## Subcommittee on Genetic Modification Orientation for Staffers

## **Problem Set 1: Finding articles (mostly)**

- 1. Do a search that uses silly search terms -- "I want to find something about genetic modification" -- in the following ways:
  - A. Enter it (without quotes) into the library search site. What do you get? Why?
  - B. Enter it (without quotes) into PubMed search site. What do you get? Why?
  - C. Google is much cleverer, but its database is also much broader, so it is often difficult to find research articles in it. Enter the same search terms (without quotes), and try to find a research article concerning genetic modification. Relate your experience.
- 2. Find the research article that forms the basis for this news article:

Park, A (2017).

HIV genes have been cut out of live animals using CRISPR.

Time. 19 May 2016

Give its citation and describe how you found it.

- 3. Choose some <u>research article</u>, perhaps the one you found in Question 2, one that appears in one of the <u>Topic pages</u>, or any other that strikes your fancy. Find a different research article that cites the first. Give its citation and describe how you found it.
- 4. Find a <u>review article</u> on some specific aspect of genome modification. Give its citation and describe how you found it.
- 5. Go into CyanoBIKE, bring up the sequence of Anabaena variabilis, and direct your attention to the gene called Ava0004. Suppose someone possesses the sequence of Anabaena variabilis in the following form:

GGTTTGTCCCAACATGATTACAACTCAAAAGCTAGTTCCAGGTCTAGAGCGTCTGAATGC
TAAGTTGGTGCTTGCTTATATCTTCTATTGTGACGATTAGCAGCAAAGGTGGTAAAGGAT
GGAAATTTCCATTGACAGTTTATGGAGTCAGGTACTAGAGCGCCTACAGATAGAACTATC
TCGCCCCACCTTTGAAACTTGGATTAAAACTGCTAATGCAGAACGCTTAGAAAATAATTG
TCTAGTAATAATTACACCTAACCCTTTTGCACGCAATTGGTTACAAAAGTATTACATCAC

...and on and on through the 6 million+ letters. That's all the person has – letters. What could you tell this person to describe where to find in the sequence just the nucleotides that define gene Ava0004, starting from its start codon and ending at its stop codon?