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QBIO401

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Final Project Plan

Questions:

* How do groups of individuals of a certain ethnicity cancer-risk SNPs?
* Do certain groups of individuals with a specific ethnicity have predisposition to certain cancer-risk SNPs?
* Are certain cancer-risk SNPs expressed more greatly in certain ethnic groups compared to others?

What is an SNP? - <https://www.genome.gov/genetics-glossary/Single-Nucleotide-Polymorphisms>

How to locate SNP: <https://www.ncbi.nlm.nih.gov/snp/>

Get 1000genome data: <https://genome.ucsc.edu/cgi-bin/hgTables>

Cancer Risk SNPs:

* rs6983267
  + Associated with colorectal cancer
  + 8:127401060 (GRCh38) --- 8:128413305 (GRCh37)
  + <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763485/>
* rs4713266
  + Associated with prostate cancer
  + 6:11218797 (GRCh38) --- 6:11219030 (GRCh37)
  + <https://aacrjournals.org/cancerres/article/81/14/3764/670224/How-Cancer-Risk-SNPs-May-Contribute-to-Prostate>
* rs72699833
  + Associated with breast, cervical, colorectal and non-small-cell lung cancer
  + 1:121539689 (GRCh38) --- 1:121281487 (GRCh37)
  + <https://www.nature.com/articles/s41416-019-0614-3>