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OICR Genomics is a Clinically Accredited Program

- The Ontario Institute for Cancer Research Genomics Program is an OICR/UHN collaborative initiative that supports basic, translational, and clinical oncogenomics research.
- The group is **CAP/ACD-accredited, CLIA-certified and ISO 15189-compliant** and offers a wide range of services to researchers.



Accreditation and Quality Management

- Well-established Quality Management System that encompasses all aspects of program operation
- Validated and documented "Quality Gates" for assays
- RUO assays meet same QC metrics as equivalent clinical assays

ISO 15189/CLIA-Compliant Quality Management System

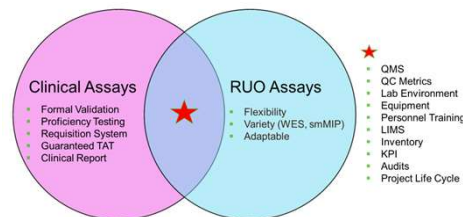


Quality Control Performed at Seven Gates

- QC metrics derived from validation experiments
- Quality Audit trail provided for every clinical case



RUO Assays held at Clinical Standard



Accredited High Throughput Lab Operation with Cutting-Edge Sequencing Instruments

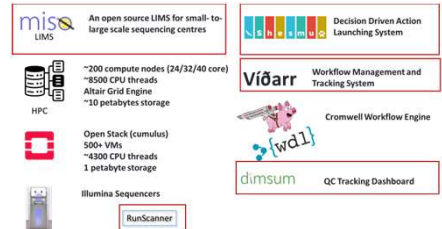
- Uni-directional workflow. Complete physical separation of template-free and template-plus workspace
- Handle DNA and RNA from different types of samples (Fresh Frozen, FFPE, cfDNA)
- High throughput liquid handlers
- Full line-up of state-of-the-art sequencing instruments for Quality Control and Production Sequencing
- First NovaSeq X Plus user in Canada with two units installed as per Summer 2023
- Capable of 1000's of clinical oncogenomic cases (100X/40X T/N)



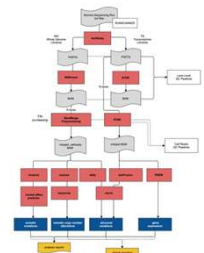
Integrated Bioinformatics, Infrastructure and Clinical Interpretation

- Well-established, in-house developed Infrastructure and Laboratory Information Systems (LIMS)
- Fully-automated and fully-validated Analysis Pipeline using industry's best practices
- Deep knowledge in genome interpretation with automated, expandable system to generate clinically actionable reports

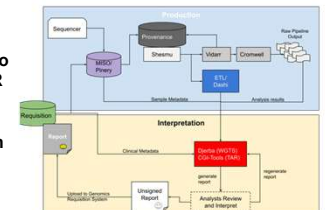
OICR Genomics Infrastructure



Fully-automated WGTS Data Analysis Pipeline



From Requisition to Report: OICR Genomics' Genome Interpretation Workflow



An example of the WGTS Clinical Report



Summary

OICR Genomics is a fully-accredited program specializing in clinical next generation sequencing assays.

The benefit of working with an accredited NGS facility:

- Guaranteed level of quality with transparent audit reports
- Clear deliverables and turnaround times
- Guaranteed retention times for reports and data
- Strict staff training program and proficiency testing
- Secure sample and data transfer
- Regular assessment of customer satisfaction
- Continuous process improvement

OICR Genomics' Objective:

For more than 10 years OICR Genomics has supported research across Canada and around the world by solving genomics and analysis problems for the advancement of cancer treatment and management. The program's mission is to enable complete genomic knowledge that guides the clinical management of cancer patients. To this end the group:

- Evaluates and provides access to emerging genome technologies
- Industrializes research-grade protocols for high-throughput use
- Implements clinical-grade assays for use in genome-guided clinical research trials

Service Offerings

Assays with both Clinical and RUO (Research Use Only) Offerings:

- Whole Genome and Transcriptome Sequencing
- Plasma Whole Genome
- Targeted Sequencing

Assays for Research Use:

- Exome Sequencing
- Single Molecule Molecular Inversion Probes (smMIP)
- cfMeDIP (Methylome Sequencing)
- Enzymatic Methyl(EM)-Seq (Methylome Sequencing)

Unique Three-Department Structure that enables High Quality, High Throughput, Clinical-Grade Genomics

OICR Genomics consists of three functionally distinct departments that work collaboratively to produce clinical-grade genomic data at a high throughput manner:

- Quality Assurance
- Translational Genomics Laboratory
- Genome Sequence Informatics

For more information:
genomics.oicr.on.ca

