

AGHipop PIPELINE

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AGHipop

- Analytical pipeline to analyze data from the Alabama Genomic Health Initiative population based cohort
- A tool for performing Genome-Wide Association Study (GWAS) analysis
- Input: Simple phenotype file investigators generate from I2B2 and/or AGHI questionnaire data
- Output: Report summarizing Single Nucleotide Polymorphism (SNP), gene based and gene-set analyses

TOOLS/SOFTWARES USED:

Slurm (Simple Linux Utility for Resource Management) , implemented on Cheaha

Bash Script (Bourne Again SHell)

PLINK 1.9: Free, open-source whole genome association analysis toolset, designed to perform a range of basic, large-scale analyses in a computationally efficient manner.

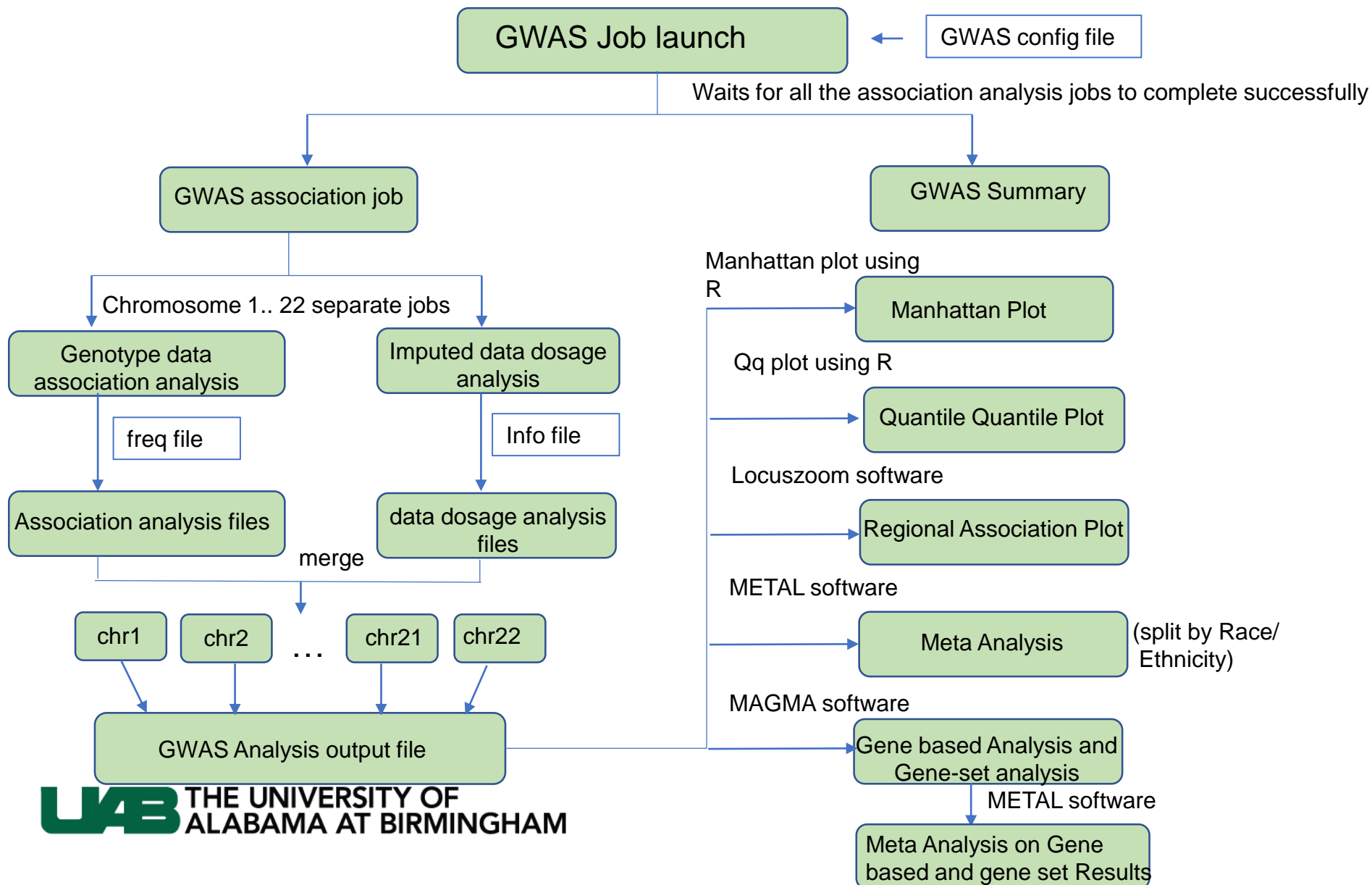
R (3.3.1):

Locuszoom plot: regional association plot is essentially a zoomed-in Manhattan plot,

Metal tool: Meta-analysis genomewide association scans

MAGMA: Tool for gene based analysis and generalized gene-set analysis of GWAS data

PIPELINE FLOW



Q&A
THANK YOU!