Week 4 – Discussion group assignment

Evolution is broadly relevant to medicine. The rapid evolution of antibiotic resistance by bacteria is obviously an important concern, but evolution may help us explain many human disorders and diseases.

The book "Why We Get Sick" makes the case that doctors need to understand the evolutionary basis of medical problems. How could this information aid the progress of medicine? Think of a specific disease or illness, and come prepared to share your ideas on how an evolutionary perspective might be useful in understanding its origin, diagnosis, or treatment. You may wish to check the following URL, part of the excellent evolution website at UC Berkeley.

http://evolution.berkeley.edu/evolibrary/article/0_0_0/medicine_01

Also, read the handout (Why we get sick) and pick **one** of the following questions to answer in less than one page. In addition you may find it useful to scan parts of Chapter 13 – on in the text Darwinian Medicine

* 25% of the public have myopia (near-sightedness) so severe that they would have a difficult time cutting it in a hunter-gatherer society! What would be an evolutionary explanation for why the genes causing myopia have not been eliminated from the population (or at least severely reduced). **Suggest observations or an experiment that could be used to test your hypothesis.**

* In your reading you'll find evolutionary explanations for two of the main problems that plague human pregnancies: high blood pressure and gestational diabetes. Think of an evolutionary explanation for some other health related condition (for example: allergies, depression, weight problems, morning sickness, menopause). **Suggest observations or an experiment that could be used to test your hypothesis.**