### 2018 MIND CENTER ANNUAL UPDATE





#### Dear friends and supporters,

The MIND Center experienced tremendous growth over the past year and further advanced its mission to unravel the causes of Alzheimer's and dementia. We have officially settled into our new home in the UMMC Translational Research Center. The Gertrude C. Ford MIND Research Center encompasses the entire first floor, representing almost 15,000 square feet of this architecturally distinctive building.

We created this update to give you a comprehensive look into each aspect of The MIND Center's missions in research, health care, and education. We are extremely

proud of what we have been able to accomplish with your support.

On the pages of this report, you will read about our new key research initiative, the UMMC MIND Center-Mayo Clinic Study of Aging, the exciting growth of our clinical services, and our ever-expanding educational programs.

In addition, we wanted to take this opportunity to recognize the state legislature and the many individuals, foundations, and organizations who have contributed to accelerating The MIND Center's Alzheimer's research and have allowed us to bring critical dementia care services and education to Mississippians battling these diseases. I would also like to take a moment to thank our dedicated community advisory board members, our board chair, Suzan Thames, and our emeritus board chairman, Ambassador John Palmer, for their significant contributions to the creation and success of The MIND Center.

Together we are making great strides in our efforts to find ways to slow, stop, and ultimately prevent these devastating diseases and bring us one step closer to a world where Alzheimer's is just a memory.

Sincerely,

**DR. THOMAS MOSLEY** Dudley and Robbie Hughes Distinguished MIND Center Chair MIND Center Director



#### Dear friends,

As Mississippians, we are truly blessed to have The MIND Center in our home state, leading the way in groundbreaking research in the field of Alzheimer's and dementia.

When you support The MIND Center, you are supporting hope for millions of people suffering from Alzheimer's and dementia worldwide. You are supporting research that could lead to therapies to slow, stop, or even prevent these diseases. You are taking a pivotal step toward a world where Alzheimer's is no longer a threat.

Each of you has played a significant role in our success and we are extremely grateful for your support.

If you have not had the chance to tour our new Gertrude C. Ford MIND Research Center, I would like to personally invite you to take a tour so you may see firsthand your generous contributions at work.

To schedule a tour, contact Melissa Robinson by email at mrobinson6@umc.edu or by phone at 601.815.4299.

Please join us in fighting Alzheimer'stogether we can make a difference. Sincerely,

Suzan B. Thames

SUZAN THAMES MIND Center Community Advisory Board Chair





The **UMMC MIND Center-Mayo Clinic Study of Aging** is a major new research study on Alzheimer's disease led by The MIND Center in collaboration with global research leader Mayo Clinic. This study represents the culmination of two decades of ongoing research between investigators at UMMC and Mayo Clinic in brain aging and dementia.

Launching in 2019, the study population will be randomly selected and will include men and women, African American and white, who are 55 years or older and live in Hinds, Rankin, or Madison Counties.

The goals of the study include (1) identifying the prevalence of cognitive changes and dementia in Mississippi, (2) finding early disease predictors to develop better tools for prevention and early diagnosis, and (3) discovering the factors behind the higher risk of cognitive decline in African Americans and differences in risk by geographic region.

The MIND Center continues to lead the **Atherosclerosis Risk in Communities Neurocognitive Study (ARIC NCS)**, a collaborative study with Johns Hopkins University, University of Minnesota, Wake Forest University, University of North Carolina-Chapel Hill, Baylor University, University of Texas at Houston, and Mayo Clinic.

The MIND Center's long-term ARIC NCS cohort is currently returning to the clinic for their seventh visit, which includes extensive lab, diagnostic, and cognitive testing. The exams also include a hearing assessment and evaluation of gait and strength to determine the correlation of hearing loss and gait on the prediction of Alzheimer's and dementia. With over 30 years of continuous funding from the National Institutes of Health, the ARIC NCS is the most comprehensive study of risk factors for Alzheimer's and dementia ever undertaken.



