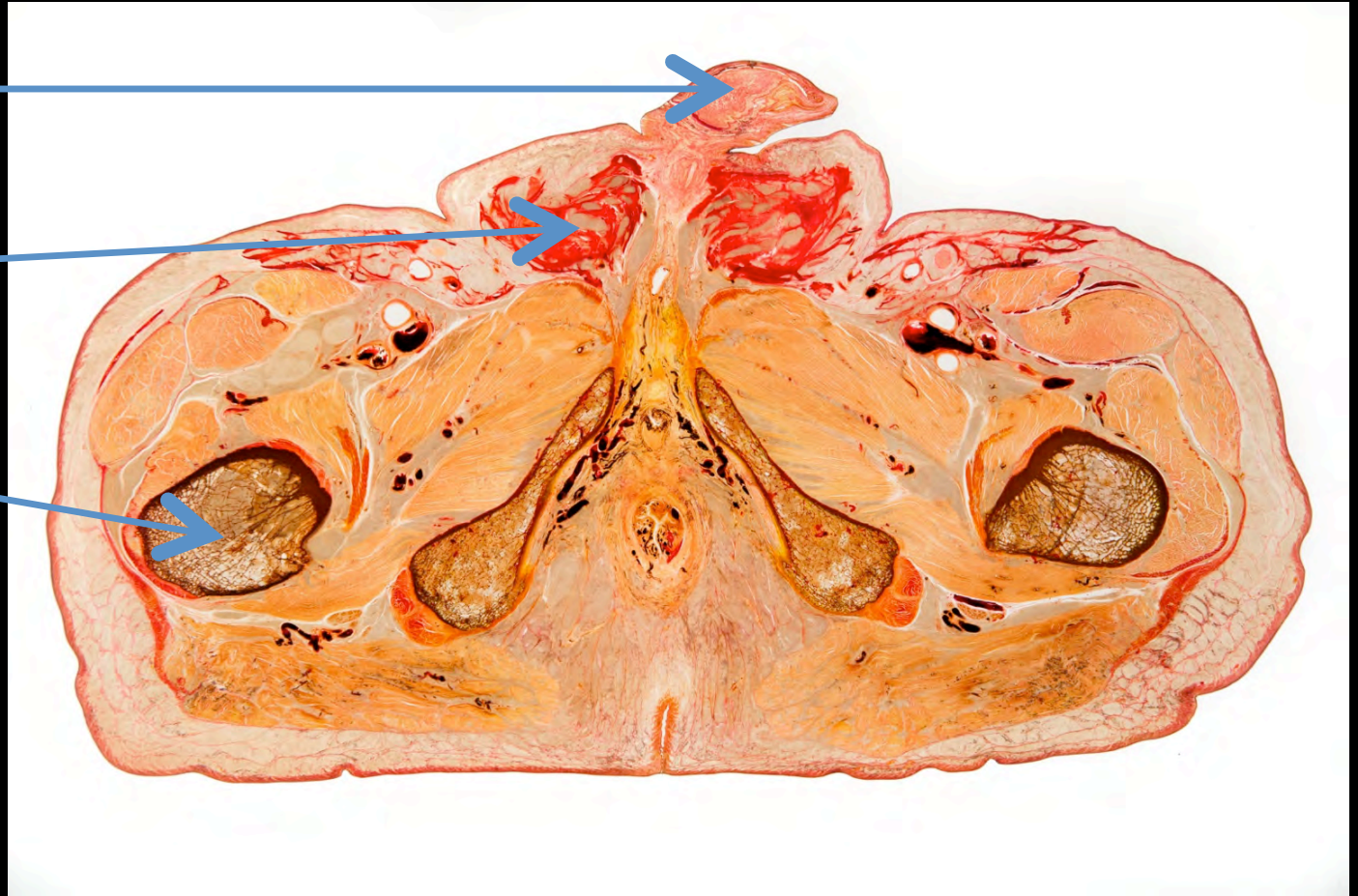


Male Pelvis Horizontal Section

Penis

