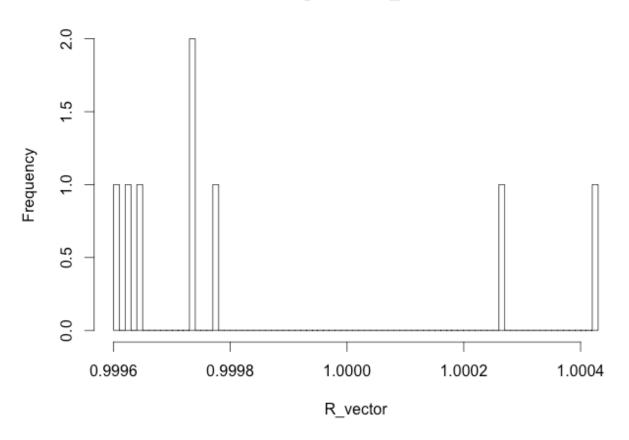
## **Supplementary Materials**

H1N1

/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript2-12-2015/H1N1/concordance/GelmanRubinStat\_2runs\_mds0\_1\_with\_ponGT0\_1\_in\_rep1.png

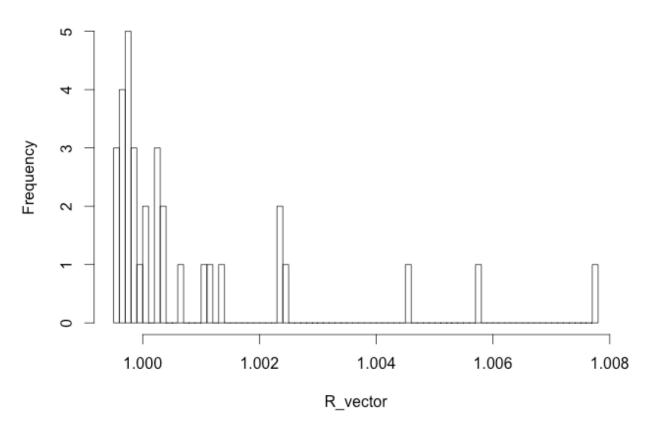
## Histogram of R\_vector



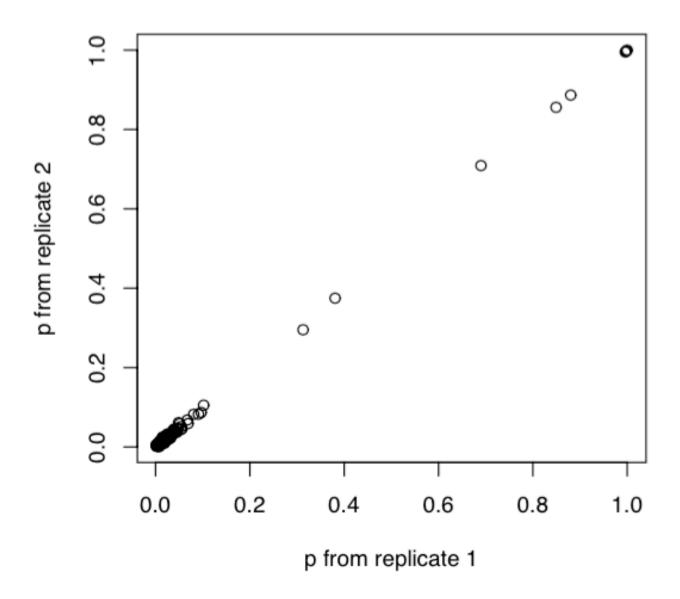
Distribution of Gelman-Rubin statistics of the estimated  $p_i \ on \ R^2 \ from 2$  replicates for A/H1N1 at  $\ harmonia \ en \ harmonia \ harm$ 

 $/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript 2-12-2015/H1N1/concordance/GelmanRubinStat_2runs\_mds0\_3\_with\_ponGT0\_1\_in\_rep1.png$ 

