

BIOC 462/491 Internship Position in Industry

Winter 2024

Restrictions

Open only to Honours Students enrolled in BIOC 462/491 during the winter 2024 semester

Company

REPAIR

THERAPEUTICS

Repare Therapeutics,

7171, Rue Frederick Banting, Building 2

Ville Saint-Laurent, QC H4S 2A1

<https://www.reparerx.com/>

Project Title: Combination of drugs in oncology

Objective

The purpose of this research project is to explore combination drug treatment with Repare Therapeutics clinical and late-stage pre-clinical drug candidates in lesion-defined cell-based oncology models and to determine any potential drug synergy. Major emphasis will be devoted to exploring drug combination opportunities with lunresertib (RP-6306), a first-in-class small molecule inhibitor of PKMYT1, in cell models of enhanced replication stress such as *CCNE1* amplification.

Description

The candidate will become familiar with the culturing of cancer cells (adherent and suspension systems) and the manipulation of these cells in medium throughput cell plating formats (96-well predominantly). The candidate will also become acquainted with the handling of small molecules and the use of liquid handling instrumentation to dispense drugs onto cells. Further to this, the candidate will be able to track cell growth in real-time using state-of-the-art instrumentation and measure the impact of these combination drug treatments on cellular growth. Data analysis will involve software training designed to evaluate synergy of drug combinations. Time permitting, the impact of these drug combinations on DNA damage biomarkers will be explored using classic methodology such as immunoblotting. There will be opportunities to present the data sets to a wider audience to gain presentation experience.

Contact Information

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