Source: KBhBIO101Viruses

## 1 | Viral Genetic Mutations

#### 1.1 | Genetic Shift

Whole segments of genome exchange abruptly as two flu viruses infect the same cell to create a new strand. There are two mechnisms by which happens - ( #ASK ) the **crossing-over mechnism** and **genome segment reassortment** 

### 1.1.1 | Crossing-over

Self-mixing of ozaki fragments during v

#### 1.1.2 | genome segment reassortment

(I think that's where two viruses coinfect the same cell, causing cross-talk in swapping segments)

#### 1.2 | Genetic Drift

This usually occurs due an error in a polymerase-driven process, where single/groups of nucleotides flip slowly over time due to mistakes in [KBhBiO101RNAReplication].

The former is an environment-dependent process, where the latter is able to be modeled as it is due to predictable transcription mistake.

#### 1.3 | Mutation w.r.t. [KBhBl0101TypesOfViruses]

# Viral genome size vs. mutation rate

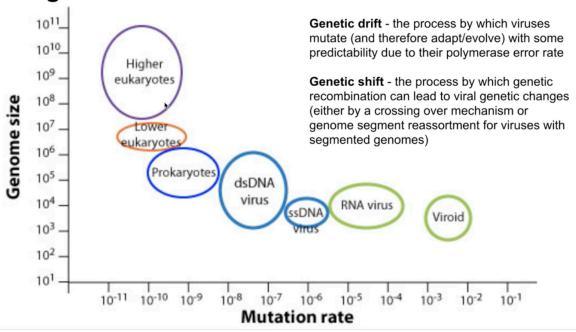


Figure 1: Screen Shot 2020-10-12 at 11.24.39 PM.png

- RNA viruses could mutate more because it does not have checks
- More complex+largest viruses (DNA viruses) harder to mutate