

Phylogenetics Homework (15 points)

Due by 12:05pm on Tuesday, February 23

1a. Only using what you can see from the photos, build a phylogeny for the following taxa. Provide justification for your phylogenetic relationships. (4 points)



1b. What other information could help you be more confident that you have the correct phylogeny? (1 point)

2. Draw a tree with 5 taxa (can make them up if needed) and label the following features: node, terminal, taxa, sister taxa, and clade. (5 points)

3. Read the Abstract, Introduction, and Discussion of the Metzker et al. 2002 paper and answer the following questions. Name two other cases that have involved accidental or intentional infection of HIV of one individual by another. Why was this case so unique from a phylogenetic standpoint? How can direction of transmission be established? Why are the authors confident that the victim was infected by the patient's virus? (5 points)