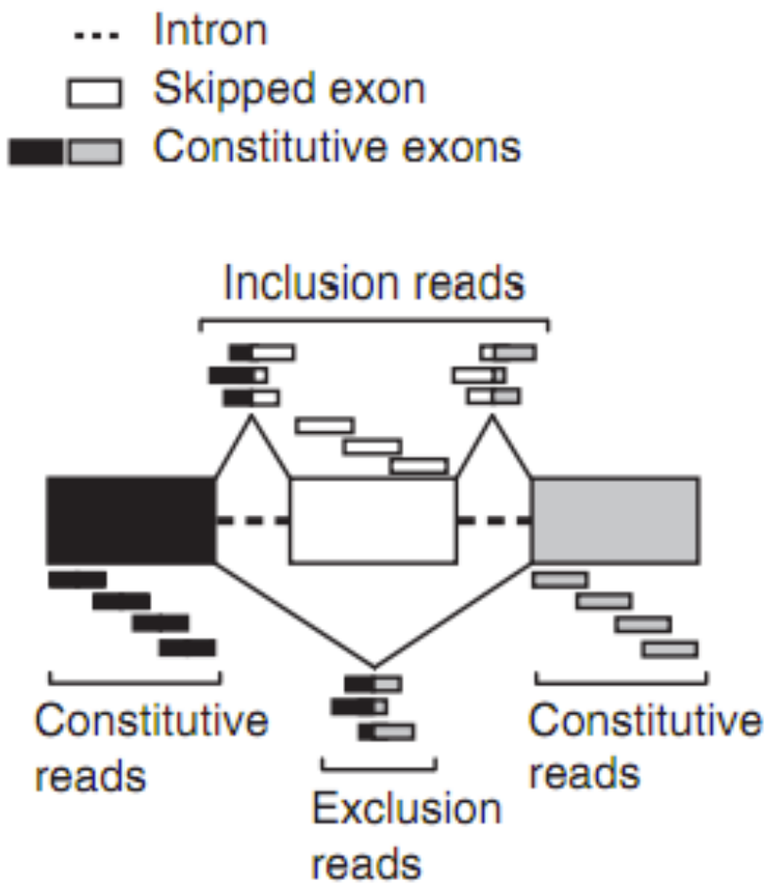
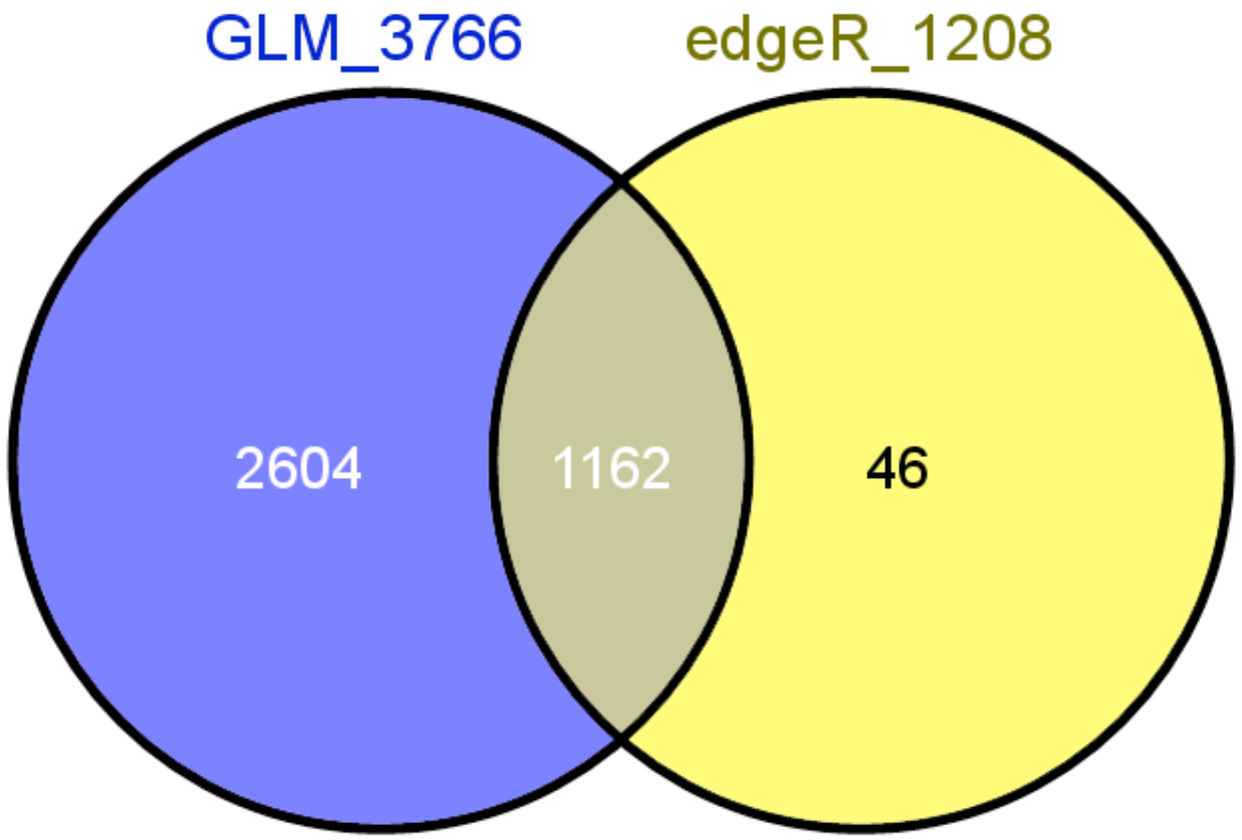