Scrotum

Femur

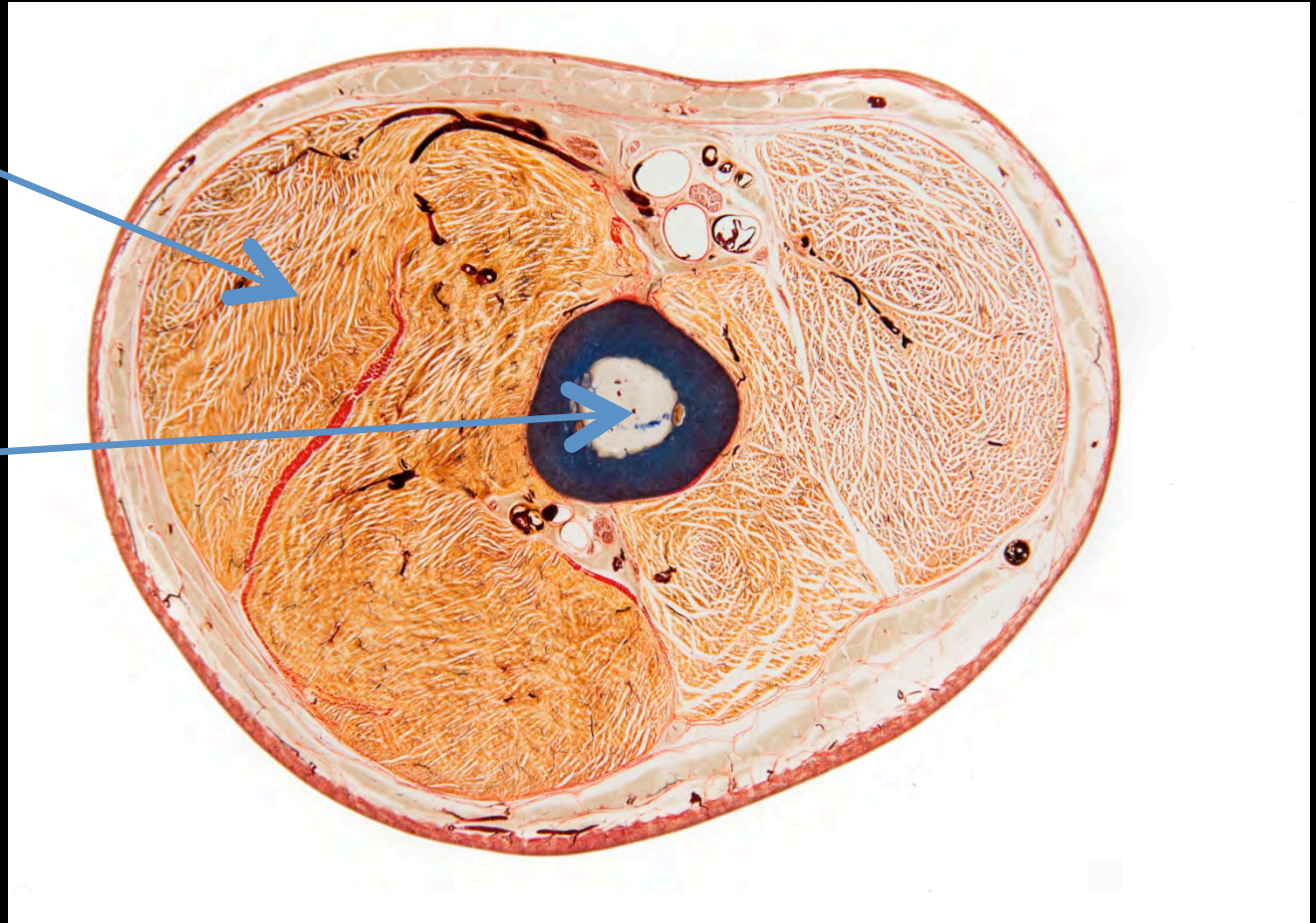


Pelvis

Thigh

Quadriceps

