

### Introduction to Single-cell RNA-seq analysis

Harvard Chan Bioinformatics Core



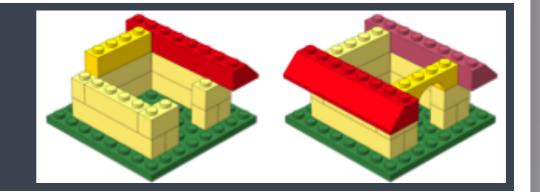
https://tinyurl.com/hbc-scrnaseq-online

## 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: <a href="https://hbctraining.github.io/main">https://hbctraining.github.io/main</a>

Sign up for our mailing list:

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

# HBC Current Topics in Bioinformatics

Generating reports with Rmarkdown	Online R resource from Harvard Catalyst	10/5/2022	1 – 4pm	<u>Register</u>
Introduction to Shell	None	11/2/2022	1 – 4pm	<u>Register</u>
Version Control using Git/Github	Shell	12/7/2022	1 – 4pm	<u>Register</u>

Free and open to everyone at Harvard University and its affiliates.

Register online!

## Data Management

HMS Data management : <a href="https://">https://</a>
 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!

Arpita Kulkarni, Single Cell Core at HMS

## Get (stay) in touch with us!

Training team : hbctraining@hsph.harvard.edu

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**Weight Specific Methods** 

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