## Hyphy Analysis

- Students will go through the following steps in Hyphy
  - Input Preparation: Import the aligned sequences into Hyphy.
  - Model Selection: Select an appropriate substitution model.
  - Selection Analysis: Run selection analysis using methods such as SLAC (Single Likelihood Ancestor Counting), FEL (Fixed Effects Likelihood), and MEME (Mixed Effects Model of Evolution).

## Results Interpretation

Students will interpret the results of their analysis, focusing on:

- Identifying sites under positive or negative selection.
- Understanding the biological significance of these sites in the context of viral evolution.
- Comparing the results from different methods (SLAC, FEL, MEME) and discussing any discrepancies.