

Dr. F.C. MacIntosh Lectureship Seminar**GUEST SPEAKER****Dr. William Pastor**

Assistant Professor, Department
of Biochemistry, McGill University

 **FRIDAY, JANUARY 12, 2024**
11:00AM**MCINTYRE MEDICAL SCIENCES
BUILDING
ROOM 1034****OR JOIN ZOOM**
[HTTPS://MCGILL.ZOOM.US/J/88192757960](https://mcgill.zoom.us/j/88192757960)
PASSCODE: 674332

“Factors governing the establishment of the embryonic and placental epigenomes”

DNA methylation is a critical epigenetic mark which mediates transcriptional silencing. During early embryonic development, correct patterning of DNA methylation is essential to prevent the expression of transposons or lineage-inappropriate genes. We have identified a transcriptional corepressor called ZMYM2 which alters the chromatin environment to allow methylation and repression of germline genes and transposons in somatic lineages. We have also found evidence indicating that differences in underlying chromatin explain both how and why the developing embryo and placenta develop strongly distinct patterns of DNA methylation