





Stop by the NanoString virtual booth to learn more about

Spatial Multi-Omics on GeoMx® Digital Spatial Profiler NanoString Corporate Workshops

AVAILABLE ON-DEMAND, NOVEMBER 16-20

Workshop One

Title: Insights into the Pathogenesis of COVID-19 as Revealed by Gene Expression and Spatial Biology. **Speakers:** Robert E. Schwartz, PhD & Alain Borczuk, MD, Weill Cornell Medicine

Workshop Two

Title: NanoString GeoMx® Panels: Strategies for Clinical Validation. **Speakers:** Christopher Corless, MD, PhD, Oregon Health & Science University

LEARN MORE

Learn more about the GeoMx® Cancer Transcriptome Atlas by visiting nanostring.com/CTA

Learn more about Research
Solutions for COVID-19 by
visiting nanostring.com/COVID19



GeoMx® The Spatial Biology Solution™

Accelerate your research with breakthrough spatial profiling technology to detect up to 96 different proteins or thousands of different RNA targets in situ



Get Actionable Results Where Other Technologies Fail

More FFPE samples meet NGS requirements using the Ionic® Purification System

Klint Rose, Ph.D. | Founder and CSO, Purigen Biosystems

Researchers and clinicians continue to be challenged by FFPE tissue samples with a low abundance of high-quality nucleic acid. FFPE samples frequently fail to produce DNA or RNA with sufficient yield or quality for downstream analyses when conventional extraction methods are used. In this workshop we will review data that demonstrates the ability of the lonic® Purification System to recover sufficient yields of high-quality DNA, RNA, or miRNA from FFPE tissue samples that prove challenging for conventional methods. Researchers seeking a more efficient and reliable method for nucleic acid extraction from FFPE samples should attend.

For more information, contact info@purigenbio.com.



FOR RESEARCH USE ONLY. Not for use in diagnostic procedures.





ABCDEFGHIJKLMNOPQRSTUVWXYZ

10x Genomics Presents: Bridging Digital and Molecular Pathology with Spatial Gene Expression Profiling

Speakers: Dr. Joseph Powell, Associate Professor at the Garvan Institute of Medical Research Florian Baumgartner, 10x Genomics

Spatial profiling of tumors at the molecular level offers key biological information while retaining organization of the tissue and cellular microenvironment. Complement pathological analyses by combining digital imaging with hundreds to thousands of molecular biological signatures, thereby merging the art and science of pathology. In this workshop, hear from Dr. Joseph Powell who will discuss genetic and spatial heterogeneity in human papilloma virus associated cancer of the oropharynx using Visium Spatial Gene Expression from 10x Genomics. Also, learn more about how this solution allows you to locate gene expression in the tissue context, identify cell heterogeneity within localized areas, and identify predictive biomarkers.

AccuGenomics, Inc Presents: SNAQ-SEQ Internal QC Standards: Powerful Tools to Improve the Accuracy of NGS-based Assays SNAQ-SEQ internal standards from AccuGenomics are a powerful technology that improves the accuracy of NGS by providing a QC standard in EVERY sample. SNAQ-SEQ enables higher sensitivity measurements by correcting for systemic and technical background errors in sequencing. In this presentation we will share data on how SNAQ-SEQ is providing unparalleled insights into the detection of low VAF targets in ctDNA and improving confidence in the accurate viral titers of SARS-CoV-2 during sequencing assays. We will demonstrate the power of spike-in controls as an ideal QC approach for NGS assays.

Agena Bioscience Presents: Responding to the COVID-19 Pandemic: Perspectives from a Clinical Laboratory Performing SARS-CoV-2 Testing

The SARS-CoV-2 coronavirus pandemic has created an enormous challenge for health systems, clinical laboratories, public health officials and communities worldwide. Testing shortages remain a bottleneck in the battle to curtail COVID-19 spread. Cost and Throughput are critical considerations when assessing testing technologies. In this session, a high-throughput molecular diagnostic laboratory will present their laboratory's experience with developing and validating a high-throughput, low-cost SARS-CoV-2 assay on the MassARRAY system from Agena Bioscience.

Agena Bioscience Presents: A Comparison of cfDNA Approaches to Guide Targeted Therapy in NSCLC

Advances in molecular oncology using liquid biopsies require the detection of multiple variants at very low allele frequencies. Laboratories today need to implement highly sensitive platforms that provide flexible content at a low price to meet the testing demands.

This session will present a comparison of the Agena Bioscience® UltraSEEK® panels for liquid biopsy testing versus the Roche cobas® and Bio-Rad ddPCR assays.

Amgen Presents: KRAS G12C - A Key Emerging Biomarker in the Pathologic Evaluation of NSCLC

Speaker: Dr Pranil Chandra, DO, FCAP, FASCP. Chief Medical Officer of Genomic and Clinical Pathology PathGroup Brentwood, TN

The rapidly evolving field of precision diagnostics has led to a paradigm shift in non-small cell lung cancer management. This workshop focuses on *KRAS G12C* as a key oncogenic driver and an emerging biomarker in NSCLC, the testing methodologies for *KRAS G12C* as well as practical considerations across the biomarker testing journey.

ArcherDx Presents: Circulating Tumor DNA Assay For Monitoring Disease Progression

Helen Fernandes, PhD
Professor of Pathology
Personalized Genomic Medicine Laboratory
Columbia University Medical Center, NY

This presentation will address the stringent parameters used for validation of the ctDNA assay including precision and reproducibility at the limit of detection. The flexibility of the panel for customization to meet specific applications will be investigated. The utility for monitoring disease progression will be discussed.

ArcherDx Presents: Anchored Multiplex PCR for Molecular Residual Disease Detection in AML Todd Druley, MD - Chief Medical Officer, ArcherDX

Dr. Druley will discuss how Archer's proprietary Anchored Multiplex PCR chemistry facilitates a customizable suite of RUO assays including tumor-informed personalization of liquid biopsy. This personalized cancer monitoring (PCM) assay has significantly lowered the limit of detection from cell free DNA in plasma, which has nearly doubled the lead time for detecting recurrent NSCLC.

AstraZeneca Presents: A Multidisciplinary Team Approach to Molecular Testing in Metastatic NSCLC in the US Program to discuss the following objectives:

- Discuss the importance of tissue acquisition as a critical first step in ensuring quality samples for molecular biomarker testing in metastatic NSCLC
- Review opportunities to improve sample handling and best practices to ensure sufficient tissue is available for molecular biomarker testing
- Review the data supporting the use of concurrent plasma-based testing in metastatic NSCLC, and discuss how this method
 may be implemented into routine clinical practice

AstraZeneca Presents: Molecular Testing for Alterations in DNA Damage Repair Pathway Genes in Ovarian and Prostate Cancer: Why, Who, and How to Test

This program provides information to help guide testing for homologous recombination deficiency (HRD) in ovarian cancer and homologous recombination repair mutations (HRRm) in prostate cancer. Information on the rationale for testing (Why Test), guideline recommendations for testing (Who to Test), and clinically meaningful information on testing options (How to Test) is presented for each tumor type.

Asuragen Presents: A Fast Track for Covering your Bases: How the AmplideX® PCR/CE CFTR Kit* Streamlines the Detection of Diverse Pathogenic Variants in Under Five Hours

Does testing for more *CFTR* mutations yield greater coverage? Do your panels reflect your testing population's diversity? Many *CFTR* panels were principally designed to detect mutations that are common in Caucasians. Recent studies, however, have shown that many *CFTR* carriers may be missed in ethnically-diverse populations, including the US demographic. This workshop will evaluate the quality versus quantity of variants in *CFTR* mutation testing, relate this concept to the design, performance, and simplicity of the AmplideX® PCR/CE *CFTR* Kit*, and translate the benefits of this kit to the streamlined, scalable, and rapid detection of mutations across different populations. *Product in development. Specifications not finalized.

Asuragen Presents: Armored RNA® Controls and Their Utility with COVID-19 Testing and Beyond

In response to the worldwide outbreak of COVID-19, Asuragen developed a number of Armored RNA controls to safely test for the presence of the novel Coronavirus as an alternative to working with live virus. Although Armored controls have been used in IVD assays for more than 20 years, the technology this year has quickly been adopted worldwide to allow companies to rapidly pivot focus. Here we highlight case studies where Armored Controls are being used to not only assist in pandemic research efforts, but push the limits of quantitative diagnostic testing.

ATCC Presents: ATCC's and BEI's Efforts to Support the Scientific Community During the SARS-CoV-2 Pandemic

ATCC and BEI Resources are extremely proud to play a leading role in supporting the scientific community during this unprecedented time. This workshop highlights not only the critical role that ATCC and BEI Resources play in providing front-line COVID-19 researchers with the high-quality authenticated biomaterials necessary to counter the current global threat, but also our own internal research efforts in the genomic analysis of SARS-CoV-2 and the subsequent publication of our genomic data on the ATCC Genome Portal.

Biocartis Presents: An Integrated Testing Algorithm: Ultra-rapid Testing with Idylla™ in Combination with NGS

Turnaround time remains a major issue in biomarker testing in oncology. Laboratories constantly face the challenge to provide accurate results from often limited samples in a timely manner. In this session, get a firsthand perspective from Dr. Maria Arcila of Memorial Sloan Kettering Cancer Center on how she delivers rapid EGFR and KRAS results alongside comprehensive NGS profiling, fusion testing, and integrates liquid biopsies into her laboratory's workflow.

Biocartis Presents: SeptiCyte® RAPID: A Host Response Test for Early Diagnosis of Sepsis and COVID-19 Triage

Sepsis is defined as a life-threatening organ dysfunction caused by a dysregulated host response to infection. From the accumulated published reports of severely ill COVID-19 patients this is what critical care physicians are seeing in the ICU. This dysregulated immune response associated with viral infection can be detected using a novel diagnostic test, SeptiCyte® RAPID, which quantifies a specific gene expression signature via RT PCR. The workshop will cover SeptiCyte® technology, analytical and clinical validation together with how the test runs on the Idylla™ platform, using a single-use, multi-chambered fluidic cartridge with all steps fully automated and completely integrated.

Bionano Genomics Presents: Next Generation Cytogenomics: High Resolution Structural Variation Detection by Optical Genome Mapping

Join the Bionanano for an on-demand worskshop in the virtual Corporate Workshop Theater.

Bio-Rad Laboratories, Inc. Presents: Ultrasensitive Viral Monitoring in HPV-associated Oropharyngeal Cancers

This seminar aims to: (1) review the causal association between oropharyngeal head and neck cancers and the human papillomavirus (HPV), (2) discuss the development of ultrasensitive, digital droplet (dd)PCR assays to detect HPV, and (3) explore current and future clinical applications of HPV cell-free (cf)DNA in disease screening, therapeutic monitoring, prognostication, and surveillance.

Glenn J. Hanna, M.D. Medical Oncologist | Center for Head & Neck Oncology

Dana-Farber Cancer Institute
Assistant Professor of Medicine | Harvard Medical School

Bio-Rad Laboratories, Inc. Presents: Molecular Diagnostic Laboratories as High-Reliability Organizations

The concepts and practices of High-Reliability Organizations (HROs) have historically been applied in critical industries such nuclear energy, airlines, and space programs, but have more recently been implemented within healthcare settings.

The Agency for Healthcare Research and Quality (AHRQ) describes high reliability as a condition of persistent mindfulness within an organization. Furthermore, that healthcare HROs relentlessly prioritizes patient safety over other performance pressures

In this presentation, the speaker will provide his perspective on applying HRO characteristics in molecular diagnostic laboratories and barriers to overcome to ensure the highest level of patient safety.

