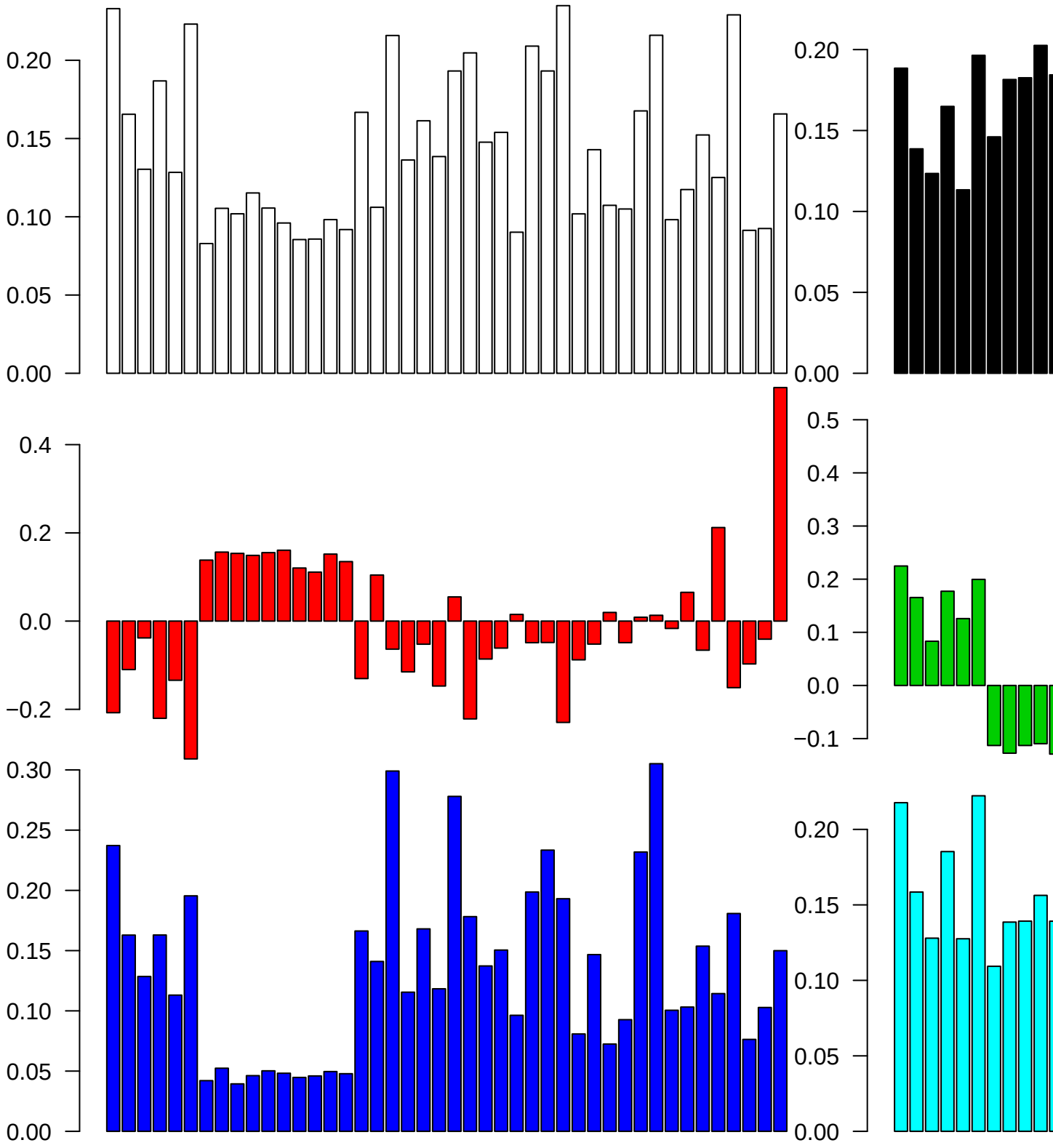
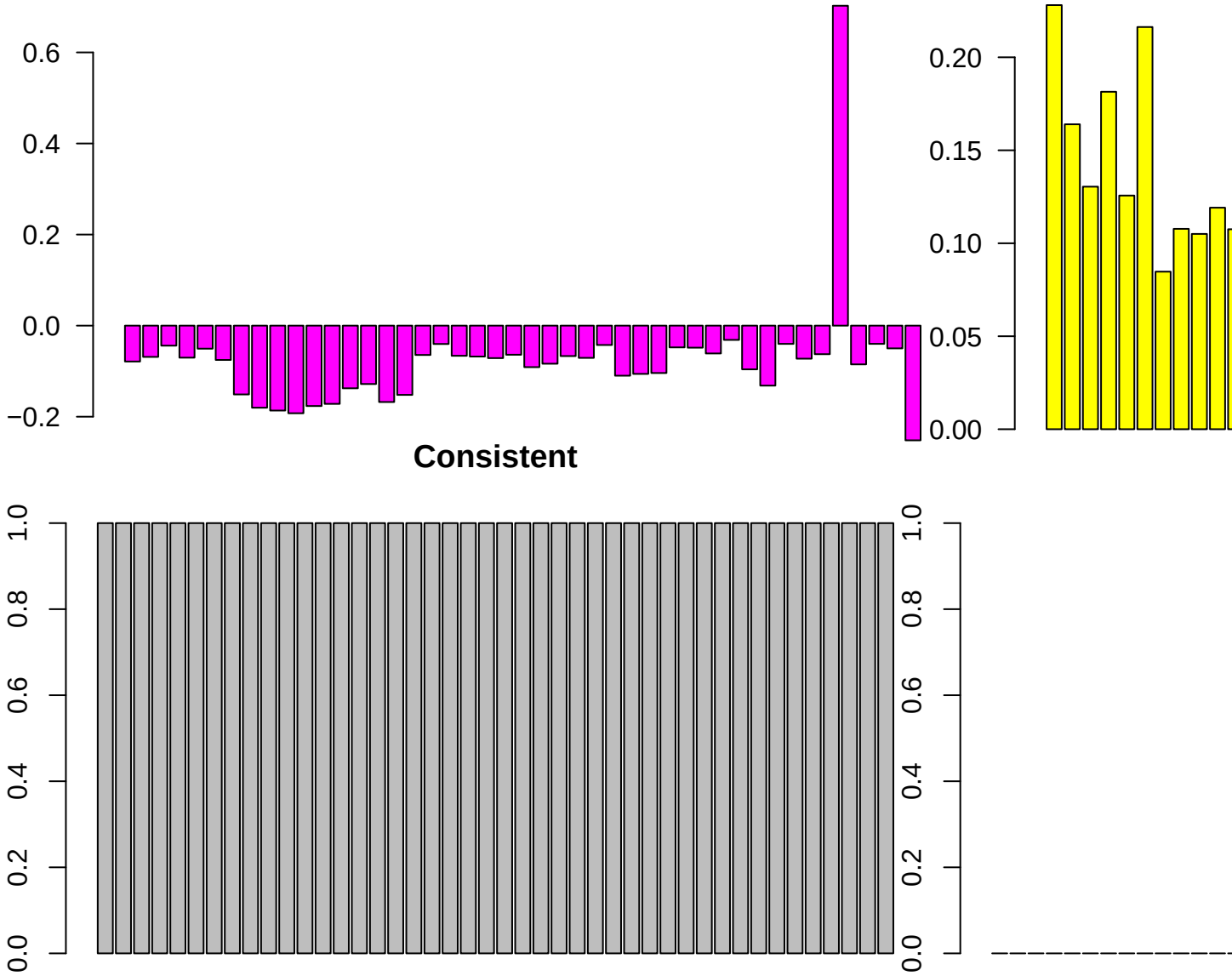
Structure of Concept Plot

