IntegraNews

HELPING YOU TO FIND™

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WELCOME TO THE FIRST ISSUE OF IntegraNews.

The goal of this newsletter is to provide an update on the latest news and events at IntegraGen Genomics. This includes the availability of the latest technologies and molecular testing platforms in our lab and new service offerings.



In addition to the featured articles in the current edition of IntegraNews we are also pleased to announce that our lab is now equipped with the dual-flow cell HiSeq 4000 System from Illumina. This system offers very high throughput with unparalleled speed and performance.

We are also pleased to announce our new alliance with the Institut Pasteur. As a result this partnership, IntegraGen Genomics will be the main operator of high-throughput sequencing activities for the National Reference Centers (CNRs) and microbiological collections at the Institut Pasteur. Click here to learn more about this partnership.

Do not hesitate to contact us if you would like to request a quote for a specific genomic research project you are working on or if you would like to learn more about the services we offer.

- Emmanuel Martin Director, Sales & Marketing IntegraGen Genomics







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- New in our lab the nCounter® Dx Analysis System from Nanostring® Technologies
- IntegraGen Genomics partners with Gustave Roussy to set up a high-throughput sequencing unit for cancer patients
- IntegraGen Genomics partners with PrimaDiag to design and validate applications for their ACSIA line of robots and streamline the handling of liquid samples for NGS projects

INTEGRAGEN GENOMICS ANNOUNCES LAUNCH OF GECO - ADVANCED GENOMIC CONSULTING SERVICE

IntegraGen Genomics has launched GeCo, an advanced genomic consulting service offering directed towards genomics researchers. GeCo provides researchers with access to leading experts in the field of biostatistics and bioanalytics and offers support for the advanced and personalized statistical analysis of genomic data ranging from the initial design of genomic research projects to the detailed evaluation of research results.

According to Emmanuel Martin, Director of Sales and Marketing for IntegraGen Genomics, "GeCo will allow us to provide an advanced, personalized level of service to our customers who are implementing genomic research projects. The complexity of data resulting from next-generation sequencing projects

and other genomic research projects using other newer technologies has led many of our customers to ask for our support with the analysis of their data. GeCo will allow us to meet this need and build upon our current service offerings by combining our rapid and high-quality analysis of genomic material with access to advanced statistical analytics tools and experts."

EXAMPLES OF SERVICES GeCo OFFERS:

- Scientific advice and design of Statistical Analysis Plan (SAP)
- Exome sequencing: analysis of recurrent mutations in a series of tumors, chromosomal aberrations, and mutational signatures



- RNA-Seq: molecular classification, identification and interpretation of differentially expressed genes and pathways
- Methylome: molecular classification, identification and interpretation of differentially methylated regions
- ChIP-seq, MeDIP-seq: identification of DNA binding peaks and comparison across several samples
- Genome-wide association studies (GWAS)
- Integration of Multi-Omics data
- Data visualization and preparation of figures and tables for publications

NEW TECHNOLOGY IN OUR LAB – THE nCOUNTER® DX ANALYSIS SYSTEM FROM NANOSTRING® TECHNOLOGIES

IntegraGen Genomics continues to offer researchers access to the newest research tools and technologies. This includes the latest addition to our lab, the nCounter® Dx Analysis System from Nanostring® Technologies.

WHAT THE nCOUNTER® DX ANALYSIS SYSTEM OFFERS YOU:

The nCounter System measures RNA expression by direct nucleic acids counting and does not require reverse transcription or amplification*. The performance of the nCounter System provides an ideal tool for translational research projects.



The nCOUNTER® SYSTEM SUPPORTS THE FOLLOWING APPLICATIONS:

- Gene expression analysis
- Single cell gene expression analysis
- mRNA expression analysis and expression profiling
- Differentially expressed genes
- Exploring of signaling pathways
- Study of fusion transcripts
- Identification of pathogens

The nCounter System provides a flexible tool that can handle the following sample types:

- Total RNA
- Cell Lysates
- Blood and serum
- Formalin-Fixed Paraffin-Embedded (FFPE) tissue

Contact IntegraGen Genomics to learn how we can support your research projects using the nCounter System or with other newer tools and technologies we have available in our lab.

