NAME OF WORKSHOP YEAR

Faculty: INSTRUCTOR AND TA NAMES

DATES

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Part I Introduction

Workshop Info

Welcome to the YEAR WORKSHOP Canadian Bioinformatics Workshop webpage!

1.1 Schedule

YOUR SCHEDULE HERE

1.2 Pre-work

You can find your pre-work here.

Meet Your Faculty

2.0.0.1 Shraddha Pai

Investigator I, OICR Assistant Professor, University of Toronto

Dr. Pai integrates genomics and computational methods to advance precision medicine. Her previous work involves DNA methylome-based biomarker discovery in psychosis, and building machine learning algorithms for patient classification from multi-modal data. The Pai Lab at the Ontario Institute for Cancer Research focuses on biomarker discovery for detection, diagnosis and prognosis in brain cancers and other brain-related disorders.

2.0.0.2 Chaitra Sarathy

Bioinformatics Specialist Krembil Research Institute

Dr. Sarathy is a computational biologist with industry experience in software development. Her previous research centered around developing multi-scale mathematical models of human systems to characterise biochemical changes in obesity. In addition, she has developed methods based on machine learning and multi-omics integration to identify drug targets in cancer and stratify patients for clinical trials. She currently focusses on characterising genetic malfunctions in neurological diseases.

2.0.0.3 Ian Cheong

MSc. Candidate University of Toronto

Ian is a Master's level candidate in the Department of Medical Biophysics at the University of Toronto. His thesis work in the Pai lab involves analysis of single-cell transcriptomes to find the link between brain development and the development of childhood brain cancer.

2.0.0.4 Zoe Klein

PhD. Candidate University of Toronto

Zoe is a PhD level candidate in the Department of Molecular Genetics at the University of Toronto. Her thesis work in the Reimand lab involves using computational tools to investigate the role of non-coding RNA in cancer.

2.0.0.5 Nia Hughes (she/her)

Platform Training Manager, Canadian Bioinformatics Hub Ontario Institute for Cancer Research Toronto, ON, Canada

— training@bioinformatics.ca

Nia is the Platform Training Manager for the Canadian Bioinformatics Hub, where she coordinates the Canadian Bioinformatics Workshop Series. Prior to starting at OICR, she completed her M.Sc. in Bioinformatics from the University of Guelph in 2020 before working there as a bioinformatician studying epigenetic and transcriptomic patterns across maize varieties.

Data and Compute Setup

3.0.0.1 Course data downloads

Coming soon!

3.0.0.2 Compute setup

Coming soon!

Part II

Modules

Module 1

4.1 Lecture

Here is an example of a pdf embedded:

Sample PDF

This is a simple PDF file. Fun fun fun.

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Here is an example of a YouTube video embedded:

4.1.1 Downloads

[insert your downloads for this module here (ex. datasets)]

4.2. LAB 17

4.2 Lab

[Your lab here]

```
# Your R code here

# For example:
x <- 42
x</pre>
```

[1] 42

```
# Your python code here

# For example:
print("hello world")
```

hello world

```
# Your bash code here
# For example:
#pwd
```

Try running these code "chunks" by pressing the green (left-pointing) triangle next to your code chunks.

You will see the code run in the console and the output provided below the code chunk.

The output of the code will also be produced under the code chunk on your website page.