Femur

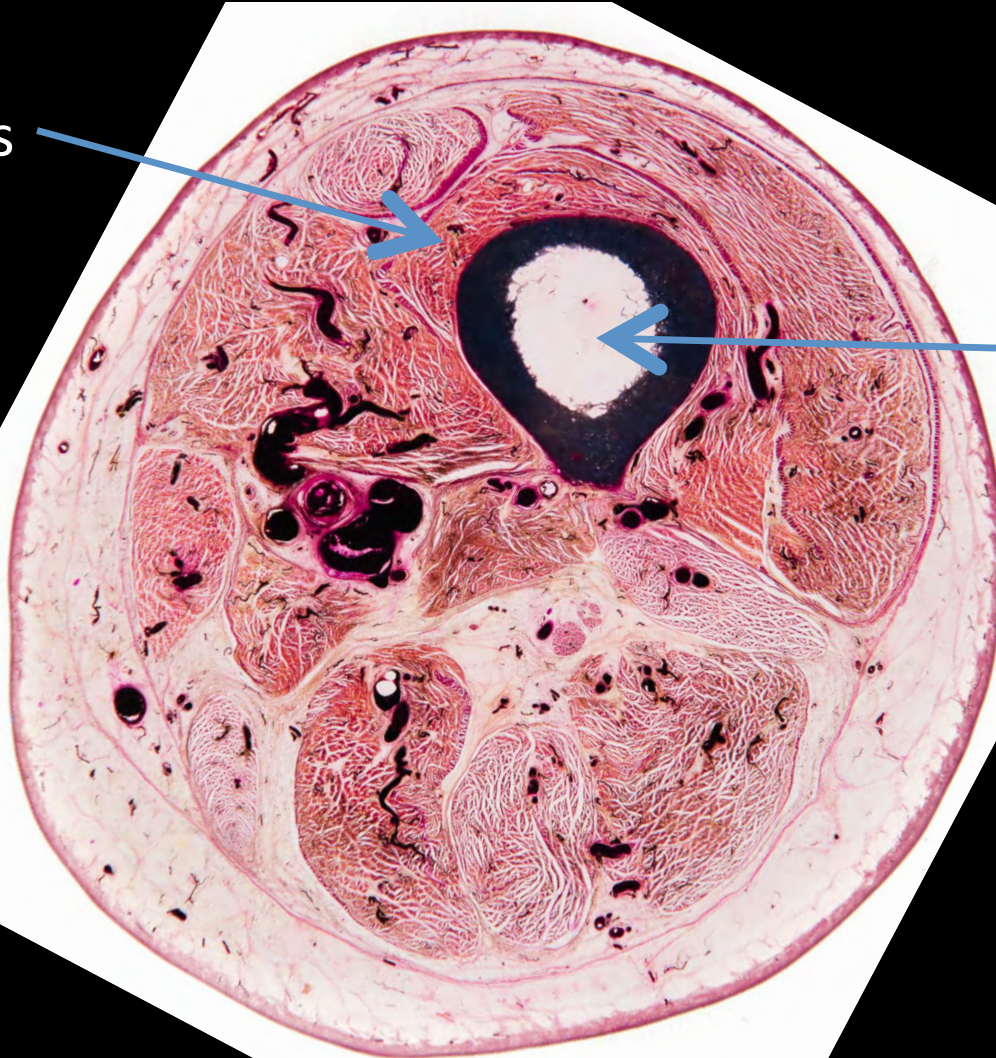


Plastination_slices-20130501-09

