MCDB 4550/5550 Molecular and Cellular Biophysics Perkins Assignment #8 Due Thursday, March 21<sup>st</sup> at the end of class

1. Bring three (3) well thought out questions about the literature paper to class and hand them in.

Additional questions on the paper for you to answer.

- 1.1 Why do the authors call their invention "digital" tension probes and what is being turned on and off and how?
- 1.2 Does the TGT provide a continuous measurement of tension? Explain how.
- 1.3 How did the authors calibrate the rupture force of two of these DNAtension probes?
- 1.4 How did they determine the tension gauge tethers were associated with integrin binding?.