

Sources for Muscle

Muscle structure/function

- Some basic information on muscle structure and contraction can be found in most contemporary Cell Biology texts; e.g. Alberts book Molecular Biology of the Cell or the current Biol 230 textbook.
- A good description of the myosin cycle plus the animations I showed can be found at the following URL: <http://wwwbio.ukc.ac.uk/geeves/research.htm> follow the link to 'The myosin family of molecular motors' at the bottom of this page for a more detailed explanation of the myosin cycle as described in class. This site is posted by the University of Kent at Canterbury's Muscle Group the home page of which is at: <http://wwwbio.ukc.ac.uk/Geeves/research/home.htm>
- Review on myosin cycle (and commonalities with kinesins) : R. D. Vale and R. A. Milligan. 2000. The way things move: looking under the hood of molecular motor proteins. Science 288:88-95. This includes a link to a nice quicktime movie of the myosin power cycle based on crystal structures at: <http://www.sciencemag.org/feature/data/1049155.shl>

Cardiomyopathies

- Accessible information on cardiomyopathies can be found at <http://www.cardiomyopath.org> and at <http://www.hopkinsmedicine.org/cardiology/heart/index.html>
- Review on Hypertrophic Cardiomyopathy; L. Fananapazir. 1999. Advances in molecular genetics and management of hypertrophic cardiomyopathy. JAMA 281;1746-1752.
- Specific examples of mutations:
- L. S. Tobacman et al. 1999. Functional consequences of troponin T mutations found in hypertrophic cardiomyopathy. J. Biol. Chem. 274;28363-28370.
- E. B. Lankford et al. 1995. Abnormal contractile properties of muscle fibers expressing β -myosin heavy chain gene mutations in patients with hypertrophic cardiomyopathy. J. Clinical Invest. 95;1409-1414.
- D. Georgakopoulos et al. 1999. The pathogenesis of familial hypertrophic cardiomyopathy: early and evolving effects from an α -cardiac myosin heavy chain missense mutation. Nature Med. 5:327-330.

I did not have time to cover **Muscular dystrophies** this year so ignore below.

- C. Badorff et al. 1999. Enteroviral protease 2A cleaves dystrophin: evidence of cytoskeletal disruption in an acquired cardiomyopathy. Nature Med. 5;320-326.