**Bioinformatics analysis of human genes associated with health-disparity related diseases**

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Polymorphisms in human genomes are known to be associated with health disparity related diseases. Our overall goal is to identify human genes associated with diseases at higher rates in African Americans. To achieve this goal, we are conducting a large-scale bioinformatics analysis on the NCBI dbSNP database. We are developing a Python program to analyze the allele frequencies in different human populations and investigate their association with human diseases. Meanwhile, we focus on a list of candidate genes that may be related to human disparity diseases. We specifically focused on the AR homolog in the human genomes and investigated their association with diabetes and lung cancer. We also compared the gene expression patterns in different human populations using Oncoming.org.