Bio-Rad Laboratories, Inc. Presents: Droplet Digital PCR for Diagnosis, Monitoring and Surveillance of COVID-19

The rapid spread of SARS-CoV-2 to numerous areas throughout the world necessitates preparedness and response in healthcare and lab facilities. The availability of specific and sensitive assays for the detection of the virus are essential for accurate diagnosis of cases, assessment of the extent of the outbreak, monitoring of intervention strategies, and surveillance studies. This seminar aims to (1) review the performance of the highly sensitive Bio-Rad SARS-CoV-2 ddPCR Kit on clinical specimens, and (2) explore current and future applications of Droplet Digital PCR with clinical sample pooling as well as wastewater surveillance.

Canexia Health Presents: Making the Case for Bringing Precision Oncology Testing In-house in Complex Healthcare System
Developing the business case for bringing cancer testing in-house can be a daunting task for laboratory, pathology, and other
scientific professionals. In this presentation, Dr. Gregory Tranah, of Sutter Health, discusses opportunities and challenges that
bringing in-house testing to a large, complex, health system presents. Dr. Tranah will discuss critical success factors such as
personalization, portability, safety, and accessibility for others who are considering embarking on this path.

Cepheid Presents: Easier and Faster BCR-ABL Monitoring with Cepheid's Xpert® BCR-ABL Ultra1

Traditional BCR-ABL monitoring entails numerous and complex steps that need to be conducted in large and divided spaces to avoid amplicon contamination. This multi-step process increases the time to result and requires several hours of technician time and training.

Cepheid's Xpert® BCR-ABL Ultra lab in a cartridge solution delivers test results in less than 3 hours and technicians can perform ondemand testing with no need for sample batching.. A hands-on time of less than 30 minutes along with minimal instrument footprint improves workflow in the lab.

Furthermore, Cepheid is excited to offer a complete solution for monitoring BCR-ABL with the forthcoming BCR-ABL Ultra p190* test. BCR-ABL Ultra p190 will be designed to have a similar workflow as Xpert® BCR-ABL Ultra, with time to result in less than 3 hours.

For easier, faster BCR-ABL monitoring, come learn more at Cepheid's corporate workshop about the ultimate solution, Xpert® BCR-ABL Ultra and upcoming BCR-ABL Ultra p190.

1. IVD. In Vitro Diagnostic Medical Device. Not available in all countries.

ChromaCode Presents: Revolutionizing Multiplex Real-Time and Digital PCR through Data Science during the COVID-19 Pandemic and Beyond

Now, more than ever, labs need the ability to maximize testing throughput without additional instrumentation or workflow changes. This presentation highlights the ability of ChromaCode's novel HDPCR technology to increase multiplexing capabilities and throughput for COVID PCR testing and the benefits of the company's unique data science approach to qPCR and ddPCR applications. Glen Hansen, PhD, of Hennepin County Medical Center will share his experience using the new COVID+ Panel to test for SARS-CoV-2, Influenza A, Influenza B, and RSV on various patient populations. Additionally, ChromaCode's Chief Technology Officer, Aditya Rajagopal, PhD, will discuss advances in the technology and its application for Digital PCR.

COMBINATI Presents: Fighting COVID-19 beyond testing – Monitor Wastewater, Quantify Viral Load and Resolve Inconclusive Clinical Samples Using the Absolute Q Digital PCR Platform.

Despite a global research response and widespread testing efforts, many challenges remain in the battle against SARS-CoV-2, including resolving false negative and inconclusive test results from symptomatic patients, accurately quantifying viral load to better understand disease course, and effective wastewatermonitoring to ensure community health. Combinati's Absolute Q Digital PCR platform has the unique ability to utilize 95% of the input sample and consistently generate 20,000 partitions - making it ideally suited for the above-mentioned application, which requires high precision, accuracy, and reliability. We will present results demonstrating reliable quantification of viral load without a standard curve, resolution of inconclusive COVID-19 bio-banked samples, and identification of rare SARS-CoV-2 targets from wastewater, all using the Absolute Q – the most accurate dPCR platform.

^{*}This product is still in development. Not for diagnostic use. Has not been reviewed by any regulatory body. May not be available in all countries

DiaSorin Molecular Presents: Congenital CMV: Underdiagnosed and Underappreciated

Congenital CMV is the most frequent infectious cause of neonatal malformation in developed nations. It is more prevalent than other neonatal conditions such as spina bifida and Down syndrome, but is under-recognized and largely unknown among pregnant women. Congenital CMV causes hearing loss, neurological impairment and even death, and timely diagnosis and treatment can minimize severity and reduce disease burden.

This presentation will address fundamentals of congenital CMV infection and diagnosis as well as screening guidelines. We will also introduce Simplexa Congenital CMV Direct for testing of newborn urine and saliva, and present the US clinical study data.

Fabric Genomics Presents: The Bottom Line: Strategies for Labs to Offer Cost-Effective Genetic Testing at Scale

With increased reimbursement, many labs are considering launching genetic tests as an economic alternative to send-outs. One of the biggest economic drivers of test cost is the time and expense of manual interpretation of variants. We'll examine where efficiencies can be gained in the interpretation process and how they not only preserve, but enhance the quality of testing.

Jeanette McCarthy, MPH, PhD Sr. Director, Scientific Programs

Foundation Medicine, Inc Presents: Liquid Biopsy: A Clinical Overview

An overview of Liquid Biopsy in Comprehensive Genomic Profiling, clinical utility supporting the use of liquid biopsy CGP in various tumor types, understanding the clinical scenarios for which liquid biopsy may be considered, and the evolution of liquid biopsy from laboratory developed test to FDA-Approved Companion Diagnostic.

GenMark Diagnostics Presents: Optimization of Syndromic Respiratory Panel Testing During a "Twin-Demic" Respiratory Season: Inclusion of SARS-CoV-2

Molecular diagnostics for respiratory infections play a key role in global health, testing for influenza during the winter, and multiple viruses and bacteria that cause influenza-like-illness year-round. Sample-to-answer respiratory panels aid laboratories and clinicians in delivering rapid, clinically actionable results for patient management, therapeutic prescribing, cohorting and/or hospital admission decision-making. Though many SARS-CoV-2 tests are available, the need to detect other viruses and bacteria is more important than ever. The ePlex® Respiratory Pathogen Panel 2 detects more than 20 respiratory pathogens, including SARS-CoV-2, to optimize efficiency during the 2020/2021 respiratory season while delivering rapid, quality results for critical patient care.

