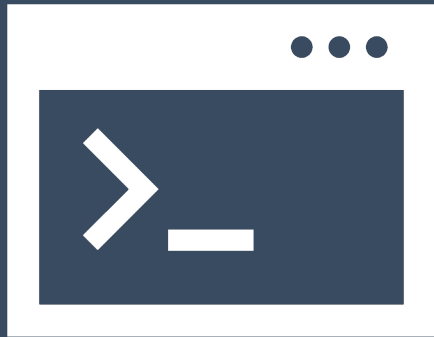


Introduction to Variant Calling

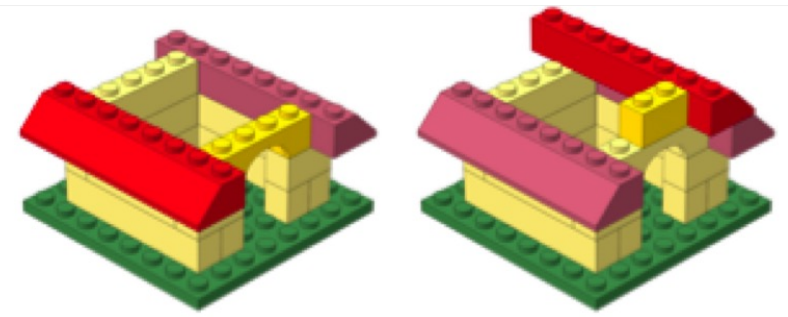
<https://tinyurl.com/Intro-to-variant-analysis>



Harvard Chan Bioinformatics Core



Learning Objectives

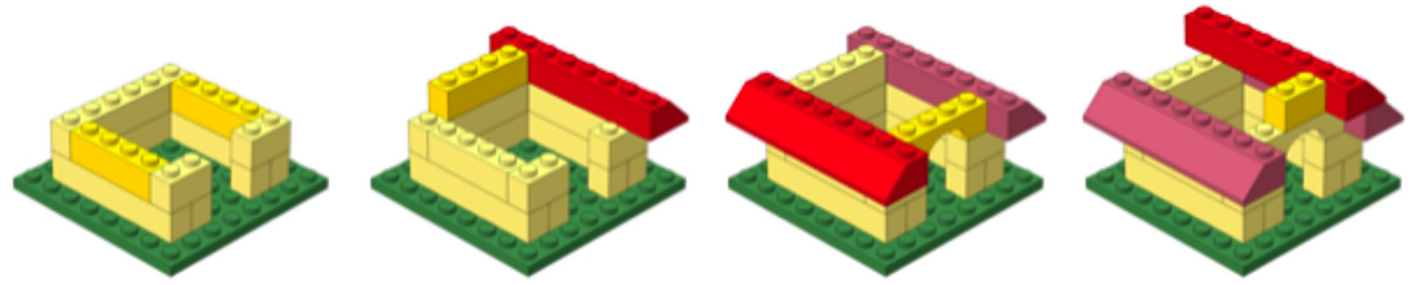


- ❖ Evaluate QC metrics for variant calling
- ❖ Call variants using GATK
- ❖ Filter variants to retain only high-quality variant calls
- ❖ Annotate variants using SnpEff and dbSNP
- ❖ Prioritize variants by their impact
- ❖ Visualize variants in IGV
- ❖ Implement cBioPortal to analyze variants

Exit survey



Keep building!



❖ Upcoming HBC workshops:

❖ Understanding chromatin biology using high throughput sequencing

❖ June 18th, 21st and 25th

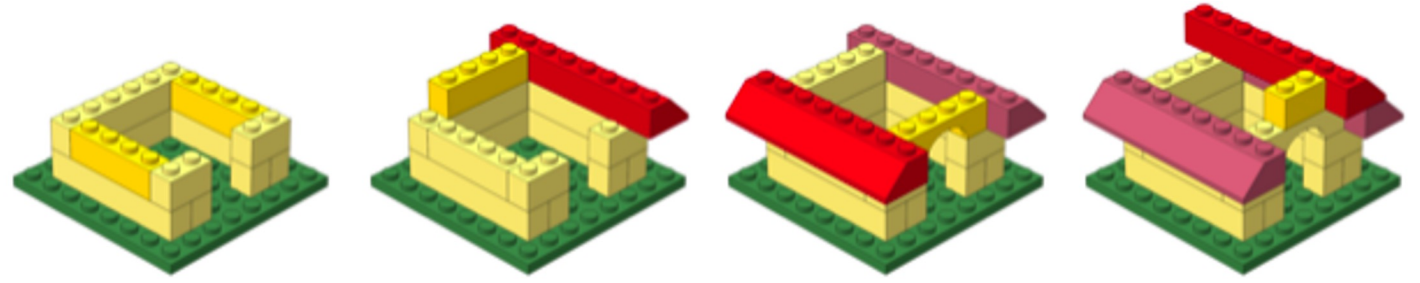
❖ ChIP-seq, CUT&RUN, ATAC-seq

❖ Introduction to R

❖ July 9th, 12th, 16th and 19th

❖ Basic syntax, reading in data, data wrangling and figure creation

Keep building!



