1. Updating the tRNA data and scoring file
   1. Copy the updated data from MitoMAP at the following links to the appropriate sheet of the tRNA data and scoring excel file:
      1. Poly data (use print function): <https://www.mitomap.org/foswiki/bin/view/MITOMAP/PolymorphismsCoding>
      2. Path data (use print function): <https://www.mitomap.org/foswiki/bin/view/MITOMAP/MutationsRNA>
   2. Update the program (write path and poly muts from MitoMap to tRNAs) so that the entire data field is searched by the find end and find start programs. Also update what the final position value is. Note that the variants captured by pubmed search are highlighted and included at the bottom of the pathogenic mutation data sheet
   3. However:
      1. The mutations found by pubmed need to be added into the corresponding tRNA sheet manually
2. Run the “write path and poly muts from MitoMap to tRNAs” program which will create the file: “tRNA data and scoring\_updated” file in the output folder. If you are satisfied with the file, move it into the dataset files folder and replace the original “tRNA data and scoring” file.
3. Run MitoTIP with the desired settings, and it will create the files in the output folder including the “tRNA data and scoring\_scored” file.
   1. Note:
      1. Need to update line 420 and 411 with the search range of the Pathogenic Mutation Reference