Illumina Presents: Flexible Capabilities to Enable Comprehensive Genomic Profiling

Comprehensive Genomic profiling (CGP) is becoming standard of care in oncology. It allows clinicians to maximize clinical information from limited biopsy samples so that patients are matched with approved therapies or enrolled in relevant clinical trials. Flexible solutions for automation, sample batching, and data analysis platforms are key to offer CGP testing at local institutions so that data access and turn-around time can benefit patients.

Illumina Presents: Comprehensive Genomic Profiling from Liquid Biopsy Samples

With the adoption of Immuno-Oncology in the clinic there is an increasing complexity and diversity of biomarkers to be tested. Limited tissue availability and patient health status can be a barrier to the acquisition of sufficient material for genomic testing, therefore an alternative to invasive tissue sample collections such as liquid biopsy is needed.

Liquid biopsy panels that enable Comprehensive Genomic Profiling (CGP) allows consolidation of individual biomarkers into a single NGS assay and can be an alternative to traditional tissue-based testing.

Illumina Presents: Sequencing-based Spatial Analyses

By combining traditional spatial methods such as histology with sequencing, sequencing-based spatial analyses allow researchers to study the tumor microenvironment in situ and understand the dynamic relationship between the tumor and the microenvironment. Spatial genomics offers an unbiased view of the cancer biology and true discovery power for drug targets and biomarkers.

Illumina Presents: Leveraging NGS-based Solutions for Detection of Respiratory Virus Infections (COVID-19)

As the need for testing and identification of SARS-CoV-2 continues to rise, labs can benefit from an expansion of technologies and testing capabilities. This workshop will feature solutions which leverage next-generation sequencing (NGS) and enable increased flexibility for testing of respiratory virus infection. Experts will discuss their experiences, possibly review use cases, and weigh-in on the potential of NGS to offer more robust testing compared to other methodologies.

Integrated DNA Technologies Presents: A Multi-Institutional Collaborative Effort to Facilitate Development and Standardization of Clinical Research Next Generation Sequencing

The accelerating uptake of NGS in the oncology diagnostics research space has placed a great degree of stress on individual academic laboratories to continually offer the latest in biomarker testing. Inter-institutional collaborative development efforts represent a promising way forward to lessen development burdens and costs and to help promote cross-laboratory concordance. This session introduces the Genomic Oncology Academic Laboratory (GOAL), a consortium designed to facilitate collaboration in this area. GOAL partners with Integrated DNA Technologies, Inc., (IDT) to produce shareable, modular, low-cost hybrid capture systems capable of supporting cooperative, inter-institutional, clinical research, NGS development.

Integrated DNA Technologies Presents: IDT Technology update: SARS-CoV-2 Research

Since January, IDT has offered oligos and probes for the detection of SARS-CoV-2 using third party qPCR protocols, in both stocked and custom formats. We also offer custom guide RNAs for CRISPR-Cas13 research, and our NGS line-up is a great way to start exploring evolutionary questions related to the COVID-19 pandemic. This workshop will discuss traditional and emerging workflows in COVID-19 research, and where our qPCR, CRISPR, and NGS products fit in.

Invivoscribe Presents: Clinical Utility of NGS in Lymphoid Malignancies Including Minimal Residual Disease (MRD) Testing As hematopathology progresses, novel techniques such as NGS continue to evolve and replace traditional methods such as Sanger Sequencing RCB, and flow extensions of the progressing of the respect to the progressing of the progres

Sequencing, PCR, and flow cytometry for diagnosis, prognosis, and monitoring of therapeutic response. NGS-based somatic hypermutation and clonality testing has become an essential component of pathologic evaluation of hematolymphoid proliferations, allowing researchers to evaluate an evolving clonal landscape. The unparalleled sensitivity and flexibility of NGS enables objective stratification of disease along with earlier prediction of relapse. This workshop will explore how highly precise insights gained though NGS are rapidly translating to improvements in the management of hematologic diseases.

Invivoscribe Presents: Artificial Intelligence (AI) and other Data Science Applications in Molecular Pathology

A subset of Artificial Intelligence (AI), Deep Learning (DL), has opened up new applications in medicine. This workshop will focus on various DL algorithms like convolutional neural networks (CNNs) and other artificial neural nets which have been instrumental in improving computer vision. The audience will learn how to evaluate the best strategies to minimize bias and what types of neural architecture should be used for various applications. One goal is to understand the types of problems that Deep Learning and Machine Learning can address. Finally, to introduce open data software that can improve the procedures of molecular laboratories.

LGC Seracare Presents: : Technical Challenges Advancing NGS ctDNA Testing to MRD and bTMB

Companion diagnostics that analyze circulating tumor DNA by NGS successfully support the enrollment of patients into clinical trials and therapeutic treatment selection for only a subset of cancer patients. However, to fully realize the potential of NGS-based liquid biopsy application for all cancer patients, new technical advances are clearly needed. This workshop will provide a forum to discuss the technical challenges validating cfDNA NGS assays for ctDNA positive minimal residual disease (MRD) monitoring and for blood-based tumor mutational burden (bTMB) measurements as a surrogate biomarker for patient outcomes in immuno-oncology therapies.

Luminex Presents: Using an ARIES® Laboratory Developed Test for SARS-CoV-2 to Respond to the COVID-19 Pandemic in Louisville, KY

Speaker(s): Leslie A. Wolf, PhD, HCLD(ABB)

The University of Louisville Infectious Diseases Laboratory (IDL) is a high-complexity, CLIA-certified laboratory in Louisville, KY. The IDL adopted the Luminex ARIES® platform in 2016 for diagnostic testing to increase throughput while minimizing the risk of amplicon contamination. Our familiarity with the ARIES platform allowed us to pursue FDA Emergency Use Authorization for a duplex PCR assay detecting the N1 and N3 targets of the SARS-CoV-2 genome. This presentation outlines our methods, quality control material selection, the populations tested, the challenges we faced, and the future for the laboratory developed SARS-CoV-2 duplex PCR assay.