Topic	Pre-requisites	Date/Time	Time	Registration
R basics	None	6/26/24*	1 – 4pm	Register!
Publication Perfect I	R basics	7/17/24	1 – 4pm	Coming soon!
Publication Perfect II	R basics	8/21/24	1 – 4pm	Coming soon!
RShiny	R basics	9/18/24	1 – 4pm	Coming soon!

Get an O2 account!

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O2 Cluster Account

Description

What does it do?

Get an account on O2, the HMS High Performance Compute cluster

Available To

Who is eligible?

Any HMS or HMS-affiliated researcher who has an HMS eCommons account.

Cost

What does it cost?

There is no cost to labs whose PI has a primary or secondary faculty appointment in an HMS Quad department.

If the PI of your lab does not have a primary or secondary faculty appointment in an HMS Quad department, cluster usage will be charged for beginning later in 2021. Please see the following page for current details about rates: <https://it.hms.harvard.edu/rc/core/rates>.

Support

Please fill out the [online help request form](#), or email rchelp@hms.harvard.edu.

How to Access

How do I get it?

Two-factor authentication is required to request an account on O2, as well as for O2 logins once your account is created. Harvard University uses a mobile app called Duo that makes the process quick and easy. Even if you already use Duo for HarvardKey, you will still need to setup a Duo profile for HMS.

- [Setup HMS two-factor Authentication \(HMS Duo Mobile\)](#)
- [Reactivate or Reconnect HMS two-factor Authentication \(HMS Duo Mobile\)](#)

Once you have Duo set up, Click the "Get Service" link to login and complete the request form.

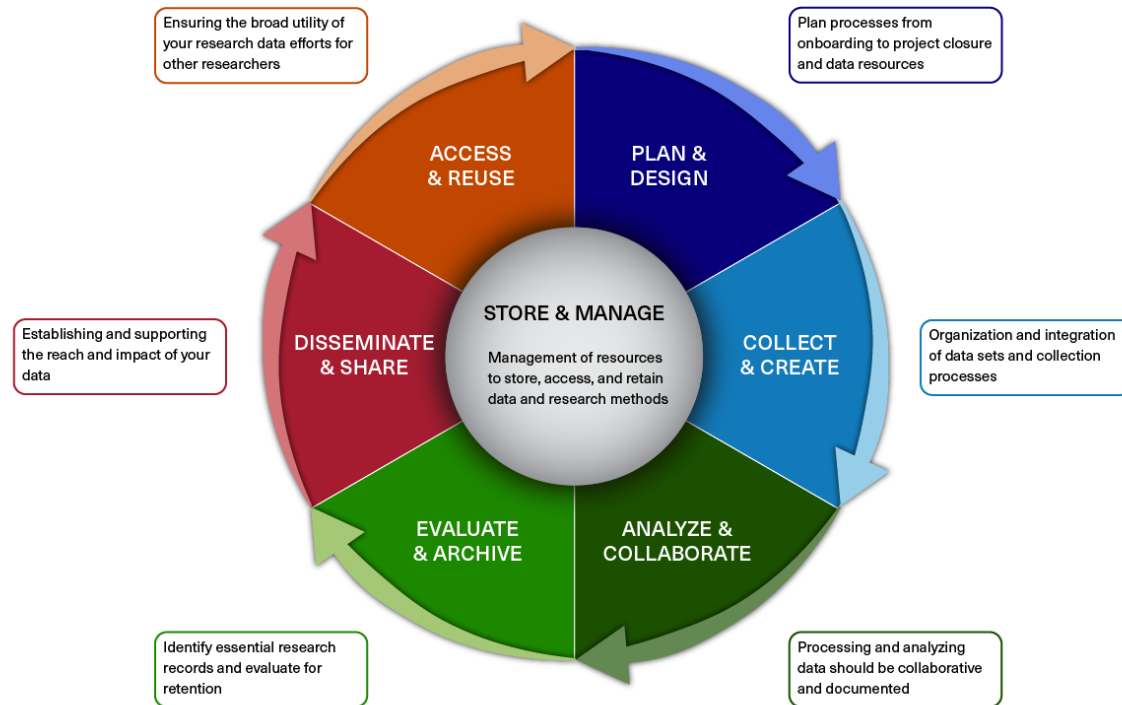
Get this service

Learn more

Don't see what you're looking for?

Research Data Management (RDM)

BIOMEDICAL RESEARCH DATA LIFECYCLE



Date	Time	Event	Location
Jun 14	12pm	Level Up Your GIS Skills: A Three-Part Series (Part 1)	Countway Library Classroom L2-025
Jun 21	12pm	Level Up Your GIS Skills: A Three-Part Series (Part 2)	Countway Library Classroom L2-025
Jun 26	1pm	R basics	Zoom
Jun 28	12pm	Level Up Your GIS Skills: A Three-Part Series (Part 3)	Countway Library Classroom L2-025
Jul 24	12pm	Best Practices for Data Visualization	Zoom
Jul 31	12pm	Plotting like a Pro: Data Visualization with ggplot2	Zoom

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 September 5th, 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

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