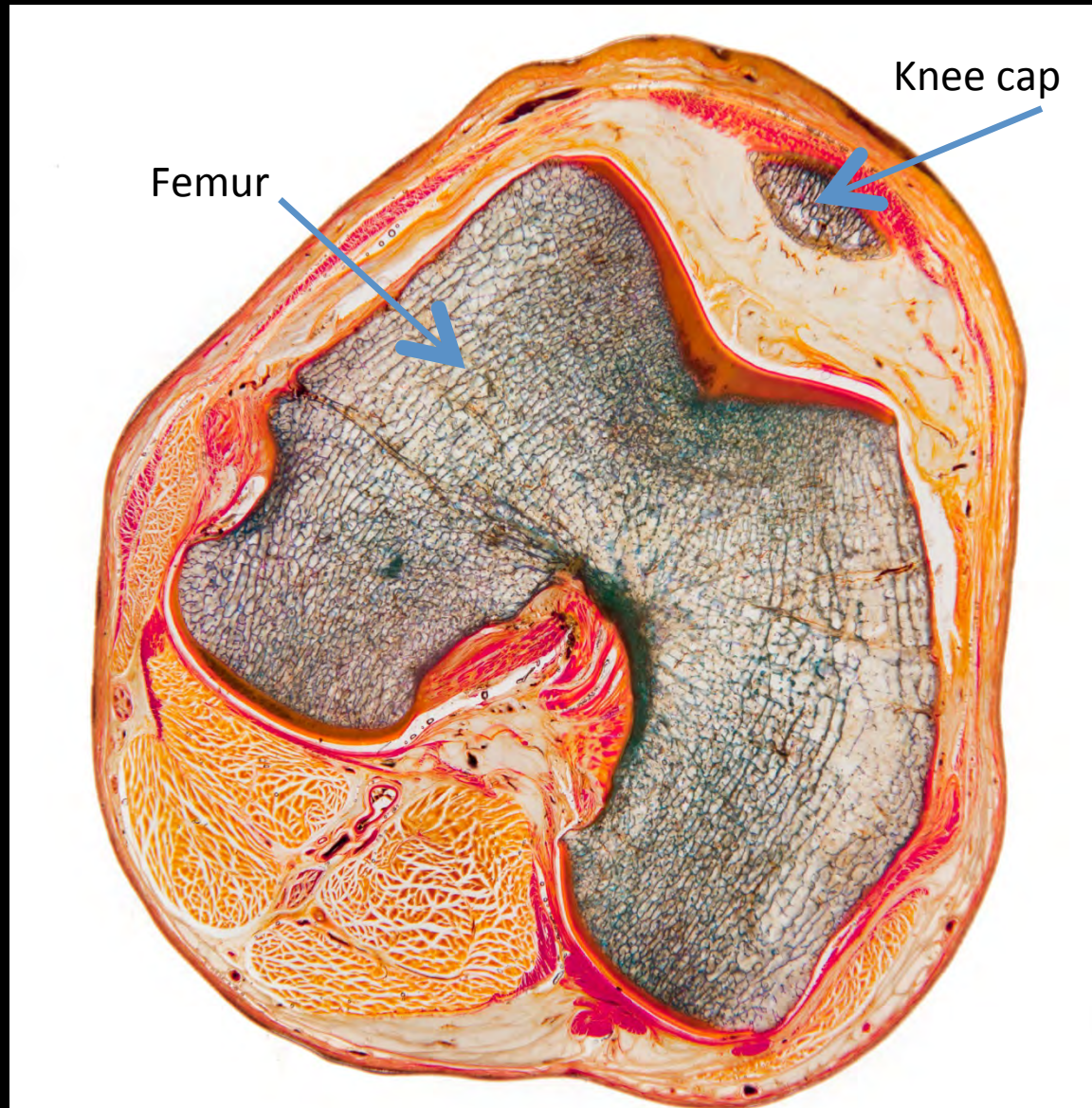
Thigh

Quadriceps

