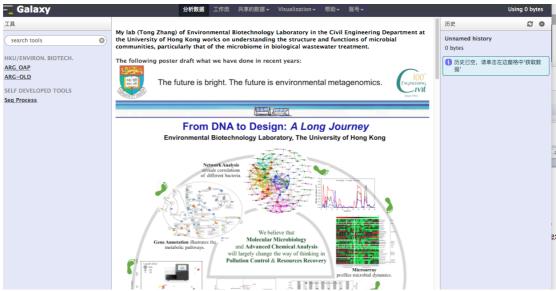
Using ARG_OAP to assign ARGs to type and subtype levels

1. Go to http://smile.hku.hk/SARGs/



 Click ARG-OAP -> Upload Files to upload files generated by Ublastx_stage_one: extracted.fa and meta_data_online.txt into ARG_OAP separately.

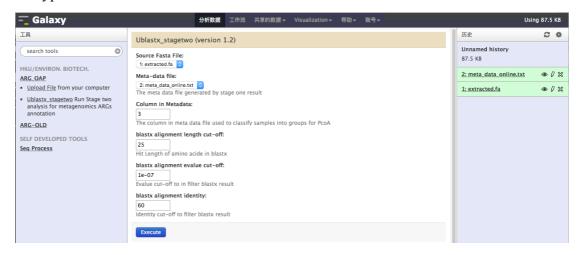


After uploading it would be like this on the history panel:



3. Click Ublastx stagetwo to run the second step to assign ARGs into type and

subtype level.



For Source Fasta File: choose the uploaded extracted.fa

Meta-data file: choose the uploaded meta_data_online.txt

Users can chose the parameters for the similarity search and the column number in the meta_data_online file to be the classification catergory for PcoA plotting colors.

Click **Execute** to perform the analysis.

4. After the step finished, there are four output files on the history panel and user can download them:



The four output files are the final results for ARGs identification results:

- **Files 1, 2** are the PcoA figure for samples of environmental samples from ocean sediment, drinking water system, sewage treatment system and livestocks for ARGs abundance matrix normalized by 16S reads number and cell number separately.
- File 3, 4 are the mother tables for subtype, type and subtype of user samples and environmental samples ARGs abundance of normalization on 16S reads number and cell number separately.