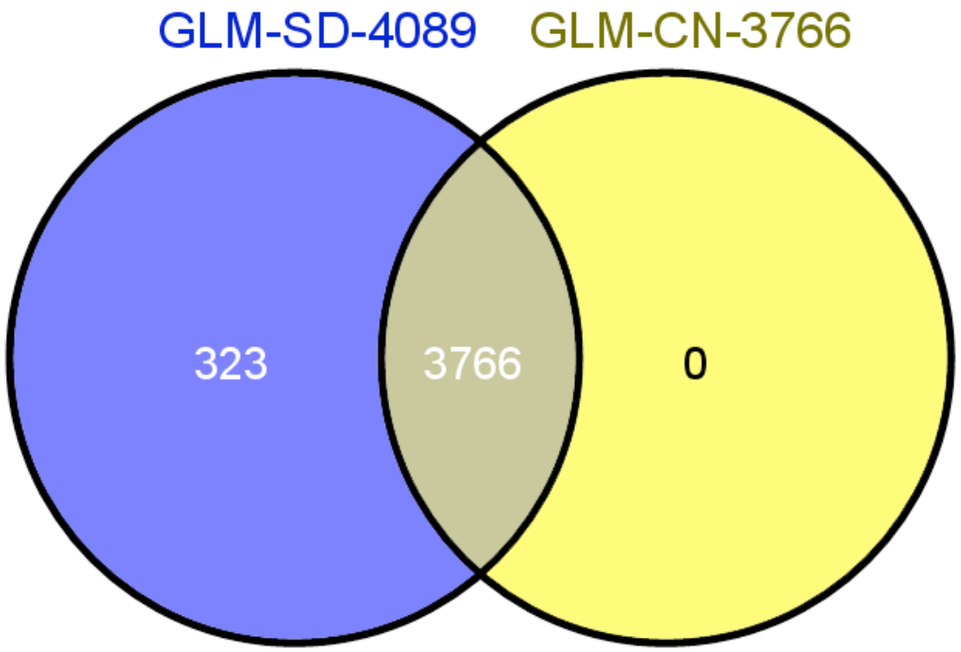
3. Test for differential alternative splicing

