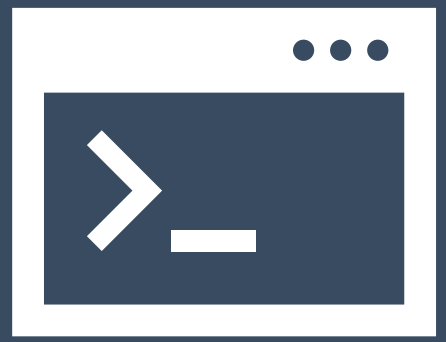
HBC
Harvard Chan Bioinformatics Core

Shell for Bioinformatics

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



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

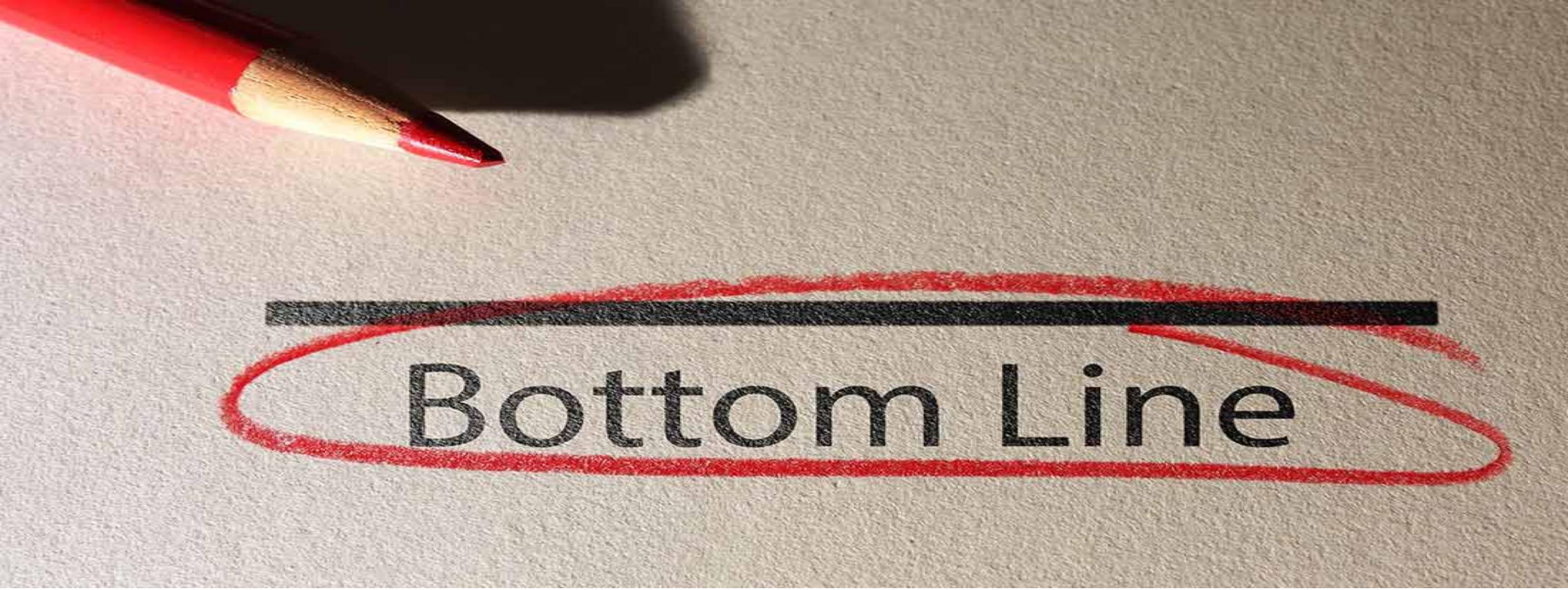


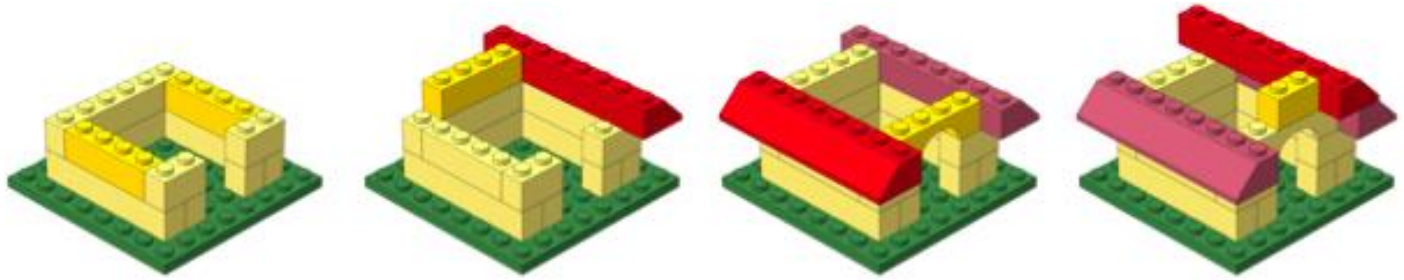
Image source: Balboa Capital Blog

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

Exit survey

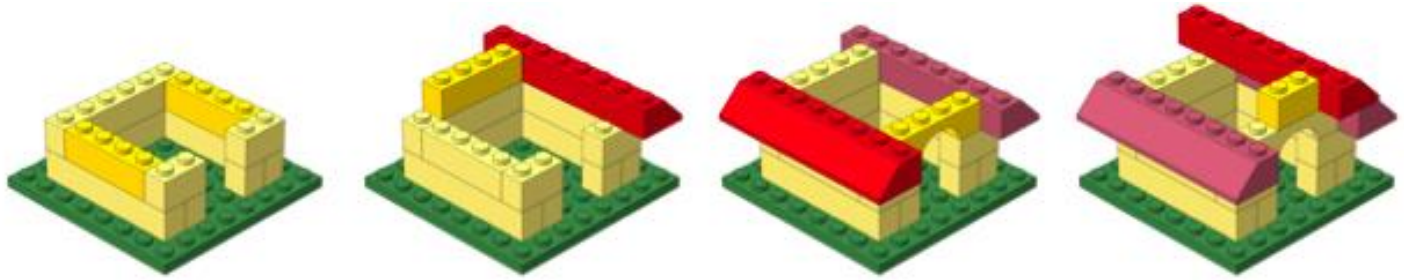
https://tinyurl.com/hbc-shell-exit

Keep building!



Topic	Category	Date	Duration	Prerequisites
Investigating chromatin biology using ChIP-seq and CUT&RUN	Advanced	May 2, 6, 9	Three 2.5h sessions	Shell for Bioinformatics
