

# 4<sup>th</sup> African Pharma Congress

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## Preclinical HIV and TB work at the CPRU

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The preclinical research efforts of the catalysis and peptide research unit on HIV and TB drugs will be presented. HIV-1 subtypes are unevenly distributed across sub-Saharan Africa and prevalence rates differ significantly from country to country. HIV-1 subtype C is the predominant subtype in the global epidemic and in southern Africa, the worst affected region. I will discuss hypotheses for geographic differences, present data on molecular epidemiology and discuss data from our lab that suggests unexpected subtype-specific biological differences. I will discuss possible implications of these data for disease progression and epidemic spread. The unit explores four legs of drug discovery, namely theoretical methods (molecular modeling) in drug design, drug synthesis, biophysical analytical methods and biochemical methods (including animal studies). An update on the progress of each of these aspects will be presented.

## Biography

Hendrik Gerhardus Kruger has graduated from Potchefstroom University, South Africa, in 1996 under the supervision of Frans Martins and Attie Viljoen. He actively pursues the synthesis, computational chemistry and biotesting of cage compounds in the Catalysis and Peptide Research Unit at University of KwaZulu-Natal, South Africa.

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## Notes: