

Bridging Pathology and Genomics: A Practical
Workshop on NGS for Pathologists and
Pathology Researchers 2024

Faculty: INSTRUCTOR AND TA NAMES

October 21, 2024 - October 22, 2024

Contents

I	Introduction	5
1	Workshop Info	7
1.1	Class Photo	7
1.2	Schedule	7
1.3	Pre-work	8
2	Data and Compute Setup	9
II	Modules	11
3	Module 1	13
3.1	Lecture	13
3.2	Lab	13
4	Module 2	15
4.1	Lecture	15
4.2	Lab	15
5	Module 3	17
5.1	Lecture	17
5.2	Lab	17
6	Module 4	19
6.1	Lecture	19
6.2	Lab	19

Part I

Introduction

Chapter 1

Workshop Info

Welcome to the 2024 Bridging Pathology and Genomics: A Practical Workshop on NGS for Pathologists and Pathology Researchers Canadian Bioinformatics Workshop webpage!

1.1 Class Photo

1.2 Schedule

Time (East- ern)	October 21, 2024	Time (East- ern)	October 22, 2024
08:30 - 09:00	Arrivals & Check-in	08:30 - 09:00	Arrivals
9:00 - 9:30	Welcome (Nia Hughes)	9:00 - 9:30	Recap of Day 1 and Introduction to Day 2 (Larry)
9:30 - 10:30	Sequencing Platforms and Technologies (Bernard)	9:30 - 11:00	Sequence Analysis (Larry)
10:30 - 11:00	Break	11:00 - 11:30	Break
11:00 - 12:00	Laboratory Operations and Sample Preparation (Bernard)	11:30 - 13:00	Hands-on Exercise: Sequence Quality and Variant Review (Larry)
12:00 - 13:00	Lunch Break	13:00 - 14:00	Lunch Break

Time (East- ern)	October 21, 2024	Time (East- ern)	October 22, 2024
13:00 - 14:00	Hands-on Exercise/Discussion (Bernard)	14:00 - 15:00	Clinical Reporting pt. 1 (Iain)
14:00 - 15:30	Lab Tours (Bernard)	15:00 - 15:30	Break
15:30 - 16:00	Break	15:30 - 16:00	Clinical Reporting pt. 2 (Iain)
16:00 - 17:00	Data Generated by Different Platforms (Larry)	16:00 - 17:00	Hands-on Exercises (Iain)
17:00 - 17:30	Q&A and Wrap-Up (Day 1)	17:00 - 17:30	Q&A and Wrap-Up (Day 2)
17:30	Finished	17:30	Finished

1.3 Pre-work

You can find your pre-work here.

Chapter 2

Data and Compute Setup

2.0.0.1 Course data downloads

Coming soon!

2.0.0.2 Compute setup

Coming soon!

Part II

Modules

Chapter 3

Module 1

3.1 Lecture

3.2 Lab

Chapter 4

Module 2

4.1 Lecture

4.2 Lab

Chapter 5

Module 3

5.1 Lecture

5.2 Lab

Chapter 6

Module 4

6.1 Lecture

6.2 Lab