Meridian BioScience Inc. Presents: Challenges and Solutions for the Development of RT-qPCR Diagnostic Respiratory Assays
From limit of detection and specificity to assay format and workflow, diagnostic assay developers face complex challenges which could be overcome with the latest technologies developed by Meridian. In this session the topics of inhibitor-tolerance and room temperature assay stabilization will be discussed in the context of market demands for accurate and accessible respiratory testing.

Molecular Health Presents: Get Ready For The Future of Gene Variant Interpretation With MH Guide

Come join us to discover how MH Guide facilitates quick and efficient analyses of tumor profiles using the most recent findings about biomarkers and the response, resistance and toxic effects of cancer therapies.

MH Guide is one of the most comprehensive and largest global clinical/oncological knowledge-platform with freely accessible structured and unstructured medical knowledge provided for molecular pathological analyses of gene variants. This includes published scientific and biomedical knowledge about cancer therapies, signaling pathways, clinical-molecular variant interpretations (CVIs) as well as clinical (genome) studies. MH Guide meets the highest standards for data protection, data security, and risk and quality management.

NanoString Technologies Presents: Insights into the Pathogenesis of COVID-19 as Revealed by Gene Expression and Spatial Biology.

Understanding the complex interplay between a pathogen and the host response is important to developing effective vaccines and therapeutics. The nCounter® Analysis System and GeoMx® Digital Spatial Profiler (DSP) from NanoString enable researchers to rapidly perform high-plex experiments in key areas of biology that answer questions related to the effect of pathogen infection at the molecular, cellular, tissue, and individual level.

The GeoMx COVID-19 Immune Response Atlas enables spatial studies of the SARS-CoV-2 virus and host response with over 1,800 RNA targets, including SARS-CoV-2 viral markers and the ACE2 receptor, among other receptors, proteases, cell markers, and viral response markers.

NanoString Technologies Presents: Nanostring GeoMx® Panels: Strategies for Clinical Validation.

The development of new biomarker panels for the Nanostring GeoMx® Digital Spatial Profiler offers new opportunities to explore biological heterogeneity present in advanced solid tumor biopsies. There is interest in adapting GeoMx® panels as possible tools for selecting and assessing novel therapeutic combination strategies. We are developing standard controls to assess dynamic range for specific biomarkers and provide reproducible signals for data normalization and inter-run comparisons. The approach relies mainly on FFPE cell lines, sometimes after specific treatments . The goal is to establish a standard tissue microarray that meets clinical laboratory requirements and enables inter-run and inter-laboratory comparisons.

Oxford Gene Technology Presents: Implementing SureSeq Myeloid and CLL Panels for Comprehensive Genomic Profiling of Haematological Malignancies

Two-part presentation:

- Implementing SureSeq CLL + CNV Panel to replace multiple methods for a single NGS workflow including CNV detection
- Comparison of a hybridization-based NGS panel versus single analyte and amplicon-based NGS assays for somatic mutation testing in myeloid malignancies

Transitioning CLL FISH Analysis into the Molecular Biomarker Era

Tracy Tucker, PhD, FCCMG

Cytogeneticist and Molecular Geneticist, Cancer Genetics and Genomics, BC Cancer Agency

Associate Professor, University of British Columbia

Analytical Utility Assessment of Myeloid NGS Gene Panel Testing; A single site experience

Elizabeth McCready, PHD, FCCMG , Head of Molecular Cytogenetics

Hamilton Regional Laboratory Medicine Program

Associate Professor, McMaster University

Perkin Elmer Presents: Technical and Workflow Considerations for Coronavirus Detection

Choosing the right solution for your laboratory's SARS-CoV-2 testing needs can be a difficult decision. With dynamic demand on labs, making the wrong choice could be catastrophic. In this workshop we will be discussing the critical factors to consider when choosing a workflow that meets your testing needs.

https://perkinelmer-appliedgenomics.com/home/sars-cov-2-testing-solutions/.

Personal Genome Diagnostics Presents: The PGDx elio™ Approach to Decentralizing Comprehensive Tumor Profiling: The First FDA-Cleared Kitted NGS Solution

NGS in clinical oncology is predominantly limited to send-out services, resulting in lengthy turnaround times and largely excludes the pathologist from the diagnostic process. PGDx elio™ tissue complete, the first FDA-cleared comprehensive tumor profiling kit for use in molecular labs, provides a reliable, regulated test with decreased turnaround time. Coupled with an automated bioinformatics pipeline, the PGDx elio™ platform offers a decentralized approach as a kitted IVD product to facilitate widespread adoption of NGS in clinical oncology. Also offering a plasma solution for oncology research, PGDx elio assays are developed through design control and validated to ensure high sensitivity and specificity. The PGDx elio™ model is readily designed for onsite implementation, offering an in-house NGS solution, engaging pathologists and oncologists while allowing patient samples and data to stay in the local care setting.

PierianDx Presents: Maximizing an IVD's Clinical Impact and Adoption

NGS-based in vitro diagnostics (IVD) facilitate broad, widespread adoption of NGS-based testing in cancer and other complex conditions. These diagnostic assays lay a solid foundation for oncologists and ordering physicians to dramatically improve patient care. Yet to reach their full potential, these assays require a robust counterpart: a sophisticated solution that accurately and quickly matches patients with the best approved therapies and the most relevant clinical trials. Patients deserve no less. To support comprehensive interpretation and reporting of IVD assays, we have developed a clinical genomics knowledgebase and supporting software platform to rapidly auto-classify and generate a comprehensive clinical genomic report based on FDA/EMA approved therapies, clinical trials, medical interpretations, and clinical practice guidelines.

