

Introduction to RNA-seq using High-Performance Computing (HPC)

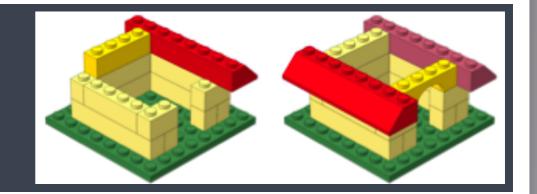
Harvard Chan Bioinformatics Core

in collaboration with

HMS Research Computing

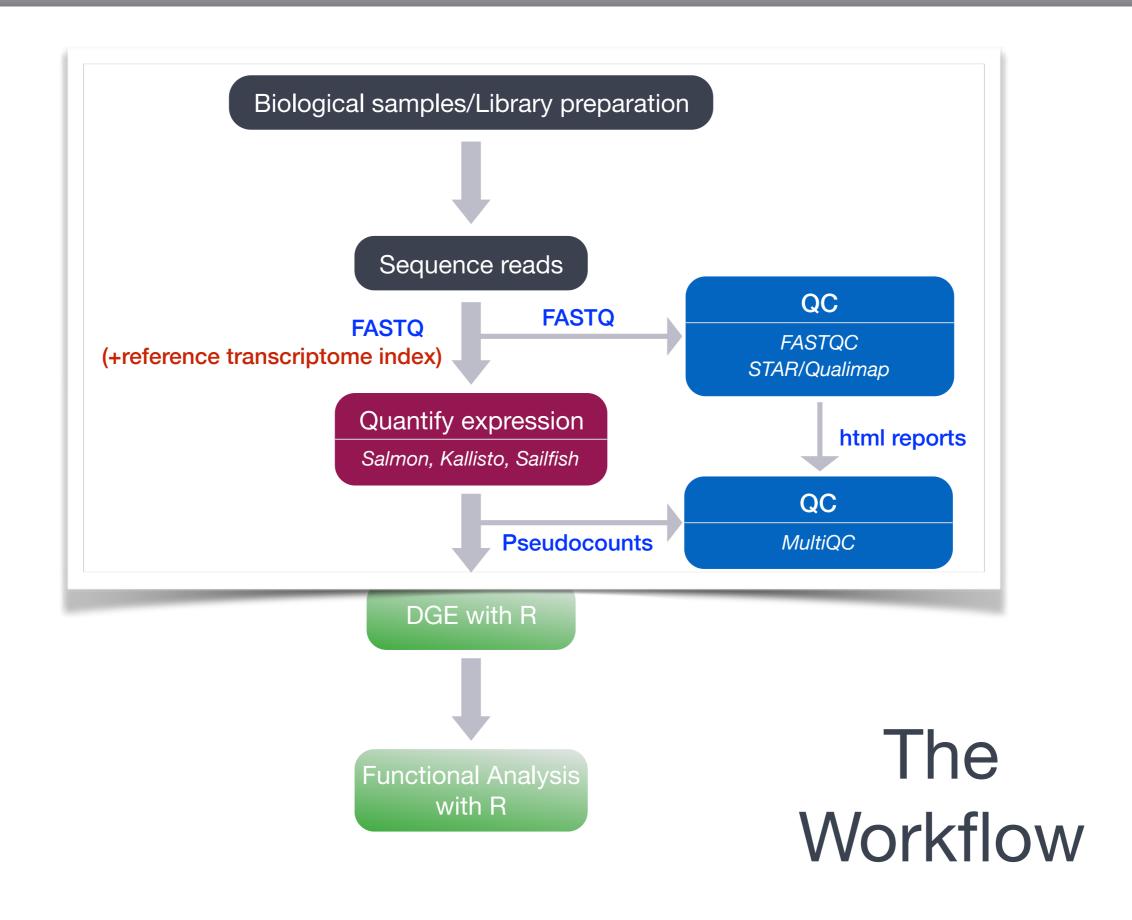
https://tinyurl.com/hbc-rnaseq

Learning Objectives

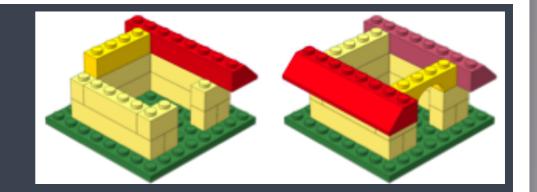


- ✓ Describe best practices for designing a bulk RNA-seq experiment
- ✓ Describe steps in an RNA-seq analysis workflow (from sequence data to expression quantification).
- ✓ Implement shell scripts on a high-performance compute cluster to perform the above steps.

We won't be covering how to perform differential gene expression (DGE) analysis on count data in this workshop. A DGE workshop will be held on April 1st/2nd and the pre-requisite for it is a working knowledge of R (March 12th/13th).



Survey



https://tinyurl.com/hbc-rnaseq-exit

Thanks!

- Kathleen Keating and Andy Bergman from HMS-RC
- Data Carpentry

These materials have been developed by members of the teaching team at the <u>Harvard Chan Bioinformatics Core (HBC)</u>. These are open access materials distributed under the terms of the <u>Creative Commons Attribution license (CC BY 4.0)</u>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



Contact us!

HBC training team: hbctraining@hsph.harvard.edu

O2 (HMS-RC): rchelp@hms.harvard.edu

HBC consulting: bioinformatics@hsph.harvard.edu

Twitter

HBC: @bioinfocore

HMS-RC: @hms_rc