



# **EXCELLENCE IN GENETICS & IMMUNOLOGY SEMINAR SERIES**



**Sylvie Lesage, Ph.D.**

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**Title: “Immunogenetics of NK cell differentiation”**

**Wednesday, April 1<sup>st</sup>, 2015**

***Martin Amphitheatre | Room 504, 12:00 PM***

*McIntyre Medical Sciences Building*

“Interferon-producing killer dendritic cells (IKDC) were identified in 2006 as a distinct cell type exhibiting hybrid properties of both NK cells and plasmacytoid dendritic cells. Indeed, as for NK cells, IKDC exhibit the capacity to produce IFN- $\gamma$  and to mediate cytotoxic activity and, as for DC, they efficiently present antigens and stimulate T cell responses. The combination of these unique properties endows IKDC with a unique immune potential allowing to specifically bridge functions of the innate and adaptive immune system. The outstanding biological potency of IKDC was rapidly noted in various *in vivo* tumoural settings. However, the study of IKDC for their anti-tumoural properties was rapidly halted as a debate emerged regarding both the cellular lineage origin of IKDC and their hybrid cellular properties. Recent work by the team of Dr. Lesage demonstrates not only that IKDC are part of the NK cell lineage, but that they represent a late intermediate step in the differentiation of NK cells. In addition, Dr. Lesage has exploited an immunogenetic approach to identify candidate genes relevant to the differentiation of NK cells, including IKDC”.

***This seminar is mandatory for Biochemistry Graduate students***

**LOCATION:** McIntyre Medical Sciences Building, Room 504, 12:00 PM

**HOSTED BY:** DRS SILVIA VIDAL & MAYA SALEH