Storey Lab

Lewis-Sigler Institute for Integrative Genomics

♡ Statistics — Genomics ♡

@storeylab

Focus of the Lab

- Characterizing genomic variation
  - nucleotides (genetic variation)
  - gene expression
  - epigenetics and chromatin
- Role of genomics in molecular and trait variation
  - genetics of gene expression
  - genetics of complex traits
- Statistical theory, methods, and algorithms for high-dimensional data
  - inference on many parameters simultaneously
  - accounting for latent variable structure

Find Us

On the internet:

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http://genomics.princeton.edu/storeylab/
https://github.com/storeylab
https://twitter.com/storeylab
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In person:

Andrew Bass (QCB)   Wei Hao (QCB)
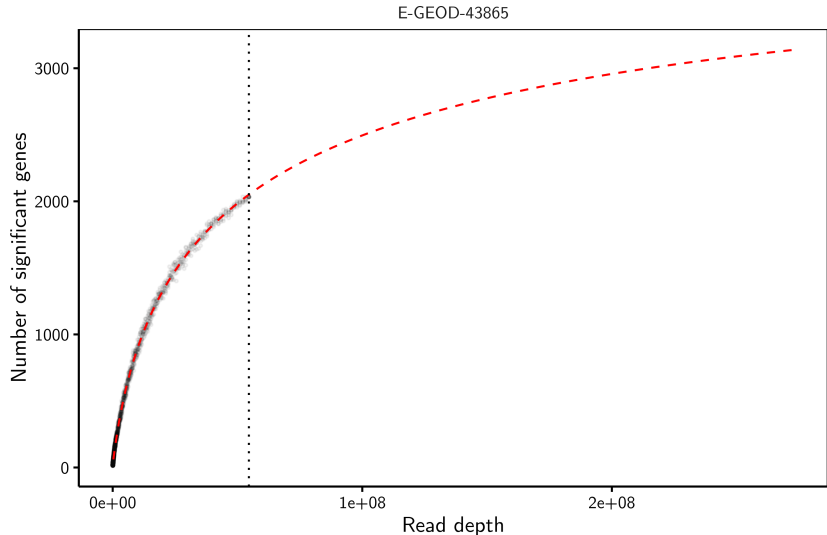Irineo Cabreros (PACM)   Emily Nelson (QCB)
Chee Chen   Alejandro Ochoa
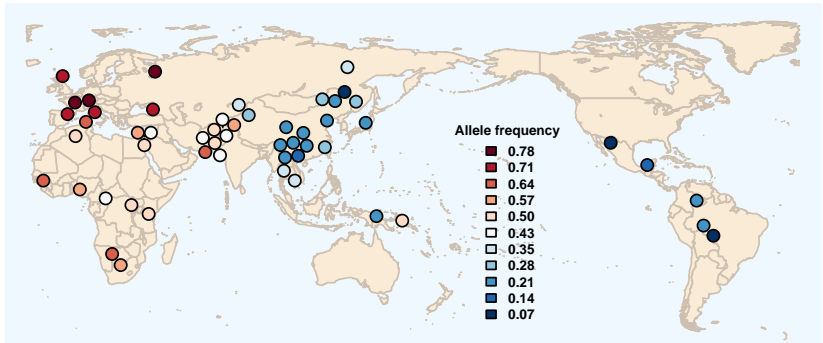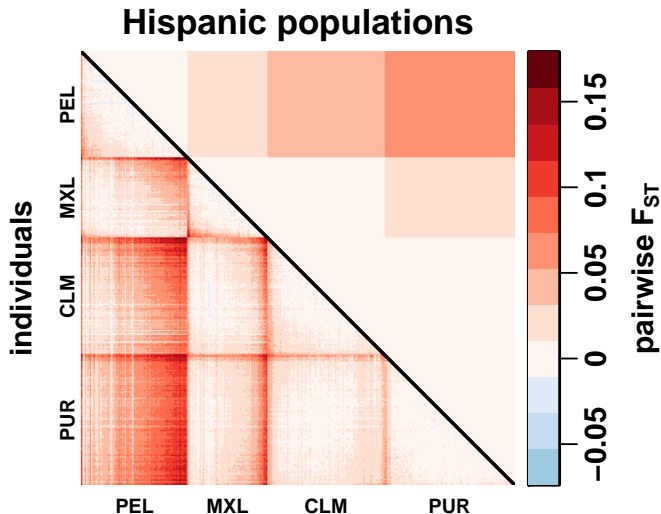Sean Hackett