A new **Eye Determinants of Cognition (EyeDOC) Study** that launched in 2018 uses sophisticated retinal imaging to identify predictors or changes in the eye representative of early cognitive impairment and dementia. A collaboration with Johns Hopkins University, this study of ARIC participants seeks to identify novel eye biomarkers as a safe, non-invasive screening tool for dementia.

The **ARIC Microbiome Study** examines digestive tract bacteria composition and neurocognitive function in the ARIC study population to identify the link to neuro-outcomes such as cognitive functioning, brain MRI abnormalities, and mild cognitive impairment or dementia.

In the spring of 2018, The MIND Center began recruiting new study participants from the community to participate in the **Aging, Cognition, and Hearing Evaluation in Elders (ACHIEVE) Study**, which examines the impact of healthy lifestyle coaching and hearing loss treatment on preventing or delaying cognitive decline.

The EyeDOC, Microbiome, and ACHIEVE Studies will add to our understanding of the causes of Alzheimer's and dementia and help identify new predictors and treatments for the diseases targeted at disease prevention and early intervention. (cont'd)

### Advances in Research

(cont'd)

The MIND Center has multiple ancillary studies that are also funded by the NIH that examine the relationships between cognitive impairment and other medical conditions including diabetes, heart irregularities such as atrial fibrillation and calcification of the arteries, and overall heart function. These studies leverage the use of advanced diagnostic testing such as novel ECG monitoring, echocardiograms, and CT imaging. Several current projects study brain amyloid and intracranial atherosclerosis using detailed MRI/ MRA imaging.

The MIND Center completed its enrollment in the **Imaging Dementia–Evidence for Amyloid Scanning (IDEAS) Study**, which seeks to determine the efficacy of amyloid PET scanning on the diagnosis and treatment of Alzheimer's disease. A total of 75 participants with atypical mild cognitive impairment or dementia were recruited in Mississippi by The MIND Center and analysis of collected data is underway.

The MIND Center's Clinical Trials program expanded with its participation in the **HARMONY and SERENE Studies**, sponsored by Acadia Pharmaceuticals. The purpose of these clinical trials is to evaluate the efficacy of the drug Pimavanserin in treating agitation and aggression in Alzheimer's disease and reducing hallucinations and delusions that are sometimes associated with dementia.

Additionally, The MIND Center participated in the **GERAS-US Study** sponsored by Eli Lilly and Company to learn about health care use, costs, and clinical outcomes over time for participants with early stage Alzheimer's disease in the United States.







## Compassionate



■ The MIND Center continued its free community education series **Mind Matters** at the UMMC Student Union building. Topics this past year included "Hearing Loss and Cognitive Decline," "The Power of Music and the Mind," "Positive Mental Health as You Age," and "New Research into the Causes of Alzheimer's and Dementia." Experts on each subject provided information to patients and their caregivers who then had an opportunity to ask questions related to their specific situation.

■ The MIND Center hosted the **6th Annual Alzheimer's State Planning Summit** in December 2017 for statewide constituents involved in the development and implementation of the 2015– 2020 State of Mississippi Strategic Plan for Alzheimer's Disease and Related Dementias.

■ In June 2018, The MIND Center hired a **Director of Education and Outreach** to further expand its provision of education and training to family caregivers, health care providers, and the general public. Kathy Van Cleave holds a master's degree in social work and has over 24 years' experience in health care. She was employed for the past 15 years by the Mississippi Department of Mental Health's Division of Alzheimer's Disease and Other Dementia, where she served as executive director.

■ Art in Mind continues to thrive by helping individuals with memory loss rebuild connections and improve cognitive abilities through art. The monthly program is a collaboration between The MIND Center, Alzheimer's Mississippi, AARP, and the Mississippi Museum of Art, where participants observe and discuss art in the museum galleries then create their own artwork in a studio setting. Due to high demand for the program, a second session has been added each month to accommodate more participants.

