HUMAN ANATOMY:
A Prosection Guide

3rd Edition

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GROSS ANATOMY LABORATORY PROCEDURES

1. **Appropriate laboratory attire is required:**
   Scrubs (full-length, scrub pants), close-toed shoes (no Crocs), safety glasses, and Nitrile gloves.

   Scrubs are available in the campus bookstore (no specific color required).
   NO shorts or skirts permitted, even if made from scrub material.
   Safety glasses for splash protection are available in the lab.
   Gloves will be provided; please try to limit use to ~ 1 pair/session.
   Long hair must be tied back, away from the face. Long necklaces should be removed.
   Contact Lenses are **NOT** advised,
   as they are permeable to volatile compounds and may result in injury.
   Students should bring their lab manual to lab sessions.

2. **No food or beverages are allowed in the laboratory - EVER.**

   Smoking and/or chewing gum is prohibited in the laboratory.

3. **No cadaveric materials (or models) are EVER to be removed from the Gross Anatomy lab.**

   This is a State and a Federal law.
   You **WILL** be prosecuted to the fullest extent of the law.

   Models, prepared specimens, etc., are available during scheduled class and open lab times.
   Any student who damages a model will be held financially responsible.
   Model keys are found in the 3-ring notebooks and at http://faculty.une.edu/cas/fdaly.

4. **No gloves should be worn outside of the lab or while a student is handling models or real bone.**

   This also pertains to x-ray lightboxes, LCD screens, and blackboards.
   The reason that you wear gloves is to protect yourself.
   Handling “clean” material with dirty gloves negates the safety of using gloves.

5. **Keep the floor free from material that might fall from the dissection tables.**

   The embalming fluid is VERY slippery.
   To avoid falling hazards, please clean slippery spots immediately. (Don’t wait to be asked!)
   Spray Simple Green on the greasy spot AND wipe until dry;
   just spraying is **NOT** enough.
6. Please keep all material (skin, organs, limbs, etc.) at the table with the rightful “owner.”

   This is to ensure that when the cadavers have finished their role at the University, they will be returned in full to the surviving family members.

7. Keep the cadaveric tissue moistened with the wetting solution provided (Infutrace).

   Infutrase minimizes the vaporization of the phenolic compounds in the embalming solution. Help maintain the dissections by making sure that the body bags are closed.

8. There are no “clean sinks” in the lab.

   The sinks in the lab are used to wash tools and trays, as well as hands. Wash your hands prior to leaving the lab AND again after changing in the locker room.

9. Pregnant or nursing women are STRONGLY discouraged from participating in the laboratory.

   There is evidence that indicates women exposed to phenolic solvents during pregnancy have increased incidence of children born with congenital birth defects. Those interested in laboratory alternatives will be accommodated.

10. Report all injuries sustained in laboratory to an instructor/teaching assistant.

    You will be required to fill out an injury report form. Forms are located in the wall hangers near sinks in lab.
TREATMENT OF CADAVERA

1. Confidentiality of the identity of all bodies must be assured, including anonymous donation, for student usage.

2. Matriculating students are authorized to utilize human bodies for anatomical courses of medicine, dentistry, or allied health sciences at institutions authorized by State statutes. This use is subject to the rules and regulations prescribed by the Anatomical Board, and the Board may allow such people access to the location where bodies are utilized for anatomical study without further specific approval. Faculty members, residents, medical students, and appropriate non-faculty medical, dental, or nursing practitioners not enrolled in a course at an institution for study may also utilize the cadavera, if given permission by the responsible person designated by that institution. The study must be carried out in the approved areas given this purpose within that institution, as described below.

3. A body or bodies must be utilized in specific locations approved by the Anatomical Board. Such locations are to be construed as restricted areas and must be designed to ensure the proper security of the body, prevent unauthorized access or usage, contain facilities required for the proper manner of scientific usage, and remain in a securely locked condition when not in immediate use. Places for body storage, such as departmental morgues, are to be construed as restricted areas. Access is to be limited to the faculty and appropriate staff of that responsible person designated by that institution for admission to this restricted area. Only applications giving legitimate reasons for access will be approved.

