## Lab 10: Reproduction & Development

#### Next Week (Mon-4/17 & Fri-4/21): Field Trip

- -Wednesday students must sign up today for Friday (see me if there is a conflict)
- -Meet on Graham Ave. near Handicapped Parking Lot
- -Bring your manual and pencil
- -Wear proper clothing and footwear for walking outdoors

# **Human Reproductive Structures** pages 186-191

-review human structures and compare with pig anatomy from what you've already observed in your specimens

**Males**: testis, epididymis, vas deferens, seminal vesicle, prostate gland, bulbourethral gland, urethra, penis, scrotum

**Females**: ovary, fallopian tube (oviduct), fimbriae, uterus, cervix, vagina, clitoris, labia minora and majora

- -Use the male and female human reproductive anatomy models
- -We will do a class dissection of an adult pig uterus (uterine horn) and look at the reproductive structures along with the membranes associated with the developing fetus

## **Introduction to Development** pages 245-247

- -Read about development and understand the terms growth, differentiation, and morphogenesis
- -Omit the sea star development slides, but look over figure 19.1 to see developmental stages
  - -be familiar with cleavage, blastula, blastocoel, gastrulation, archenteron, germ layers (ectoderm, mesoderm, endoderm), and coelom
  - -these stages are very similar in many organisms up to the point of late gastrulation

## **Chick Development, & Human Development** pages 250-262

- -Read section 19.3 and pay particular attention to the location and function of the 4 major extraembryonic membranes
  - -Chorion, Amnion, Yolk Sac, & Allantois
  - -We will do a class demo dissection of a 2 day and 4 day old fertilized chick egg
    - -observe contents under dissecting scope after discussion (use manual as reference)
- -Study the slides in the back of the lab and compare developmental stages at 24-hr, 48-hr, 72-hr and 96-hr using the dissecting scopes (use manual as reference)

# -BE SURE TO REVIEW ALL THE BOLD TERMS ASSOCIATED WITH EACH STAGE OF DEVELOPMENT

- -Read section 19.4 and review stages of human development in manual
  - -pay attention to extra-embryonic membranes and compare to chicks
  - -identify similar and different developmental structures found in humans compared to chicks
- -Review pictures of human development set up on front table
- -Observe human development models on cart

#### **Miracle of Life Video**

-Complete worksheet that follows video

### Complete questions 1-10 on page 262