

## **FACILITIES AND RESOURCES**

### **Linda T. and John A. Mellowes Center for Genomic Sciences and Precision Medicine (Mellowes Center)**

**Dr. Raul Urrutia, Director**

The Mellowes Center for Genomic Sciences and Precision Medicine occupies a 20,000 sq. foot facility on the 5th floor of the Health Research Center within MCW and is directed by Dr. Raul Urrutia. These facilities have modern design, state-of-the-art equipment, and expert personnel to allow the efficient implementation of next generation sequence methodologies to non-cancer Clinical Genomics, Cancer Genomics, Pharmacogenomics, Epigenomics, Molecular Pathology, and Rare Diseases. Our diverse team believes that innovation is the key to advancement of understanding, diagnosing, preventing, and treating disease with better outcomes than ever thought possible. The Center designs, prepares, sequences, and analyzes exome panels, whole exome and genome sequencing, transcriptomic sequencing, epigenetic assessment at the genomic level through (ChIP-Seq, ATAC-seq and RRBS), single cell RNA sequencing, spatial transcriptomics. Our resources include both short (Illumina) and long read (Nanopore) sequencers that allow for rapid detection and confirmation variants, as well as structural variants, isoform expression, native epigenetic modifications respectively. The Mellowes Center is also dedicated to providing comprehensive data analytic solutions for a wide variety of researcher areas and experience levels. The Bioinformatics and Data Analytic Unit supports service lines in the areas of WES, WGS, RNA-Seq, Spatial Transcriptomics, miRNA panels, ChIP-Seq, CUT&RUN, CUT&TAG, ATAC-seq, RRBS, and gene panels. Additionally, our Center analytics constantly enrich the analysis through developmental based expansion in a collaborative, innovative environment that supports the high throughput, data rich workflows. These shared resources rapidly adapt and evolve to ensure researchers have access to the most state-of-the-art methodologies and data analysis. Collaboration among the units allows for simplified, quality controlled, and multi-functioning, integrated sample processing workflows.