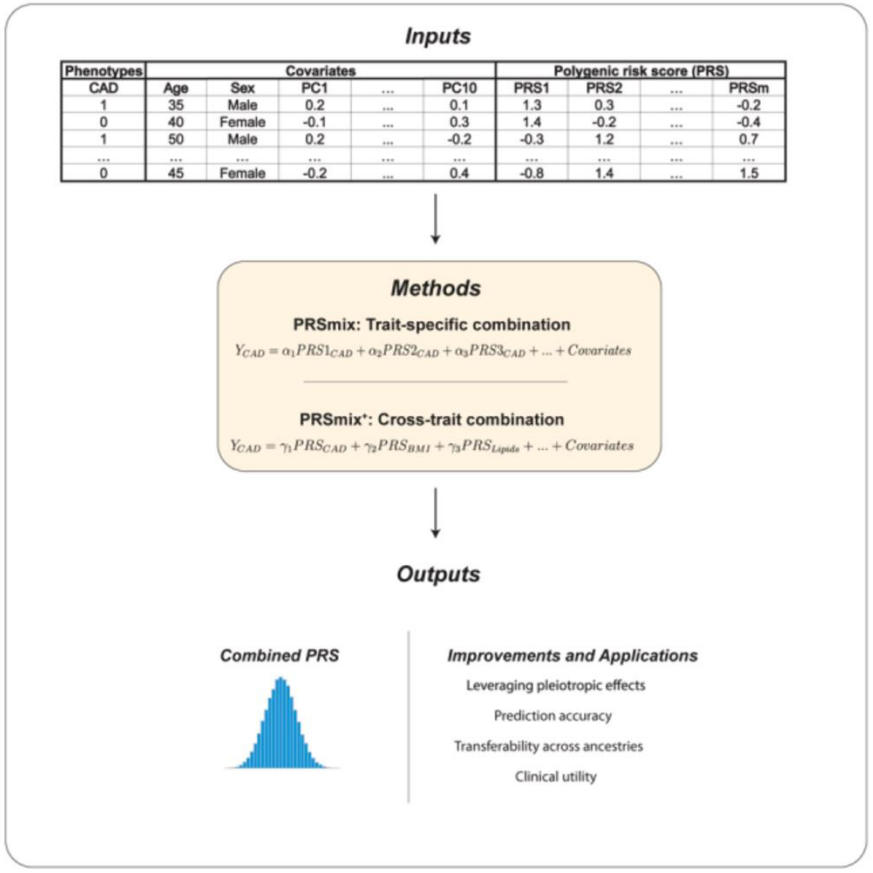
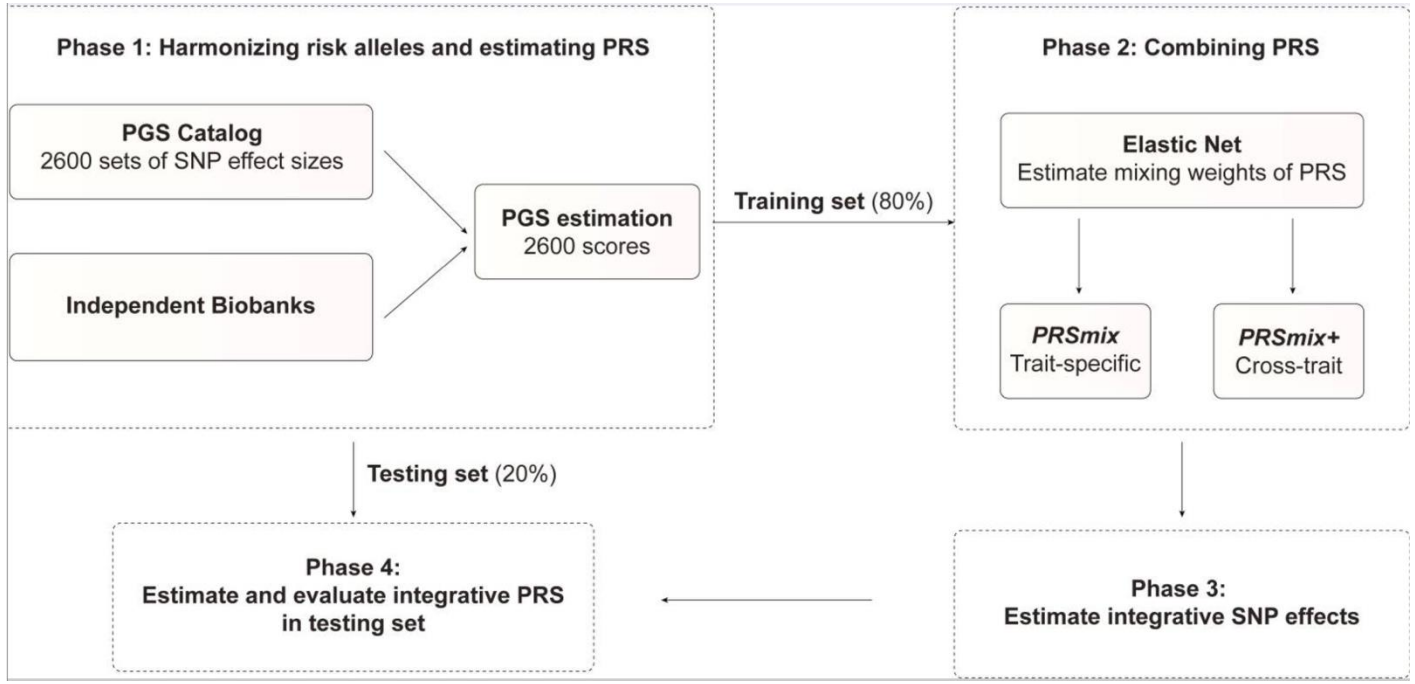
Group Presentations Introduction

