**Introduction to bulk RNA-seq data analysis**

*(Experimental design -> Raw data -> Count matrices)*

**Note:** Due to the COVID-19 outbreak, we are cancelling the current workshop scheduled for March 16th and 17th. Please [email us](mailto:hbctraining@hsph.harvard.edu) if you have any questions.

**Next workshop dates:**

*TBD* (updated dates will be added when they become available.)

Note: Registration will open about 3 weeks prior to the workshop dates, and the dates/times above may be updated at that time.

**Description:**

This 2-day hands-on workshop will instruct participants on how to design a bulk RNA-seq experiment, and how to efficiently manage and analyze the data using the command-line interface and high-performance computing.

**Prerequisites?**

This is one of our advanced workshops, and requires registrants to have attended the following Basic workshop(s) offered by our training team within the last 6-8 months.

- Introduction to command-line interface workshop

If you have **not taken the above workshop(s) with us**, but **are already fluent** with shell/bash and already use HMS-RC's O2 cluster, please do the following:

- Complete the registration first
- Then email us directly at hbctraining@hsph.harvard.edu with a description of your knowledge/experience.

**Who should attend?**

Eligible* Harvard researchers who have attended an Introduction to command-line interface workshop recently, and want to learn:

1. How to design a bulk RNA-seq experiment
2. The steps involved in taking raw RNA-sequencing data (Illumina) and generating a count (gene expression) matrix
3. How to compute and assess QC metrics at every step in the workflow
4. How to automate a simple workflow on the cluster using shell scripting
5. How to effectively use HMS-RC's O2 cluster for analysis

**Cost and Registration:**

There is a **non-refundable and non-transferable** $65 registration fee for this advanced workshop.

We will be accepting 20-30 participants on a first-come, first-served basis:

- If you are one of the first 20-30 eligible* registrants, you will receive an email with a link to pay the (non-refundable & non-transferable) $65 registration fee.
- If you are not among the first 25-30 eligible* registrants, you will be added to the waitlist and notified when we open registration for the next iteration of this workshop.

**NOTE:** You will not have a reserved seat for this workshop until you pay the registration fee. Please make sure you pay within the time stated in that email, else you will lose your spot to someone on the waitlist.

**Eligibility requirements:**

* To be eligible to attend this workshop you should fulfill at least one of the following criteria:

- Harvard Medical School researcher in a lab on the Quad, with grants administered by HMS
- Harvard Medical School graduate students
- Harvard researchers whose PIs are associated with the HSCI as Principal or Affiliated faculty

If you are unsure of your eligibility, please register anyways and we will get back to you.
Registration is closed.

(Please check the eligibility requirements above prior to registering)

Questions?

Please contact us at hbctraining@hsph.harvard.edu with any questions.