Physics 498IBR—Introduction to Biophysics Research.

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Classroom Teaching, Physics 498IBR
Office hr: 12-1pm on Monday (after class) or by appointment/email.

Homework # 8
due Monday 4/3/06

You do NOT have to write up any of the homework since a lot of it has previously been assigned. Spend enough time to read the vision article—it's reasonably intense.

Read:

- NY Times Science Times

On web site:

Evolution and DNA

1. Why Sex? *Science* …2006. (Should already have read.)
2. Brief section how haplotyping works given the diploid nature of chromosomes. (Still a bit confused, but clearer than it was before!) And the brand-new ability to measure haplotyping with single molecule fluorescence.

Molecular Motors via Optical Traps

3. Asbury, C. L., Fehr, A. N. & Block, S. M. (2003) Kinesin moves by an asymmetric hand-over-hand mechanism. *Science* **302,** 2130-4. (Should have already been read.)

Vision

4. Single-photon detection by rod cells of the retina, F. Rieke, D. A. Baylor, Reviews of Modern Physics, Vol 70 No 3, July 1998 pgs 1027-1036. (PDF, 669K, attached).

(I'll probably give a lecture on the biology of vision.)