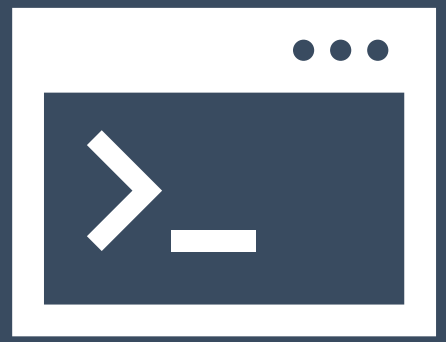
HBC
Harvard Chan Bioinformatics Core

Introduction to the command-line interface (shell)

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

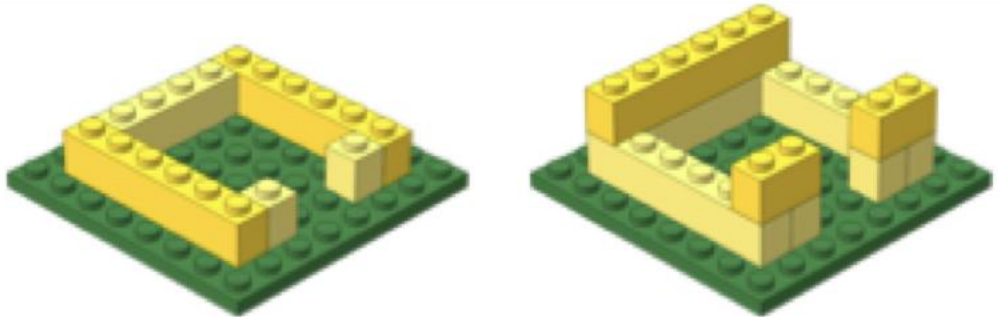


Harvard Chan Bioinformatics Core

in collaboration with

HMS Research Computing

Learning Objectives



- Navigate around the command line interface (bash/shell)
- Create and manipulate text files
- Submit jobs to a high-performance computing cluster

