

VTPs / Microbial Surveillance + Metagenomics Analysis / Instructions

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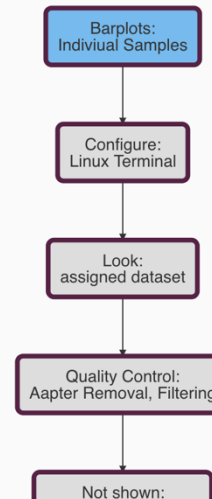
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- 2. Introduction to the project
- 3. Rationale: MetaSub Project
- 4. Overview: Bioinformatics Analysis
- 5. Bioinformatics Tasks
- 6. Beyond this Training
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4 Overview: bioinformatics analyses

This guide is intended to teach you how to teach you one component of metagenomic analysis: how to plot abundances at the “phylum” level for each metagenomics sample.

Throughout the VTP, each participant characterizes, quantifies and visualize microbial metagenomics data from sequenced swabs of public urban environments on their own AWS High Performance Compute instance. In the Linux terminal, they perform genomic data quality control, genome alignment, taxonomic characterization & abundance quantification, and in R, they viaualize results, conduct a principal component analysis. To conclude, they investigate their most abundant species and use the Patric database to consider how they would determine the strains of these species.



| Text ➤

Option 1: Preferred QA UI

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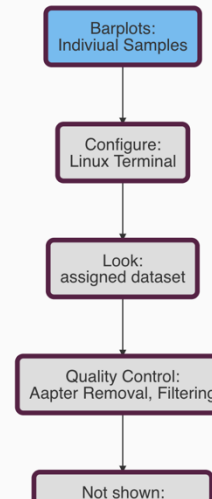
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Interesting. What's AWS?



VTPs

▾ Microbial Surveil...

instructions

Collaborate

Cohort Results

▸ Drosophila + sc...

▸ Variant Calling +...

▸ Single-cell Trans...

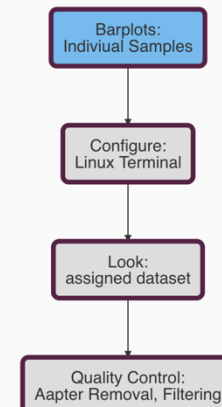
▸ Economics + So...

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What is R?

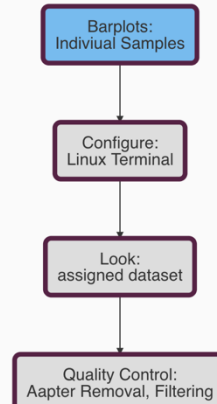


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PA Interesting. What's AWS?

M █

Cursor blinks and prints text to screen word by word

Dots should emerge one by one as AI generates the response and it's printed to the screen

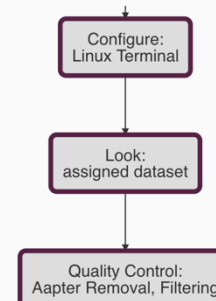
User can type new query into chatbox while AI response is being generated, but they cannot submit it (i.e. `return`/`enter` key is disabled) suuntil the AI's response to the previous query is posted

What is R? ...

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Interesting. What's AWS?



Amazon Web Services (AWS) is a collection of remote computing services (also called web services) that make up a cloud computing platform, offered by Amazon.com. These services operate from 12 geographical regions across the world. It provides a variety of services such as computing power, storage, and databases to name a few. It allows customers to rent virtual computers on which to run their own computer applications. AWS is one of the most widely used cloud computing platforms and is particularly popular among startups and enterprises for its scalability and flexibility.

What is R? ▶

Option 2: Alternate QA UI (Not preferred)

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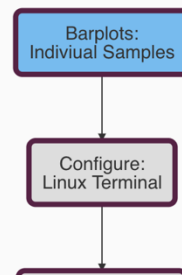
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Thanks.

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You're welcome! Let me know if you have any other questions.

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