PierianDx Presents: The Clinical and Organizational Impact of Insourcing NGS Testing

Commercial laboratories offer NGS tests that many healthcare organizations call upon to perform biomarker testing for cancer patients. These for-profit entities are expensive and limit a provider's ability to provide quick, informed care that keeps both patient samples and patient data local. What becomes possible when a healthcare organization insources these tests? In this workshop, Dr. Nikoletta Sidiropoulos, Associate Professor and Director of Pathology at University of Vermont, discusses the positive clinical and organizational impact of insourcing NGS testing based on a review of 578 small biopsy cases in non-small cell lung cancer. Dr. Sidiropoulos also discusses the important role that the in-house pathologist plays and the genomic literacy that healthcare organizations gain by insourcing NGS testing.

Pillar Biosciences Inc. Presents: Introduction to the IVD Pillar® ONCO/Reveal™ Dx Lung and Colon Cancer Assay (CE IVD) and ONCO/Reveal HRD Panel

Come join Pillar Biosciences for a two-part workshop highlighting two exciting new products. First, CEO Dr. Gang Song will speak about Pillar's CE IVD ONCO/Reveal Dx Lung and Colon Cancer Assay. Dr. Song will highlight performance data generated during analytical and clinical verification and validation studies. In the second part of Pillar's corporate workshop, Dr. Lynn Fink of Xing Cancer Care will speak about their validation and use of the ONCO/Reveal HRD Panel.

Promega Corporation Presents: Extraction-Free Sample Preparation for COVID-19 Testing

The COVID-19 pandemic has resulted in an extremely rapid scale-up of demand for in-vitro diagnostic molecular assays that is straining global supply chains resulting in shortages of reagents used in the molecular testing workflow. As a world-wide supplier of sample extraction products, we are acutely aware that the availability of reagents and consumables used for RNA purification from a sample is a rate-limiting step to ramping up to meet global testing needs. In response, Promega developed the XpressAmp™ Direct Amplification Reagents that provide a fast, RNA extraction-free, method to prepare viral samples for PCR-based amplification.

Promega Corporation Presents: A Novel Bioluminescent Immunoassay for Detecting SARS-CoV-2 Antibodies

Nidhi Nath, PhD, Senior Research Scientist at Promega Corporation, will be discussing the new Lumit™ Dx Technology and how it was adapted into a reliable in vitro diagnostic for the detection of SARS-CoV-2 antibodies. The Lumit™ Dx SARS-CoV-2 Immunoassay provides labs with a simple, no-wash alternative to traditional plate-based immunoassays and can be easily automated to accommodate testing of large sample sets. In this presentation you will learn about the Lumit™ Technology, the simple workflow, and the clinical performance of the Lumit™ Dx SARS-CoV-2 Immunoassay.

Promega Corporation Presents: Introduction to Capillary Electrophoresis (CE) Applications and Promega's New Spectrum Compact CE System

This presentation will introduce you to capillary electrophoresis (CE) for the analysis of fluorescently labeled DNA molecules. Fragment and sequencing analysis will be described along with an overview of Promega's new Spectrum Compact CE System.

Purigen Biosystems, Inc. Presents: Turn Sample Loss Into Actionable Results – Get More FFPE Samples Into Sequencing with the Ionic® Purification System

Researchers and clinicians continue to be challenged by FFPE tissue samples with a low abundance of high-quality nucleic acid. FFPE samples frequently fail to produce DNA or RNA with sufficient yield or quality for downstream analyses when conventional extraction methods are used. Despite efforts to optimize these labor-intensive extraction methods, extracts from FFPE samples frequently fail to qualify for next-generation sequencing or fail to yield actionable results when sequenced. In this workshop, we will review data from samples purified on the Ionic® Purification System that demonstrates the ability of the system to recover DNA, RNA, or miRNA from challenging FFPE tissue samples with sufficient yield and quality for downstream molecular analyses.

QIAGEN Presents: Introducing the QIAGEN QIAreach Platform – Your Accurate, Automated and Portable COVID Testing Solution Speakers: Dr. Sonia Rao, PharmD, Senior Medical Science Liaison, QIAGEN

Dr. L. Masae Kawamura, Senior Director, Medical Affairs, QIAGEN

Please join us to learn about the latest, accurate, and affordable option for COVID-19 testing and assessment. The new QIAGEN QIAreach Anti-SARS-CoV-2 Total* antibody solution offers optimal sensitivity and specificity, as well as ease of use in both installation and test performance. This automated solution offers qualitative results within 10 minutes, and both the test, as well as the results interpretation are located at the device itself.

In this presentation, we will discuss the background of COVID-19 antibody testing and review the QIAreach Anti-SARS-CoV-2 Total Test technology and available performance/validation data. QIAGEN will also soon launch the QIAreach SARS-CoV-2 Antigen test[†], which can run simultaneously with the QIAreach Anti-SARS-CoV-2 Total test on the shared QIAreach eHub platform. QIAreach SARS-CoV-2 Antigen is currently under development and is coming later this year.

QIAGEN Presents: Ct Value Stewardship for SARS-COV-2: Interpreting with Common Sense Is Not Necessarily Common Speakers: Dr. Yitzchak Goldstein, MD, Assistant Professor, Department of Pathology, Albert Einstein College of Medicine Dr. Inessa Gendlina, MD Assistant Professor, Department of Medicine – Infectious Diseases, Albert Einstein College of Medicine

Real-Time PCR Cycle Threshold (Ct) values have become a widely debated metric in management of SARS-CoV-2 infection, however, their interpretive utility remains controversial. While Ct values can help augment the interpretation of a positive test, variability of clinical presentations and sample-related challenges necessitate that Ct values be framed within the context of the clinical presentation. Understanding additional factors such as community prevalence of disease, patient underlying immune status, and clinical stage of illness are vital to assisting clinicians in interpreting Ct values appropriately. Drs. Goldstein and Gendlina will review scenarios, opportunities and limitations in the clinical utility of Ct values

QIAGEN Presents: Lab Experience – Evaluation of QIAGEN's QIAseq Multimodal Panel in Comprehensive Genomic Profiling Speaker: Ravindra Kolhe MD, Ph.D., Vice Chair, Pathology, Medical College of Georgia at Augusta University

A better understanding of the molecular biomarkers underlying cancer development and progression is critical for improvements in patient healthcare. The profiling of actionable biomarkers has been made possible with recent advancements in NGS workflows but with the challenges of requiring parallel workflows, longer turnaround times and higher costs. In this webinar, Dr.Ravi Kolhe will discuss how his team was able to conduct comprehensive genomic profiling by using QIAseq Pan-cancer Multimodal Panel, the only single extraction NGS workflow with simultaneous library prep for both RNA and DNA.

