Worksheet - 2

- 1. The data underwent hierarchical clustering, employing the Pearson correlation as the distance metric.
- 2. We designated putative GRB target genes below an HCNE concentration peak as human TFs whose orthologs were in conserved synteny with the array of HCNEs in the human:zebrafish alignment. Density peaks and syntenic regions were downloaded from the Ancora Genome Browser.
- 3. Analysis of the mouse cDNA sequence revealed that it encodes at least 44,000 distinct transcriptional units. All RNAs in a transcriptional unit share a common external sequence transcribed from the same genomic strand.
- 4. Calculating multispecies alignment in anticipation of improvements in predictive power.
- 5. The molecular mechanisms of morphological evolution have begun to be elucidated with the development of molecular embryology and the advent of the post-genomic era.
- 6. To gauge the level of enhancer activity enrichment in predicted tissues, we contrasted the occurrence rates of enhancers within the three tissues under investigation against a reference set of 528 previously analyzed sequences. These sequences were identified as developmental enhancers based on stringent sequence constraints but lacked prior predictions of tissue specificity.