

## **Problem Set 4: Genomics**

### **Background**

This problem set will introduce you to working hands-on with some introductory genomic tools.

### **Instructions**

1. Download the complete sequence of the GenBank entry with the accession number `MM_000277.2` as a FASTA file.
2. Translate the DNA sequence to RNA.
3. Using BLAT and the UCSC Genome Browser, align the seequence to the human genome and view the alignment. Take a screenshot of your browser window and attach it to the report.
4. Using PubMed and/or other resources (e.g. The Human Mutation Database), identify at least one disease state of this gene.

### **The report**

Develop a report (I recommend a Word (or other text editor) document) for your problem set that includes answers to all of the questions posed above, showing plots where appropriate.

Save your report as a PDF file and submit your report through the course 2GW site. Clean up your code and submit it as a supplementary file, along with your main report.

### **Due date**

Day 7, Week 7