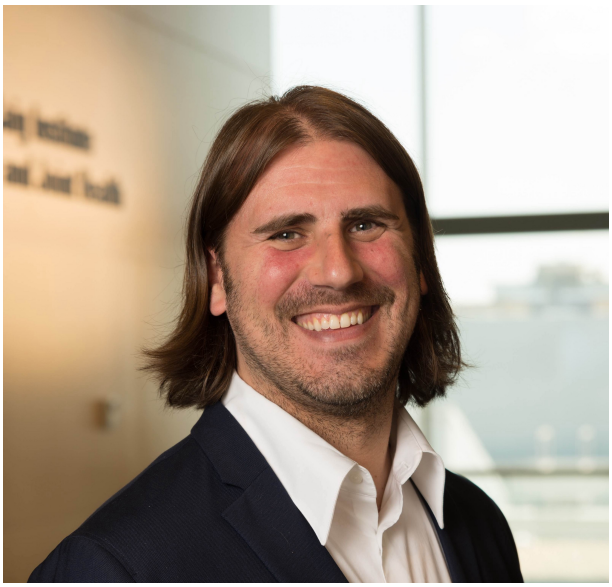
*The Centre for Blood Research presents*

# CBR SEMINAR SERIES

Wednesday, May 1, 2024
1:00PM - 2:00PM PT

Life Sciences Centre
1003 (LSC3) & Zoom

## "Keeping up with the TEMPO in the omics era."




## DR. TONY DUFOUR

**Associate Professor,** University of Calgary
**Associate Professor,** McCaig Institute
**Scientific Director,** Southern Alberta Mass Spectrometry (SAMS) Core Facility


What time is it? Can different cells give different answers to the question "what time is it?"

Do humans have internal clocks that can "*tell*" gene transcript to turn on and become proteins? How do these clocks work during aging and are these clocks inaccurate during diseases?

Are these clocks the same within different cell types?

Our team created a "*proteomic clock*" atlas of the eye using 120 human patients. From this data, we can begin to better predict a healthy person's age based on their protein profile. The clock revealed that diseases such as diabetic retinopathy, Parkinson's disease and uveitis cause accelerated aging within specific cell types.


*Many thanks to generous support from:*