

MCDB 4550/5550  
Molecular and Cellular Biophysics  
Problem set #1

**Due Thursday, February 1<sup>st</sup> at the end of class** ( in person or via email to [tperkins@colorado.edu](mailto:tperkins@colorado.edu)).

Everyone: Howard: 2.1, 2.3, & 2.5. Please show your work for full credit.

Grad. students: Howard 2.2 & Calculate the weight of a E. Coli cell in PicoNewtons and calculate the average velocity a cell would move in  $\mu\text{m/s}$  subject to this force in water.