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McGill University Research Centre on Complex Traits (MRCCT)  
and the Goodman Cancer Research Centre (GCRC)**



## **Dr. Pamela Ohashi, PhD**

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**Title:** “Insights in Immune Regulation from the Tumor Microenvironment”

**Wednesday, April 4, 2018**

**McIntyre Bldg. | Room 504, 4:00 PM**  
McIntyre Medical Sciences Building

*“Although immune therapy has garnered tremendous excitement in the field of oncology, further in depth understanding is needed to be able to take this therapy to the next level. We have focused on examining the complex tumor microenvironment in human cancers with the goal to understand the inhibitory mechanisms that are prominent in this disease.*

*From this perspective, we have identified a novel population of innate lymphoid cells (ILCs) that regulates the activity of tumour-infiltrating lymphocytes (TIL). Notably, the presence of regulatory ILCs in TIL cultures correlated with impaired T cell expansion and a striking reduction in the time to disease recurrence in patients. Functional studies revealed that regulatory ILCs suppressed both CD4<sup>+</sup> and CD8<sup>+</sup> TIL expansion and altered cytokine production. ILCs with regulatory potential could be distinguished phenotypically from conventional NK cells and other ILCs, suggesting they may constitute a novel innate lymphocyte population. These studies demonstrate a previously unidentified cell population regulates tumour-associated T cells.*

*We also have been investigating properties of Treg cells in the tumor microenvironment from various patient samples, with differences observed between HGSC tumors and melanoma. We have also identified various subsets of CD8<sup>+</sup> T cells in HGSC. Data from these studies will be presented.”*

**LOCATION:** McIntyre Medical Sciences Building, Room #504, 4:00 PM

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