



## WOMEN'S HEALTH IN WOMEN'S HANDS COMMUNITY HEALTH CENTRE

### RESEARCH PROJECT OVERVIEW

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Title:	<b>EXAMINING THE ABILITY OF HSV2 THERAPY TO REDUCE HIV TARGET CELL NUMBERS IN THE CERVIX OF HSV2 INFECTED WOMEN</b>
Principal Investigator(s):	Dr. Anu Rebbapragada
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Project Duration/ Funding:	CIHR Emerging Team Grants 2008 - 2013

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#### **Project Summary:**

Sexually transmitted infections are known to promote HIV acquisition by increasing the correlates of HIV susceptibility. Correlates of HIV susceptibility include various components in the mucosal immune milieu of the genital tract such as, HIV target cells (CD4 T cells expressing the CCR5 HIV co-receptor; CCR5+ CD4+ T cells and dendritic cells expressing the DC-SIGN lectin; DC-SIGN+ iDCs) and inflammatory cytokine proteins. Although Human papilloma virus (HPV) is the most common genital infection globally, very little is known about how this infection changes the mucosal immune milieu and whether these changes are associated with increased susceptibility to HIV infection.

This study is nested within the co-infection study and its goal is to understand how infection with oncogenic (high risk, HR) HPV alters the female genital tract immune milieu.

Study HYPOTHESIS: Infection with HR HPV promotes HIV acquisition by increasing the level of HIV "target cells" and inflammatory cytokine proteins in the genital tract (correlates of HIV susceptibility).