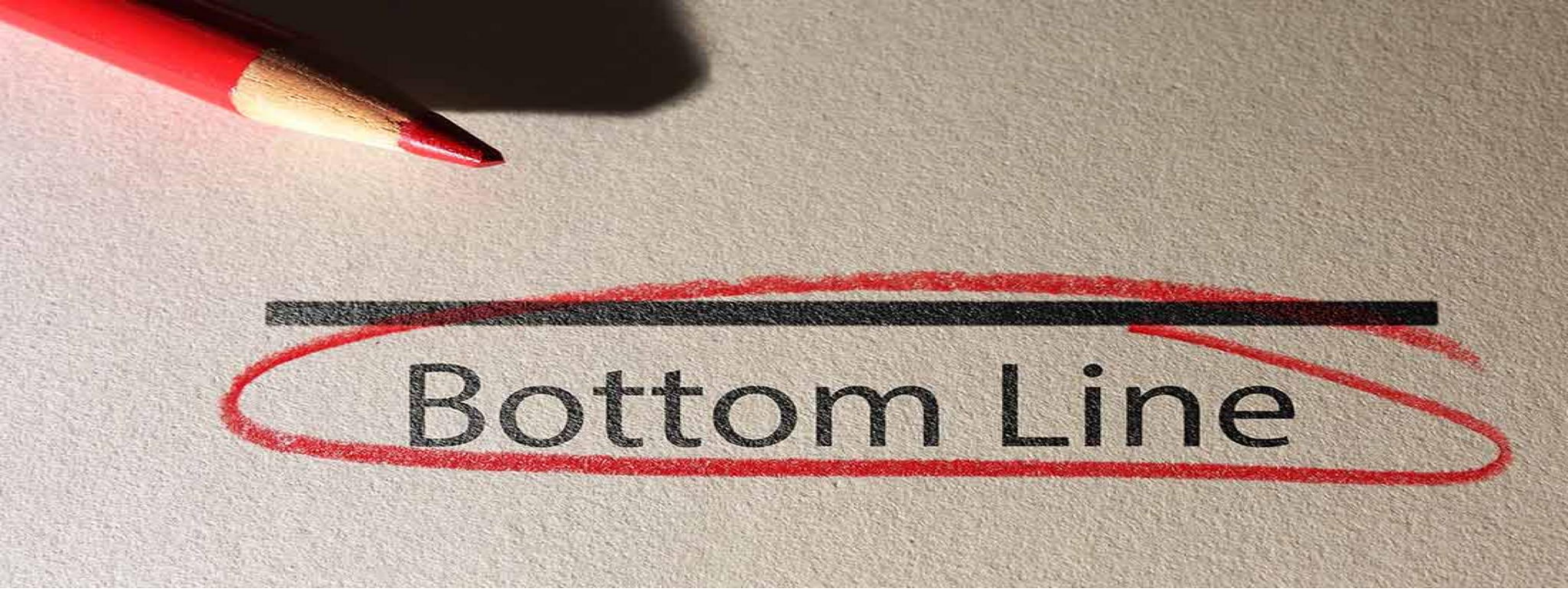


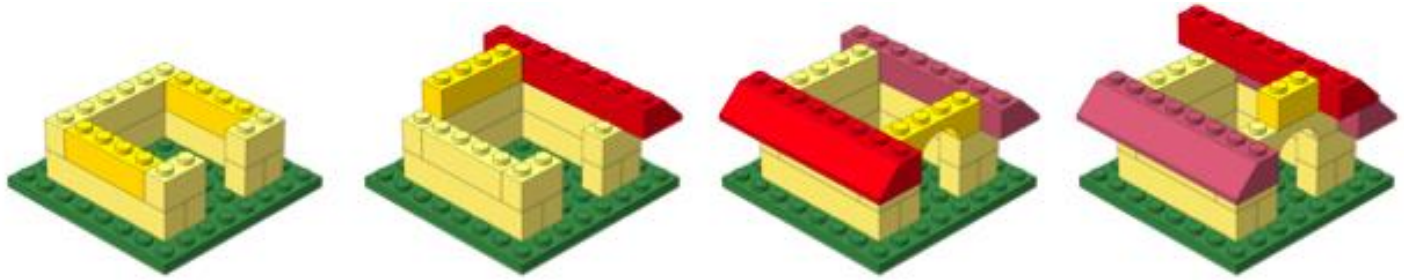
Image source: Balboa Capital Blog

If you plan to process raw high throughput sequencing data yourself, you will need to learn shell.

Exit survey

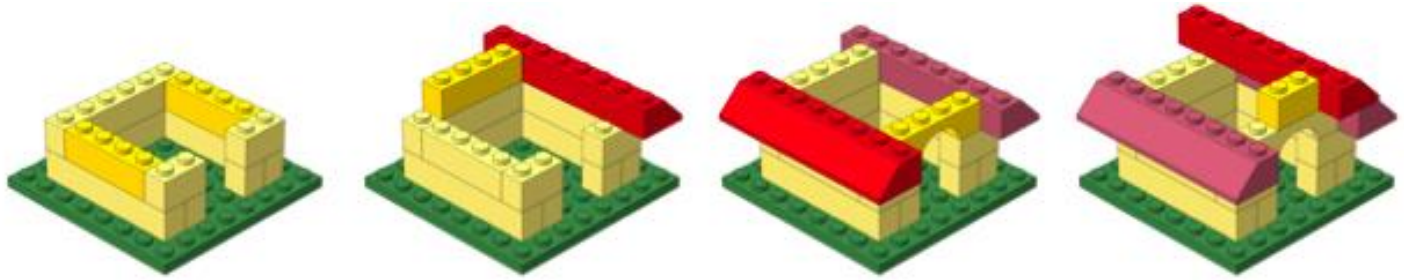
https://tinyurl.com/hbc-shell-exit

Keep building!



Topic	Category	Date	Duration	Prerequisites
Introduction to bulk RNA-seq data analysis Part I	Advanced	February 4, 7, 11	Three 2.5h session	Shell for Bioinformatics
Introduction to R	Basic	February 18, 21, 25 and 28	Four 2h sessions	None
Introduction to SingleCell RNA-seq	Advanced	March 4, 7, 11	Three 2.5h session	R
Introduction to Differential Gene Expression (DGE) Analysis	Advanced	March 18, 21, 25, 28	Four 2h sessions	R
Pseudobulk	Advanced	April 4, 8, 11	Three 2.5h sessions	R

Keep building!

