5. Phylogenetic Analysis – DNA 2
Today:
*CSI-HIV homework (5 pts)
*Discussion 2 (5 pts).

Next week: Mimicry, no assignments due
Following week (starting March 5th): Notebooks due, Introduce & plan term projects (proposals due before spring break)

This week is a continuation of last week's lab on phylogenetic analyses Students will download DNA data files from the groups they studied and use these to build phylogenies. The DNA files are available on Blackboard. The relationships inferred may (likely) differ from what they built last week using morphology, and they are asked to consider what this means for trait evolution. In other words, which of the morphological traits they scored show homoplasy, based on the DNA tree; which appear homologous? Which homoplasy events are convergent? Which are reversals? They are also asked to map the morphological trait transitions onto the DNA tree. This is challenging, so be sure to give students time and support for this.

Students should have plenty of time to get caught up on their notebooks this week. Be sure to check their work on a weekly basis to help keep them on track.

Discussion
There should be plenty of time to discuss papers. Again, I encourage you to focus the attention of students on details of the figures &/or tables, and the relationship between the data and the hypotheses proposed. The statistical tests might be challenging, so you may need to help guide interpretation of those as well.