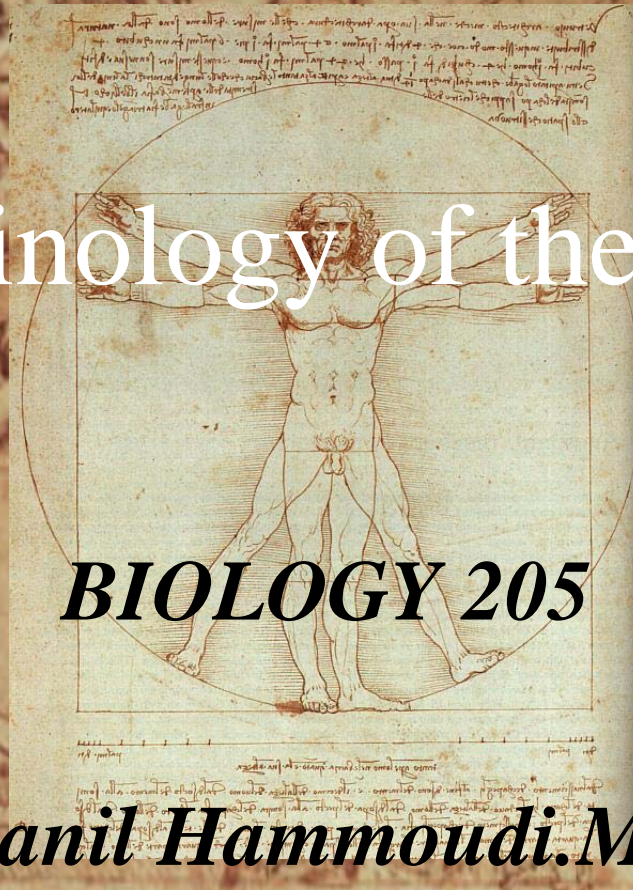


Terminology of the Body

BIOLOGY 205

Danil Hammoudi.MD



Objective 1: Describe “anatomical position.”

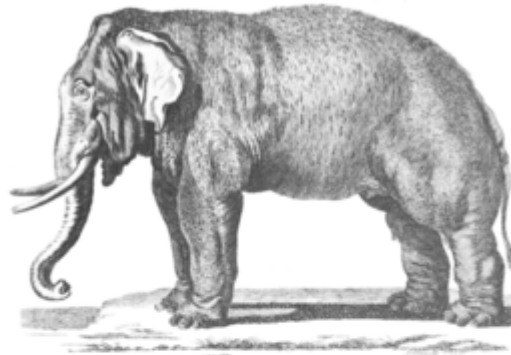
**These are key words to know &
DEFINITION**

–**Anatomy**

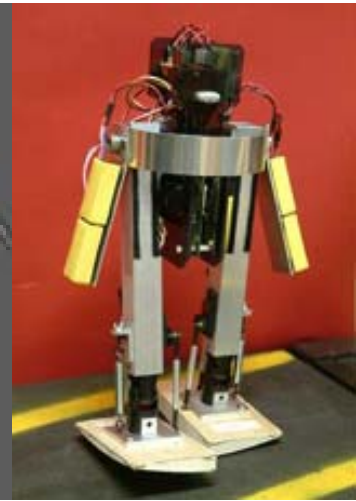
–**Physiology**

–**Anatomical position.**

- **Quadrupeds**



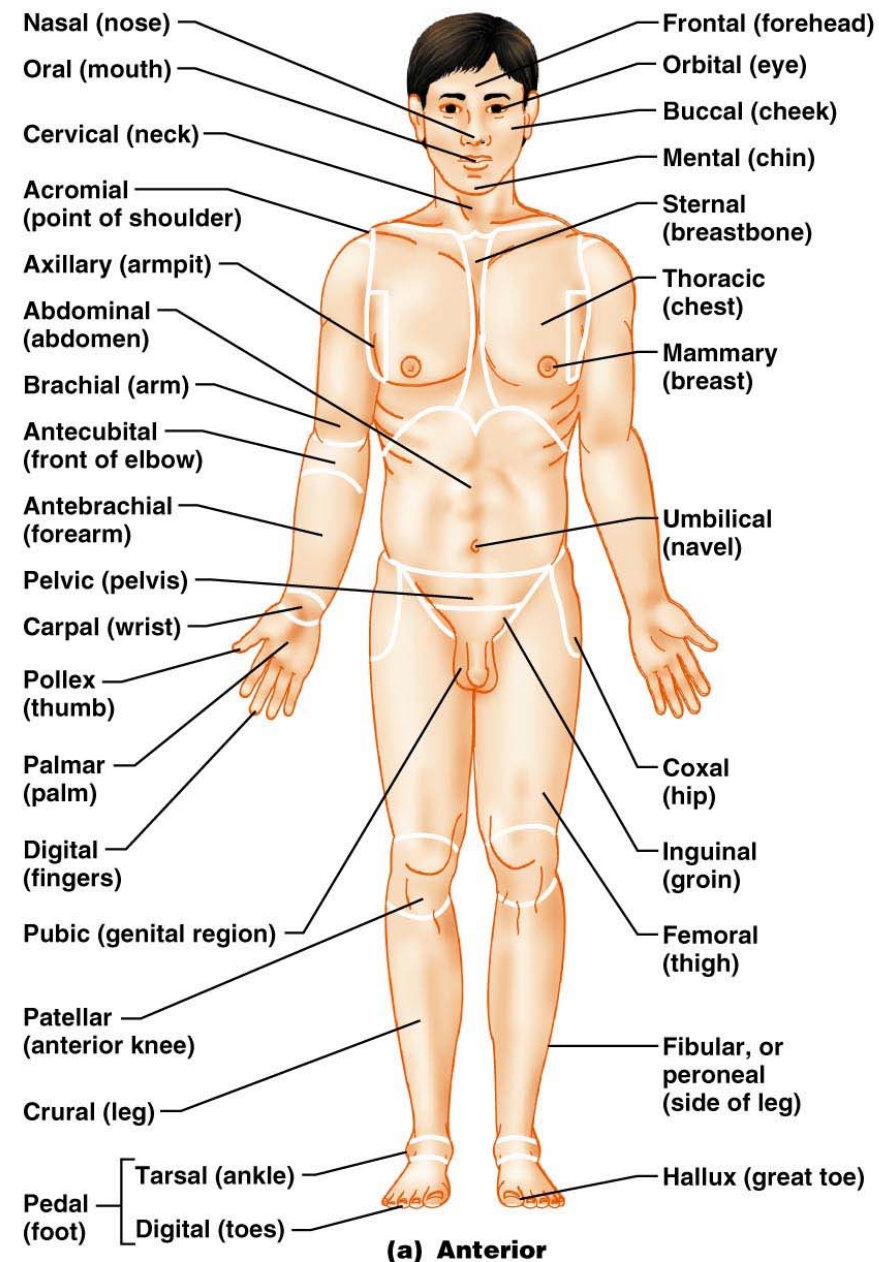
- **bipeds**





Anatomical position

The anatomical position is the universal starting position for describing movements, with the exception of horizontal flexion, which occurs when the arm moves forwards from an already abducted position



