**BIO380: Cancer Biology**

**Homework Assignment #11: Bioimage Informatics, Part I**

**50pt, Due Wednesday April 19**

1. Make your merged image from Image J into a figure: import the image into a document and write a figure legend that includes: the cell type, the scale, what structures are dyed and what colors they are in your image. (15pt)
2. Reflect on the Bioimage Informatics **Part I** activity. (20pt)
   1. What issues did you run into? Were there any portions of the lab that were unclear? (4pt)
   2. What skills would have better prepared you for this activity? (2pt)
   3. What surprised you about the cells you viewed? (4pt)
   4. Why might automation of the measurements you performed be difficult? (4pt)
   5. How do you think ImageJ could be used to study cancer cells? (6pt)
3. Read the Pre-experiment section of the Bioimage Informatics **Part 2** activity (and watch the video including in this activity). (15pt)
   1. Why are cell lines used to study oncogenes? (2pt)
   2. Why did researchers make mutations to EGFR in these cells? (4pt)
   3. Why did they make mutations at many locations in EGFR? (4pt)
   4. What observations might they make comparing wildtype and EGFR mutated cells? (5pt)