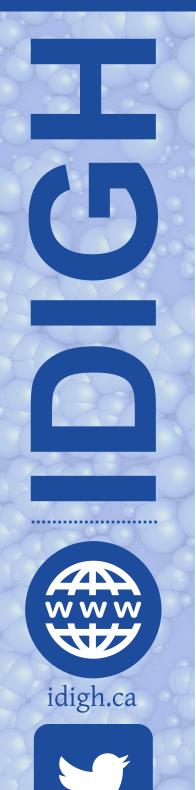


Programme en maladies infectieuses et immunité en santé mondiale Infectious Diseases and Immunity in Global Health Program

La recherche pour le bénéfice de la santé mondiale Improving Global Health through Research

Séminaire / Seminar



@IDIGHProgram

13 novembre / November 13 (12:00)

1001 boul. Décarie, Bloc E, EM1.3509



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A role for anti-HIV-specific antibodies in HIV control: What we know, what we don't know, what we need to know

HIV Envelope-specific antibodies able to mediate antibody dependent cellular cytotoxicity (ADCC) have been implicated in protection from HIV infection. However, Envelope-specific antibodies have the capacity to support ADCC of both HIV-infected and HIV-uninfected bystander cells. Lysis of HIV-infected cells by ADCC is desirable while lysis of uninfected healthy bystander cells contributes to CD4 T cells loss and pathogenesis. It is important that assays measuring ADCC activity distinguish between these two target cell types. In this seminar, I will describe the development of a novel ADCC assay and HIV infected target cells, which simultaneously quantify the killing activity of Envelope-specific antibodies on both HIV-infected and uninfected bystander cells. Using these tools, we show that Envelope-specific antibodies in HIV+ plasma mediate the ADCC of genuinely HIV-infected cells displaying Envelope in its native closed conformation, though these antibodies represent only a minority of all the anti-HIV Envelope-specific antibodies in HIV+ plasma. This assay can be used for the development of vaccine strategies aimed at evaluating the induction of Env-specific antibody responses capable of controlling HIV infection.

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