

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

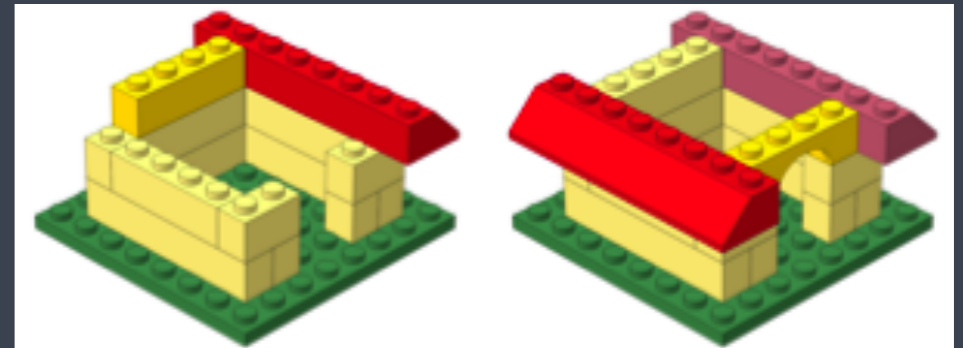
Harvard Chan Bioinformatics Core

in collaboration with

HMS Research Computing

<https://tinyurl.com/intro-to-rnaseq-adv>

Learning Objectives



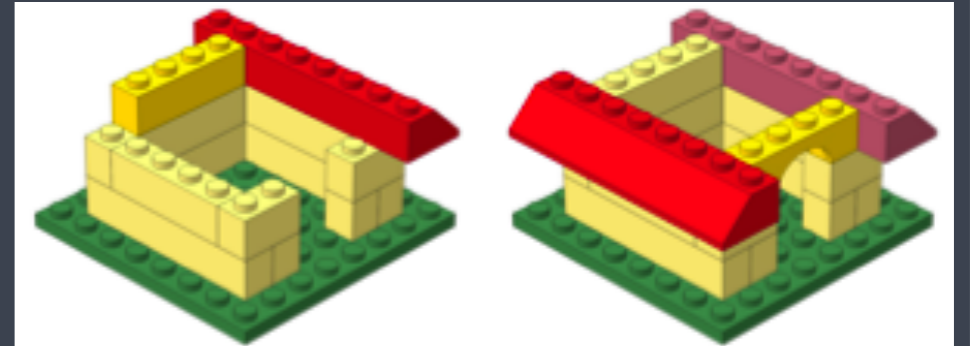
- ✓ Describe best practices for designing a bulk RNA-seq experiment
- ✓ Describe steps in an RNA-seq analysis workflow (from sequence data to expression quantification).
- ✓ Implement shell scripts on a high-performance compute cluster to perform the above steps.

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).

Useful Resources

- *Creating shortcuts or aliases in Bash*
- *Copying files from other remote locations to O2*
- *Creating symbolic links*
- *Obtaining reference genomes or transcriptomes*

Survey



<https://tinyurl.com/rnaseq-adv-exit-survey>

Upcoming workshops

- October 3rd & 4th: **Introduction to R** (*registration closed*)
- October 21st & 22nd: **Introduction to differential gene expression analysis (bulk RNA-seq)**
- November 19th & 20th: **Introduction to R**
- December 2nd & 3rd: **Introduction to single-cell RNA-seq**

Upcoming free, monthly, 3hr workshops

- **November 15th:**

Setting up for Success: Everything you need to know to make your data analysis reproducible

Presented by Julie Goldman from Countway Library

- **December 13th:**

Setting up for Success: Introduction to Version Control (Git)

Bioinformatics Community Networking Breakfast!

- *Free and open to the LMA community*
- *Food and seats are **first-come-first-served***
- *Last Wednesday of every month*

Date: **Sept. 25th, 2019**

Time: **9:00 to 10:30 am**

Venue: **HSPH Building 2,
Room 426**



Thanks!

- Kathleen Keating and Andy Bergman from HMS-RC
- [Data Carpentry](#)

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