* Single cell assay requires amplification prior to analysis on the nCounter System



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INTEGRAGEN GENOMICS PARTNERS WITH GUSTAVE ROUSSY ON HIGH-THROUGHPUT SEQUENCING UNIT FOR CANCER PATIENTS

IntegraGen Genomics and Gustave Roussy, Europe's leading oncology center, have partnered to create the first highthroughput, large-scale, sequencing platform in France allowing the identification of somatic genetic alterations within the whole exome of a patient's tumor which permits personalized cancer treatments.



IntegraGen installed and has been operating the sequencing platform on behalf of Gustave Roussy since mid-2014. The Clinical Research Sequencing Unit is located with the institution's Molecular Medicine building and is used for both whole exome and RNA sequencing.

The unit is being operated within strict quality criteria required for clinical research. By also delivering sequencing results in a timely manner, these analyses allow for an exhaustive exploration, without an a priori hypothesis, of a patient's tumor within the framework of Personalized Medicine programs developed at Gustave Roussy. The analysis of the mutational profile (or molecular portrait) of each patient's tumor may allow for individualized therapeutic intervention.

Professor Eric Solary, Head of Research at Gustave Roussy comments that "this is a major step for molecular diagnostics. Since 2010, patients enrolled in our Personalized Medicine program have had their directed therapy thanks to the sequencing of a few tens of tumor genes. Now we have access to the sequence and the expression of all coding genes of each patient's tumor. By doing so we can actively participate in the implementation of the 3rd French cancer Plan, with one of its objectives being to develop the use of the tumor exome within

clinical research projects. This information will allow us in the future to better predict responses to treatments and avoid useless or even counter-productive therapies."



IntegraGen Genomics now offers a complete onsite clinical sequencing service solution which leverages our expertise and is designed to support your clinical sequencing needs. We have experience setting up high-throughput sequencing platforms, or alternatively, we can help to optimize the use of platforms already at your location.

CONTACT US for more details

INTEGRAGEN GENOMICS HELPING TO DESIGN AND VALIDATE APPLICATIONS FOR PRIMADIAG'S ACSIA LINE OF LAB ROBOTS

IntegraGen Genomics is working with PrimaDiag, a French leader in the design and development of simple and powerful robotic platforms for rapid automation in molecular biology laboratories, to design and validate applications for PrimaDiag's ACSIA line of robots in order to streamline the handling of liquid samples for nextgeneration sequencing (NGS) projects. The joint project is designed to leverage the capabilities of the ACSIA robotic platform to automate the processing of capturing and washing samples prior to sequencing them with the latest high-throughput sequencing technologies.





The addition of the ACSIA robot as a new tool in IntegraGen Genomics' lab will lead to a reduction technician time and effort to prepare samples for NGS project and also reduce the

overall time to process these samples. The ASCIA robot also has the capability to handle large samples volumes.

Francis Rousseau, Ph.D., the Director of IntegraGen Genomics laboratory in Evry commented that "we are pleased to work with PrimaDiag to help identify, develop and validate protocols associated with the use of their ACSIA robots for NGS applications. Our validation studies have demonstrated that their technology adapts easily to our laboratory protocols, the robot is easy to program, and the associated software provides the flexibility needed for our NGS projects. We are also pleased with the time and resource savings the ACSIA robot provides and the high quality, reproducible results it delivers.

"We are pleased to be partnering with IntegraGen to validate the use of the ACSIA platform for NGS applications," stated PrimaDiag's President Guillaume L'Hermite. "We have benefited tremendously from IntegraGen expertise as a leader in genomic research and their experience working with newer laboratory platforms. Their insight and knowledge with validating new technologies in their lab will allow us to expand the use of the ACSIA line to other labs who are performing NGS research projects.

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At IntegraGen Genomics we have the experience and expertise to support the development and design of your genomic research projects. We are a recognized leader in the field of genomic research and provide our customers:

- Access to the latest high-throughput sequencing and molecular research technologies.
- Advanced bioinformatics and biostatistical analytical tools and services to deliver your results.
- Delivery of high-quality results in timely fashion.