4. Photographs of a body or any of its parts are not to be made for any reason without the express consent of the Anatomical Board or the responsible person designated by the institution. The Board retains the right to edit, with respect to propriety, all photographs utilizing gross anatomical human material intended for publication, and the Board must be notified of intention to publish such material.

5. The Anatomical Board emphasizes the importance of maintaining the continuing good will of the public. Students who will utilize bodies for anatomical study are to be thoroughly instructed on the proper manner of professional conduct. No action is to be made, public or private, that in any way will demean the human body. Conversational improprieties and any other manner of unprofessional or unethical conduct are strictly prohibited. The need for genuine and sincere respect for the dignity of the deceased human body and the obligation to treat the body in a responsible and professional manner are to be regarded as essential. While authorized students or others approved by the Board or by the responsible person of an institution have access to locations for body usage, such individuals do not have the authority in turn to grant admission or visitation privileges for guests not approved by the responsible person designated by the institution. Only persons having legitimate purpose shall be granted admission or the privilege of usage. All guests granted admission to location for anatomical study must comply with the professional standards outlined herein.

*** Students with hypersensitivities to formaldehyde: be aware that respiratory masks are available at Student Health. ***

Respirators issued by the University MUST have a written physician’s approval for use.
Disposable respirators may also be found at www.homedepot.com or www.lowes.com.
REFERENCES

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http://www.archives.nd.edu/cgi-bin/words.exe

http://wwwbiology.ualberta.ca/courses.hp/zool250/Roots
WORD BANK AND DEFINITIONS

a- / an- without, from, after
ab- / abduc- / abduct / abducens away from, lead, take or carry away, detach
acetabulum small (vinegar) cup, ~2 oz
acro- summit, top, promontory
acromion highest point (acro-) of shoulder (omos)
ad- / adduct to, towards, near
adenoid resembles a gland
af- / afferent moving towards center, inflowing
al / ala / ali wing
alb- / albigo- / albicans opaque white, whitish tinge, pale, pearl
alveolus basin, serving bowl, hollow sac, cavity
amphi- both sides, double
ampulla flask, jug, or bottle for holding liquids
amygdala almond-shaped, almond-like
ana- no brain (head)
anacephaly to supply or to connect with a mouth
anastomosis clamp, bracket, armrest
anconae vessel / choke, throttle, strangle
ang- angle, apex, corner, nook
angios- 1 year, annual, ring, circlet
annul- handle, loop, end of a rope
ante- before, in front of, first (in time, place or order)
anterograde away from cell body
anti- prevent, against, opposite, resisting
antrum cave, cavity, hollow without bony walls
appendix that which hangs, supplement, appendage
aqueduct conduit, canal, water (aqua) leading (ductus)
arch(ae/i)- tree, tree structure with branches, gallows
areola ancient
asper- rough
ast(e)r- star
Atlas Greek Titan forced to hold the world on his shoulders
atrium vestibule, entrance hall, reception hall
aur- ear, gold
auscultate to listen to something
axi- / axon axis, axle, pole
brach- unpaired, single
at the bottom
brachi- / brachium two, double
bregma two heads
blast- two heads
bifid cleft in two parts
bicusps germ layer
blasto- "front part of head"
short
buccal air passage, windpipe
buccinator mouth cavity, check
bulbo / bulbus trumpeter
bursa plant bulb or garlic-like
bursa pouch or purse
calc- / calcaneus stone / heel / calcium / limestone
calyx / calyces chalice, cup of a flower
-campus level field, open space for games, sea
canal canal
-cap / capit / cipit / capitae little canal
-capill- / capillary head, that which has a head
-card- / cord- fine hair
hearth

spider, resembles a spiderweb, cobweb
carina
keel of boat

carotid
produces stupor, refers to sleep

wrist
tail
horse’s tail
hollow
blind
beer, belly
head, brain
little cerebrum
brain
neck
crossing
cartilage
cord, rope
cord of the tympanum
membrane, dance
bile
eyelash
around
reservoir
key
resembles a 4 post bed
slope
with, together, borne together
snail
hole
neck / of the neck
hillock, mound, small hill
large intestine
with
sent out, link like structures
shell

