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**Duke/UNC Awarded Grant to Establish Joint Alzheimer’s Disease Research Center**

*The NIH-funded center of excellence will focus on identifying early changes in dementia and factors driving disparities*

DURHAM, N.C. – Duke University and the University of North Carolina at Chapel Hill have been awarded funds from the National Institutes of Health to establish a prestigious Alzheimer’s Disease Research Center (ADRC), part of a federally-funded national network of similar centers.

The research center, one of 33 nationwide, will focus on identifying age-related changes across the lifespan that impact the development, progression and experience of Alzheimer’s and related dementias. The center will also identify how factors that arise in early- and mid-life contribute to racial, ethnic and geographic disparities in dementia.

NIH funding for the joint Duke/UNC center is expected to total $14.8 million over the next five years.

“The new ADRC unites two extraordinary institutions in the effort to prevent, delay and treat Alzheimer’s by focusing on the known risk factors, including race, age, female sex and genetic predisposition,” said Rich O’Brien, M.D., Ph.D., chair of the Department of Neurology at Duke University School of Medicine. “We'll also greatly advance our understanding of the brain and how it changes across the lifespan.”

The Duke/UNC center is part of a unique collaboration between the two universities that began in 2019. It unites experts from a wide range of disciplines that include geriatrics, neurology, psychiatry, radiology, bioinformatics and pathology.

A distinctive feature of the Duke/UNC center is its focus on adults ages 45 to 80 years old and some as young as 25, seeking signals of dementia before memory problems surface. By identifying these biological processes, researchers may be able to develop tools for earlier diagnosis and determine new targets for treatments that prevent or delay onset.

“A lot of data are looking at people who already have disease, but it’s become increasingly clear that we may learn more if we start earlier,” said co-principal investigator Heather Whitson, M.D., professor of medicine and director of the Duke Center for the Study of Aging and Human Development.

“It’s important to start recruiting people who are in early to middle adulthood and have a major risk factor for developing Alzheimer’s or dementia in the future,” Whitson said. “That’s where the scientific payoff is -- to understand what’s going on early.”
Another key element of the Duke/UNC project is its mission to increase research and clinical trial participation among under-represented groups. The risk of developing Alzheimer’s disease is higher among both Blacks and Latinos compared to whites, yet research studies disproportionately include white participants.

“The reasons why dementia risk is higher among Black populations has not been well-studied,” said co-principal investigator Gwenn A. Garden, M.D., Ph.D., professor and chair of the UNC Department of Neurology at the UNC School of Medicine. “Enrolling a diverse cohort that includes people with different lifestyles and racial backgrounds will help address risk in populations. This is important because we don’t know if current diagnostic approaches are as effective in populations that haven’t been well-studied.”

Whitson and Garden said the NIH funding will enable teams from both institutions to engage local communities with new hypotheses about Alzheimer’s disease. Specific projects for local community members to consider participation include:

- A study recruiting and following people from North Carolina who either have dementia or may be at risk for developing dementia later. This group of study participants will be younger and more diverse than many of the other cohorts followed by ADRCs around the country.

- A project to collect and store samples such as blood or spinal fluid, along with brain images from people with well-characterized dementia or dementia risk. This project would help identify new biomarkers of Alzheimer’s disease, understand key biological changes that precede the onset of disease, and potentially identify targets for new therapies.

- A Brain Bank that provides participants the opportunity to donate their brain to science.

With the NIH ADRC designation, the Duke/UNC collaboration will be recognized as one of the NIH Centers of Excellence. Additionally, as part of the network of centers, this new center will share important research with other ADRCs throughout the country, including data, biological samples, genetic information, therapeutic targets, and imaging and biomarkers, helping scientists across the country and the world learn more about dementia at a faster pace.

The National Institute on Aging, part of the NIH, established the ADRC network in 1984 to advance research in Alzheimer’s and related dementias. Among their achievements, the centers have made strides in better understanding the hallmarks of Alzheimer’s disease, distinguished differences between normal cognitive changes vs. those associated with dementia and conducted clinical trials on potential treatments for Alzheimer’s disease.

“We are excited to move forward with this designation as an Alzheimer’s Disease Research Center,” Whitson said. “It will enhance our missions to engage with our community, to educate patients and families about dementia and options for top-notch care and research and to nurture and educate rising students and young investigators who also represent the diversity of our State and will become tomorrow’s leaders in our fight against Alzheimer’s disease.”

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