CV

jk

Education

PhD Biochemistry Western University 2016-2022

BSc Hon. Specialization in Biochemistry of Infection and Immunity Western University 2012-2016

Bioinformatics competencies

command line (proficient):

- tools: bowtie2, bwa, STAR, salmon, kallisto, fastqc, fastp, featureCounts, htseq-count, deeptools
- workflow: snakemake, nextflow
- HPC: linux, slurm, globus

R (proficient):

- differential gene expression analysis: edgeR, DESeq2, limma, voom, standR
- data wrangling and visualization: ggplot2, ComplexHeatmap, tidyverse
- interactivity: shiny

python (beginner):

• numpy, pandas, matplotlib, scanpy, squidpy

Peer reviewed publications

- Kim, S. J., Cecchini, M.J., Woo, E., Jayawardena, N., Passos, D. T., Dick, F. A. & Mura, M. Spatially resolved gene expression profiles in fibrosing interstitial lung diseases. *Thorax* (under review) (2024).
- Kim, S. J., Kiser, P. K., Asfaha, S., DeKoter, R. P. & Dick, F. A. EZH2 inhibition stimulates repetitive element expression and viral mimicry in resting splenic B cells. *The EMBO Journal* 42, e114462 (2023).
- Kim, S. J., MacDonald, J. I. & Dick, F. A. Phosphorylation of the RB C-terminus regulates condensin II release from chromatin. *Journal of Biological Chemistry* 296, (2021).
- **Kim, S. J.**, Asfaha, S. & Dick, F. A. CDK4 inhibitors thwart immunity by inhibiting phospho-RB-NF-B complexes. *Mol Cell* 73, 1–2 (2019).
- Ishak, C. A. et al. An RB-EZH2 complex mediates silencing of repetitive DNA sequences. *Mol Cell* 64, 1074–1087 (2016).

Presentations

- Kim, S. J., Kiser, P. K., DeKoter, R. P. & Dick, F. A. Elucidating the mechanism behind EZH2 inhibition and immune activation. Oncology Research & Education Day. London ON, Canada 2023
- Kim, S. J., Kiser, P. K., DeKoter, R. P. & Dick, F. A. Elucidating the mechanism behind EZH2 inhibition and immune activation. Oncology Research & Education Day. London ON, Canada 2022
- Kim, S. J. & Dick, F.A. Elucidating the mechanism behind EZH2 inhibition and anti-viral immune signaling. Oncology Research & Education Day. London ON, Canada 2021
- Kim, S. J., Ishak, C.A. & Dick, F.A. Pharmacological inhibition of EZH2 activates anti-viral immunity. London Immuno-Oncology Symposium London ON, Canada 2020
- Kim, S. J., Ishak, C.A. & Dick, F.A. Pharmacological inhibition of E1A-insensitive pRB-E2F1-EZH2 complex activates anti-viral immunity. ICGEB DNA Tumour Virus Meeting. Trieste, Italy. [2019].{cvdate}

Awards

Dr. William Zaharia Award 2024

Ontario Graduate Scholarship 2020

Howard Hughes Medical Institute Stipend 2018

Cancer Research and Technology Transfer Scholarship 2017

Academic experiences

Advanced Sequencing Technologies and Applications. Cold Spring Harbor Laboratory. 2018