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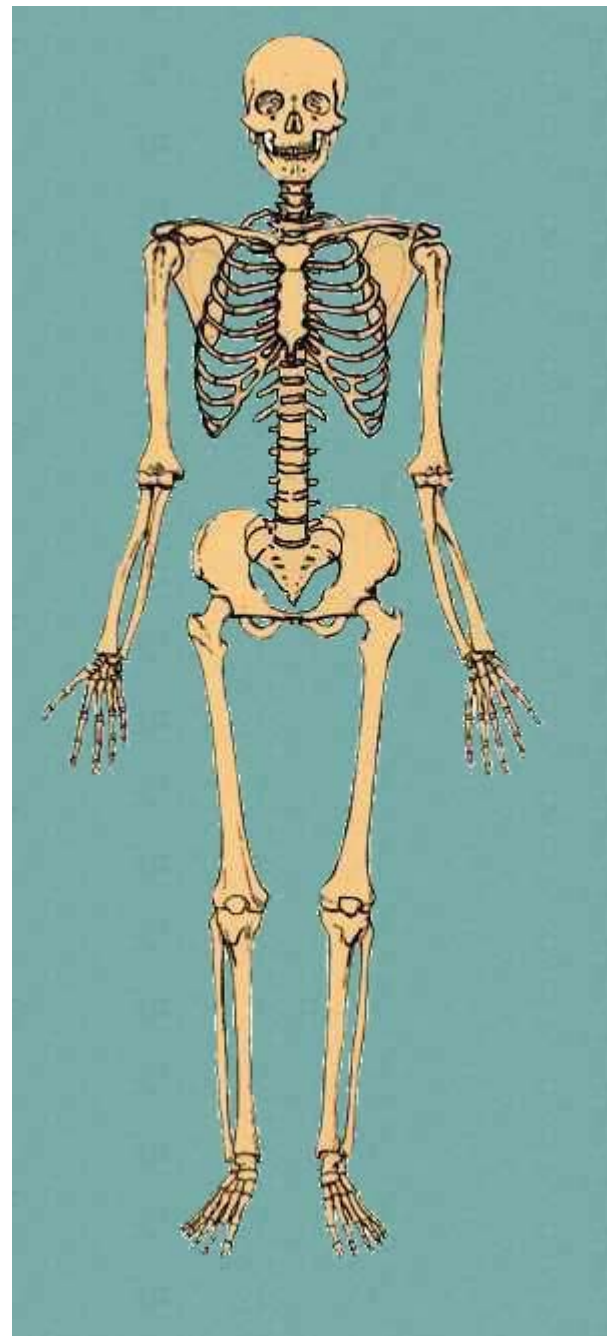
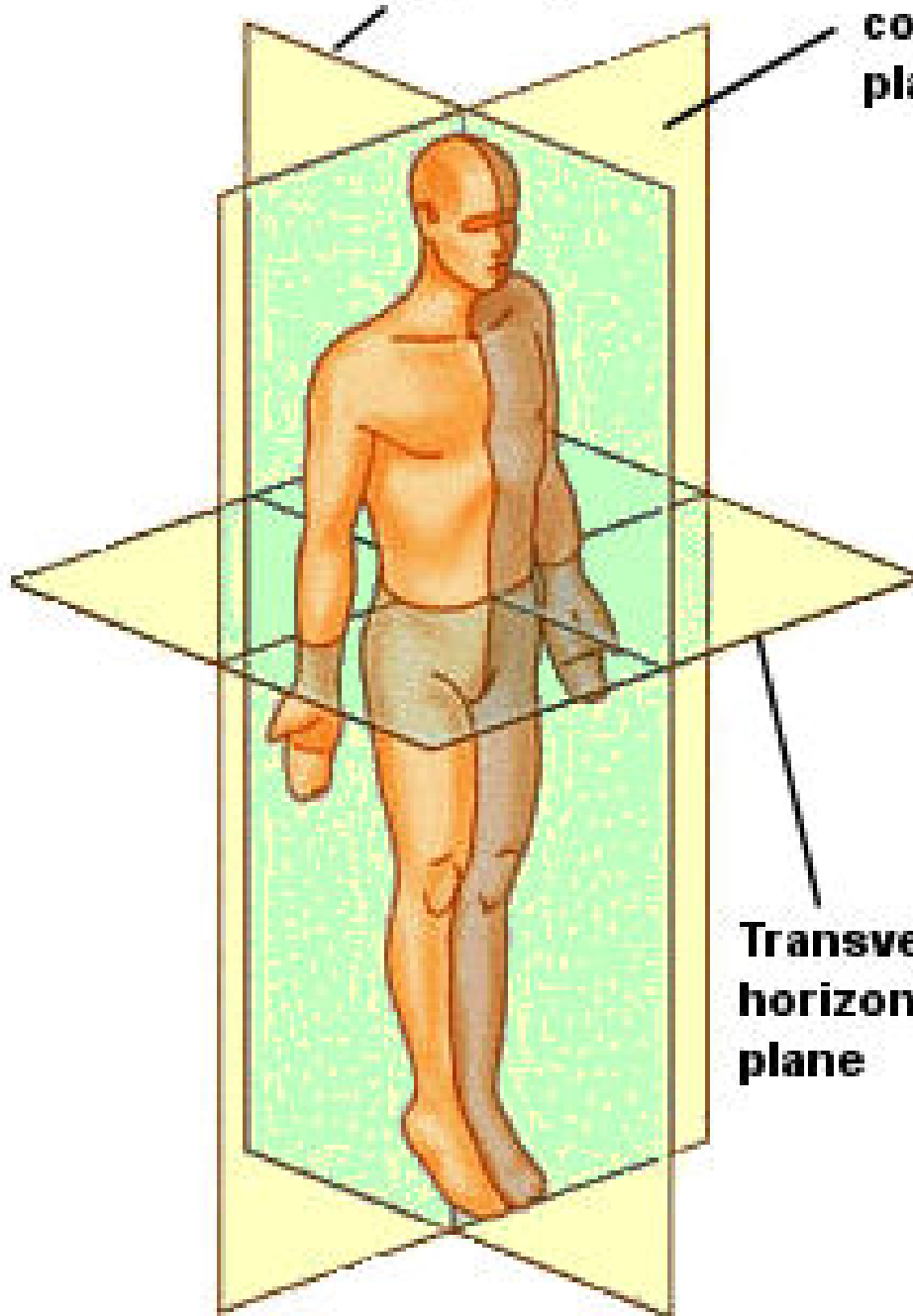


