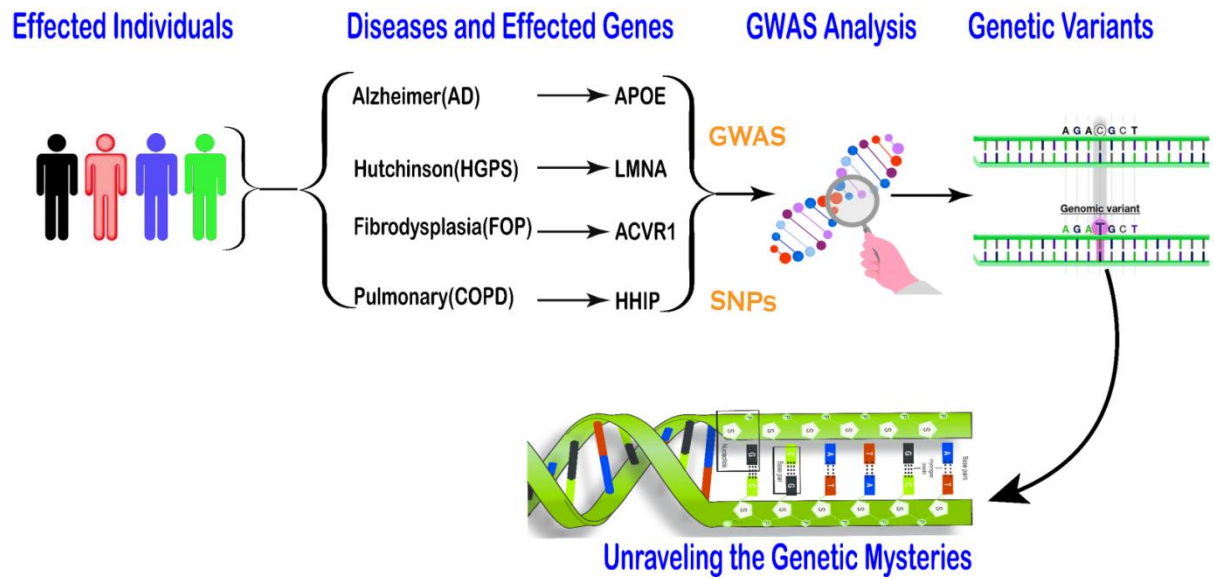


Graphical Abstract:



Unlocking Rare Diseases Genetics: Insights from Genome-Wide Association Studies and Single Nucleotide Polymorphisms