INVITES YOU TO ATTEND

LOST IN TRANSLATION

Date:  Tuesday October 13th
Time:  Noon
Location:  PMCRT (formerly TMDT), Room 4-204
Hosted by the Princess Margaret Genomics Centre

Total RNA discovery
Brian Dugan – Global Product Manager – QIAGEN

Studying gene expression is now more than simply DNA to RNA to protein. Cellular gene expression relies on not just mRNA but also regulatory RNA, including miRNA and IncRNA. By studying multiple RNA types simultaneously, research can unlock the full picture inside your sample. miRNA is a key regulator found to be indicated in normal development as well as disease pathology. IncRNA share similarities in length to mRNA, but act as key modulators similar to miRNA. We will discuss how simultaneous analysis of coding and noncoding RNAs using QIAGEN’s complete sample-to-insight workflow can reveal the mysteries in your samples.

Role of microRNA-mRNA interactions in Endometrioid Endometrial Carcinoma, a “Sample to Insight” biological exploration.
Jean-Noël Billaud, Ph.D – Principal Scientist QIAGEN

Endometrial adenoarcoma is a common cause of gynecological cancer death in Europe and North America. The most dominant subtype, Endometrioid Endometrial Cancer (EEC) accounts for >80% of this cancer and is estrogen-dependent. We will show how in silico solutions developed by QIAGEN Bioinformatics enabled us to analyze and identify the biological parameters involved in EEC tumor progression including signaling pathways, biological processes, and potential transcriptional drivers. Total RNA extracted from tissues obtained after surgical resection from three women at Stage One EEC was subjected to RNA-sequencing. The data was uploaded directly from the Sequence Read Archive and the FASTQ files were processed with Biomedical Genomics WorkBench for secondary analysis including mapping, quantification and differential expression analysis. Through streamlined integration analyzed data was seamlessly uploaded to Ingenuity Pathway Analysis (IPA) and Ingenuity Variant Analysis (VA) for biological interpretation, providing a sample to insight solution.

Preregistration is requested – Lunch will be provided
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