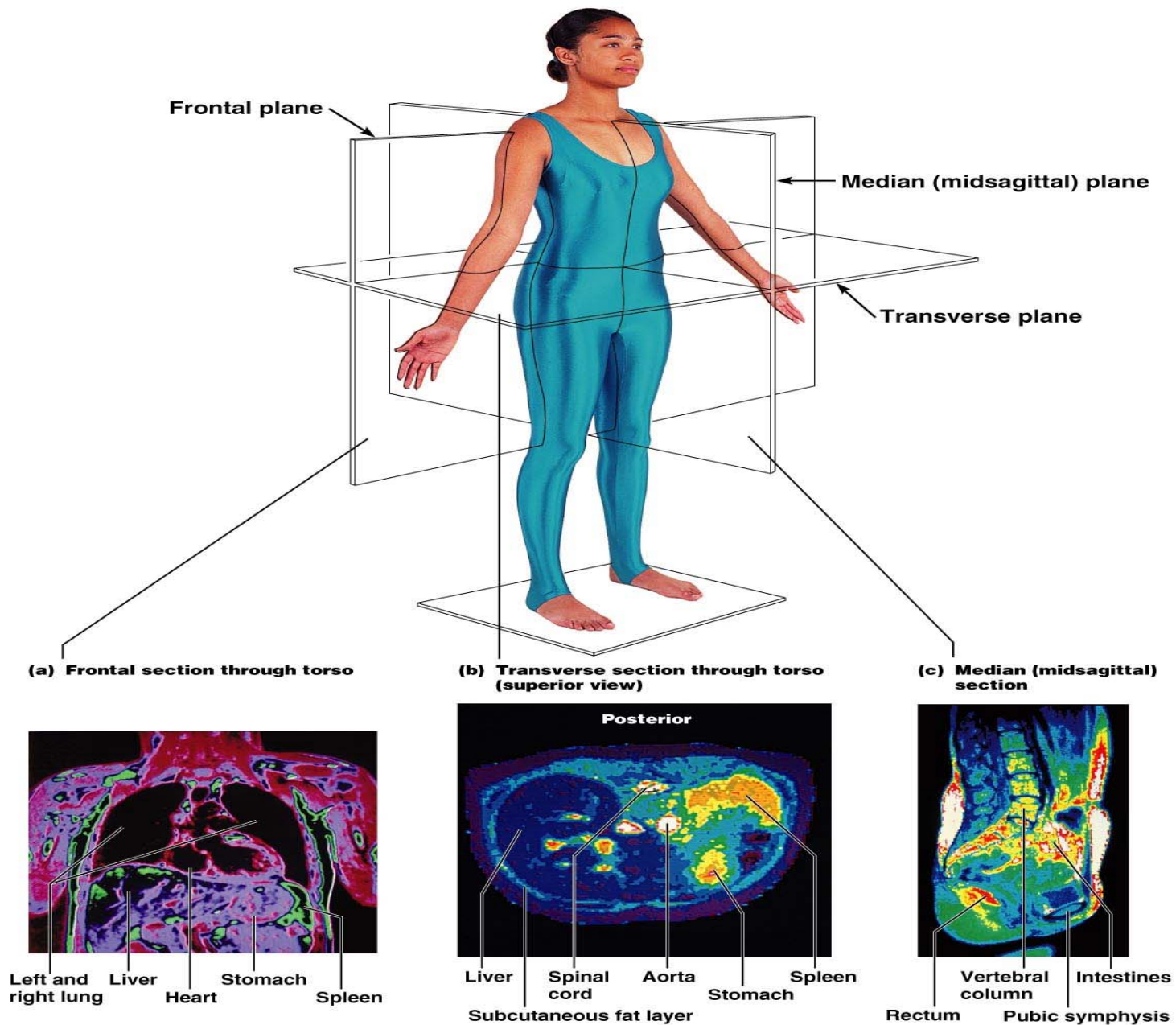
Figure 1.7a

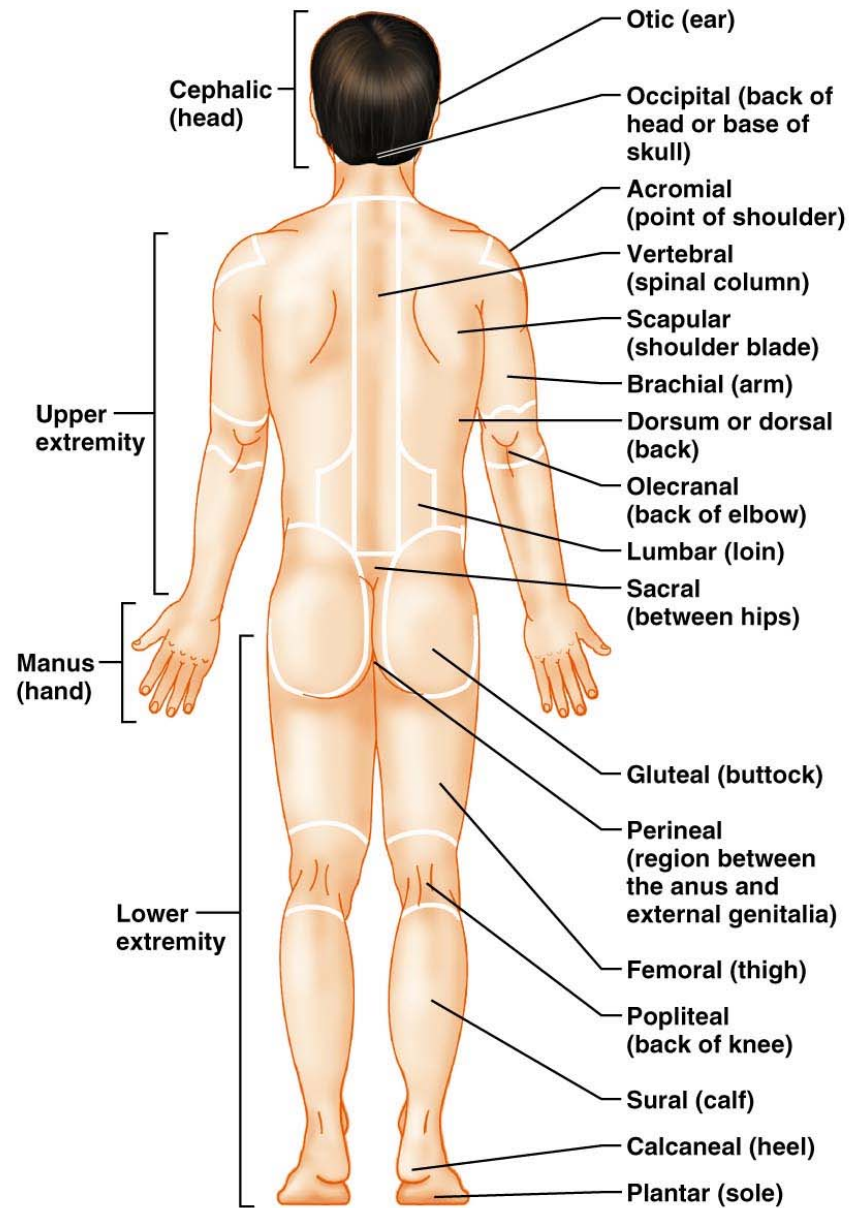
Median / saggital plane

**Frontal /
coronal
plane**

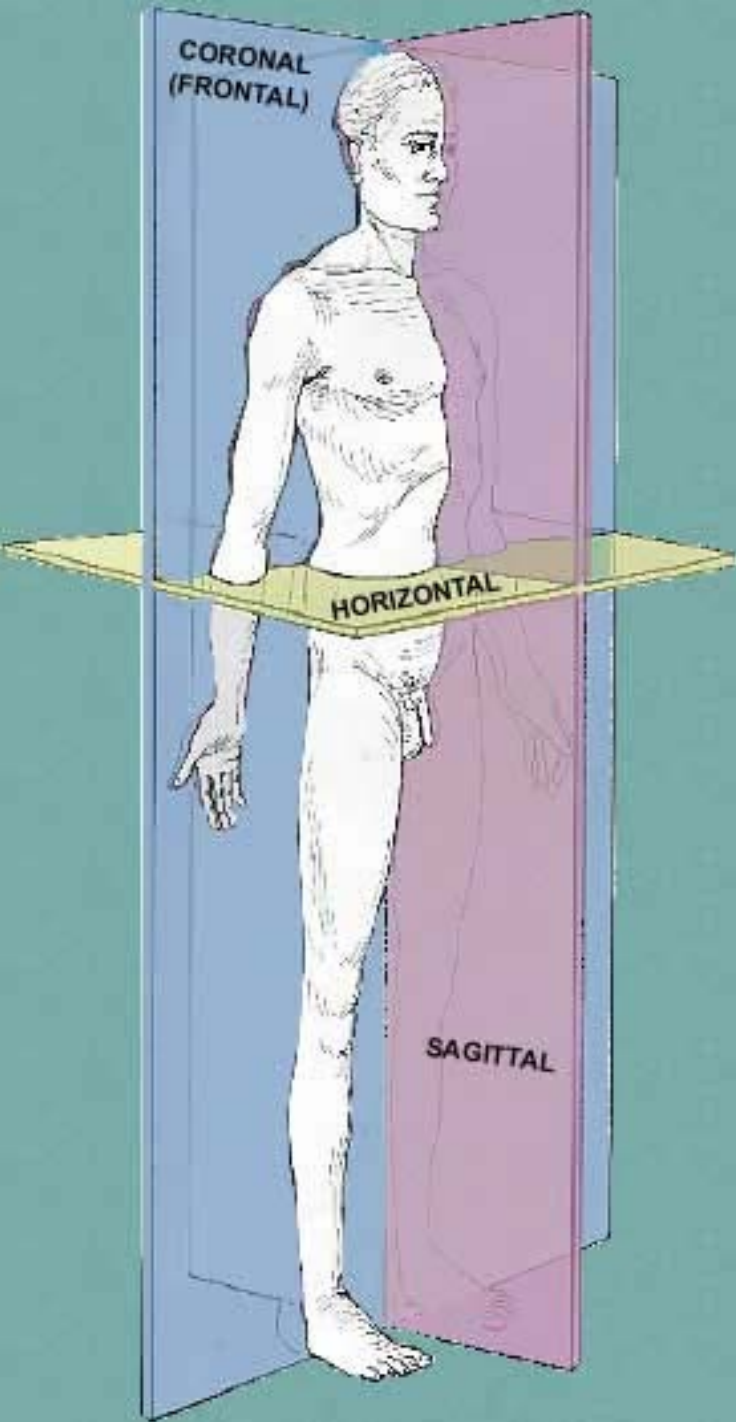


**Transverse /
horizontal
plane**





(b) Posterior

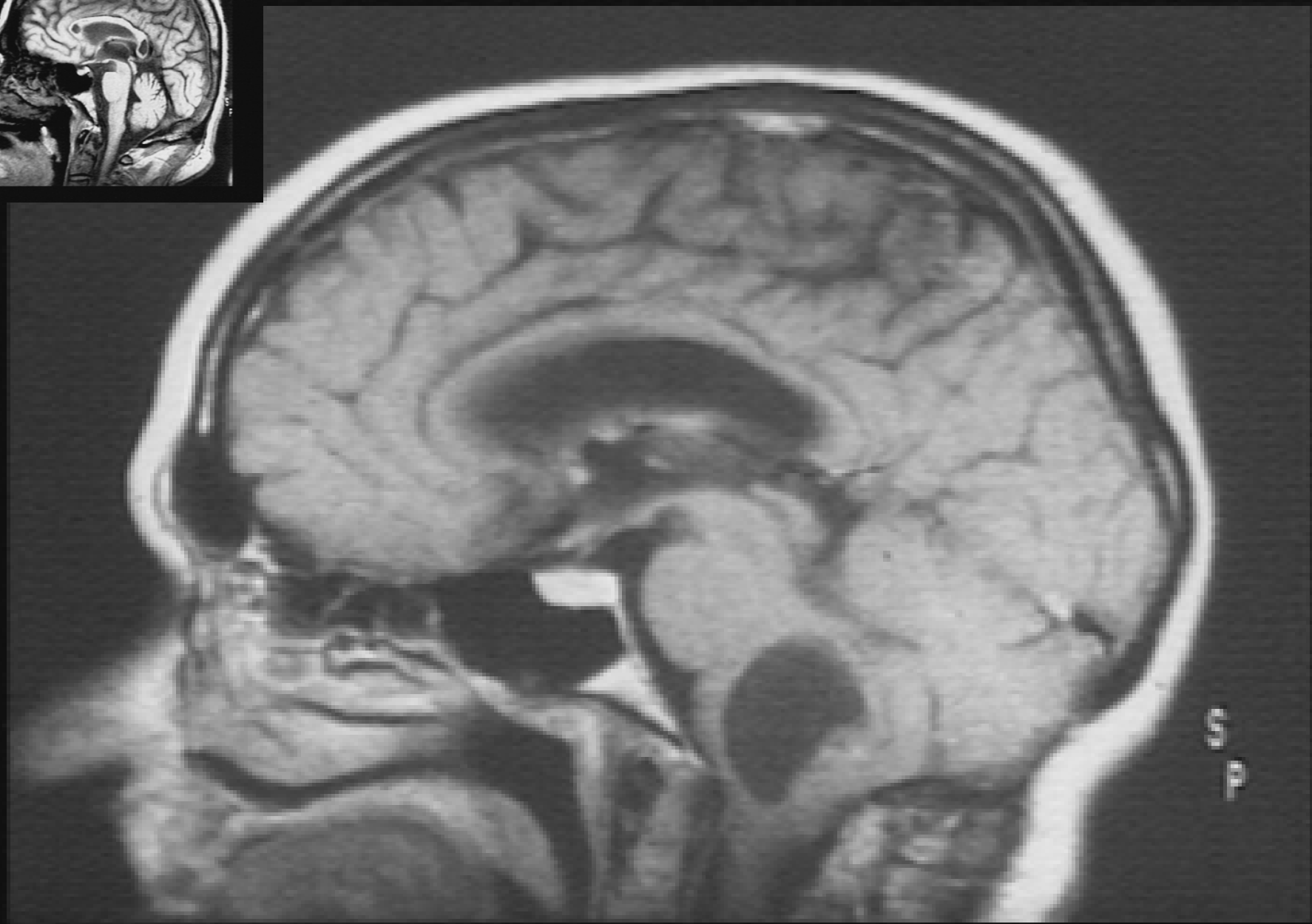
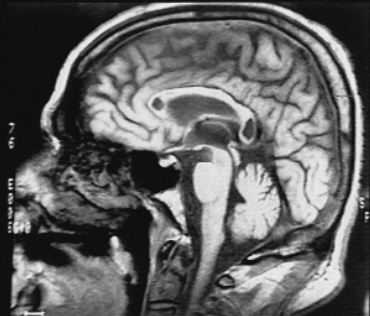


FRONTAL (or coronal) separates the body into Anterior and Posterior parts

MEDIAN (or midsagittal) separates body into Right and Left parts

HORIZONTAL separates the body into Superior and Inferior parts

SAGITTAL any plane parallel to the median plane



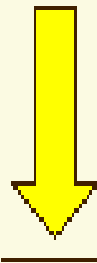
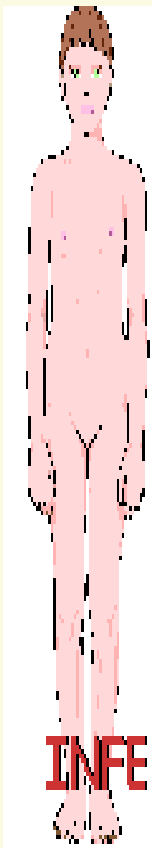
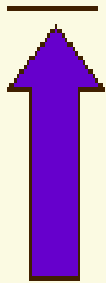
Directional Terms

- ■ Superior and inferior – toward and away from the head, respectively
- ■ Anterior and posterior – toward the front and back of the body
- ■ Medial, lateral, and intermediate – toward the midline, away from the midline, and between a more medial and lateral structure

