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Objectives

You can watch the seminar in this **link**.

Abstract: With decreasing cost of genomic sequencing, cancer research groups are generating large multi-omics and single cell data for various cancer types along with histopathology and radiological images. Researchers face major challenges in secure data management, efficient data analysis and responsible data sharing. At the Ontario Institute for Cancer Research (OICR), the Genome Informatics team has developed such software solutions for the International Cancer Genome Consortium (ICGC), and has made them available to researchers in an open-source software suite called Overture. In addition, we have built a compute cloud called the Cancer Genome Collaboratory enabling researchers to perform analyses on over one petabyte of cancer genomic data. We are continuing to build out the infrastructure of the genomics cloud in close collaboration with the cancer informatics community particularly in the ICGC Accelerating Research in Genomic Oncology (ARGO) initiative and the European-Canadian Cancer Network (EUCANCan).

Affiliation: Genome Informatics Group Director at the Ontario Institute for Cancer Research

Dr. [Christina Yung](#) leads a team of software engineers, infrastructure specialists and bioinformaticians at OICR to build tools that empower and accelerate cancer research discoveries. Dr. Yung and her team develop data portals and full stack software for ICGC initiatives (including ICGC-ARGO and [ICGC's Data Portal](#)), the [Kids First Data Resource Portal](#) and the [NCI Genomics Data Commons](#) amongst other big data projects.

Dr. Yung's previous experience includes managing the [Pan-Cancer Analysis of Whole Genomes](#) (PCAWG) Technical Working Group, and the Cancer Genome Collaboratory (CGC). With her interdisciplinary background in bioinformatics, computational biology, machine learning, cancer genomics and cloud computing, Dr. Yung's work spans multiple scientific disciplines and all cancer types.

Speakers

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Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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