

Will McFadden

EMORY UNIVERSITY

Klamon Impact Award

Ph.D. Candidate, Biochemistry, Cell and Developmental Biology Third Year ARCS Scholar

Structural and Biochemical Effects of Capsid-targeting 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.