condyl- / condyle
knuckle
opposite, against
resembles a crow’s beak
horn
refers to a crown, left / right direction
body
pertains to the cortex
rib, refers to rib
hip / cuckoo
skull
suspender, hanger
sieve, form of a sieve
ring, resembles a ring
crest
crest of a rooster
leg, shank
cross-like
elbow
wedge, form of a wedge
point
circular
bladder
flayed
cross banding, link unlike structures
carrying (fero) away (de)
resembles the letter delta, a triangle (Δ)
tree, branched
tooth
skin
two
across, through
a wall across or dividing something
two bellies

contra- / contralateral

opposite, against

resembles a crow’s beak
horn
refers to a crown, left / right direction
body
pertains to the cortex
rib, refers to rib
hip / cuckoo
skull
suspender, hanger
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carrying (fero) away (de)
resembles the letter delta, a triangle (Δ)
tree, branched
tooth
skin
two
across, through
a wall across or dividing something
two bellies
incus
infra-
infundibulum
inguinal
innominate
inter-
 intra-
ipsi-
iris
-issimus
jejunal
jugular
kerat-
kinesis
kyphosis
labi-
labyrinth
lacer- / lacerum
lacrim- / lacrimal
lact-
lacuna- / lacunar
lamboid
lamina / lamella-
lati-
latissimus
lens
levator
lig-
lin-
ling- / lingua / lingula
lith- / lithoid
longissimus
lordosis

anvil
under, beneath
funnel
refers to the groin
not named (hip bone)
between
within
same side
rainbow
most, to the extreme
empty, barren, hungry, fasting, unproductive
refers to throat
cornea
movement
bent, hunchback
lips
maze
torn
tears, refers to tears
milk
space, hollow or lake
resembles a lambda (λ)
leaf, layer
wide, broad, spacious
most lateral, lateral to the extreme
bean, lentil
lifter
tie, bind
line
tongue / little tongue
stone, resembles a stone, rock
longest, long to the extreme
backward bending

lumbrical
luna- / lunate / lunar
lute-
lymph
macula
magni-
maj- / major
malleus
mamm- / mast- / mastoid
mandib-
manu
masseter
matri- / mater
maxi- / maxim
maxill-
meatus
medi-
medull-
melan / melanin
mening- / meninx
meniscus
mentum
mes- / meso-
meta-
min- / minor
minim-
mitral
motor
multi-
myo-
nari- / narls-
neo-
nephr- / nephros

earthworm
moon, moon-like, moon shaped
yellow
clear water, spring water
spot
large
greater
hammer, mallet
breast, resembles a breast
lower jaw
hand
chewer
mother
large, greatest
jaw
passage, channel, canal
medium
marrow, center most part, quintessence
black, dark
membrane
crescent
chin
middle
after, beyond
smaller
smallest
refers to a bishop’s hat (mitre)
mover
many
muscle
nostril, nose
new
kidney
nerve
nerve bundled fascicles outside central nervous system
nerve
negr- nervous
node
nuch- / nuchal
nucle- / nucleus
obturat- / obturator
occip-
occulta
ocul- / opti- / ophthalmo-
olecranon
olfact
oligo-
oment- / omentum
omo-
omohyoid
opponens
or- / os- / osti-
orb- orchid-
orum
os coxae
oscoceph- / esoph-
oss- / osteo-
ott- / otic
pate / patella
palid
pumpiniform
pancreas
papilla
para-
parietal