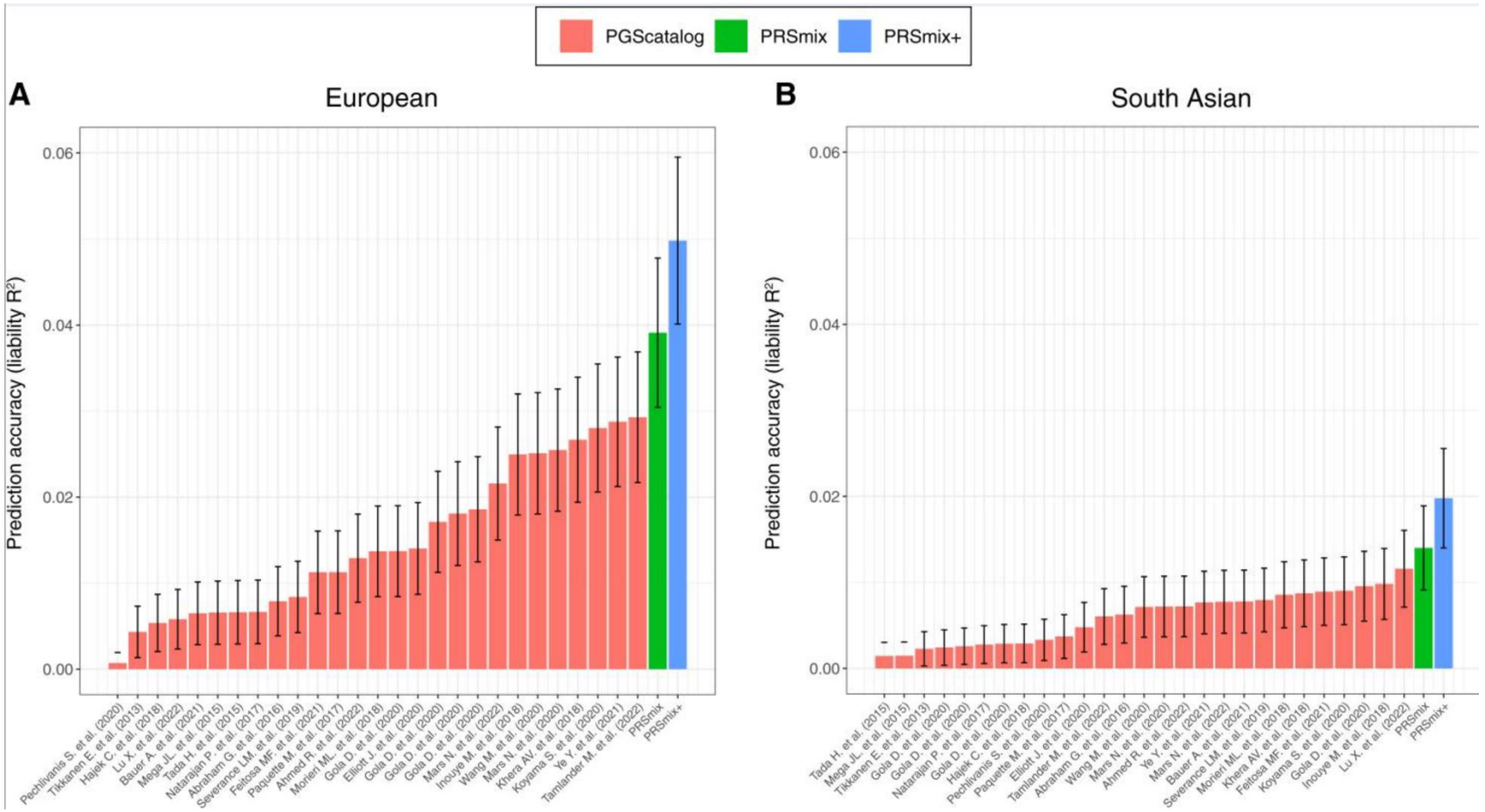
Tinashe Chikowore

Key Concept: PRS integration using Elastic Net





PRSmix vs previously reported PRS



Project topics

Questions

Qn1. Do you think the PRSmix approach will predict well in continental Africans? What are your reasons in favor of or against?
Qn2. What metrics will you use to evaluate the predictivity of the PRS for the trait you have been assigned?
Qn3. May you outline the steps and sample code you will use to apply the PRSmix approach to the trait you have been assigned?
Qn4. Apply you analysis plan in Qn3 and determine the predictivity of the intergrated PRS using the PRSmix approach.

Analytical datasets

Group 1 Glycated hemoglobin (HbA1C) https://github.com/tinashedoc/cvx/blob/main/hba1cdta.txt
Group 2 Insulin reistance (HOMA_IR) https://github.com/tinashedoc/cvx/blob/main/homairdta.txt
Group 3 OGTT 2hr glucose https://github.com/tinashedoc/cvx/blob/main/2hrglcdta.txt
Group 4 Subcutaneous adipose tissue (SAT) https://github.com/tinashedoc/cvx/blob/main/satdta.txt

Sample project file

```
PID HbA1c PGS000102 PGS000177 PGS001163 PGS001968 PGS002186 PGS002341 PGS002372 PGS002413 PGS002462 PGS002511 PGS002560 PGS002609 PGS002658 P
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001 5.3000002 2.83891e-05 0.0146902 -1.31922e-06 -3.30679e-06 -1.65969e-07 2.8008e-07 -8.01093e-09 0.0027667 0.00862707 0.0169613 0.00191387
002 5 3.15382e-05 0.0144697 -6.97978e-06 -3.98243e-06 -2.33413e-07 3.07285e-07 4.06901e-07 0.00352973 0.00987039 0.0171528 0.00192215 0.0024
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Project Timeline

Assign	Assign tasks and roles to group members to tackle the project ensuring the tasks can be completed in parallel by Tuesday.
Ensure	Ensure you complete Qn 1 and Qn 2 by Wednesday as these do not require data analysis.
Write up and finalise	You need to write up and finalise the analysis plan by Thursday.
Run	Run the analysis and finalise your work for presentation on Friday.