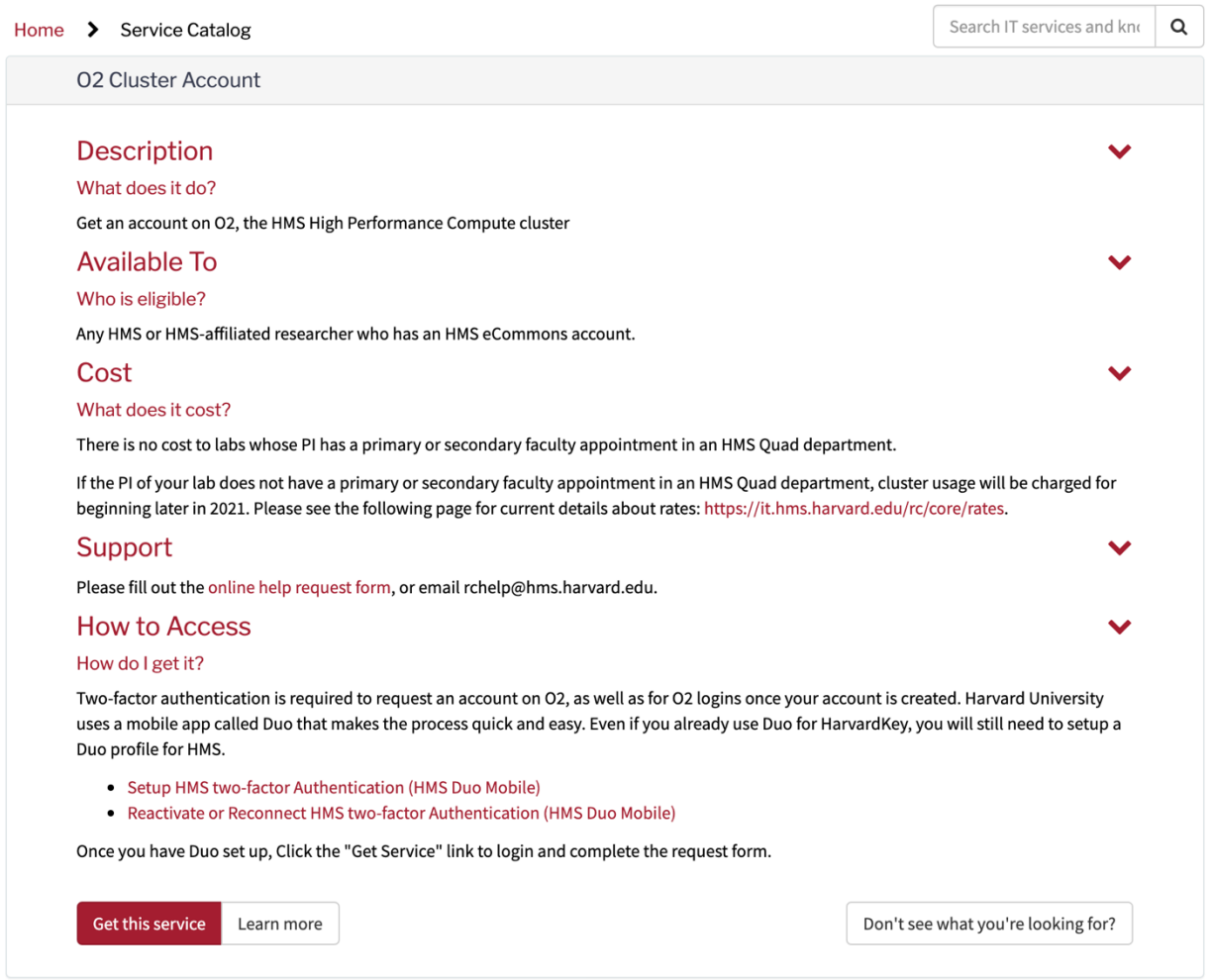


2025 schedule:

Topic	Pre-requisites	Date/Time	Time	Registration
Foundations of R	None	2/19/25	1 - 4 pm	Registration coming
Reproducible Research using Rmarkdown	Foundations of R	3/19/25	1 - 4 pm	Registration coming
"Track Changes" for Your Code: an Introduction to Git and GitHub	Shell	4/16/25	1 - 4 pm	Registration coming
Coding with Others: Managing Conflicts on GitHub	GitHub Part I	5/21/25	1 - 4 pm	Registration coming