## Histogram of R\_vector

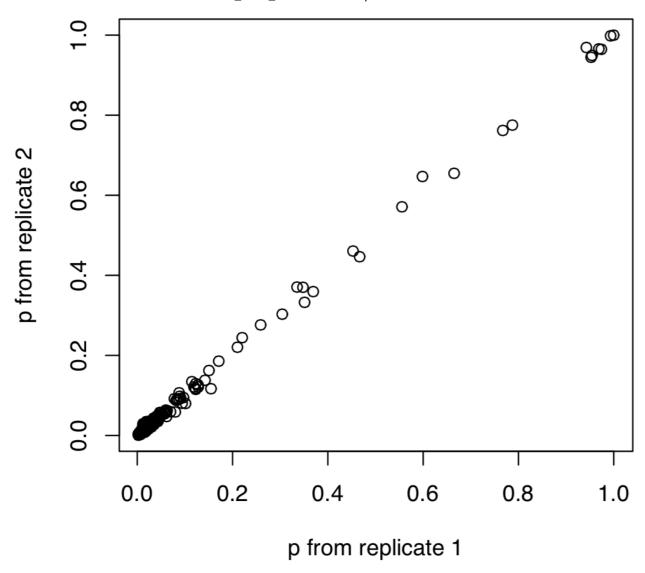


Distribution of Gelman-Rubin statistics of the estimated  $p_i$  on R^2 from 2 replicates for A/H1N1 at  $\alpha = 0.3$ .



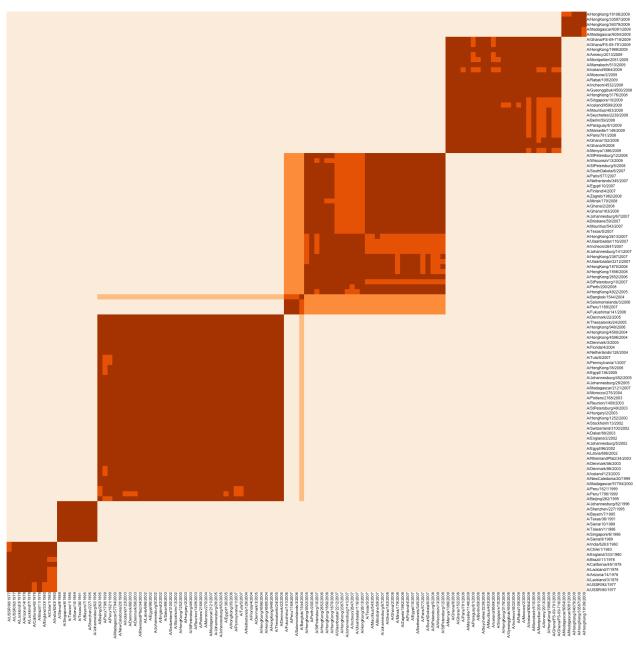
Scatterplot of the estimated  $p_i\$  comparing replicate 1 and 2 for A/H1N1 at  $\$  at  $\$  kappa= 0.1\$ ( $R^2 = \#$ ).

 $/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript 2-12-2015/H1N1/concordance/H1N1-C3b-mds0\_1Vs0\_3-concordance.eps$ 



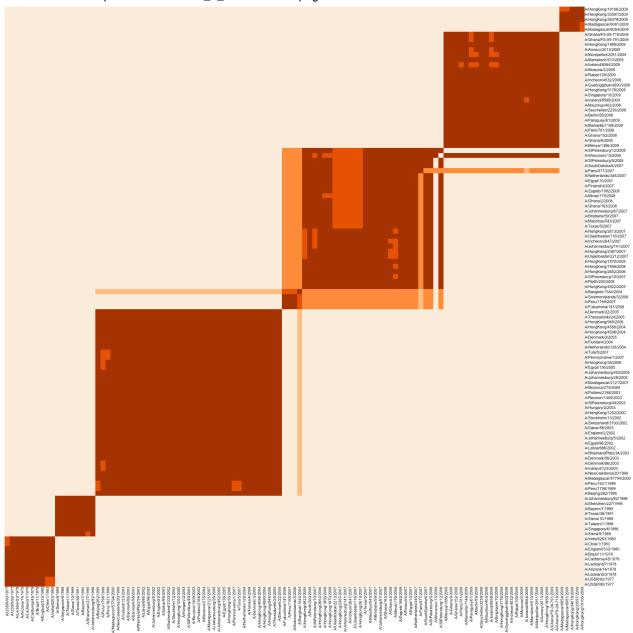
Scatterplot of the estimated  $p_i\$  comparing replicate 1 and 2 for A/H1N1 at  $\$  at  $\$  ( $R^2 = \#$ ).

