Federal funding begins for statewide Alzheimer's research venture

The U.S. National Institutes of Health will award an estimated $9 million over the next 5 years to a new statewide center to enhance the understanding and treatment of Alzheimer's disease and related dementias beginning Monday, Aug. 15, for University Research Corridor institutions the University of Michigan, Michigan State University and Wayne State University. Katie McLean | The Ann Arbor News (Submitted photo)

By Martin Slagter | mslagter@mlive.com
Email the author
on August 16, 2016 at 8:25 AM, updated August 22, 2016 at 9:26 AM

ANN ARBOR, MI — Federal funding begins Monday, Aug. 15, for a statewide venture that brings together University Michigan State University and Wayne State University researchers, clinicians and trainees.

The U.S. National Institutes of Health will award an estimated $9 million over the next five years to a new statewide enhance the understanding and treatment of Alzheimer’s disease and related dementias.

The Michigan Alzheimer’s Disease Core Center (ADCC) will support researchers and clinicians from the University Corridor, comprised of U-M, MSU and WSU.
The new Michigan ADCC is one of nearly 30 NIH-funded Alzheimer's disease centers across the nation, and the only three major research universities.

"This is a remarkable opportunity to leverage the combined clinical, research and educational expertise of our three institutions to tackle this devastating disease," said Scott Counts, Ph.D., associate professor of translational science and mole at MSU College of Human Medicine in a press release.

Over 5 million Americans 65 and older have Alzheimer's disease, and another several million have other forms of dementia, including frontotemporal dementia, Lewy Body dementia and vascular dementia, according to the University of Michigan System. Currently, no disease-slowing therapies exist for any dementia.

The ADCC will support a wide range of studies on Alzheimer's disease and other dementias while also educating care professionals and the public on the causes and treatment of dementias.

Alzheimer's disease is characterized by two kinds of accumulated protein deposits: plaques and tangles. Much of the research in the field investigates beta-amyloid, the protein that forms the plaques. The Michigan ADCC instead will focus on different factors.

"We'll emphasize studies of the many non-amyloid factors contributing to disease because beta-amyloid, though important in Alzheimer's, is already getting considerable attention," said Henry Paulson, M.D., Ph.D., U-M neurologist of the Michigan Alzheimer's Disease Center. "The goal of all this innovative research across the three universities is disease processes and develop better treatments for the various dementias."

Researchers also are investigating strong links between dementia and other illnesses such as cerebrovascular disease, metabolic disorders and depression.

Once funding begins, they'll be able to more deeply integrate with geriatrics, movement disorders and other programs at the three universities to develop new lines of research, in some cases supported by pilot project funding.

As one example, the team is already working with the WSU Healthier Black Elders Center to advance understanding in underrepresented minorities.

"To advance Alzheimer's research, we need to integrate data coming from various platforms including clinical, genetic, biomarkers and imaging data," said Hiroko Dodge, Ph.D., U-M associate professor of neurology leading the ADCC's management and statistical core. "Our center will be able to provide unique and high impact science, taking advantage of university's big data initiatives and integrating their analytical approaches with clinical knowledge."

The ADCC will foster career development of junior investigators to prepare the next generation of experts in Alzheimer's and other dementias. The center seeks to provide training opportunities across many areas of research and at all levels of expertise, from high school students to junior faculty.

ADCC investigators at all three universities also will come together annually for a research symposium to facilitate and learn about each other's latest discoveries.

"We are especially excited that this collaboration will extend the scientific and community engagement work on Alzheimer's disease in African-Americans," said Peter Lichtenberg, Ph.D., director of WSU's Institute of Gerontology and ADCC
for training.

The Michigan ADCC's multi-institutional approach will extend its reach across the entire state to help citizens of Mi wherever they may live.

"The collaboration between Michigan's three Level 1 research universities and the integration of strong community represents an enormous opportunity for the citizens of Michigan to benefit directly as they struggle to understand with persons suffering with Alzheimer’s disease," Lichtenberg said.