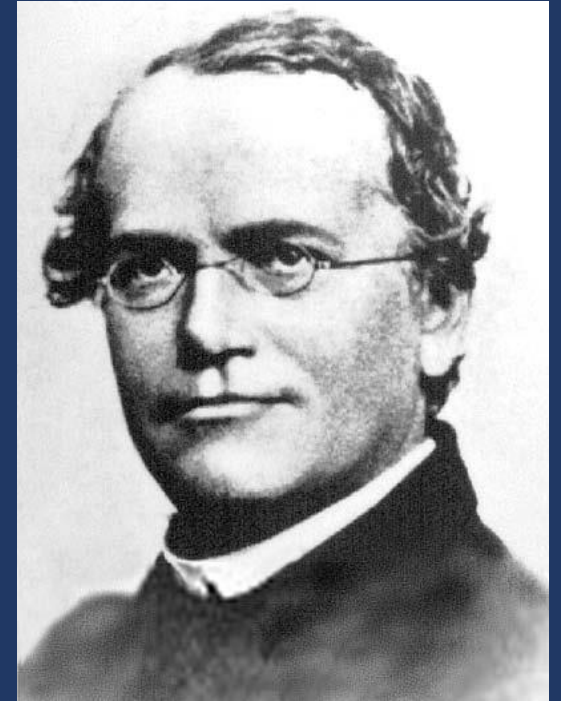


Other OpenMendel Projects



Xinkai Zhou

PhD Student, Department of Biostatistics, UCLA

ASHG 2020

TraitSimulation.jl

Sarah Ji, Hua Zhou, Janet Sinsheimer, Kenneth Lange and Eric Sobel

<https://github.com/OpenMendel/TraitSimulation.jl>

Quick and easy simulation of phenotypes under a variety of genetic architectures

Highlights

- Computationally efficient
- Versatile models
 - Generalized Linear Models
 - Variance Component Models
 - Ordered Multinomial Models
 - Generalized Linear Mixed Models
- Integrates with other OpenMendel modules

MixedModelsBLB.jl (Work in Progress)

Xinkai Zhou and Hua Zhou

Lightning fast statistical inference of Linear Mixed Models on longitudinal data (repeated observations) using Bag of Little Bootstraps (BLB)

Highlight:

Works for massive and distributed data

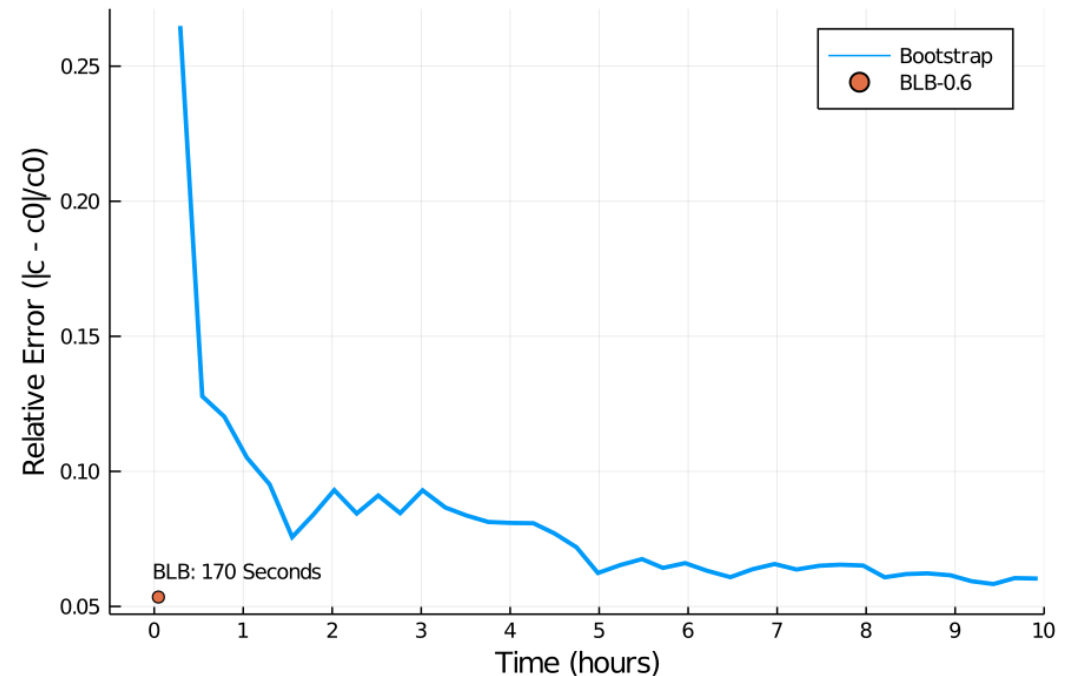


Fig 1. On a simulated data set with 20 million observations.

Current and New Packages

- MendelBase.jl
- MendelSearch.jl
- SnpArrays.jl
- VCFTools.jl
- MendelKinship.jl
- MendelTwoPointLinkage.jl
- MendelLocationScores.jl
- MendelGeneDropping.jl
- MendelGameteCompetition.jl
- MendelEstimateFrequencies.jl
- MendelAimSelection.jl
- MendelGeneticCounseling.jl
- VarianceComponentModels.jl
- MendelGWAS.jl
- OrdinalGWAS.jl
- MendelIHT.jl
- MendelImpute.jl
- TraitSimulation.jl
- MixedModelsBLB.jl
- ADMIXTURE.jl

Check our website:

<https://openmendel.github.io>

Thank you!