**What do you suppose the function of the “$” sigil is in the spreadsheet conditional?**

Answer: The sigil helps to fix row, column and cell in an excel.

**What part of the spreadsheet conditional must be changed to go from a dot plot to a LCS plot?**

Answer: IF(C$1 = $A3,1,0) changes to =IF(D$1 = $A4,1+C3,0) . There is addition of counter in the spreadsheet conditional.

**When doing a global sequence alignment, what is the purpose of including a conditional within the first option?**

Answer: This initializes the first row and first column, aligning the letters of sequence to a gap

**Where is the match, mismatch, and gap costs in the Excel formula?**

Answer:

=MAX(B2+IF($A3=C$1,1,0), B3-1, C2-1)

$A3=C$1,1,0---1 is a match and 0 is a mismatch

B3-1--- -1 is a gap cost

C2-1 --- -1 is a gap cost

**Change the global alignment scoring scheme to be match = +2, mismatch = ‐1, gap = ‐2. What is the new alignment score?**

