

Introducing Principal Investigator Dr. Joel Pearson

By CCMR

Tue Sep 27 16:58:00 CDT 2022



CancerCare Manitoba Research Institute (CCMR) is pleased to welcome Dr. Joel Pearson as Principal Investigator at CCMR. Dr. Pearson joined CCMR on September 1, 2022. He is also Assistant Professor in the Department of Pharmacology and Therapeutics at the University of Manitoba.

Dr. Pearson completed his PhD at the University of Alberta studying the pediatric lymphoma, anaplastic lymphoma kinase-positive, anaplastic large cell lymphoma. Following this, he pursued postdoctoral training at the Lunenfeld-Tanenbaum Research Institute at Mount Sinai Hospital in Toronto, ON. There he worked to understand how cellular context influences transformation and genesis of aggressive neuroendocrine cancers, such as small cell lung cancer and drug-resistant neuroendocrine prostate cancer.

Dr. Pearson's research program will focus on understanding how to overcome the inherent complexity of cancer and identify better cancer therapies.

Cancer complexity, heterogeneity and plasticity hinder successful diagnosis and treatment. A critical aspect of improving patient outcomes is to find ways to overcome this complexity. Identifying overarching principles of cancer biology that span tumor type offers an attractive approach to simplify this complex disease and pinpoint broadly relevant therapies. For example, during his postdoctoral work, Dr. Pearson demonstrated that cancers can be functionally stratified into just two classes – either “YAP^{on}” or “YAP^{off}” – based on distinct expression and functions of the transcriptional co-activators YAP and TAZ. In YAP^{on} cancers, YAP and TAZ are well-known oncogenes. However, Dr. Pearson identified a broad group of YAP^{off} cancers, where YAP and TAZ are instead tumor suppressors. Importantly, these classes exhibit distinct therapeutic vulnerabilities and lineage plasticity allows cancers to switch classes to drive drug resistance. Using cutting-edge genomic, functional genomic and single cell approaches, Dr. Pearson will work to exploit these fundamental principles of cancer biology to identify better ways to treat aggressive neural and neuroendocrine cancers.

We are excited to have Dr. Pearson on our team and we look forward to his contributions to CCMR. Welcome, Dr. Pearson!

View more information about Dr. Pearson:

Google Scholar (<https://scholar.google.com.au/citations?hl=en&user=QB5csocAAAAJ>)