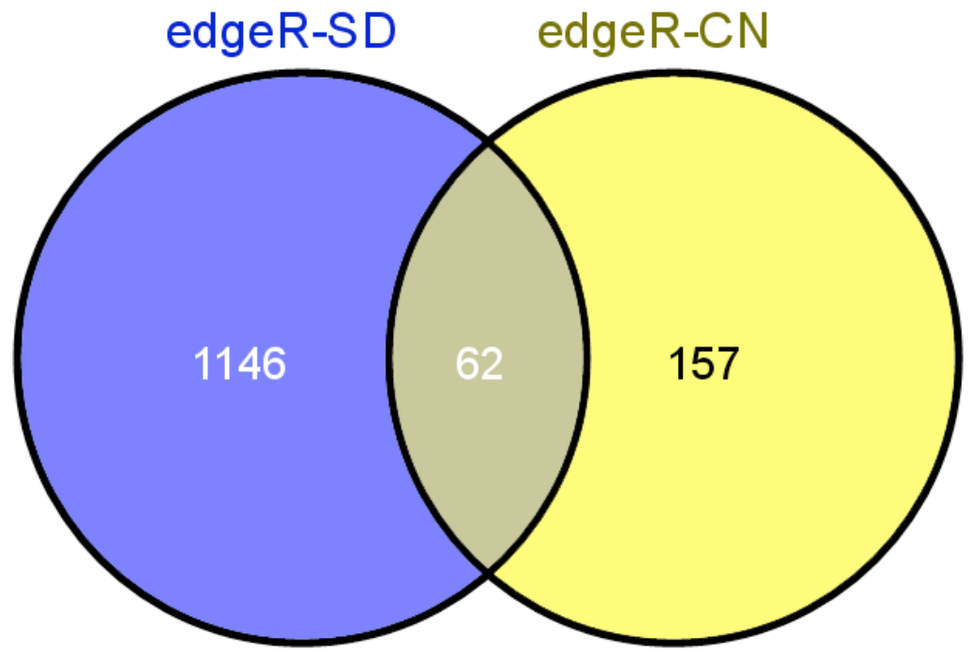


- 10 CEU VS 10 YRI, norm by counts at each event



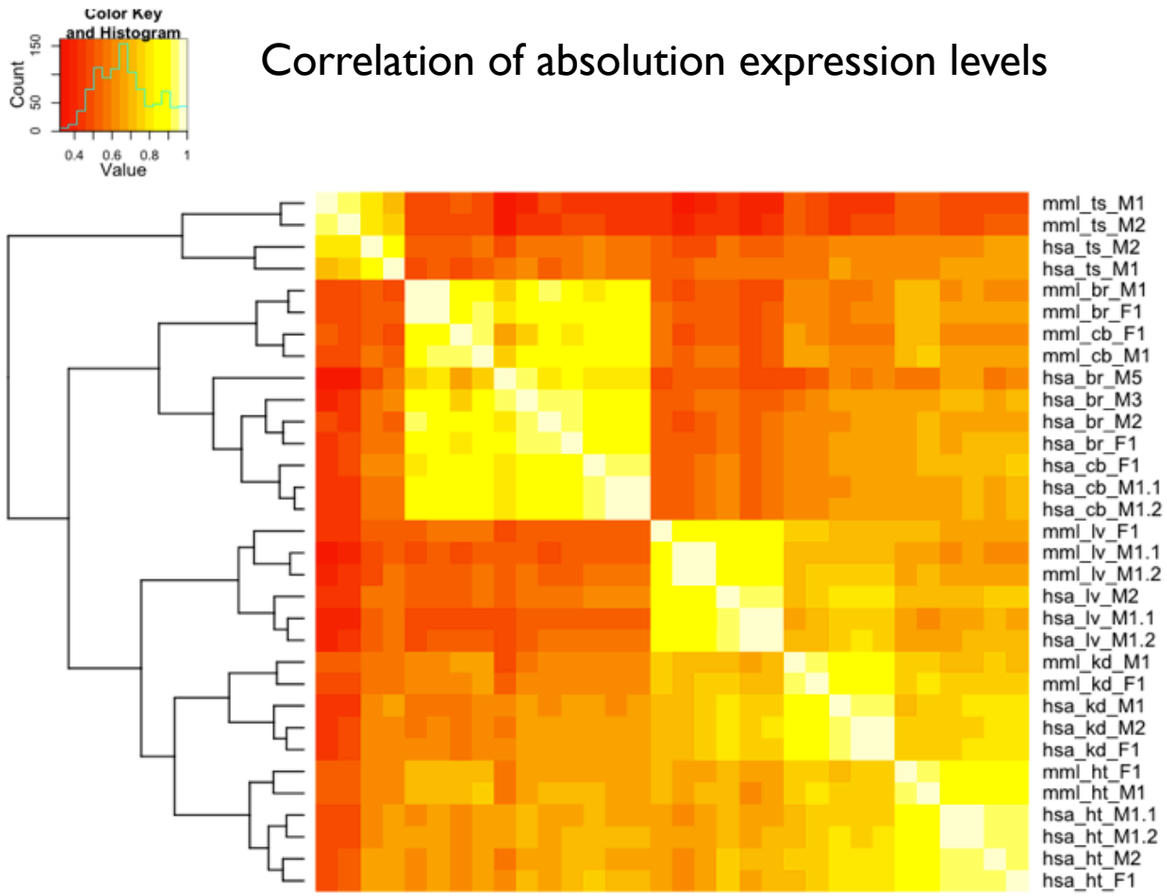
- 10 CEU VS 10 YRI, norm by counts at each event VS norm by seq depth



