

Will McFadden



Ph.D. Student, Biochemistry, Cell and Developmental Biology Second Year ARCS Scholar
ARCS Century Award

Structural and biochemical effects of capsidtargeting molecules on HIV-1 capsid assembly

For the tens of millions of individuals living with human immunodeficiency virus 1 (HIV-1), antiretroviral therapies are life-saving medicines that prevent the onset of acquired immunodeficiency syndrome (AIDS). Our lab previously reported compounds with anti-HIV-1 activity that belong to a unique class of antiretrovirals not currently used in clinical practice. Here, I aim to determine how these compounds modify the assembled structures of the HIV-1 virion and to establish the biochemical parameters of compound binding to lay the groundwork for the next generation of HIV-1 therapeutics in order to help outpace antiviral drug resistance.













