# BMI/CS 576 - Day 9

- Today
  - Pairwise sequence alignment by hand
    - Global, local, and global affine-gap
- Thursday
  - Intro/review of probability
    - random variables, independence, distributions

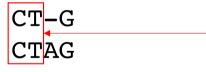
### HW

- HW1 was due yesterday
  - Consider using your "slip" days if you turn it in late
- HW2
  - posted soon (likely tomorrow)
  - due around Oct 23
  - sequence alignment

## Quiz

Below are two optimal *global* alignments of pairs of sequences (the sequences are different for the two alignments), with a scoring scheme of match = +1, mismatch = -1, space = -2. Which of these alignments are also optimal *local* alignments?

### **Alignment 1**



This part of the alignment is a local alignment with score = +2, compared to the score of the global alignment, which has score = +1

#### Alignment 2

ACT-GAC

ACTAGAC



Only alignment 2