subSeq: Computationally efficient way to subsample reads
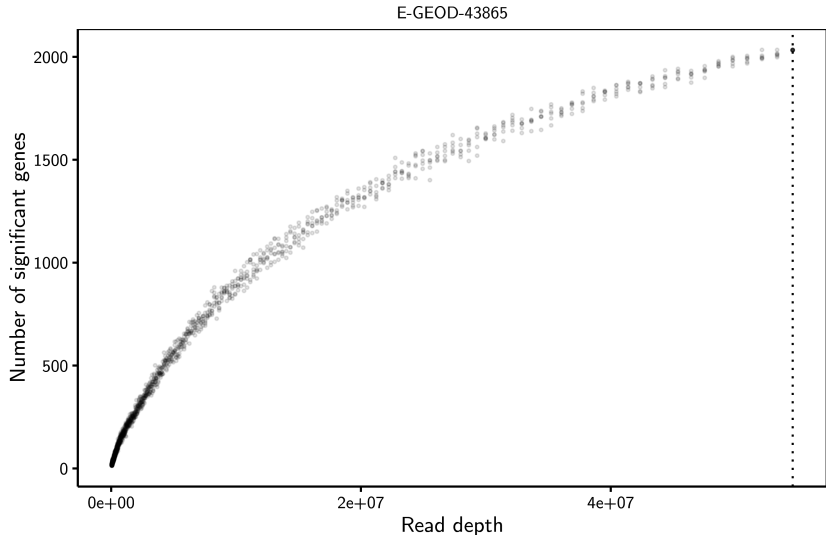
superSeq: Predicting adequate read depth to maximize statistical power

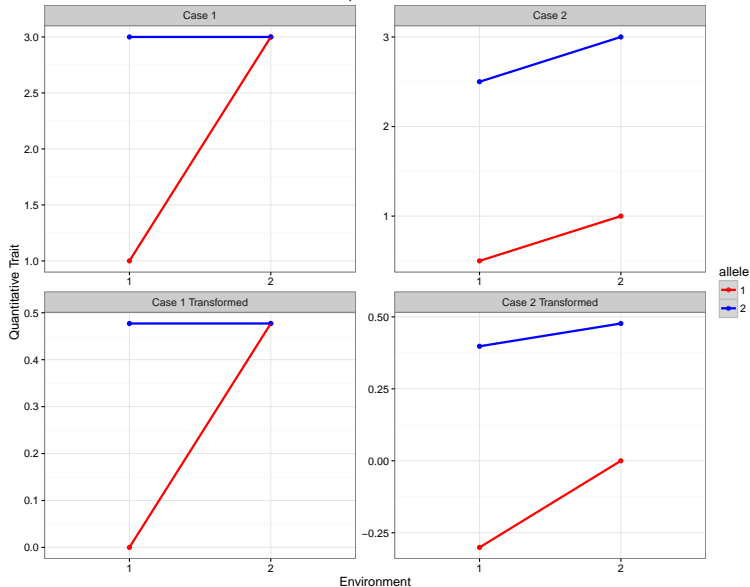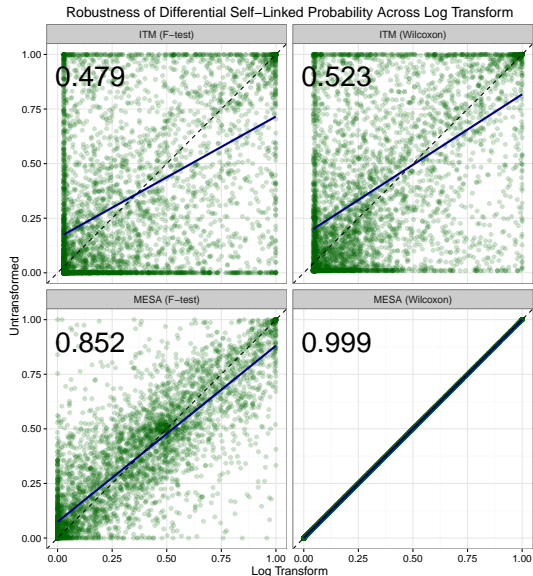# Complex Population Structures:
Human Genome Diversity Panel

Hispanic populations

Gene-by-Environment Interactions

Example GxE Plots

Scale Robustness of Our Method

Robustness of Differential Self−Linked Probability Across Log Transform

New Experimental System