

Bio 376 Fall 2011 – Lab updates

Schedule changes:

Sept. 21	Frog Embryogenesis (prepared slides & whole embryos); Starfish prepared slide. Review <i>vade mecum</i> ³ section on amphibian early development. Sand dollar, starfish, frog digital pics due by Mon. Sept. 26, 5 PM (email).
Sept. 28	Begin chick slide work, examine and dissect live chick embryos, begin whole mount histology. Review <i>vade mecum</i> ³ , section on histotechniques. Quiz on Frog embryo at beginning of lab. Chick wm digital pics due by Mon. Oct 3, 5 PM (email).
Oct. 5 in ST429	Research project lab: Polymerase Chain Reaction (PCR) amplification of target developmental gene(s) by research group. Quiz on PCR at beginning of lab. Continue chick embryo prepared slides, complete histology (ST330).
Oct. 12 in ST429	PCR lab 2: Agarose gel electrophoresis, analysis of PCR products, selection of DNA to clone. Complete chick embryo prepared slides (ST330). Chick serial sections pics due Mon. Oct. 17, 5 PM (email). PCR lab report due in lab, Wed., Oct. 26.
Oct. 19	LAB PRACTICAL/EXAM, turn in lab notebook & chick wholemount slide.

Turning in digital pics by email:

Images are done and turned in individually, not as a part of your research group.

For all images, **include both an unlabeled and labeled version of the image**. Images should be centered, in focus, and the subject should fill a good portion of the image (in other words, not too small). The field should be even illuminated, with a good exposure (not too dark or light). If you want to orient your image, note that the microscope stage can also be rotated somewhat. Note, these pics do *not* substitute for labeled drawings in your lab notebook.

Image names should include something informative plus your initials.

Examples of good image titles:

frog_neurula_CML.jpg / chick-48hr-xs-heart-CML.jpg / starfish_gastrula_CML.jpg

Labels should include anything noted for labeling in the lab handout (similarly labeled in your drawings). This is not necessarily the same as found in the atlas (usually the atlas has a lot more structures identified). But, don't label something if can't be seen in the image (...so, if you can't make out much, perhaps you should try a different embryo/slide/section). If anatomical designations of animal/vegetal, dorsal/ventral, or anterior/posterior are possible, include them in your labeled image.

Due Sept 26:

Sand Dollar – one image of fertilized/cleaving embryo(s)

Starfish – at least one embryo of your choice

Frog – 1. two embryo pics of different stages – cleavage/blastula, gastrula or neurula – your choice

2. one pic of a 4 mm frog cross section (xs) – your choice