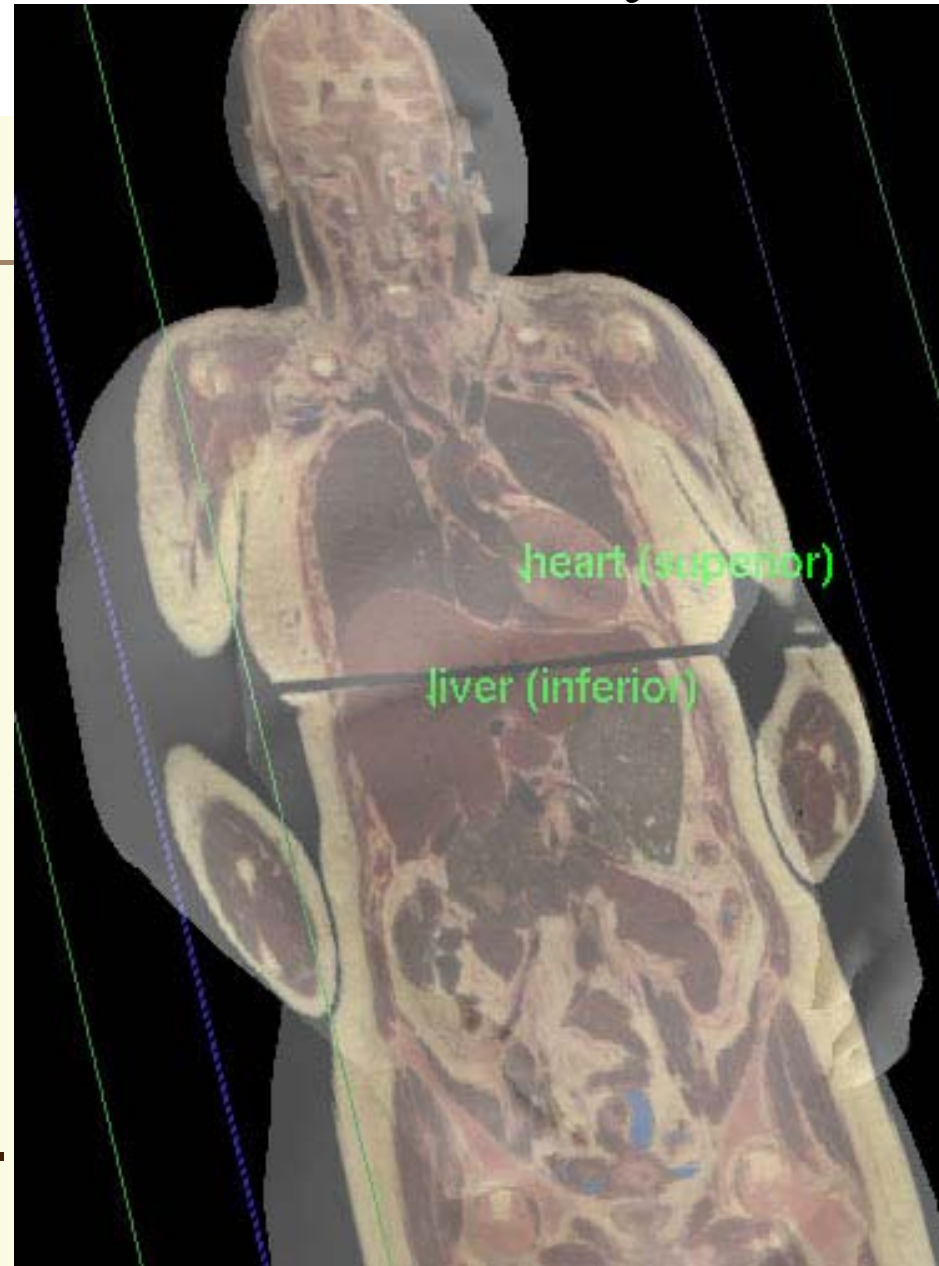
- **Superior and inferior** – toward and away from the head, respectively

SUPERIOR and INFERIOR

SUPERIOR - closer to the head



INFERIOR - closer to the feet



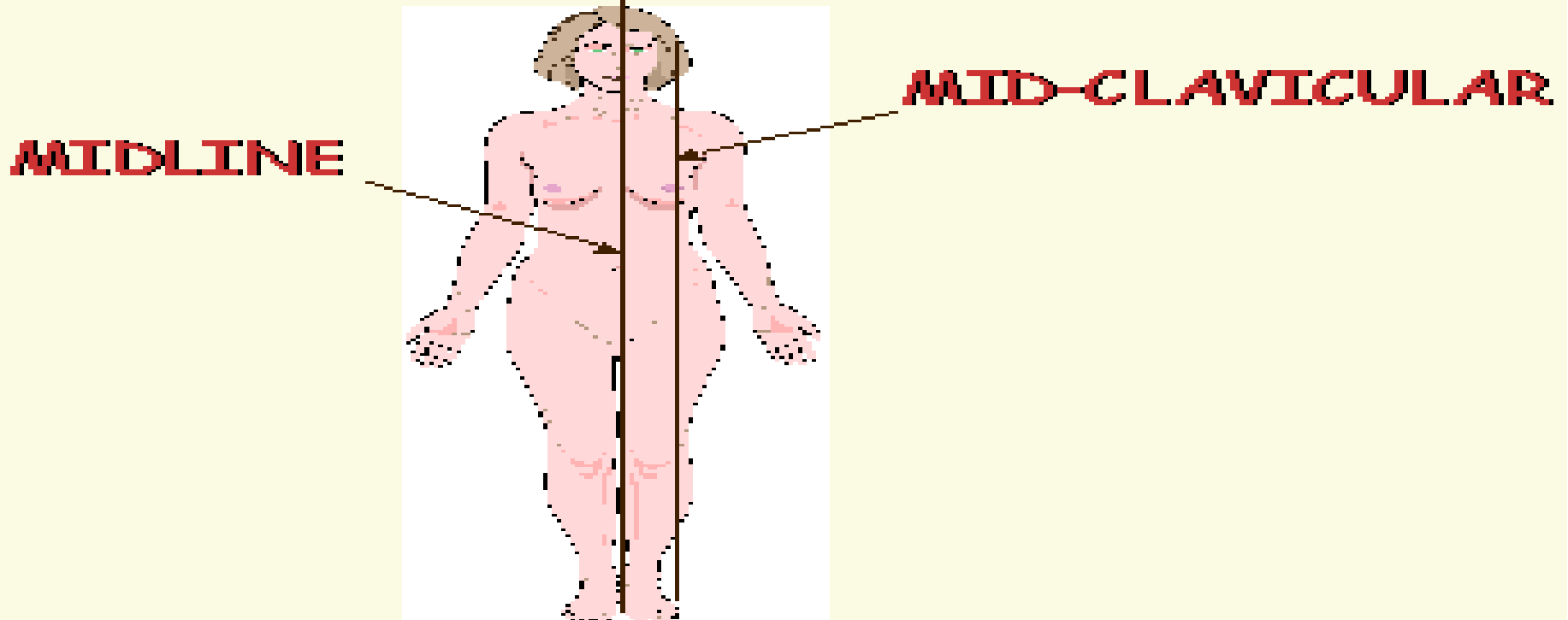
- Anterior and posterior – toward the front and back of the body

