Dr. Vance is an expert in cognitive aging, cognitive remediation, and aging with HIV.

Even slight cognitive changes in efficiency can severely impact the aging population, especially those with HIV, impacting their driving safety and quality of life which poses immediate public health concerns. Preliminary studies in Vance’s research examine the link between olfaction and cognition in older African American and Caucasian adults with HIV. A second study will be the first to combine transcranial direct current stimulation with speed of processing training. The synergy from these two techniques is hypothesized to produce profound improvements in cognitive and everyday functioning.

The long-term goal of Vance’s research is to extend the transcranial direct current stimulation research to older adults with HIV who have experienced cognitive loss. He ultimately hopes to find unique ways to detect and intervene in cognitive loss in vulnerable populations.