CS 291 - PERSONAL GENOMICS FOR BIOINFORMATICIANS

Problem Set 1 - Ancestry

All homework should be sent to mgymrek@ucsd.edu with subject line [CSE291 PS2:LASTNAME] by the beginning of class on **Tuesday**, **January 24**.

Objectives

- Determine ancestry in homogeneous and admixed genomes.
- Predict relationships between related samples.
- Impute missing variants using imputation from a reference panel.

Analyzing ancestry using principal components analysis

Chromosome painting

Relative finding

Imputing missing variants