



Probing the Epigenome for Therapeutic Opportunities

Thursday, May 6, 2021

11:30 AM to 12:30 PM

<https://purdue-edu.zoom.us/j/99822915094>

Regulation of gene expression programs by chromatin associated factors is fundamental to most biological processes, and many disease mechanisms. Chemical probes are valuable tools to link inhibition of a specific protein to functional outcomes, are highly complementary to genetic methods and more closely mimic strategies for therapeutic translation. Over the past 10 years we have developed 56 well validated chemical probes to epigenetic regulators and distributed them as an unencumbered open science resource to the research community. In my lab we have been using the collection to facilitate understanding of epigenetic mechanisms and to identify and validate therapeutic targets for cancer in patient-derived cancer models such as tumour organoids. I will present data on our most recent chemical probes and describe the application of our entire collection of chemical biology reagents to discover new regulatory mechanisms of therapeutic relevance in cancer.



**Cheryl
Arrowsmith, PhD**

Professor

Medical Biophysics

University of Toronto