ANTERIOR and POSTERIOR



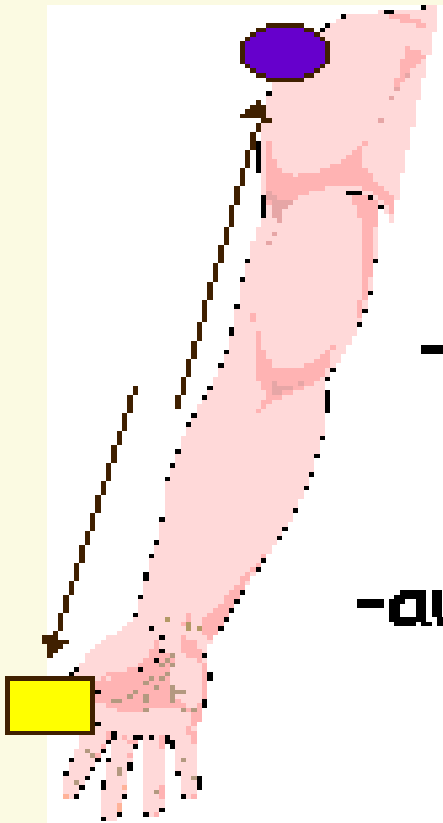
Medial, lateral, and intermediate – toward the midline, away from the midline, and between a more medial and lateral structure

MIDLINE and MID-CLAVICULAR



- Proximal and distal – closer to and farther from the origin of the body part

PROXIMAL and DISTAL



↑
PROXIMAL
-toward attachment

DISTAL
-away from attachment

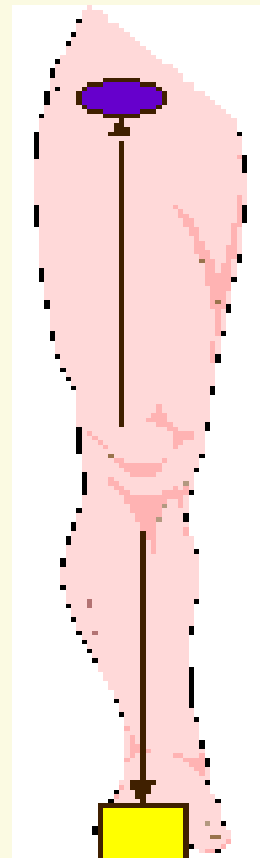
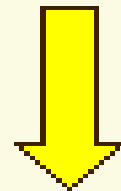
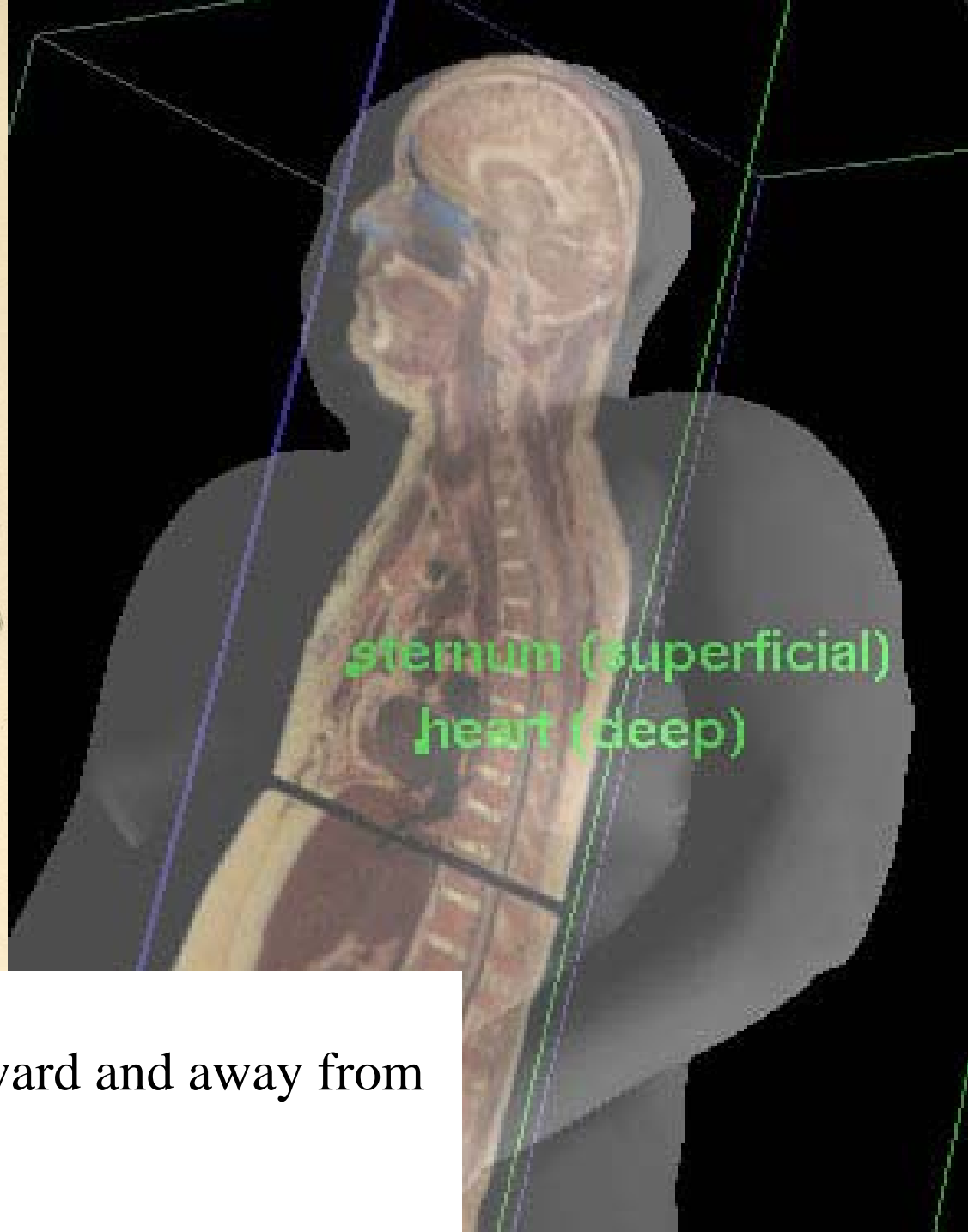
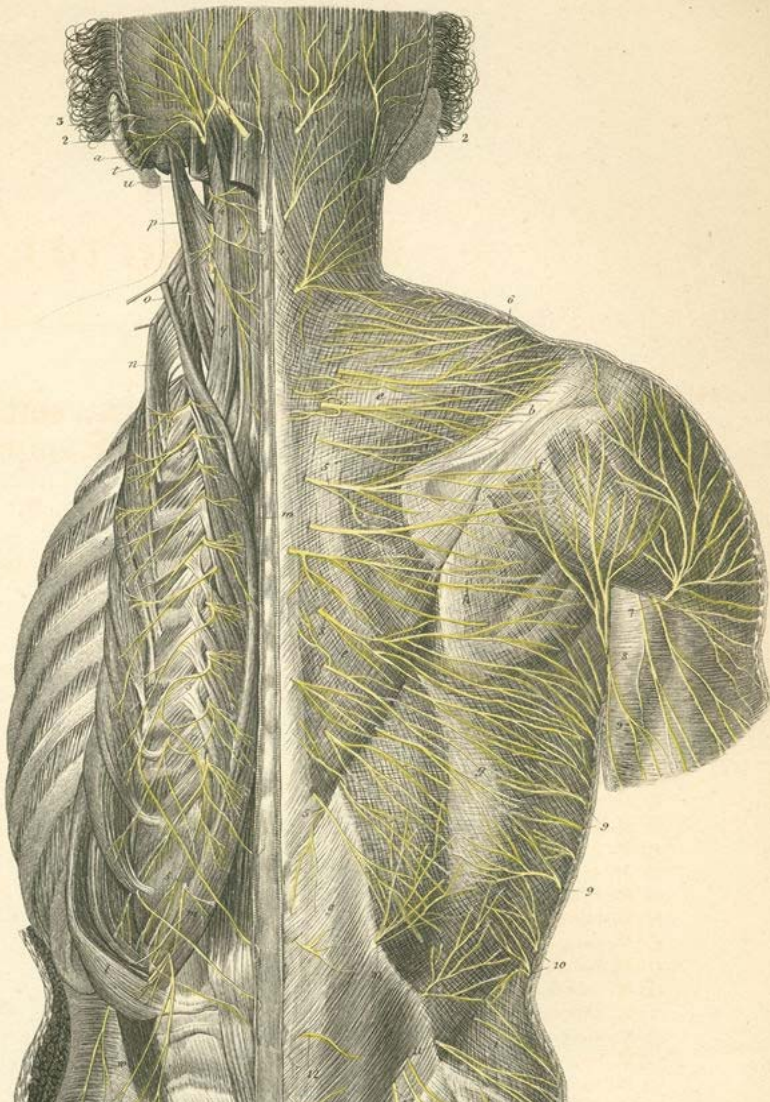


Fig 1.



