

Technology-Enhanced Pharmaceutical Discovery (TEPD)

SEMINAR SERIES 2024/2025

Monday April 7th, 2025

12:15p.m.

GUEST SPEAKER

Dr. Kerene Brown
Technical Specialist, Research
Dynacare

“Therapeutic Drug Monitoring”

Therapeutic Drug monitoring is the practice of measuring drug concentrations in patient's blood at timed intervals. This is done to maintain a relatively constant concentration of the medication in their circulation. This process helps physicians monitor and maintain drug levels within the therapeutic window which improves efficacy and limit toxicity. Chromatography/Mass Spectrometry techniques have become the gold standard in Therapeutic Drug Monitoring due to the high analytical specificity and sensitivity. Not all drugs require therapeutic drug monitoring, it is valuable for drugs used for an extended period of time, which show pharmacokinetic variability and with a narrow therapeutic window.