E.g. Comping the results from the MCC tree vs. Tree 2. /Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript1-21-2015/H1N1/heatmap/H1N1-C3b-mds0\_1\_vsS2-ordered.png



(very similar here)

Between MCC tree (upper triangle) and Tree 3 (lower triangle) Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript1-21-2015/H1N1/heatmap/H1N1-C3b-mds0\_1\_vsS3-ordered.png



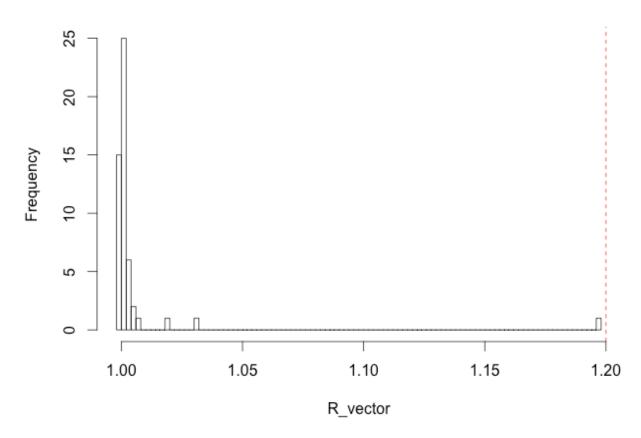
see the dropbox folder for more..

# **H3N2**

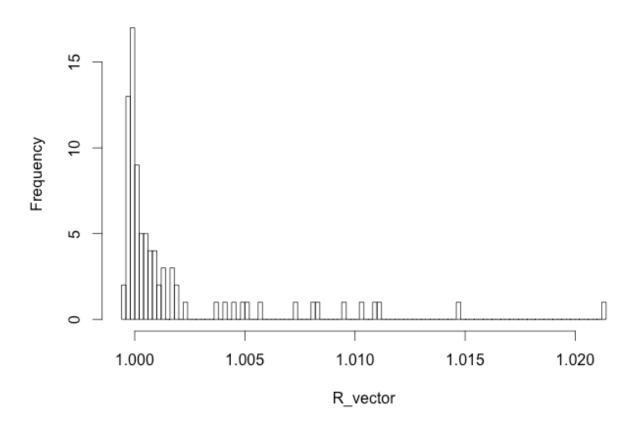
#### MCMC convergence diagnostics:

 $/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript 2-12-2015/H3N2/concordance/GelmanRubinStat\_mds0\_1\_with\_ponGT0\_1\_in\_rep1.png$ 