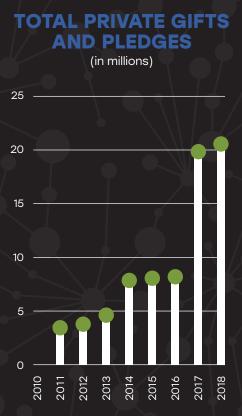
# Core

- As the only outpatient center dedicated to Alzheimer's diagnosis and treatment in Mississippi, The MIND Center Clinic continues to grow and expand its provision of memory and dementia care services in the Jackson Metro Area at the University Physicians Pavilion in Jackson and University Physicians-Grants Ferry in Flowood.
- 2018 brought several clinical staff additions including a new geriatric provider, Dr. Lyssa Weatherly, an additional Nurse Care Coordinator, LeAnn Fagan, as well as a new Nurse Practitioner, Lyndsey Dill.
- We are excited to announce that Dr. Kim Tarver will join The MIND Center Clinic in July 2019 as the new Director of MIND Center Clinical Services. Dr. Tarver is Assistant Professor of Medicine in the Division of Geriatrics at UMMC where she trained and became board certified in internal medicine. She has more than 20 years' experience in clinical practice and teaching in the area of geriatrics. Dr. Tarver has additional certificate training in psychotherapy and is currently completing a geriatric fellowship at UMMC. She is a provider in The MIND Center Clinic and divides her clinical time between memory evaluations, primary care of geriatric patients, and psychotherapy with older adults.
- In partnership with UMMC's Center for Telehealth, the TeleMIND program continues to expand across the state with sites at UMMC Holmes County in Lexington, Life Help Region VI Community Mental Health Center in Greenwood, and UMMC Grenada. TeleMIND offers memory and dementia care services to Mississippians in remote areas of the state through secure audio-visual technology.
- To provide support and guidance to families of loved ones battling Alzheimer's and dementia, The MIND Center offers a range of caregiver support services, as well as counseling in both group and individual settings. This year, a second caregiver support group was added at the University Physicians-Grants Ferry location to augment the longstanding caregiver support group at the University Physicians Pavilion. Both caregiver support groups meet once a month in the evening and are open to families of The MIND Center Clinic patients and members of the local community.

## The MIND Center by the Numbers



Over





22 Million in private funding raised since inception



\$1,050,705 in private support for cash and realized gifts for the Fiscal Year July 1, 2017-June 30, 2018

Almost

**15 Million** 

in funding appropriated by the Mississippi State Legislature since 2014 Participants in the 3rd Annual Brawn and Bubbles 5k Run for the Brain

The MIND Center's research is thriving with the addition of several new and exciting studies,

and we now have 16 active grants funded by the National Institutes of Health (NIH)

totaling more than \$16 Million.

# The MIND Center

The MIND Center gratefully acknowledges the following donors who made gifts in support of our mission of education, research, and health care during the 2017–2018\* year.

#### Gifts of \$100,000 or more

Gertrude C. Ford Foundation, Inc. Old Ladies Home Association

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\*The fiscal year dates were July 1, 2017 to June 30, 2018.

GERTRUDE C. FORD MIND RESEARCH CENTER

# Recognition Wall

In November 2017 The MIND Center unveiled a focal wall that honors its donors for cumulative giving of \$10,000 or more from inception to June 30, 2018.

The wall, designed by Jackson-based firm Kiyomi, is inspired by brain scan imagery and features a moving light component that alludes to the firing of neurons. Kiyomi selected local artist Rob Cooper to create a stained glass portrait of Gertrude C. Ford, which is installed in a custom light box built by craftsman Joe Partridge. Jackson's Pearl River Glass was enlisted to create donor nameplates. Local vendors Davaine Lighting and A+ Signs and Creative supplied and installed custom lighting and graphics.

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\$10 million or more Gertrude C. Ford Foundation

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# Be Port of the Solution.

Community support and private donations are critical to accelerating The MIND Center's research and expanding our dementia care services to support Mississippians across the state. Join our giving society today to be a part of the solution.

To learn more or to make your gift, contact 601.815.4299 or mindcenter@umc.edu. Donate online at umc.edu/mindcenter.



#### **THE MIND CENTER** The University of Mississippi Medical Center 2500 North State Street Jackson, Mississippi 39216

umc.edu/mindcenter