Dr. Ravindra Kolhe will share his insights on using the QIAseq Pan-cancer Multimodal Panel for his labs comprehensive genomic profiling needs

QIAGEN Presents: Introducing NeuMoDx Molecular, a High Throughput Automated Molecular System to Address the COVID-19 Diagnostic Challenge

Speakers: Dr. Heba Mostafa, MD, PhD, Johns Hopkins Jason Ong, Senior Director Marketing, NeuMoDx

Please join us to learn about the NeuMoDx molecular system for high-throughput COVID-19 testing. The NeuMoDx Molecular Systems are fully automated solutions that use proprietary NeuDry technology, magnetic particle affinity capture, and real-time PCR chemistry in a multi-sample microfluidic cartridge. The systems also allow laboratories to efficiently validate their own Laboratory Developed Tests, including those provided by the WHO and CDC, to immediately improve throughput and increase the volume of testing.

In this presentation, Dr. Mostafa will discuss the COVID-19 diagnostic challenge and testing landscape, followed by a review of the NeuMoDx molecular system and initial performance data.

QIAGEN Presents: Multiplex detection of oncogenic mutations using LNA-based assays on the QIAcuity digital PCR system Speaker: Dr. Özlem Karalay, Senior Scientist, Digital PCR Assay Development, QIAGEN

Digital PCR (dPCR) enables specific and sensitive detection of genetic alterations in oncogenes. It is particularly suited for the analysis of rare mutations in precious samples such as circulating cell-free DNA (ccfDNA) from blood and other body fluids. For reliable detection of single base exchanges at low frequency, both, a reproducibly working dPCR system and optimized PCR assays, are indispensable. Locked Nucleic Acid (LNA)-enhanced oligonucleotides with substantially high levels of affinity for their complementary sequences make these assays excellent tools for the detection and discrimination of highly similar DNA targets.

Here, we discuss simultaneous, high-sensitivity detection of up to three different mutations using QIAGEN's QIAcuity dPCR system in combination with the dPCR LNA Mutation Assays.

Rheonix, Inc. Presents: Rheonix COVID-19™ MDx Assay - Enabling Fully Automated, Sample-to-Answer Molecular Testing for COVID-19

The Rheonix COVID-19™ MDx Assay* is a fully automated, sample-to-answer molecular test that enables detection of SARS-CoV-2, the virus that causes COVID-19, directly from respiratory samples. Please join us to hear our laboratory testing partners discuss how implementing the Rheonix system enabled them to quickly bring COVID-19 testing in-house, significantly reducing cost and turnaround time and facilitating more rapid decisions for their patient populations. (*For use under FDA Emergency Use Authorization only).

Roche Presents: More Advances in Transplant: Nothing Standard about Standardization

This webinar will address the direct impact of COVID-19 era on Transplantation, the evolution and importance of standardization in quality of transplant care, recent advances in testing procedures for BK and EBV, and establishing best practices in care for transplant patients leads to improved quality of care.

Dr. Ray Hein, Ph.D., Lead Scientific Affairs Manager Roche Diagnostics

Roche Presents: Algorithms of COVID-19 Testing with Multiple Modalities

The ongoing COVID-19 pandemic has reinforced the crucial role of diagnostic testing in outbreak control. While high-volume molecular diagnostic testing is and will remain the backbone of the country's COVID-19 testing response, it cannot be the only option. There are several complementary testing modalities needed to address unique applications and environments across high-volume molecular tests, multiplex testing, antibody tests, antigen-based viral tests, and point of care molecular testing solutions.

In this webinar, we will share testing strategies and key considerations for addressing SARS-CoV-2 testing demand.

Dr. Alan T. Wright MD MPH SVP & Chief Scientific Officer Roche Diagnostics

Roche Presents: New Automated FFPE Tissue Dissection Method for Successful NGS Downstream Applications

Introduction of system and presentation of data comparing the new method with manual tissue dissection.

SOPHIA GENETICS Presents: Comprehensive Tumor Profiling Capabilities for Actionable Insights

Comprehensive genomic profiling offers great opportunities, however, many institutions find it challenging to implement and obtain maximum performance from new NGS tests. Discover how SOPHiA Genetics removes complexity from NGS testing and variant interpretation, while optimizing analytical performance across all variants types.

SOPHIA GENETICS Presents: Overcoming Limitations of Assessing HRR Deficiency in Somatic Samples with NGS

Homologous recombination repair (HRR) deficiency continues to increase in importance as a biomarker, yet the complexity associated with its detection in somatic samples beyond SNVs is also becoming clear. Learn how SOPHiA GENETICS can support you in overcoming the limitations and maximizing the ability to detect HRR deficiency in somatic samples.

STEMCELL Technologies, Inc. Presents: Increasing the Sensitivity of Cytogenetic Analysis of Hematologic Malignancies Through Cell Enrichment

In hematologic cancers including B cell lymphomas and multiple myeloma, malignant and non-malignant cells are mixed in the bone marrow or peripheral blood at variable frequencies. Enrichment of lymphoid cells prior to further analysis using FISH can enhance the sensitivity of this technique by increasing the presence of malignant cells. This improves the resolution of FISH in detecting chromosomal abnormalities in patient samples, particularly in cases where disease burden is low.

Thermo Fisher Scientific Presents: Responding to the COVID-19 Outbreak: Global Clinical Performance and Development of the Applied Biosystems TaqPath COVID-19 Assay

As the world continues to contend with the pandemic, Thermo Fisher Scientific continues to arm laboratories with the widest, most innovative selection of COVID-19 testing solutions that meet the needs of the communities in which they operate. From the initial launch in January to Emergency Use Authorization and global approvals, in March, to subsequent developments to enable more laboratories to do more testing, our kit has become a central component of many COVID-19 protocols around the world. In this workshop, some of those laboratories will share clinical data and discuss how our solutions are helping in the fight against SARS-CoV-2.

Thermo Fisher Scientific Presents: Back to Work, School, and Life: Utility of COVID-19 Testing to Help Communities Restore
Testing volumes need to increase by orders of magnitude in order to restore communities back to normality. This workshop focuses
on solutions that equip laboratories to participate in expanding testing and screening regimes for students, office employees,
athletes, tourists, and more. In this webinar, we will cover effective strategies for establishing such testing channels, the operational
requirements, and testing solutions that are up to the challenge.

Thermo Fisher Scientific Presents: Scaling COVID-19 Testing: High-Throughput, Highly Automated COVID-19 Testing with the New Thermo Fisher Scientific™ Amplitude™ Solution

Laboratories are being told that COVID-19 testing volumes must increase to help restore our communities back to some degree of normality. But how can laboratories scale while minimizing costs, and with the confidence of assurance of uninterrupted supply of tests and reagents? Introducing the upcoming Thermo Fisher Scientific™ Amplitude™ Solution—a highly-automated molecular diagnostic testing system that can analyze over 6,000 specimens in a single day with the reliability and confidence of assured assay and reagent supply, along with 24/7 world class service and support. Attend this workshop to see the performance data and hear from early-access customers.

Thermo Fisher Scientific Presents: Driving Paradigm Change in Precision Medicine in NSCLC

During this workshop, speakers will review the rapidly evolving biomarker landscape and latest clinical research data in NSCLC, with the focus on several emerging new biomarkers, such as EGFR Exon 20 Insertions. The oncologist and pathologist speakers will highlight how the paradigm change in NSCLC impact their practice, the importance of NGS and fast TAT results to enable best treatment decision. They will share their best practice working together as a care team, value of tumor board and implementing NGS in-house.

Thermo Fisher Scientific Presents: Advances in NGS Automation accelerates time to Results for Myeloid and Comprehensive Genomic Profiling

In recent years, next-generation sequencing (NGS) has emerged as a powerful tool for complex mutational profiling, owing to its ability to rapidly and simultaneously interrogate multiple genomic aberrations from a single sample. During this workshop, speakers will discuss their perspective and experience with new automated solutions for Oncomine™ Myeloid Assay GX, a revolutionary approach to myeloid profiling that enables specimen-to-report automation in a single day; and Oncomine Comprehensive Assay Plus, an end-to-end solution that distills hundreds of genes into a report in as little as 3 days. Speakers will also present recent data and discuss how these solutions address current challenges in their oncology research.

Thermo Fisher Scientific Presents: Case Studies in Epidemiological Research of SARS-CoV-2 Using Next-Generation Sequencing (NGS)

Tracking the global spread and evolution of SARS-CoV-2 is important for epidemiology research, essential to help adapt and establish possible preventative measures and potential treatment options. Researchers are now adopting NGS to interrogate the SARS-CoV-2 genome across multiple samples simultaneously for contact tracing and to rapidly obtain a global picture for surveillance. In this workshop, speakers will present their experience with rapid and highly automated targeted NGS workflows for analyzing SARS-CoV-2, enabling labs to go from sample to report in a single day with minimal hands-on time.

Thermo Fisher Scientific Presents: High-throughput Methods for Extraction and Detection of Nucleic Acid: Viruses, Saliva and Beyond

Thermo Fisher Scientific workflows around viral nucleic acid extraction and detection, including our newly developed method for use with saliva which has become an appealing alternative to common swab techniques and an increasingly popular sample type for viral nucleic acid detection.

Thermo Fisher Scientific Presents: Critical Role of Circulating Tumor DNA Reference Materials in the Field of Liquid Biopsy Liquid Biopsy is a non-invasive method for identifying biomarkers present in circulating tumor DNA (ctDNA). Recent ctDNA detection technologies could potentially revolutionize early cancer detection. As liquid biopsy technologies become more sensitive, screening for early cancer detection using a blood test could become routine clinical practice. However, with the advent of new technologies comes an equally important need for novel reference materials and quality assessment schemes to ensure quality test implementation.

Thermo Fisher Scientific Presents: The Evolving Landscape of Expanded Carrier Screening Given Increasing Ethnic Diversity and Genomic Advancements

Join this workshop to hear Linda Hasadsri, MD, PhD, Co-Director of the Genomics Laboratory at Mayo Clinic, share a general overview of expanded carrier screening (ECS). Additionally, Dr. Hasadsri will share the ECS experience at Mayo, including a deep dive into several interesting case studies illustrating the complexities of ECS.

Our second speaker, Jose Luis Costa, PhD, is a Director of Medical Affairs at Thermo Fisher Scientific. Dr. Costa will present the analytic verification of a novel NGS assay for expanded carrier screening research.

Twist Bioscience Presents: Leading the way in NGS Sample Prep

Twist Bioscience presents CEO Emily Leproust and two customer success stories during the AMP Corporate Workshop. Visit to hear how Twist's best-in-class double-stranded DNA probes enable performance not before achieved in applications such as rare variants in liquid biopsy and early detection cancer screening.

Join Jo Vandesompele from Biogazelle as he shares "Twist Custom Enrichment for RNA sequencing of liquid biopsies from FFPE samples" and then hear from Gahee Park, PhD, University of Cambridge as she presents "Targeted Epigenome Sequencing of cfDNA Improves Sensitivity for Early Cancer Detection".