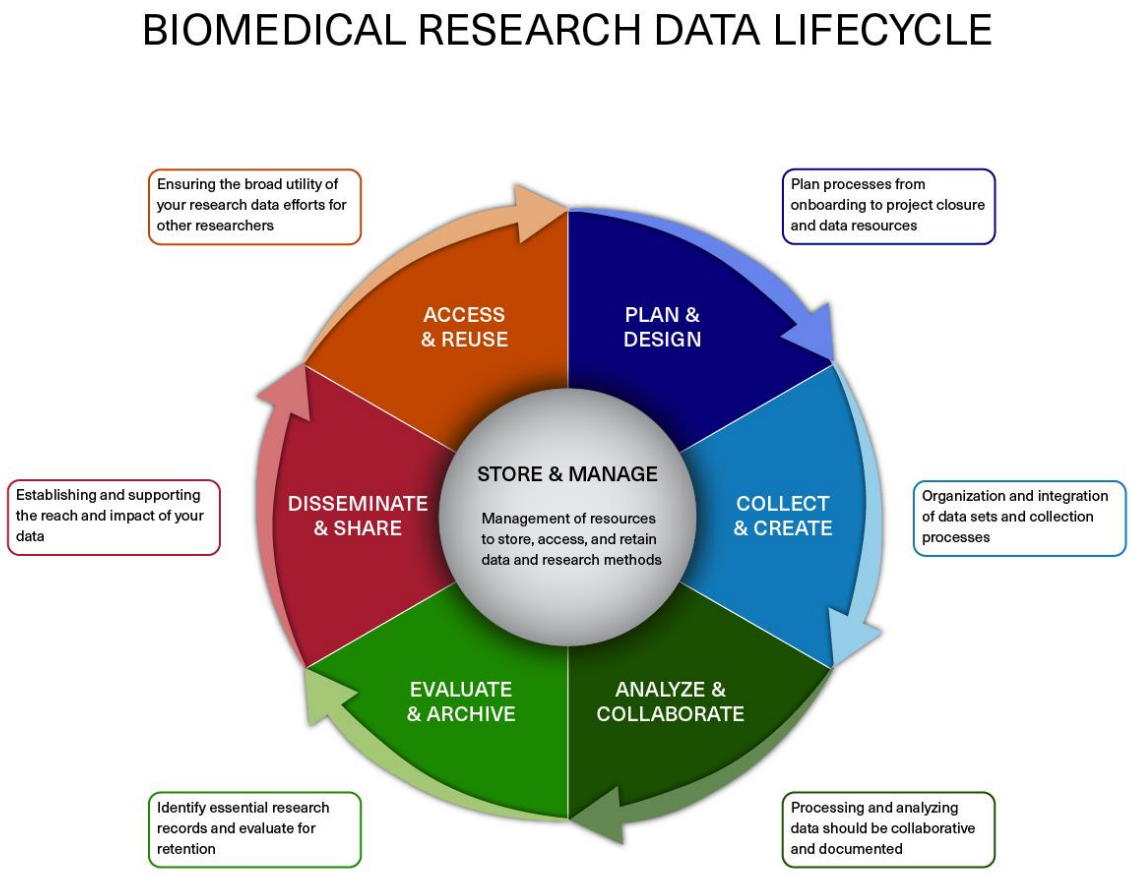
https://bioinformatics.sph.harvard.edu/current-bioinformatics-topics-workshops

Get an O2 account!



HMS IT RC O2- Confluence

Research Data Management (RDM)



Spring 2025 Data Lifecycle Training

Plan & Design

February 11
Data Management Offboarding for Research Projects

March 19
A Guide to Efficient Research Practices

March 26
Tips and Tricks for Writing an Actionable Data Management Plan

May 21
Research Data Stewardship Basics

Collect & Analyze

January 29
Data Literacy: Introduction to GIS

February 19
Foundations in R

March 19
Reproducible Research using RMarkdown

April 16
An Introduction to Git and GitHub

May 21
Managing Conflicts on GitHub

Store & Evaluate

March 10
Introduction to the General Records Schedule

April 7
Managing Paper Records: Off-Site Records Storage

April 21
Managing Electronic Records: Shared Drives and Emails

Share & Publish

February 27
Research Management: Open Access Publishing

April 9
Research Management: Closing Out Your Research

April 23
Data Sharing with Harvard Dataverse

In-person
Virtual

LONGWOOD
RESEARCH DATA MANAGEMENT

Learn More & Register
bit.ly/rdmwg-calendar

https://datamanagement.hms.harvard.edu/about/news-events/rdmwg-calendar

Better RDM practice benefits you

- **HMS Data Management LMA**
  - **Webpage:** https://datamanagement.hms.harvard.edu
  - **Sign up for quarterly email updates**
- **Harvard-wide Research data Management**
  - https://researchdatamanagement.harvard.edu/

Join us for HBC Community Breakfast!

- An opportunity to get to know others in the community
- Free food and beverages
- Great conversations

More Info:

http://bioinformatics.sph.harvard.edu/breakfast/

Thanks!

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

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Contact Us

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