

Statgen Seminar, Winter 2011: Detection of Natural Selection

- Jan 11 Haldane JBS. 1957. The cost of natural selection. *Journal of Genetics* 55:511–524.
Tim Thornton: Lisa Brown
- Jan 18 Kimura M. 1968. Evolutionary rate at the molecular level. *Nature* 217:624–626.
Vladimir Minin?: Chris Glazner
- Jan 25 Maynard Smith JBS. 1968. “Haldane’s Dilemma” and the rate of evolution. *Nature* 219:1114–1116.
O’Donald P. 1969. “Haldane’s Dilemma” and the rate of evolution. *Nature* 221:815–816.
King JL and Jukes TH. 1969. Non-Darwinian evolution. *Science* 166:788–798.
Daniela Witten: Serge Sverdlov
- Feb 1 Tajima F. 1989. Statistical method for testing the neutral mutation hypothesis by DNA polymorphisms. *Genetics* 123:585–595.
Tim Thornton: Caitlin McHigh and Kevin Rubenstein
- Feb 8 McDonald JH, Kreitman M. 1991. Adaptive protein evolution in the ADH locus in *Drosophila*.
Nature 351:652–654.
Vladimir Minin?: Jerry Kim
- Feb 15 Lewontin RC, Krakauer J. 1973. Distribution of gene frequency as a test of the theory of selective neutrality of polymorphisms. *Genetics* 74:175–185.
Robertson A. 1975. Remarks on the Lewontin-Krakauer test. *Genetics* 80:396.
Nei M, Maruyama T. 1975. Lewontin-Krakauer test for neutral genes - comment. *Genetics* 80:395.
Baer CF. 1999. Among-locus variation in F_{st}: Fish, allozymes and the Lewontin-Krakauer test revisited. *Genetics* 152:653–659.
Bruce Weir: Xiuwen Zheng
- Feb 22 Akey JM, Zhang G, Zhang K, Jin L, Shriver MD. 2002. Interrogating a high-density SNP map for signatures of natural selection. *Genome Research* 12:1805–1814.
Biswas S, Akey JM. 2006. Genomic insights into positive selection. *Trends in Genetics* 22:437–446.
Bruce Weir: Matt Conomos
- Mar 1 Huff et al.: Detecting positive selection from genome scans of linkage disequilibrium.
BMC Genomics 2010 11:8.
Sabeti PC, Schaffner SF, Fry B, Lohmueller J, Vavilili P, Shamovsky O, Palma A, Mikkelsen TS, Altshuler D, Lander ES. Positive natural selection in the human lineage. *Science* 312:1614–1620.
Hellman NR, Bustamante HM, Clark AG. 2007. Recent and ongoing selection in the human genome. *Nat Rev Genet* 8:857–868.
Bruce Weir: Peter Chi, Elizabeth Marchini
- Mar 8 Mizumo H, Alwal G, Wang HJ, Levine AJ, Vasquez A. 2010. Fine-scale detection of population-specific linkage disequilibrium using haplotype entropy in the human genome. *BMC Genetics* 11: Article 27.
Albrechtsen A, Moltke I, Nielsen R. 2010. Natural selection and the distribution of identity-by-descent in the human genome. *Genetics* 186:295–U486.
Bruce Weir: Cheng Zheng