

MCDB 4550/5550
Molecular and Cellular Biophysics
Perkins
Assignment #6
Due Thursday, March 7th at the end of class

1. Problems from Howard:
Everyone: 5.2
Graduate students: 5.3
2. Bring three (3) well thought out questions about the literature paper to class

Additional questions on the paper for you to answer

3. At a conceptual level, what is the difference between fluorophore localization between MINFLUX and FIONA that offers MINFLUX's its main advantage?
4. What evidence did the authors present that it is the two head bound state of kinesin that hydrolyzes ATP?
5. Why was the unequal step sizes of the single dye labelled N356C surprising? How did the two dye-labelled construct help explain this result?