Highly active antiretroviral therapy has revolutionized the battle against HIV/AIDS. From its current global rollout, HIV/AIDS morbidity and mortality has been greatly reduced, yet substantial interest exists in the development of new therapies to further mitigate the HIV/AIDS health burden, and to inhibit fallout from the development of antiretroviral drug resistance. One potential therapy under recent deliberation is GB virus C (GBV-C). GBV-C is a virus that does not cause disease, and most remarkably is clinically shown to delay the progression of HIV to AIDS.

In this talk, we illustrate the utility of GBV-C inoculation for mitigating the health burden of AIDS using mathematical models. Our results show that, even in the face of GBV-C virulence evolution, GBV-C inoculation can be an effective therapy for reducing AIDS morbidity and mortality.