Introduction to Variant Analysis	Advanced	May 20, 23, 27, 30	Four 2.5h sessions	Shell for Bioinformatics
Introduction to R	Basic	June 3, 6, 10, 13	Four 2h sessions	None
Introduction to Peak Analysis	Advanced	July 8, 11, 15	Three 2.5h sessions	R
Introduction to single-cell RNA-seq	Advanced	September 9, 12, 16	Three 2.5h sessions	R
Pseudobulk and related approaches for scRNA-seq analysis	Advanced	October 21, 24, 28, 31	Four 2.5h sessions	R
Tools for Reproducible Research	Advanced	November 14, 18, 21	Three 2.5h sessions	R

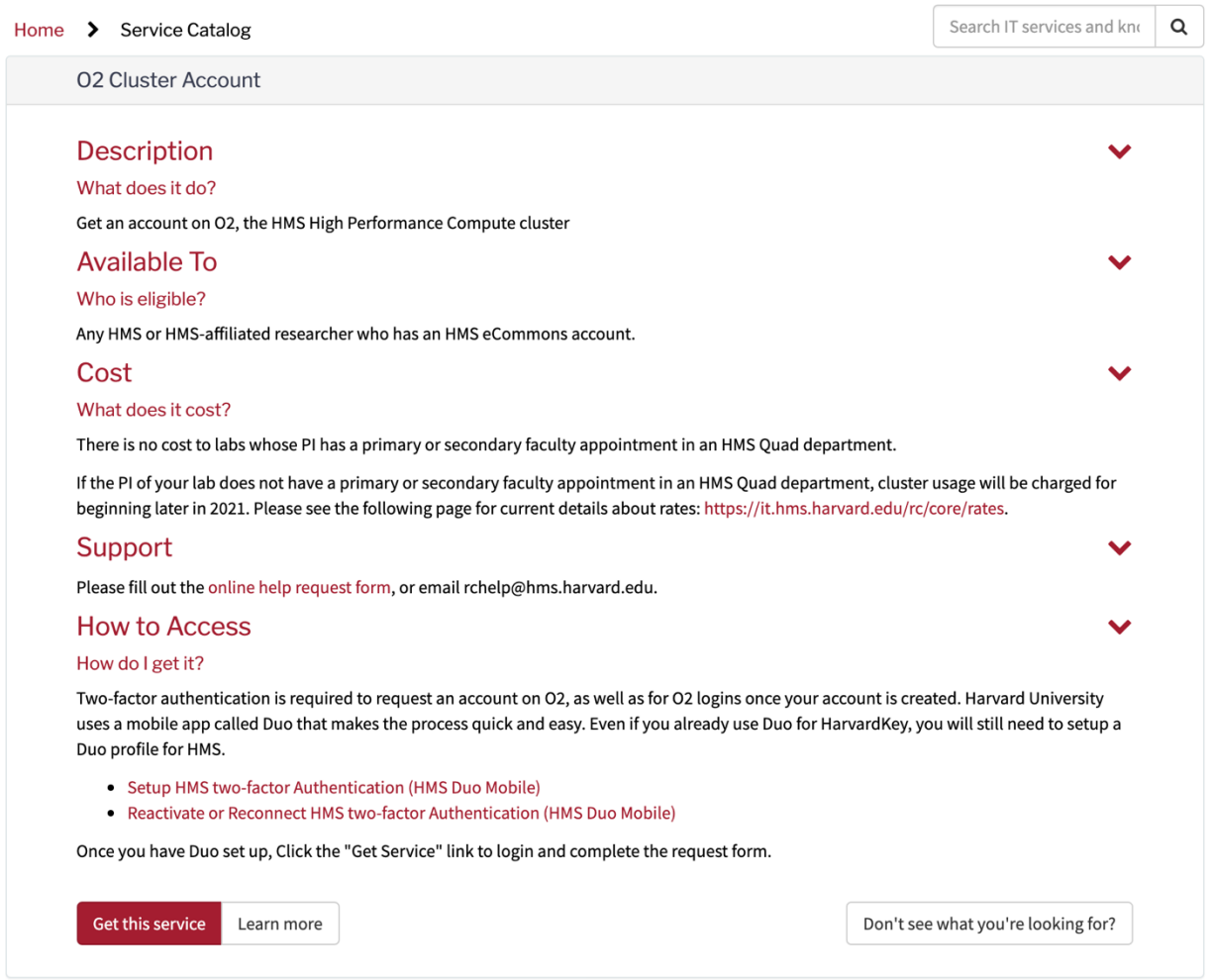
Keep building!



Topic	Pre-requisites	Date	Time	Registration
Coding with Others: Managing Conflicts on GitHub	“Track Changes” for your code: An Introduction to Git and GitHub	5/21/25	1 - 4 pm	Register now!
Statistics for Computational Biology Projects	None	6/18/25	1 - 4 pm	Register now!
Deeper differential expression analysis with shrinkage correction	Foundations in R	7/16/25	1 - 4 pm	Register now!

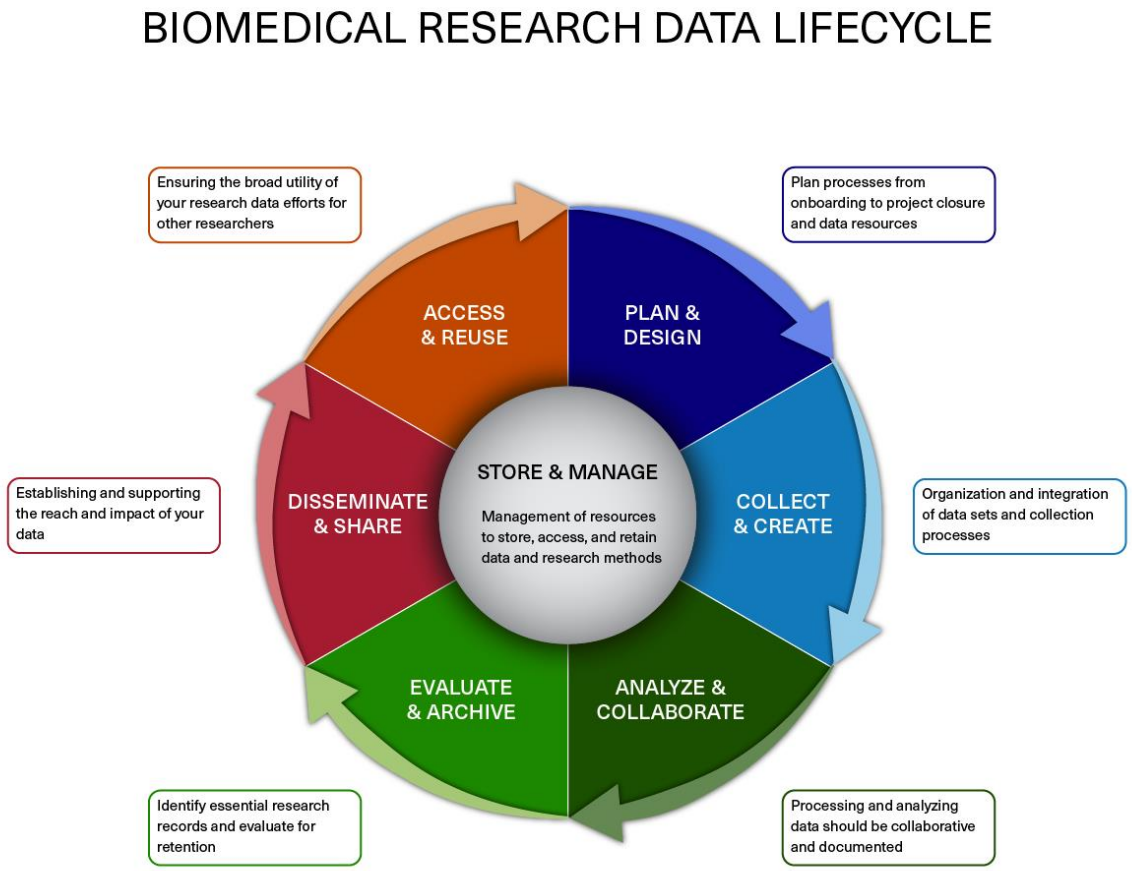
https://bioinformatics.sph.harvard.edu/current-bioinformatics-topics-workshops

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

Thursday May 8th, 2024
9:00 to 10:30am

More Info:

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

Thanks!

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

Contact Us

HBC
Harvard Chan Bioinformatics Core

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