## Questions and discussion items Freedman et al. (2011) 43: 513-518

- 1. What is the greatest challenge after a genome wide association study?
- 2. What is the underlying hypothesis with respect to how SNPs exert their effect i.e. confer risk to complex diseases?
- 3. Wat is essentially different in this hypothesis compared to studies of early onset osteoarthritis families?
- 4. What are 2 ways to assess the functionality / effect of a SNP?
- 5. What is different between these two methods.
- 6. What is a Tag SNP?
- 7. How could the SNP affect the epigenetically regulated gene expression?
- 8. What would be critieria for a strong candidate gene?
- 9. If you check the functional genomic lecture of Wednesday, do you consider DIO2 a strong candidate gene for Osteoarthritis.
- 10. If a strong candidate gene is selected, likely to be affected by the genome wide association signal what would be next steps to proof causality to the disease.