parotid
pars
parvi- / parvo-
pectus / pectoris
ped- / pes / pod- / peduncle
pellucid-
peri-
peristium
pes anserinus
petr- / petrous
phalanx / phalanges
-phantom
phren- / phrenic
-physis
pia
pinea- / pineal
pinna / pinnat-
pisum / pisi- / pisiform
platy- / platsma
pleura
plex- / plexus
plica
pneumo- / pneumon-
pollex
pons
popliteal
post-
pre- / pro-
profund- / profund
pronate
proprioceptive
prostrate
proximal
psoas
pter- / pterion / pterygoid
ptosis
pubi-
pudendal
pulmo-
pyrus- / pyrrh- / piriform
quadri- / quarter / tetr-
quadriceps
radius
ramus
raph
re-
rect- / rectus / rectum
ren- / renal
ret- / retae / retina
retro-
retrograde
rhin- / rhino-
rhombus / rhomboid
risorius
rostr- / rostral
rota-
rubr- / rubro
saccu-
sacr- / sacrum
sagittal
salpinx / salpingo-
saphenous
sartorius
scala / scalene
scap- / scaph- / scaphoid

nearest to center of body or origin
loin
wing, resembles a wing
falling
sexually mature
shamed
lung
form of a pear
four
four heads
wheel spoke
branch
seam
back again
straight
kidney, refers to kidney
net, network, little net
behind, after, backward
back towards cell body
nose, snout
diamond shaped, resembles a diamond
from riser, to laugh or smile
beak, prow
turn, rotate, revolve, turn around
red
little bag, purse, sachet
holey, holy, sacred, consecrated
resembles an arrow, anteroposterior
tube or trumpet
visible
tailor
ladder, staircase, uneven, unequal length
hollow, bowl, ship, resembles a boat or skiff

scdr-
sella turcica
semi-
septum
serrat- / serratus
sesamoid
sigmoid / sigmoid
sin- / sinus
sipho-
soma / -some
sphen- / sphenoid
sphinct-
splenius
squam- / squamous
stapes
stell- / stellate
stem- / sternum
styl- / styloid

sub-
sulc- / sulcus
super- / supra-
supin- / supinate
syn- / synapse
synovial
tactile
tenia / taenia
talus / tarsus
tect- / tectum
tegmentum
tele-
tenacul-
tentor-

hard
Turkish saddle
half
partition
jagged edged, saw toothed, notched
resembles a herb seed
resembles the letter S or sigma (Σ)
cavity, recess, hollow, bay
tube or trumpet
body
wedge, resembles a wedge
closing, band
bandage
fish scale, flat
stirrup
star
breastbone, chest
column, pen, peg, resembles column, pen or peg
below, under, beneath
furrow or ditch
beyond, above, over, excessive
to lie back, bend backwards
joined together, with
joined with (syn-) an egg (ovum)
relating to touch
ribbon, band
ankle
covered, roof, roof-like covering, ceiling
skin, body armor, covering, clothing
fra, end
holding
spreading like a tent
teres
thalam-
-thele / -thelium
thenar
thyreo- / thryoid
tibia
trab- / trabecula
trachy / trachea
tract
trago- / tragus
trans-
trapez- / trapezius / trapezoid
trema-
tri- / ter- / tertii-
triceps / triquetrum
trigeminal
trochanter
trochlea
tuber
tunica
tympan- / tympanum
ulna / ole-
umbilic- / omphalos
unc- / uncus
uv- / uvela / uvula
vagina
vagus
valgus
varus
vas-
velum
round, smooth
inner chamber, bedchamber, marriage chamber
cell layer
palm of hand, base of thumb
resembles a shield
flute
beam, supporting beam
rough
drawing out, elongated path of central nervous system
goat
across, through
four sided table
hole
three, triple
three heads / three corners
three twins
runner
pulley, block and tackle
swelling outgrowth
covering
drum
elbow
navel, belly button
hook
grapes, little grape
sheath
wandering
knock knee, converging at knee
bowlegged
vessel
veil
ventr- / ventral
verm- / vermiform
vesi- / vescic-
vincula
vitr- / vitreous
vomer
xiphi / xyphoid
zyg- / zygos / zygote
belly, anterior
worm, form of a worm
bladder, blister
chains
organs of body cavity
life
glass, glassy
ploughshare
sword, resembles a sword
yoke, something that is yoked or joined
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