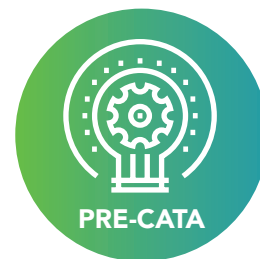


PROJECT TITLE

Development of a New Cellular Hierarchy-Based Framework for Advancing Precision Medicine in AML



PRINCIPAL INVESTIGATOR

Dr. John Dick – University Health Network

SCIENTIFIC SUMMARY

Dr. Dick's team has uncovered a new framework to understand the unique cellular hierarchy of each of the acute myeloid leukemia (AML) patients in their study cohort of more than 1,000 people. This new hierarchy-based modeling integrates mutational drivers with leukemia stem cell properties and is highly predictive of both patient survival and relapse. Using machine learning, they have developed specific hierarchy classifiers that accurately predict response to a wide range of targeted therapies. This study will refine these new AML classifications for future clinical trials. This new hierarchy classification offers the potential to guide treatment decisions and inform the design of drug combinations in a new way for AML.