

# Abstract Information

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<b>Participation :</b>	symposium
<b>Title of the Symposium :</b>	Neuroimmune dysfunction and mental health outcomes: advances in immunopsychiatry in Africa
<b>Category :</b>	Academic/Researcher
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<b>Title :</b>	Depression in people with HIV: Intersections with neuroimmune and metabolic dysfunction
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**Abstract :** Inflammation and HIV status have been independently linked to an increased risk for depression, but few studies have explored the combined effects of these risk factors. Given that HIV results in persistent and chronic inflammation despite antiretroviral therapy, it is possible that the increased prevalence of depression among people with HIV may be partly attributed to inflammation.

This talk will focus on the possible contribution of inflammation to the risk for depressive symptoms, using data from African cohorts of young people living with and without HIV. In a small sample (N = 36) of young people living with HIV in South Africa, we first show that early-life systemic inflammation measured using high-sensitivity C-reactive protein (CRP) concentrations was correlated with depressive symptom severity in adolescence ( $r = 0.56$ ,  $p = 0.008$ ). Next, in a large cohort (N = 862) of children in Uganda followed longitudinally for up to 24 months, we find that the longitudinal trajectories of depressive symptoms were influenced by a significant interaction of HIV status and baseline CRP concentrations. At higher CRP concentrations, children with HIV showed lower baseline depressive symptoms ( $r = -0.14$ ,  $p = 0.003$ ), but their symptoms decreased less sharply over time compared to children without HIV ( $r = 0.08$ ,  $p < 0.001$ ). Therefore, the relationship between inflammation and depressive symptoms varied significantly according to HIV status.

Finally, this talk will consider emerging data on possible interactions of immune and metabolic dysfunction to the increased risk for depression in people living with HIV. We will discuss the value of investigating neuroimmune mechanisms of the risk for depression in people with HIV,

both as a means to positively impact the mental health of a large population group that is often underserved, and as a model for immunopsychiatry research more generally.