Lab 5: Urogenital & Musculoskeletal Systems

Urogenital System	pp. 183-191, p. 198 questions 1-3, 5, 7-11, 14, 17
Long Bone & The Skeleton	pp. 231-233 & 236-237, p. 244 questions 1-6
The Muscles	pp. 237-241 & C53, p. 244 questions 7, 8, 12-14

Urogenital System pp 183-191

-Take your pigs out and get ready for dissection

-I will demonstrate how to properly begin the dissection for the urinary system and the reproductive system

-We are focusing on the fetal pig urogenital system; we will look more closely at the human reproductive system in a few weeks

-*Urinary System*: kidney, ureter, urinary bladder, urethra

-*Male Reproductive System*: testis, epididymis, inguinal canal, vas deferens, spermatic cord, seminal vesicle, urethra, bulbourethral glands (Cowper's gland), penis

-*Female Reproductive System*: ovary, oviduct, uterine horn, urethra, vagina

-Please use the labeled demo pigs for comparison to your dissection of the male & female urogenital system

-How is the urethra different in the male and female?

-What bone (structure) did you have to break apart in order to see portion of the urethra?

-Why do female pigs have a uterine horn and human females have a uterus?

Kidney Structure p. 206

-Use the sheep kidney on display to identify the structures within the kidney:

Renal artery & vein, renal cortex, renal medulla, nephrons, renal pelvis, ureter

-You will not be able to see all the structures, but be able to identify the region where you would find them

-What is the major function of the kidneys?

Long Bone pp. 231-233

-Read about the skeletal system and then about the long bone

-You should know the following parts of a long bone: *spongy bone, compact bone, periosteum, yellow bone marrow, red bone marrow, diaphysis, epiphyses*

-use the cow femur in order to locate some of the above terms

-You will not be able to see the red marrow on cow femur, but may have noticed it when you cut through the pelvic bone on your fetal pigs

-Besides the yellow marrow in the center of the bone, what is the rest of the material in the center cavity (medullary cavity) of the cow femur?

Skeleton pp. 236-237

-Be able to identify ***ALL*** the bones on p.236 using the articulated skeleton in the lab

-You will already know more than you think, so focus on the bones you are unfamiliar with

Muscles pp. 237-241

-Be able to identify the following muscles: *biceps brachii, triceps brachii, tibialis anterior, gastrocnemius, quadriceps group, hamstring group, deltoid, trapezius, pectoralis major*

-Use the muscle man model for locating and practicing the muscles

See back page

Muscle Action & Antagonistic Pairs pp. 231, 238, 240, C53

-Know the following terms: *origin, insertion, action of the muscle, antagonistic pair (p.231 &240)*
-Know the muscle action terms: *flexion, extension, abduction, adduction (p.240)*
-Complete the table on p. C53
-Use the muscle man to describe where the muscles has its origin and its insertion
-You can also use the internet to figure out some of the origins & insertions

Review Sessions:
Kevin-Monday 6-7:30pm, Tuesday 6-7:30pm
Hannah Olshan-Wednesday 6-8pm, Thursday 6-8pm
Alaa Craddock-Monday 3-5, Wednesday 3-5, Thursday 3-6pm
Charles Sontag-Thursday 3-6

You must email these instructors to get permission to attend one of their lab review sessions

Practical Exam #1 Next Week
(Make-up practicals can only be given during 3/6-3/9)

25 stations, each station worth 2 pts
2 questions at each station
1 min 30 sec at each station
No going back to stations after exam is finished!

Covers Labs 1-5

Be sure to visit lab webpage for lab handouts, images from the 5 labs and practice practicals