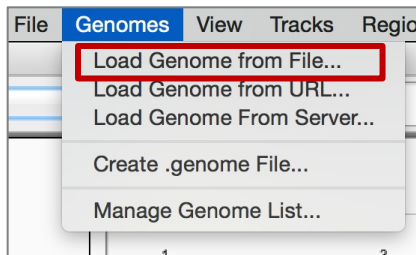


IGV Hands-on Exercise

Load genome from file

1. Clear out the data from the previous exercise: Select *File > New Session*

2. Select **Genomes** > *Load Genome from File*



Note this is the **Genome** menu, not the File menu

and browse to the **igvData** workshop folder, and then to the **genome** subfolder and open **chr1.fasta**

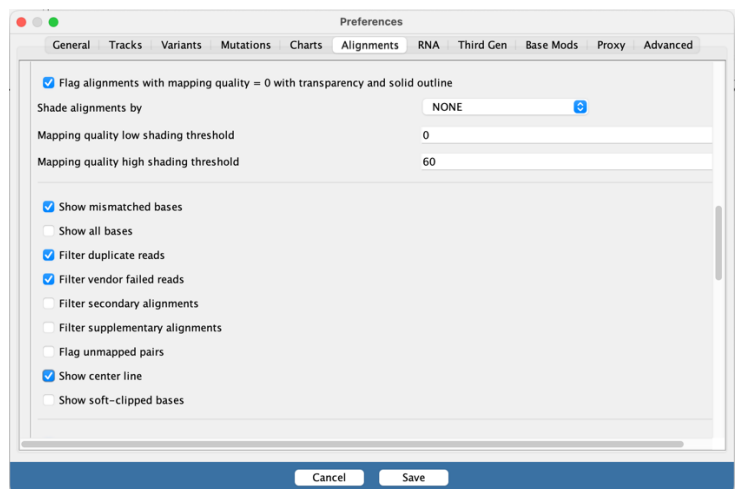
The *chr1.fasta* file contains chromosome 1 from Human hg18.

3. Note in the IGV window: there is no gene track, and no cytoband ideogram in the genome ruler.

IGV hosted genomes package everything together, but you loaded only the FASTA file with the sequence. You can zoom in and out as before, and enter the numeric value of a locus, but you cannot find a gene locus by entering the name in the search box.

4. Ensure show centerline setting is set

Select "View > Preferences > Alignments tab". About 1/2 way down is an option "Show center line", check that.



[Not part of this exercise, but you can use the **UCSC Table Browser** to get a file of gene annotations]

The screenshot shows the UCSC Table Browser interface. At the top is a navigation bar with links: Home, Genomes, Genome Browser, Tools, Mirrors, Downloads, My Data, Help, and About Us. Below this is the 'Table Browser' title and a detailed instruction paragraph. The main form includes several sections: 'clade' (Mammal), 'genome' (Human), and 'assembly' (Mar. 2006 (NCBI36/hg18)). The 'group' is set to 'Genes and Gene Predictions' and the 'track' is 'RefSeq Genes'. The 'table' is 'refFlat'. The 'region' is set to 'genome' with a specific chromosome region 'chr1:1-247249719' entered. There are buttons for 'lookup' and 'define regions'. The 'identifiers (names/accessions)' section has 'paste list' and 'upload list' buttons. The 'filter' section has a 'create' button. The 'intersection' section has a 'create' button. The 'output format' is 'BED - browser extensible data', and there are checkboxes for 'Send output to' (Galaxy, GREAT, GenomeSpace). The 'output file' is 'refSeq_chr1.bed' with a note '(leave blank to keep output in browser)'. The 'file type returned' is 'plain text' with a 'gzip compressed' option. At the bottom are 'get output' and 'summary/statistics' buttons. To the right of the form, a box contains the URL: <http://genome.ucsc.edu/cgi-bin/hgTables>.

5. The cytoband cannot be loaded separately into the genome ruler.

END OF EXERCISE