First, we simulate data from the GTEx matrices and 35% tissue specific and consider a heatmap of the top 400 (the maxes):

```
##
## Attaching package: 'mash'

## The following objects are masked _by_ '.GlobalEnv':
##
##     autoselect.mix.sd, checkfunc, checkfunc.html, compare.func,
##     compute.covmat, compute.covmat.bma.only,
##     compute.covmat.bmafull.only, compute.covmat.nopc,
##     compute.covmat.with.heterogeneity.no.shrink,
##     compute.covmat.with.rho, compute.determinant,
##     compute.hm.train, compute.hm.train.bma.only,
##     compute.hm.train.log.lik, compute.hm.train.log.lik.pen,
##     compute.hm.train.log.lik.vmat, compute.hm.train.semat,
##     compute.hm.train.with.tol, compute.lik.test,
##     compute.lik.test.loglik.vmat, compute.lik.test.semat,
##     compute.mix.test, compute.mixture.dist, compute.total.quant,
##     convert.liks, factor_sim, get.prior.covar.bma.only,
##     get.prior.covar.bmafull.only, get.prior.covar.nopcs,
##     get.prior.covar.Ukl, get.prior.covar.Ukl.with.rho,
##     get.prior.covar.with.heterogeneity, hm.weight.gen,
##     lfsr.per.snp, lik.func, lik.func.with.tol, log.lik.func,
##     mixEM, mult.tissue.grid, plotting.func, plotting.func.html,
##     plotting.func.html.neg, post.array.generator,
##     post.array.per.snp, post.b.gpkl.cov, post.b.gpkl.mean,
##     post.weight.func, test.quant, total.covs.partone,
##     total.covs.partone.persnp, total.down.per.snp, total.lik.func,
##     total.mean, total.mean.per.snp, total.null,
##     total.null.per.snp, total.quant.per.snp, total.up.per.snp

##
## Attaching package: 'gplots'

## The following object is masked from 'package:stats':
##
##     lowess

## pdf
##   2
```