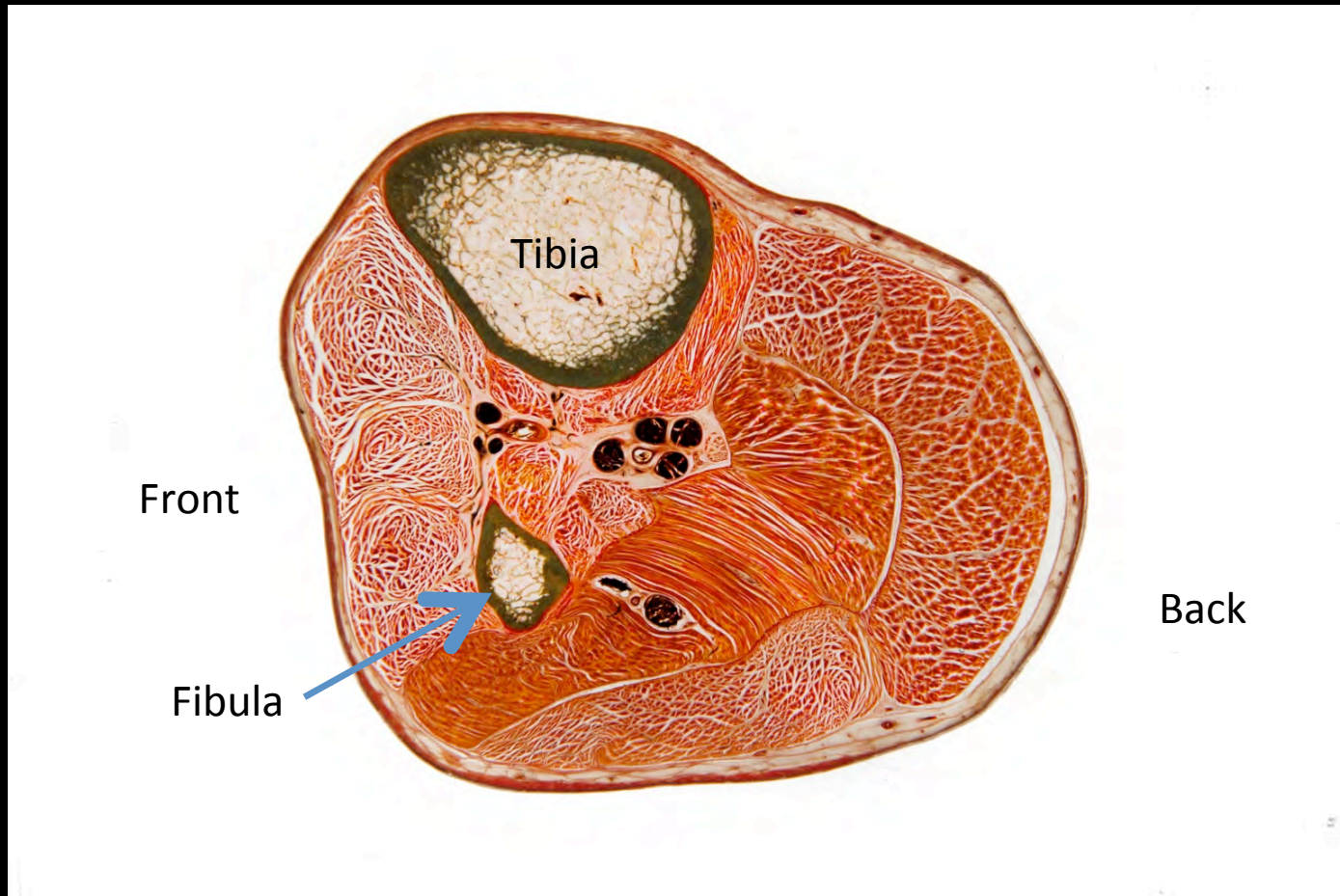
Femur



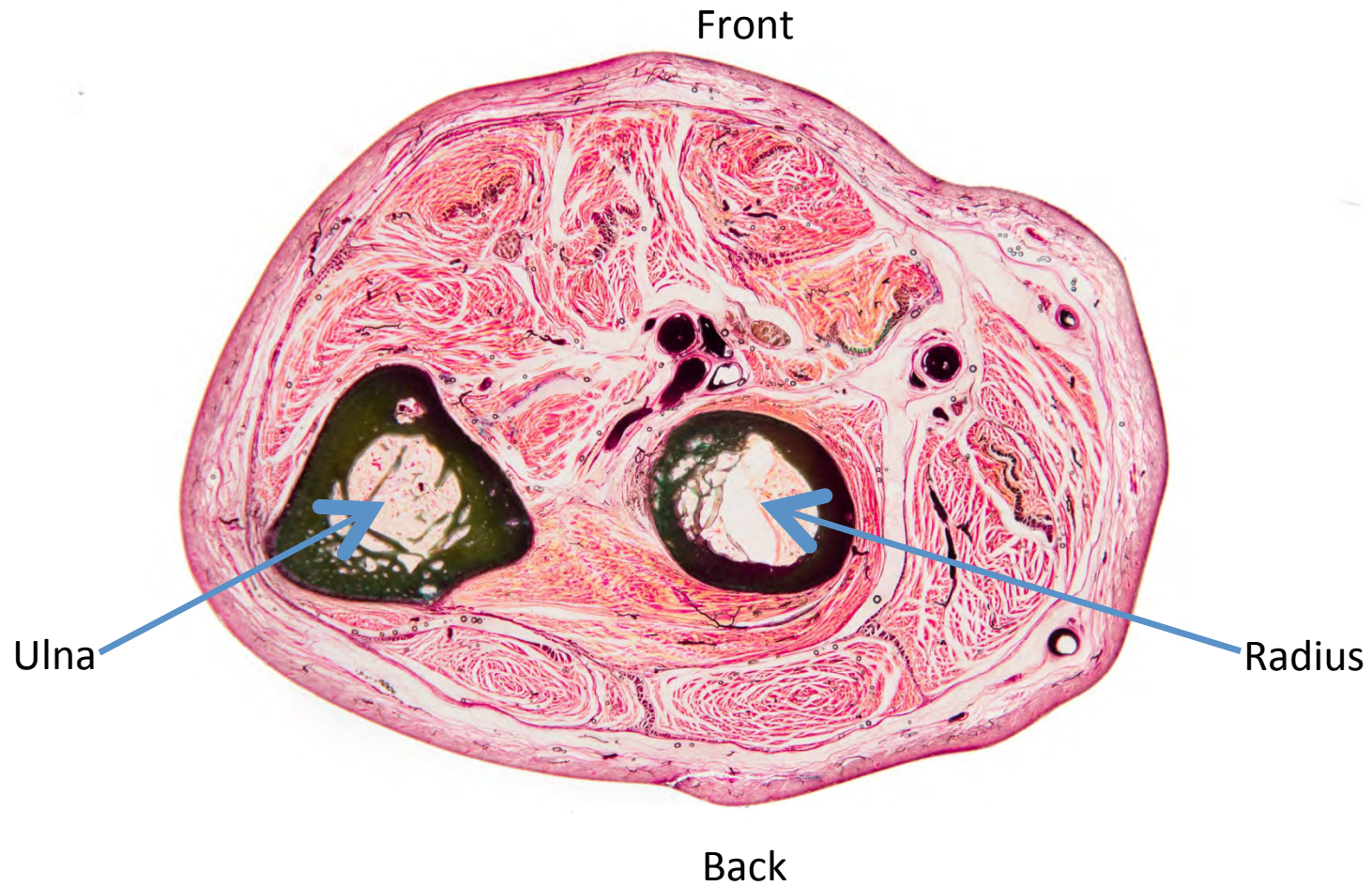
