

# 2024 Workshop Program

## Canadian Bioinformatics Workshop Series

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



#### Date and Location

October 21-22, 2024 - Toronto, Ontario

#### Course Description

The characterization of sequence variants in a patient's tumour is key to individualized cancer care. Next-generation sequencing (NGS) is used widely to identify genetic variants in clinical oncology samples. Clinical laboratory professionals and researchers tasked with interpreting molecular pathology results would benefit from understanding the strengths and limitations of the chemical processes and instruments that generate NGS data. Furthermore, an understanding of the processes by which NGS data are produced and analyzed would help with sample workflow optimization and assay troubleshooting in a clinical lab or research setting. This two-day workshop will cover the distinct sequencing chemistry used by several common NGS platforms, as well as methods for downstream data analysis and interpretation.

Participants will gain an understanding of and develop skills relating to nucleic acid sequencing technologies and their chemistries, NGS data quality control, sequence alignment and visualization, variant calling, online sequence databases and analysis tools, variant annotation, and protecting patient health data.

#### About This Collaboration

OMPRN will fully cover the course registration fee and provide support for travel and accommodation for eligible Ontario-based attendees, including pathologist, pathology residents, MD/PhD clinical laboratory scientists with a Canadian College of Medical Geneticists (CCMG) fellowship and CCMG trainees. Graduate students involved in genomics analysis of human tissue samples may be considered for OMPRN support and are encouraged to apply. For more details, please visit [bioinformatics.ca](http://bioinformatics.ca).

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