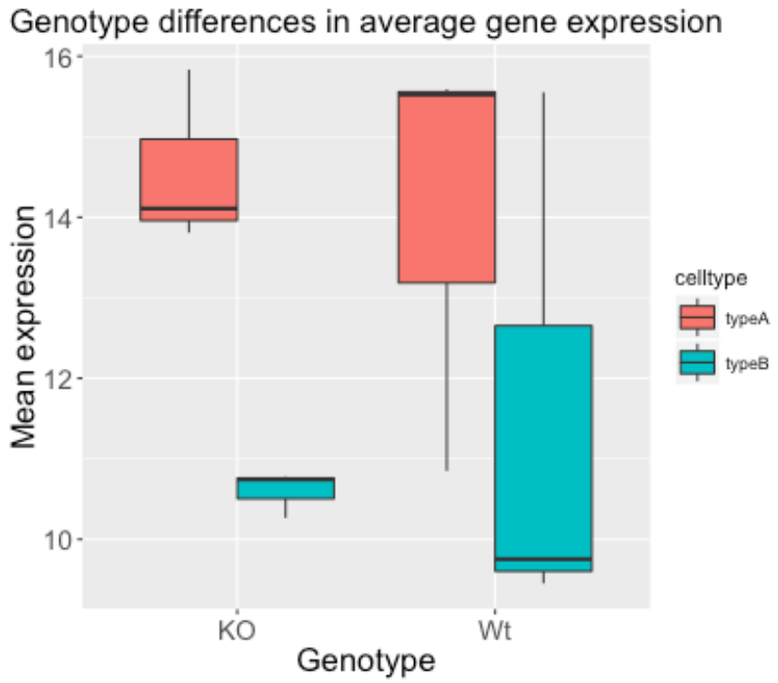


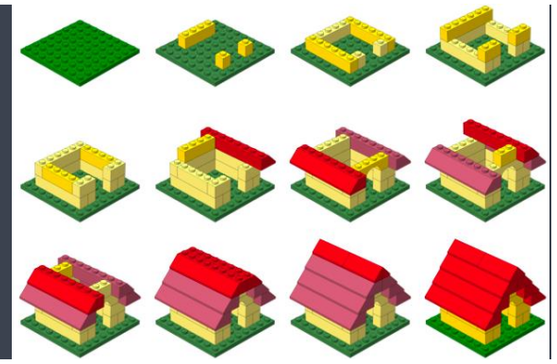
Introduction to R

Center for Computational Biomedicine and

Harvard Chan Bioinformatics Core

https://bit.ly/ccb-intro-r

Learning Objectives



- ✓ Comfortably use RStudio (a graphical interface for R)
- ✓ Fluently interact with R using RStudio
- ✓ Become familiar with R syntax
- ✓ Understand data structures in R
- ✓ Inspect and manipulate data structures
- ✓ Install packages and use functions in R
- ✓ Visualize data using *ggplot2*
- ✓ Utilize pipes, tibbles and functions from the Tidyverse package suite

Exit survey

https://bit.ly/ccb-r-feedback

Interested in additional training?

https://computationalbiomed.hms.harvard.edu/education/workshops-catalog/

Workshops Catalog

Education

- CCB Seminar Series
- Skills Surveys
- Data Analysis Club
- **Workshops Catalog**
- Additional Resources

Summer 2022 Workshops

Workshops Available

The catalog below has information about selected workshops and online learning resources for Bioinformatics, Computational Biology, and Data Management Skills that are available from CCB and across HMS. The catalog includes learning objectives, intended target audience, pre-requisites and registration instructions. All workshops below are intended for HMS graduate students, postdocs, research staff and faculty.

Didn't find what you're looking for? Visit our Additional Resources page or the Harvard Training Portal to browse a larger selection of educational opportunities across HMS!

10/3/2022 - 10/21/2022

October 2022

TUE 4 — October 4 @ 8:00 am - 5:00 pm Introduction to single-cell RNA-seq data analysis (2022)
Introduction to single-cell RNA-seq data analysis (2022)

WED 5 — October 5 @ 1:00 pm - 4:00 pm
Generating reports with Rmarkdown

Interested in additional training?

https://hbctraining.github.io/Training-modules/

Short workshops: Current Topics in Bioinformatics

These workshops are free and open to all researchers at Harvard University and affiliated institutions.

- **Workshops** on bioinformatics methods & related skills.
- Once a month for 3 hours
- Hands-on workshops - be prepared with your MAC or Windows computer
- **Free and open to everyone at Harvard University and its affiliates**
- Will meet the **first Wednesday of the month** (with one exception) **online via Zoom**
- **Sign up at the links below to receive the workshop Zoom link**

Interested in additional training?

https://hbctraining.github.io/Training-modules/

Summer-Fall 2022 Schedule (1pm - 4pm):

Topic and Link(s) to lessons	Prerequisites	Date	Registration
Basics of Python	None	8/10/2022	Closed
R practice exercises	Beginner R or Online R course - Harvard Catalyst	9/7/2022	Sign up!
Generating reports with Rmarkdown	Beginner R or Online R course - Harvard Catalyst	10/5/2022	Sign up!
Introduction to Shell	None	11/2/2022	Sign up!
Version control using Git/Github	Introduction to Shell	12/7/2022	Sign up!

Harvard Catalyst Online Resource

https://projects.iq.harvard.edu/hcatrresource

HARVARD UNIVERSITY HARVARD.EDU

Harvard Catalyst Introduction to R:
An online, hands-on training resource for learning the basics of R
Contact

HARVARD CATALYST
Harvard Clinical & Translational Science Center

HOME Lessons Faculty Supplemental Resources

Welcome to Introduction to R

This **online, hands-on learning resource** will introduce you to using R and RStudio. R is a simple programming environment that enables the effective handling of data, while providing excellent graphical support. RStudio is a tool that provides a user-friendly environment for working with R. This resource is intended to provide both basic R programming knowledge and information on utilizing R to increase efficiency in data analysis.

This comprehensive online learning resource was created in collaboration between Harvard Catalyst and the Harvard Chan Bioinformatics Core. It includes a series of videos explaining fundamental concepts in R and demonstrates the application through live coding. It is geared toward those interested in learning the basics of R for reproducible data wrangling and visualizations (ggplot2), and/or performing data analyses that require a basic knowledge of R.

Resource lessons address the following:

- **R syntax**: Understanding the different 'parts of speech' in R, and introducing variables and functions, demonstrating how functions work, and modifying arguments for specific use cases.
- **Data structures in R**: Explaining the classes of data structures and the types of data used by R.
- **Data inspection and wrangling**: Reading in data from files, and using indices and various functions to subset and create datasets (including the tidyverse suite of packages).
- **Visualizing data**: Visualizing data using plotting functions from the external package ggplot2.
- **Exporting data and graphics**: Generating new data tables and plots for use outside of the R

Oct 25 – CCB Open House

Open House

October 25 @ 1:00 pm - 5:00 pm

Come learn about CCB's educational opportunities and how our Computational Biologists and Data Scientists can help with your research! HMS faculty, staff, postdocs and students are encouraged to attend virtually or in person.

Wine and cheese networking hour to follow the Open House!

Detailed agenda and registration information will be shared as the event gets closer.

Register Here.

Add to calendar

Get (stay) in touch with us!

Sign up for our mailing list:

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

Training email: hbctraining@hsph.harvard.edu

Consulting email: bioinformatics@hsph.harvard.edu

Twitter: @bioinfocore