- Superficial and deep – toward and away from the body surface

MEDIAL and LATERAL

MEDIAL



-toward midline



LATERAL

-away from midline



PALMAR, PLANTAR and DORSAL

PALMAR
-palm side



DORSAL-topside



PLANTAR
-bottom side



SUPINE and PRONE



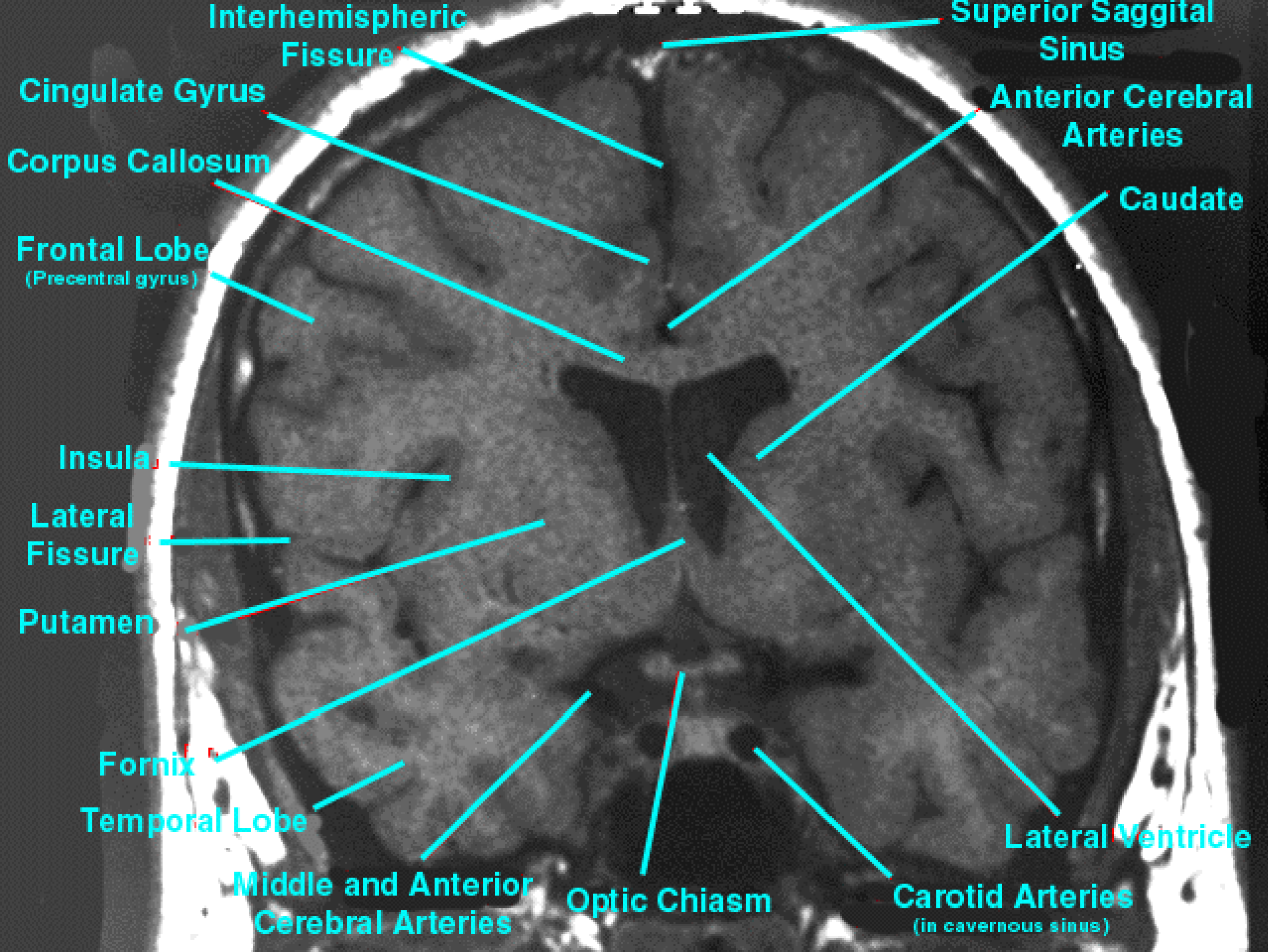
SUPINE - lying face up



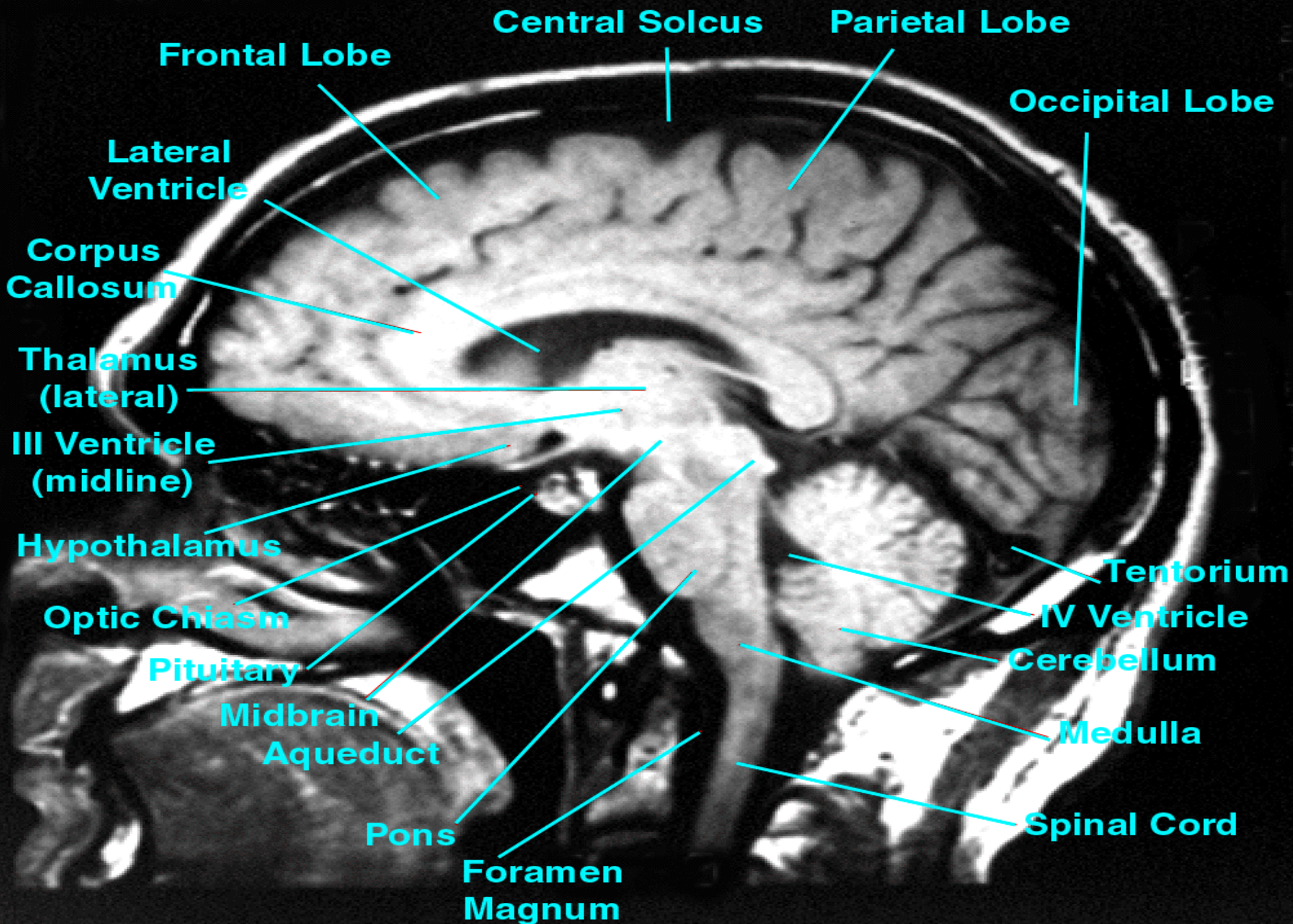
PRONE - lying face down

Terms of relation or position		
superior (<i>closer to the head</i>)	inferior (<i>closer to the feet</i>)	reference point -- horizontal plane
posterior (dorsal) <i>closer to the posterior surface of the body</i>	anterior (ventral) <i>closer to the anterior surface of the body</i>	reference point -- frontal or coronal plane
medial (<i>lying closer to the midline</i>)	lateral (<i>lying further away from the midline</i>)	reference point -- sagittal plane
proximal <i>closer to the origin of a structure</i>	distal <i>further away from the origin of a structure</i>	reference point -- the origin of a structure
superficial	deep	reference point -- surface of body or organ
median		reference point -- along the midsagittal or median plane
intermediate		between two other structures
