omics.data.edu.au

How to identify Antibiotic Resistance Genes in Genomic DNA sequences

STEP	Task
1	Go to http://omics.data.edu.au/use/
2	Launch the platform and log in
4	Add the “ABPRI-Data” and “Galaxy-QLD” apps to the toolbar.
5	Open the “ABPRI-Data” app.
6	Log-into the “ABPRI-Data” app using the username and password given to you (you will need to enter **omics** as the domain).
7	Search for “processed” “genomic” data from “Klebsiella pneumoniae”.
8	Send the resultant data files to the GenomeSpace part of the OMICs platform.
9	Locate the data you just sent to GenomeSpace.
10	Drag the 3 fasta (`.fsa`) assembly files onto the “Galaxy-QLD” app (you added this app to the toolbar in Step 4). You will be asked to log in to Galaxy. Use the username and password given to you.
Steps 11-13 are to search for antibiotic resistance genes within the genomic sequence(s).	
11	Do a search for antibiotic resistance genes within the fasta file versions of the 3 assemblies (i.e. the one bacterial chromosome and two plasmid assemblies). Tutorials describing how to undertake tasks and use tools within the OMICS platform and Galaxy-QLD are found under the Training menu link on this page: http://omics.data.edu.au (Hint: From the training website menus, select **Genomics > Finding antibiotic-resistant genes**. When reading this tutorial, be aware that by dragging and dropping data at step 11 above, you will have already imported your 3 fasta files).
13	How many antibiotic resistance genes are there in Klebsiella pneumoniae?
14	Download the 3 lists of antibiotic resistance genes to your desktop.

If you need further assistance, please contact us at omicsdataservices@lists.unimelb.edu.au