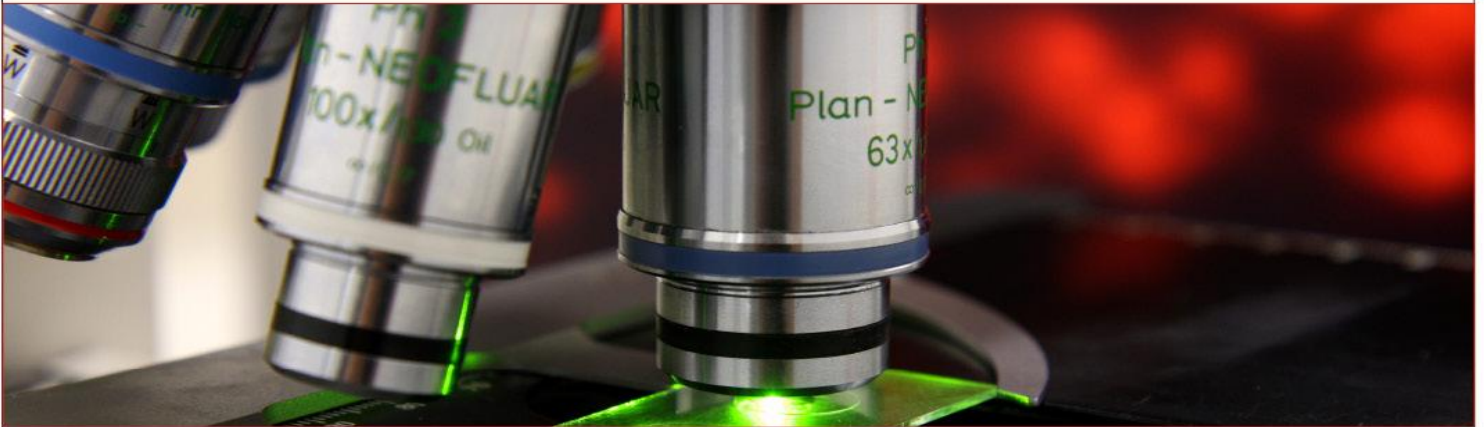


SÉMINAIRES ET CONFÉRENCES



El Bachir Affar, Ph.D.

**Professeur, faculté de médecine
Université de Montréal**

“ What a Deubiquitinase Must Overcome to Reach Its Destiny and Regulate the Epigenome”

BAP1 encodes a deubiquitinase that also functions as a tumor suppressor. The story of BAP1 is not that of a simple enzyme, but of a tumor suppressor that must earn its function by overcoming one barrier after another. Synthesized in the cytoplasm, BAP1 has first to escape potential misfolding, enduring precise quality-control pathways in which the E2/E3 ubiquitin ligase hybrid, UBE2O, constitutes an early checkpoint to BAP1 proper maturation. BAP1 has then to cross a second control to become catalytically competent through association with ASXL proteins, which promote its deubiquitinase activity within a large multi-protein complex. However, a potent enzyme without direction remains ineffective. BAP1 has next to be recruited to chromatin by FOXK transcription factors, where it removes H2AK119ub and restrains the repressive function of the PRC1 polycomb group repressive complex.

Only through the coordinated overcoming of these successive regulatory barriers can BAP1 preserve epigenetic homeostasis and execute its tumor suppressor function. Disruption of any one of these processes can impair chromatin regulation, rewire gene expression programs, and ultimately promote malignant transformation.



Faculté de médecine
Département de biochimie
et médecine moléculaire



Le jeudi 16 avril, 12h30

Pavillon Joseph-Armand-Bombardier, Salle : 1035

Et

[Zoom](#)

invité de Christine Roden
christine.rodén@umontreal.ca