

- Name of your team
 - Genebeans
- List of team members and email addresses
 - Celine Hoh, choh1@jhu.edu
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- Short title for your proposal
 - Nutrigenomic Visualization Tool on 23andMe Raw Genotyping Data
- 1 paragraph description of what you hope to do and how you will do it
 - We are going to create a nutrigenomic visualization tool that will allow users to upload their raw 23andMe data and receive a pdf report with personalized nutrition and health insights. To build the tool, we will get raw data from 23andMe using the openSNP dataset which includes SNPs and their locations for individual users. We are going to look at various nutrition-related SNPs such as caffeine sensitivity, food allergies, taste receptors, etc. and create an individualized report for the user and suggest recipes they might like to try.
- References to 2 to 3 relevant papers
 - [Genomics in Personalized Nutrition: Can You “Eat for Your Genes”?](#)
 - Examples of some SNPs related to nutrition - caffeine sensitivity, fatty liver disease, obesity/appetite
 - [Single Nucleotide Polymorphisms in Taste Receptor Genes Are Associated with Snacking Patterns of Preschool-Aged Children in the Guelph Family Health Study: A Pilot Study](#)
 - Examples of SNPs linked to fat taste sensitivity, sweet taste preference, and aversion to bitter, green leafy vegetables.
 - Determines the cross-sectional associations between three taste receptor SNPs and snacking patterns among preschoolers in the Guelph Family Health Study
 - [Detection of Nutrient-Related SNP to Reveal Individual Malnutrition Risk](#)
 - Looks at SNPs that could be related to malnutrition and focuses on creating an individualized nutrition plan - iron deficiency-related genes, folic acid deficiency genes, etc.
- References/URLs to datasets that you will be studying (Note you can also use simulated data)
 - [openSNP](#)
 - [SNPedia](#)
 - [NCBI SNP Advanced Search Builder](#)