Objective
Estimation of Prevalence and Incidence of HIV is Necessary for Disease Management

Methods
- Production of Recombinant HIV-1 Integrase in *E. coli*
- Development of different Indirect ELISA formats
- Evaluation of performance → BBI Incidence/Prevalence panel (PRB601)
- Determination of an arbitrary cutoff → 3 SD above the mean ODs of the recent samples
- Determination of the specificity of the final integrase-based assay
- Comparison of the developed assay to BED-CEIA and LAg-avidity assays

Conclusion
Integrase is a conserved and immunogenic antigen of HIV and the anti-integrase antibodies are the latest to develop among all HIV antigens, making it an appropriate marker to discriminate recent and non-recent infections. The FRR of 3 different assays show that our assay (an early generation integrase-based ELISA) performed as well or better than the BED-CEIA and LAg-avidity assays. We plan on further refining the test and using a multi-assay algorithm to improve its predictive value of detecting recent HIV infection.