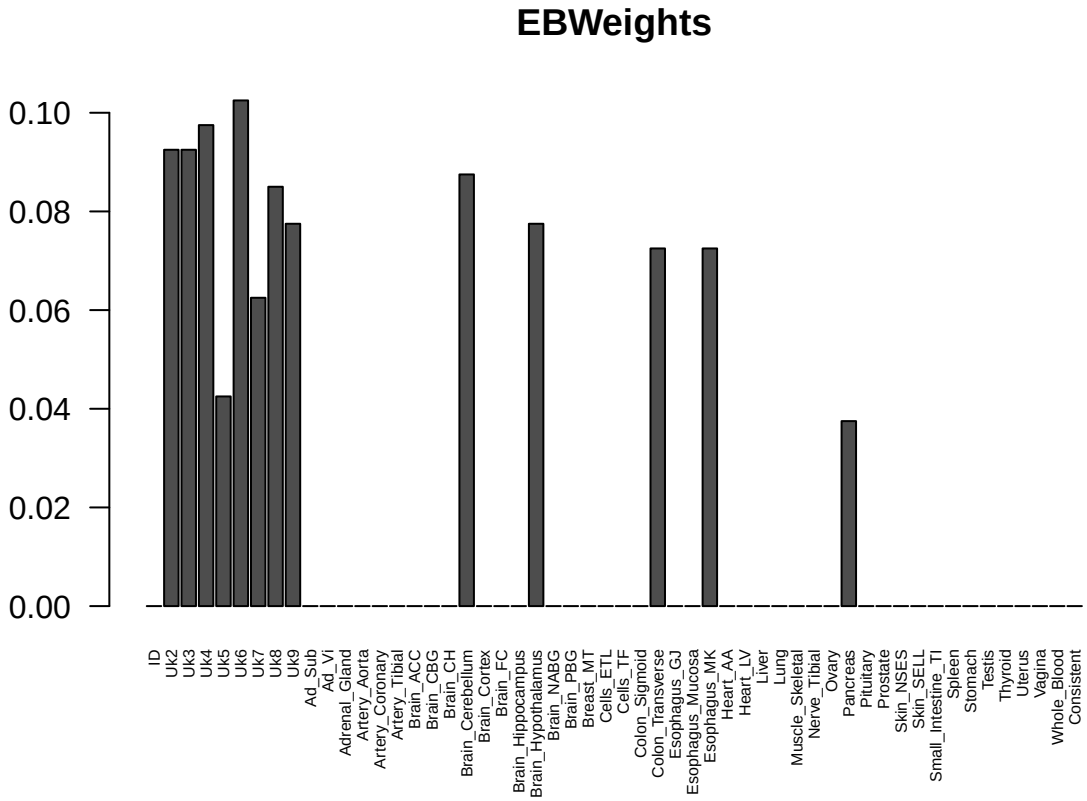
Now, I'll plot the simulated covariance matrices. In practice, these would be inferred from the maxes:


0.20
0.15
0.10
0.05
0.00
0.20
0.15
0.10
0.05
0.00
0.4
0.2
0.0
−0.2
0.5
0.4
0.3
0.2
0.1
0.0
−0.1
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.20
0.15
0.10
0.05
0.00



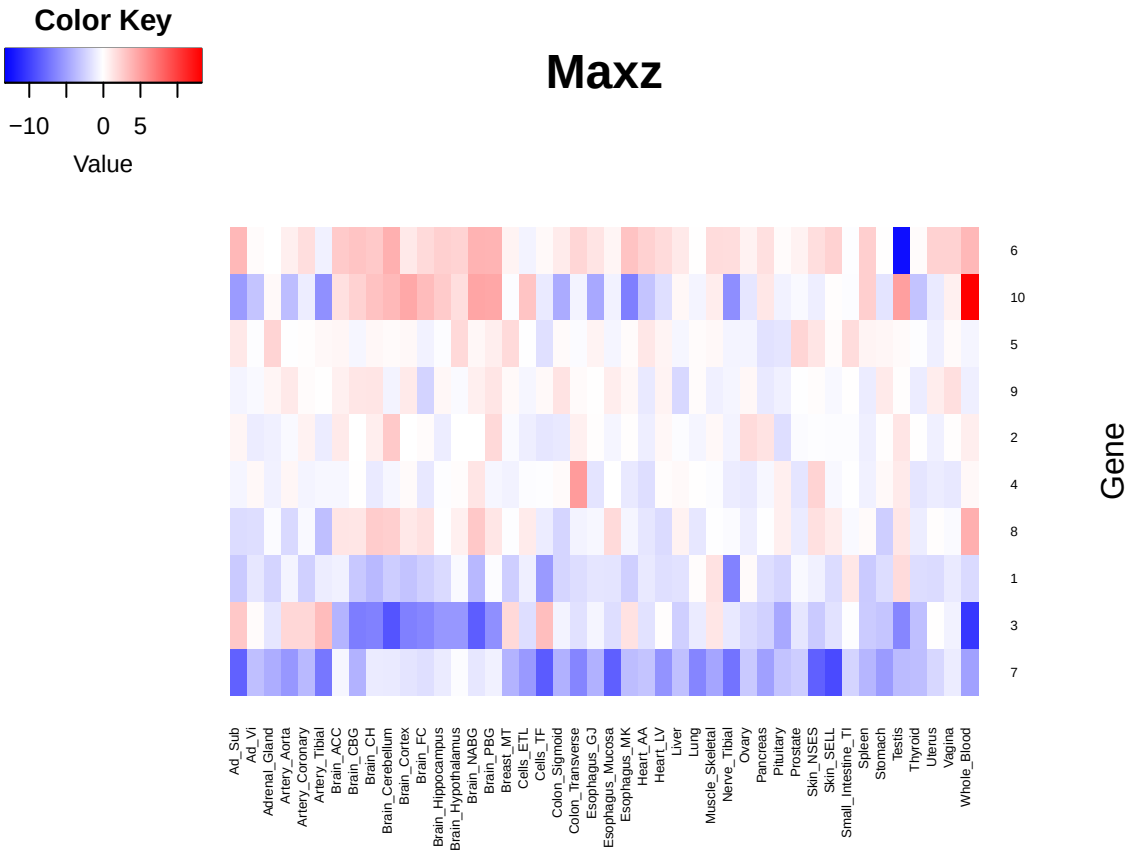
Then shows whole data set from which we obtain the grid values and the pis:

```
## pdf
##   2
```



Estimate π and 'autoselect' ω:

Now we want to return the ordered list of matrices from which the truth were simulated. Let's try a smaller subset of maxes.



Plot the barplot of the t statistics of a few select rows. Then, plot the eigenvector from the Uk in which they were simulated: