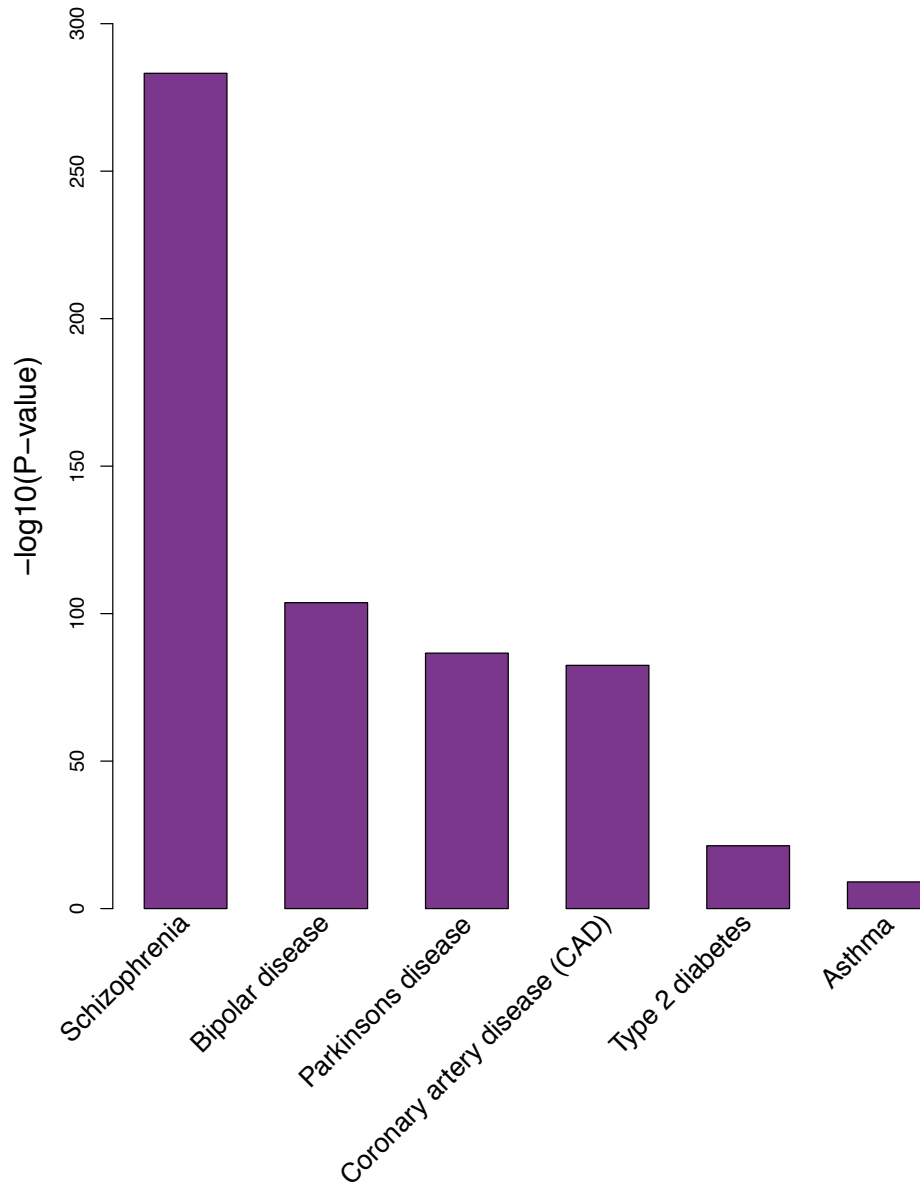


# Enrichment of GWAS SNPs for eQTL SNPs

- Three input datasets
  - GWAS SNP set
  - eQTL SNP set
  - SNP LD (linkage disequilibrium) scores calculated using 1000Genomes genotype data (from Jing)
- Extract SNPs with LD score  $>0.5$  for eQTL SNPs
- Overlap with GWAS SNPs
- Evaluate the overlap enrichment compared with background SNPs (i.e. common SNPs from 1000Genomes)

# Enrichment of GWAS SNPs for eQTL SNPs



- Enrichment of GWAS SNPs in brain diseases for eQTL SNPs are more significant than those in non-brain diseases.
- Schizophrenia GWAS SNPs have the highest enrichment for eQTL SNPs among the three brain diseases.