

Name: Sarah Neal Webb

Email: sjneal@mdanderson.org

PI Name: Joe Simmons

PI email: jhsimmons@mdanderson.org

A Baboon Research Resource for Use in Studies on Substance Abuse Disorders

Sarah J. Neal Webb¹, William D. Hopkins¹, Joe H. Simmons¹

¹The University of Texas MD Anderson Cancer Center, Michale E. Keeling Center for Comparative Medicine and Research

The Michale E. Keeling Center for Comparative Medicine and Research (KCCMR) at The University of Texas MD Anderson Cancer Center houses two colonies of baboons, including 1) the Specific Pathogen Free 18 Baboon Research Resource, which is the only national resource of olive baboons (*Papio anubis*) that are free of 18 adventitious infectious viruses and common bacteria and parasites; and 2) a conventional, non-virus-free colony. One aspect of the KCCMR baboon population (total sample ~400 individuals) is that social group members have received differing early rearing experiences, which offers a unique opportunity for investigators to examine genetics and epigenetics of substance use disorders. Further, researchers and collaborators at the KCCMR can utilize an array of methodologies to investigate mechanisms of substance use disorders and addiction, including structural and/or functional imaging, genomic, genetic, blood biomarker, life history, cognitive, and behavioral data. Importantly, the baboon is a well-suited model to investigate phenotypes often associated with substance abuse, including novelty seeking, inhibitory control, delay of gratification, anxiety, and stress (among others). The baboon research resource at the KCCMR offers unique opportunities to examine the ways that biological, social, developmental, genomic, and genetic factors may affect the risks of substance abuse and addiction.