

Introduction to Single-cell RNA-seq analysis

Harvard Chan Bioinformatics Core



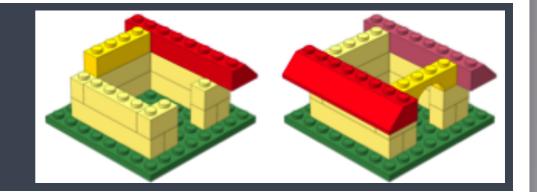
https://tinyurl.com/hbc-scrnaseq-online

Learning Objectives



- ✓ Describe best practices for designing a single-cell RNA-seq experiment
- ✓ Describe steps in a single-cell RNA-seq analysis workflow.
- ✓ Use Seurat and associated tools to perform analysis of single-cell expression data, including data filtering, QC, clustering, and marker identification

Survey



https://tinyurl.com/scRNAseq-online

Useful Resources

Computational packages for single-cell analysis:

http://bioconductor.org/packages/devel/workflows/html/simpleSingleCell.html

https://satijalab.org/seurat/

https://scanpy.readthedocs.io/

https://github.com/seandavi/awesome-single-cell

Online courses:

https://hemberg-lab.github.io/scRNA.seq.course/

https://github.com/SingleCellTranscriptomics

Resources for scRNA-seq Sample Prep:

https://www.protocols.io/

https://support.10xgenomics.com/single-cell-gene-expression/sample-prep

https://community.10xgenomics.com/

Interested in additional training?

All workshop materials are online: https://hbctraining.github.io/main

Sign up for our mailing list:

https://tinyurl.com/hbc-training-mailing-list

Data Management

HMS Data management : https://
datamanagement.hms.harvard.edu/

Click here to sign up for data management related emails

 Countway Library <u>training schedule</u> for short workshops on Research Data Management

Thanks!

Dr. Arpita Kulkarni, Associate Director, HMS Single Cell Core

Get (stay) in touch with us!

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Weight Specific Methods

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