

MARINE BIOTECHNOLOGY & BIOINFORMATICS FOR TEACHERS  
 MOSS LANDING MARINE LABS NSF ITEST GRANT  
 TEACHER LESSON PLAN FOR CLASSROOM USE  
**USING THE BLAST SEARCH PROGRAM  
 TO CONFIRM NEW SEQUENCES**

Assuming you have edited the sequence trace in Chromas or Finch and saved it or exported it as a text file...

Copy the sequence by highlighting the whole sequence and select EDIT --> COPY

Then google "NCBI" and select or click on "BLAST"

The first choice under Basic BLAST is "Nucleotide-Nucleotide Blast" - If you make that choice you should see an empty text box titled, " Enter Query Sequence" as in Figure 1 below.

Be sure to select "Other Databases" → "Nucleotide (nr/nt)," because you don't want to limit your search just to human sequences.

Paste your sequence into the search window and click the "BLAST" button.

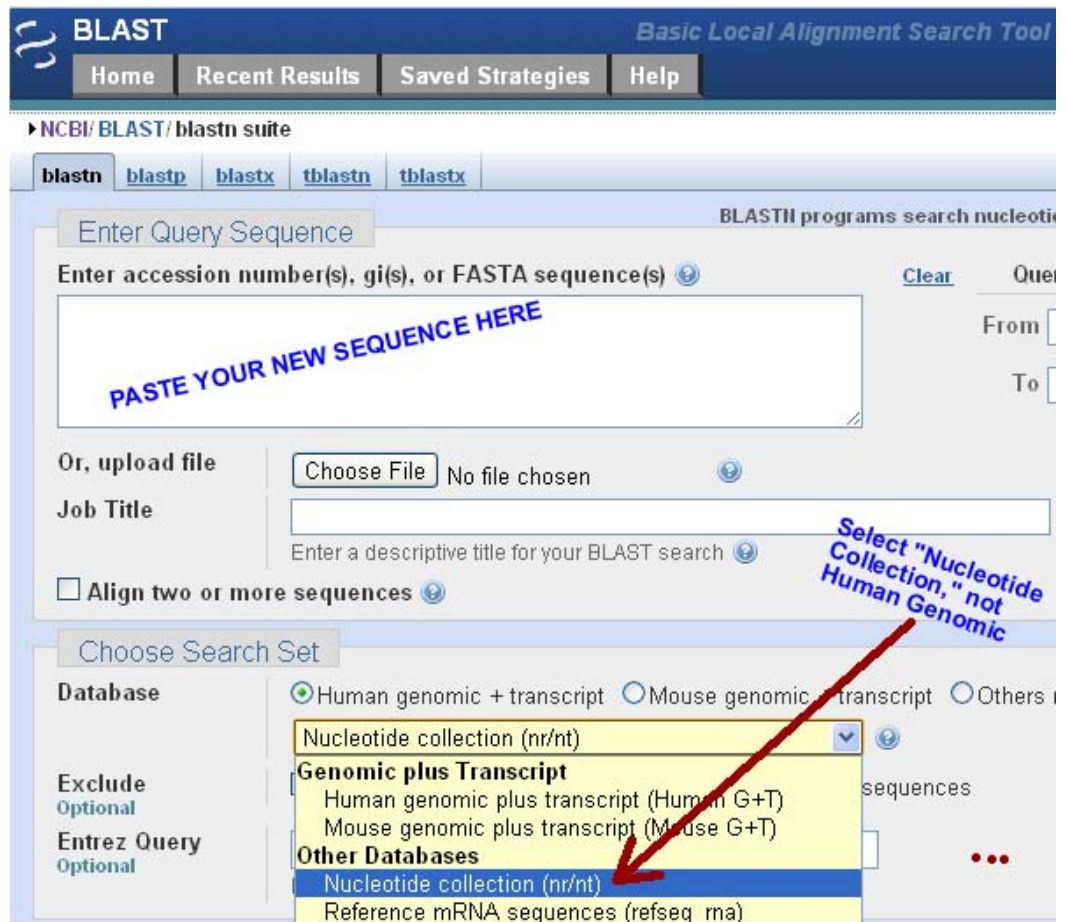


Figure 1 - Interface to the BLAST sequence search program

Wait the requisite number of seconds and then click "format."

Which sequences matched the one from your trace?! Hopefully you got a *Mytilus* species! Otherwise it's "back to the drawing board."