external	internal	refers to a hollow structure (external being outside and internal being inside)
supine	prone	face or palm up when lying on back, face or palm down when lying on anterior surface of body
cephalad	caudad	toward the head, toward the tail (feet)

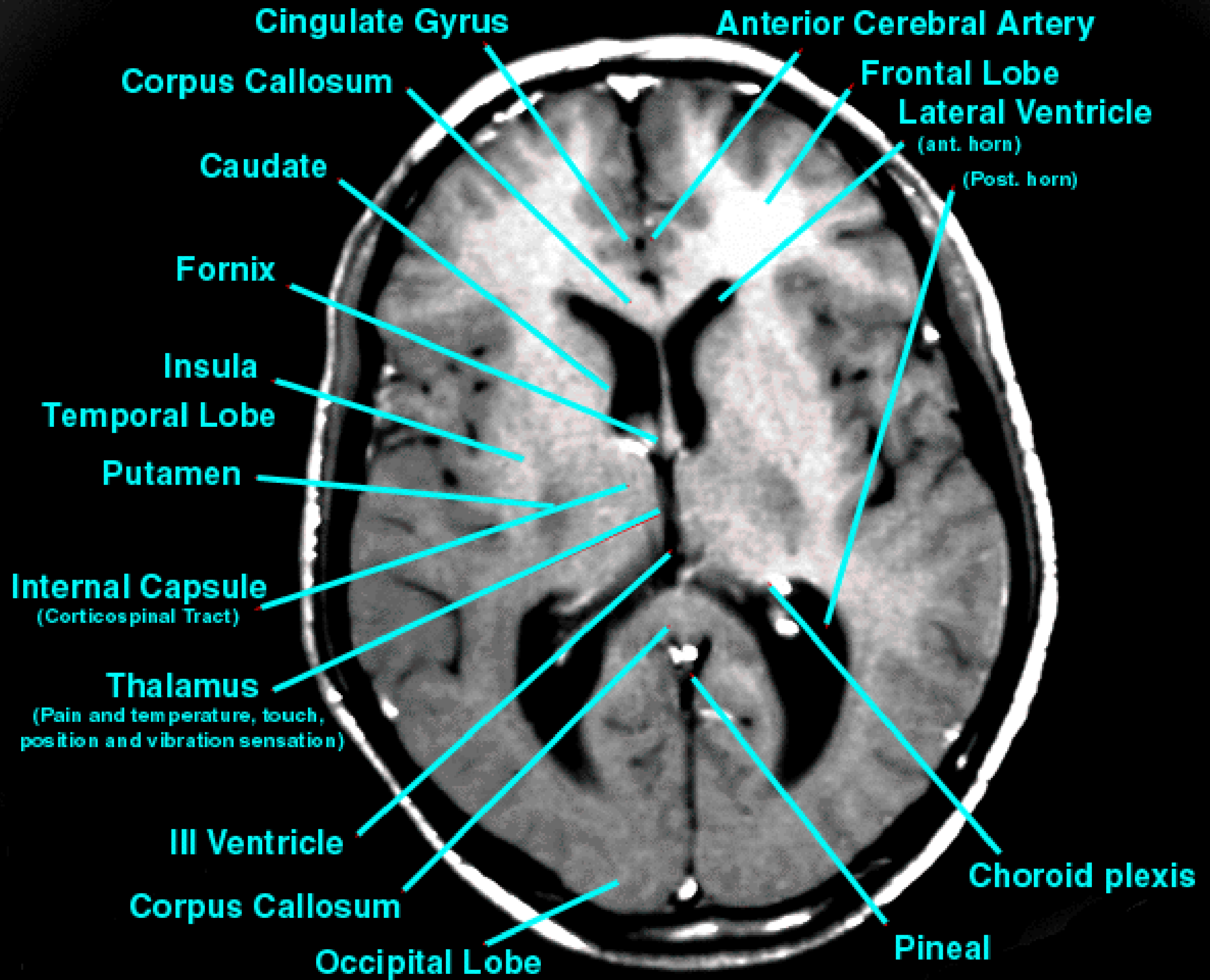
CHALLENGES



AXIAL BRAIN CUT MRI



MID SAGITTAL



TRANSVERSE

Signa 1.5T 30cmPAC100

MRI.HIP.CARDIFF

Ex: 19150

Pa: 002

Ta: 10/32

Ac: 361.7

10700

156.01

ET: 6

R 1 5 0

L 1 6 2

FOV

TR: 4000

TE: 91/ET

EC: 1/1 16 Hz

BODY

FOV: 32x32cm

7.0thk / 1.0cp

52/06:40

156x192/4 NEX

FC: 4TRF

Ex: 19150

Pa: 1

Ta: 0

Ac: 0

ET: 0

EC: 0

FOV: 0

TR: 0

TE: 0

EC: 0

52/06:40

156x192/4 NEX

FC: 4TRF

TRANSVERSE

Signal 1.5T SYS-MP51000

S 234

Case: 00000000000000000000

Ex: 1209

Se: 4

Pa: 18

Seq: R1418

M 46 222899

Apr 29 99

07:35:52 PM

Mag = 1.0

R
1
8

P
1
8

SI
TR:450
TE:104
ED:1/1 18MB

BUCY
FOV:140x10
7.0UH/0.0mmC
20/07:50
256x256Hz HEX
RC/SU:SI/MP

I 165



Ex: 1209
Se: 4
Pa: 18
Seq: R1418

M = 578 L = 388

M = 571 L = 314

SAGITAL



MRI, frontal section
anterior to posterior.



MRI, mid-sagittal section.