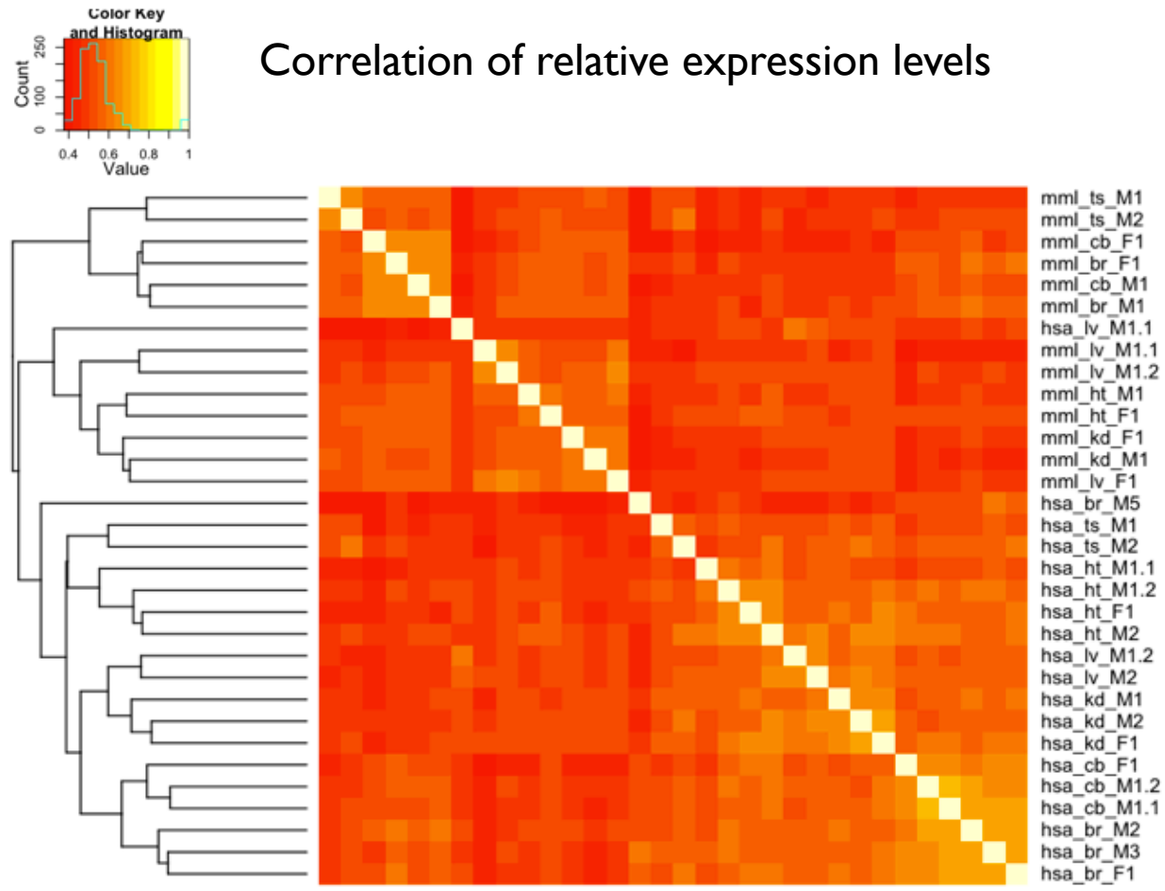


AS & human evolution - result

- 17979 Ensembl(v67) human and rhesus one2one orthologs; 1683 "exon-skipping" events(in 1683 genes) with reciprocal 0.9 liftOver mapping rate
- Gene expression levels in organs are under stronger selection pressure compared to alternative splicing



Correlation of absolution expression levels



Correlation of relative expression levels

- Brains show more differential "exon-skipping" compared to heart, kidney and liver LRT (BHP 0.05): br-109 cb-124 ht- 60 kd-66 lv- 67 ts-141

AS & human evolution - result

- 15930 Ensembl(v67) hsa/ptr/mml one2one orthologs (14380 after filtering); 190 confident "exon-skipping" events(in 180 genes)

- Human-specific using GLM-Poisson-LRT (BHP 0.05): br-1 cb-1 ht- 2 kd-1 lv- 1