BIOC 530

Alan Weiner

RNA structure and function

October 6, 8, and 10, 2014

Due October 24, 2014

Questions for the RNA lectures

1. List the basic principles and characteristics of RNA structure that enable RNA molecules to perform such varied structural and enzymatic tasks.

2. In the RNA folding movie [http://www.youtube.com/watch?v=PWETG3B6wek], why does the molecule make so many mistakes before it finally discovers the lowest energy fold? The RNA you see in the movie is constrained to move in only 2 dimensions. How might the movie be different if the RNA could move in all 3 dimensions?

3. Do you think it would be possible, sometime in the future, for computational biologists to design a functional ribosome or spliceosome made entirely of proteins? Explain your position as clearly as you can.