FACILITIES

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

The Mellowes Center for Genomic Sciences and Precision Medicine is a 20,000 square foot research facility located on the 5th floor of the Health Research Center (HRC) at the Medical College of Wisconsin (MCW) and is directed by Dr. Curt Sigmund. The Center serves as a collaborative, research-oriented resource for faculty and clinicians at MCW, Froedtert Hospital, Children's Wisconsin, and collaborating investigators, supporting translational and discovery-based research programs in genomics, precision medicine, and molecular pathology.

The Center features secured laboratory space, investigator offices, and designated equipment rooms designed to support integrated molecular and genomic workflows. Investigators, technical personnel, sequencing staff, and analytic teams work closely together to support efficient sample processing, sequencing, and data analysis activities.

The Mellowes Center maintains advanced instrumentation supporting genomic, transcriptomic, epigenomic, single-cell, and spatial profiling applications. End to end workflows are available for a broad range of library preparations that lead to next-generation sequencing and bioinformatic analysis workflows, including whole-genome sequencing (WGS), RNA sequencing (RNA-seq), microRNA (miRNA) profiling, chromatin accessibility assays (ATAC-seq), DNA methylation (WGMS), and epigenomic profiling approaches such as ChIP-seq, CUT&RUN, and CUT&Tag. Ensuring the most advanced technologies are available to all investigators, the Center offers custom preparation of single-cell and spatial transcriptomics samples. Complementing these sample preparation capabilities, the Center houses both short- (Illumina) and long-read (Oxford Nanopore) sequencing platforms. Specifically, all next generation sequencing activities within the Mellowes Center are supported by dedicated bioinformatics personnel providing integrated analytics and data interpretation. Frequent interaction between sequencing and analytic teams supports coordinated workflow development, data processing, and interpretation across a broad range of genomic applications.

Collectively, these resources provide investigators with centralized access to advanced genomic technologies and integrated research infrastructure supporting complex translational and precision medicine studies.