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Primary Research Interest:	Other
Description of Research:	Our work is aimed at delineating the structures of the brain important for memory, their interconnectivity, and importantly what happens to memory function when the structures are damaged or become progressively dysfunctional, i.e., in the case of neurodegenerative diseases like Alzheimer's Disease (AD). We use nonhuman primate models and patients with AD and AD variants. More recently we have been applying this work toward the development of both diagnostic and prognostic behavioral tasks aimed at detecting oncoming cognitive decline, even in individuals who are pre symptomatic at the time of testing. This work has been successfully applied to patients with Mild Cognitive Impairment and Alzheimer's disease and is now being applied to the domain of HIV/AIDS patients who are living longer because of the advances in antiretrovirals, but who are also showing signs of cognitive decline associated with aging. All of these activities are relevant to the patient care mission of the VA.
Relevance to VA:	Our work has helped to uncover the memory system in the brain, including structures critical for normal memory function. This work has clarified how memory is organized and is useful in understanding many medical conditions that have memory dysfunction as a key feature, i.e., depression, anxiety, and many neurodegenerative diseases. More recently we have been applying this work toward the development of both diagnostic and prognostic behavioral tasks aimed at detecting oncoming cognitive decline, even in individuals who are pre symptomatic at the time of testing. This work has been successfully applied to patients with Mild Cognitive Impairment and Alzheimer's disease and is now being applied to the domain of HIV/AIDS patients who are living longer because of the advances in antiretrovirals, but who are also showing signs of cognitive decline associated with aging. All of these activities are relevant to the patient care mission of the VA.