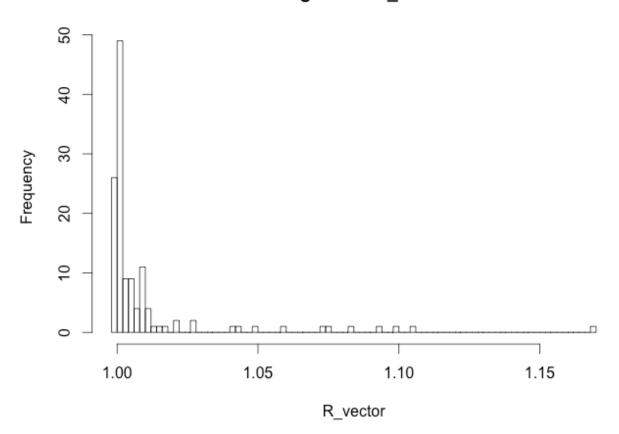
#### Histogram of R\_vector

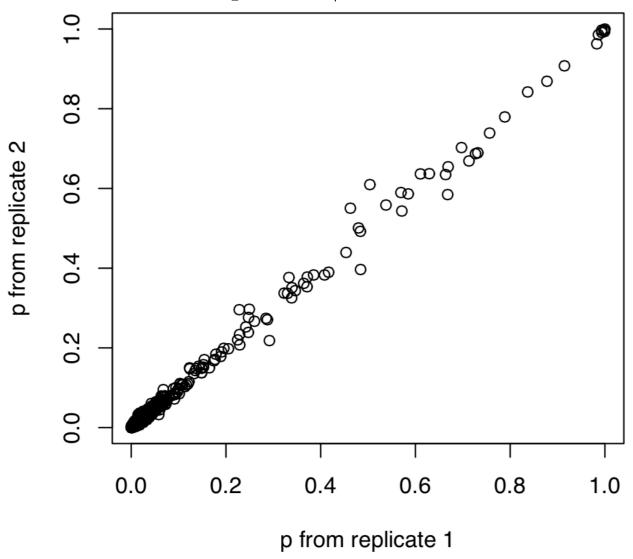


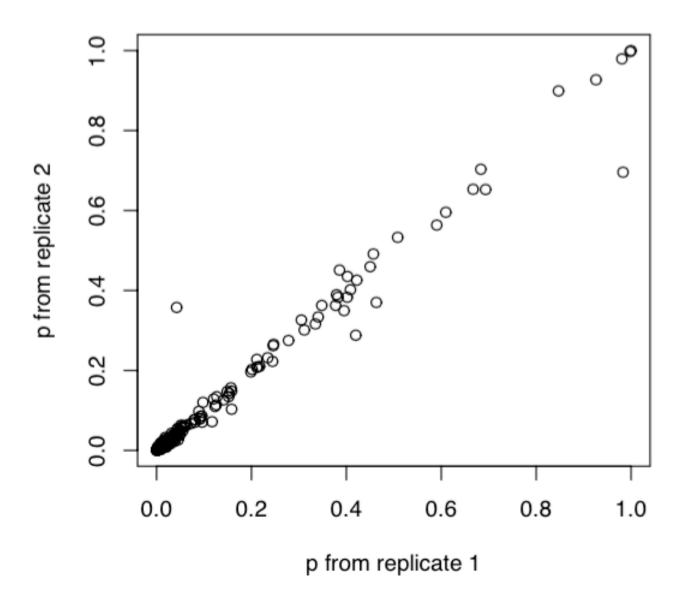
## Histogram of R\_vector

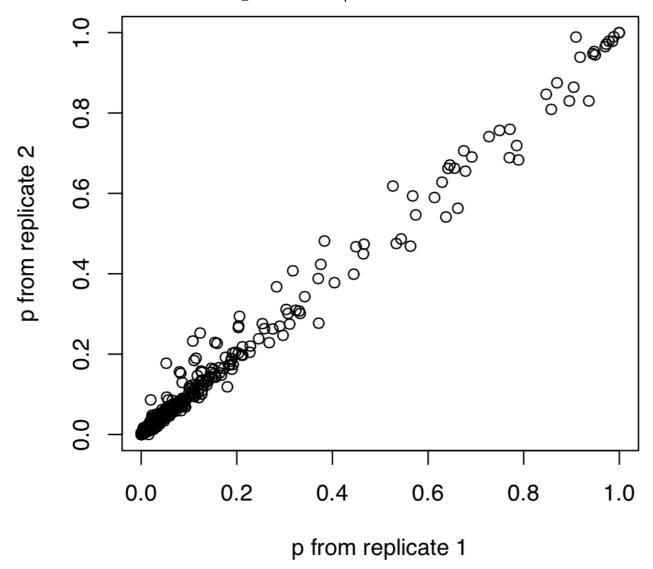


## Histogram of R\_vector

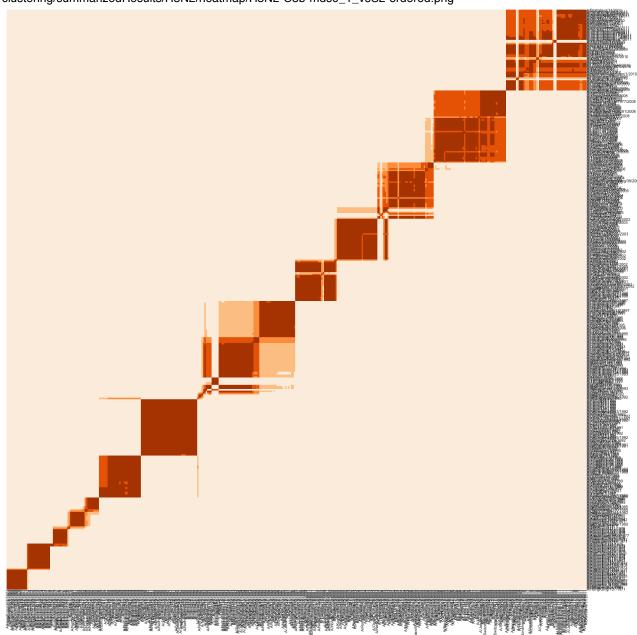








Eg. /Users/charles/Documents/research/antigenic/GenoPheno/antigenic-clustering/summarizedResults/H3N2/heatmap/H3N2-C3b-mds0\_1\_vsS2-ordered.png



vs. S6: I see more difference - eg. The middle light shading is partially gone

see dropbox for other samples