

Analysis Using R 2025

Faculty: Shraddha Pai, Delaram Pouyabahar

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Part I

Introduction

Chapter 1

Workshop Info

Welcome to the YEAR WORKSHOP Canadian Bioinformatics Workshop webpage!

1.1 Schedule

Time (EDT)	Day 1	Time (EDT)	Day 2
8:30	Arrivals & Check-in	8:30	Arrivals
9:00	Welcome (Nia Hughes)	9:00	Day 1 review Linear mixed models and evaluation (Shraddha Pai)
9:30	Exploratory data analysis and introducing clustering (Shraddha Pai)	10:00	Break (30min)
10:30	Break (30min)	10:30	Short linear model exercise (Shraddha Pai)
11:00	Exploratory data analysis and clustering project (Shraddha Pai)	12:30	Class photo + Lunch (1h)
13:00	Lunch (1h)	13:30	Bioconductor for differential expression (Shraddha Pai)
14:00	Dimensionality reduction (Delaram Pouyabahar)	14:30	Break (30min)

Time (EDT)	Day 1	Time (EDT)	Day 2
15:00	Break (30min)	15:00	Short differential expression exercise (Shraddha Pai)
15:30	Short dimensionality reduction and clustering project (Delaram Pouyabahar)	17:00	Survey & Closing Remarks
17:30	Finished	17:30	Finished

1.2 Pre-work

You can find your pre-work here.

Chapter 2

Meet Your Faculty

Chapter 3

Data and Compute Setup

3.0.0.1 Course data downloads

Coming soon!

3.0.0.2 Compute setup

Coming soon!

Part II

Modules

Chapter 4

Module 1

4.1 Lecture

4.2 Lab

Chapter 5

Module 2

5.1 Lecture

5.2 Lab

Chapter 6

Module 3

6.1 Lecture

6.2 Lab

Chapter 7

Module 4

7.1 Lecture

7.2 Lab