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*Title of Abstract and Presentation: **Biomarker Discovery and Possible Therapeutic Interventions***

Biomarker discovery and therapeutic interventions are now required for improved stroke prevention, and for the improved diagnosis and intervention that can improve independence and promote functional recovery if strokes do occur. However, we have recognized for decades that Cardiovascular-Metabolic Health promotes Brain Health and Resilience. Now that we better understand the contributions of these factors to dementia are critical to impact current and future increasing dementia in aging, NINDS and NIA have focused on and providing regular monitoring direction, identifying new areas of mechanistic and biomarker discovery in Vascular Contributions to Dementia (VCID). VCID involves mixed pathological mechanisms, and is frequently a component of Alzheimer's Disease (AD) and many other dementia diseases and conditions. Reducing vascular and metabolic risk factors significantly reduces dementia risk and occurrence in AD and is significantly involved in most other AD Related Dementias (ARD). DHSU has all the capabilities to do work that can understand the many factors (e.g., neuronal, glial, vascular and inflammatory-immune, metabolic and brain perfusion, white matter injury, etc.) that drive VCID in both animals and humans. Thus, the importance of VCID in ARD research can synergize our research and technologies (e.g., especially genomics, transcriptomics; RNA-Seq and Spatial, and metabolomics in animal and man) and link in a team-related approach throughout our Graduate Schools and COM (Neurology, Cardiology, Psychiatry, Immunology, etc.) to submit the strongest grant proposals in an area that continues to increase funding. We must stay cognizant of new, emerging NINDS-NIA RFAs in ARD that align with DHSU.