Knee



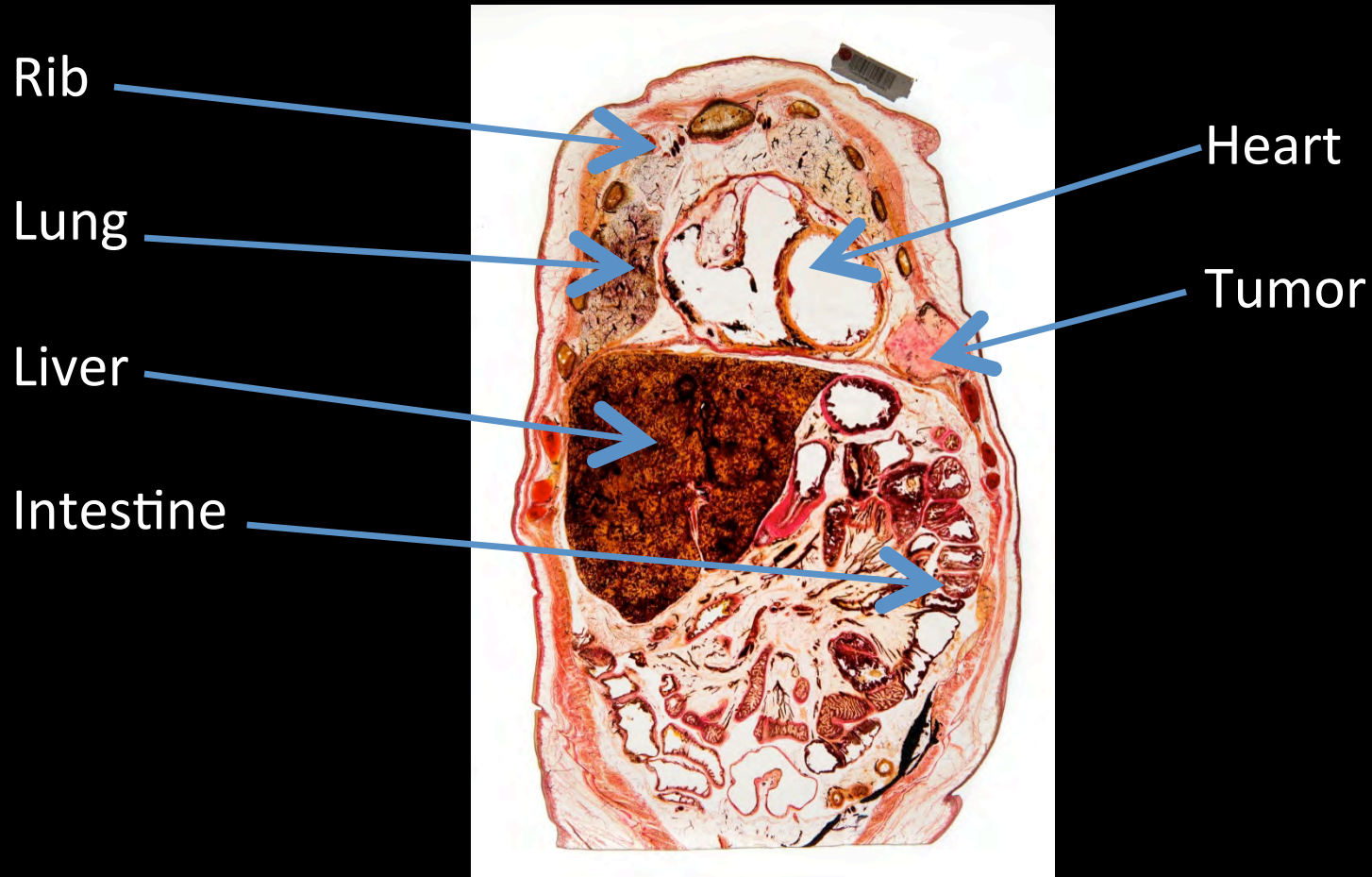
Leg



Fore Arm



Thorax, Abdomen Coronal Section



Plastination_slices-20130501-26

Section of Horse Leg



Fish

