NYU Langone Health

Alzheimer's Disease Research Center (ADRC)
Silberstein Alzheimer's Institute
Center for Cognitive Neurology

MIND MATTERS

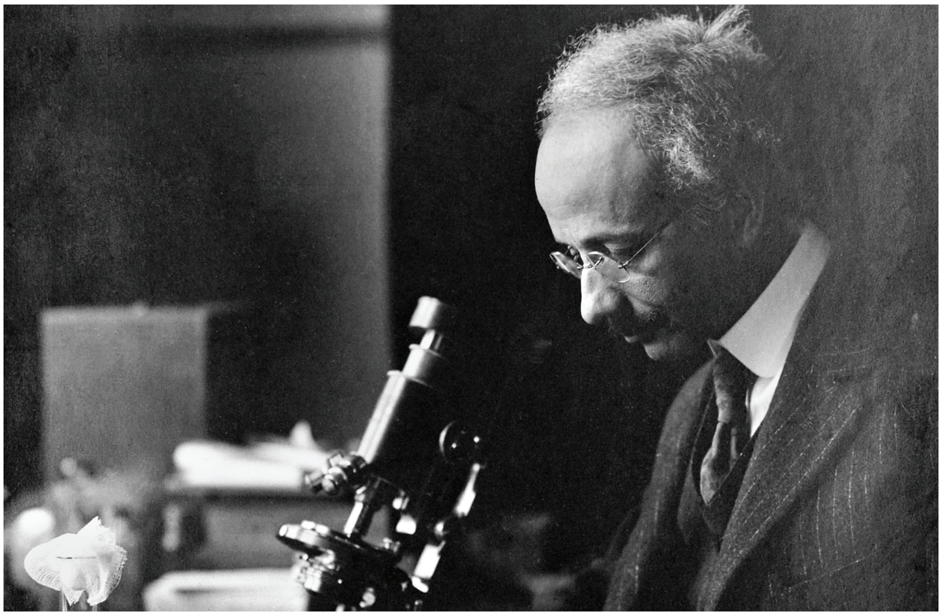
Special Edition: Black History Month

TABLE OF CONTENTS

SECTION 1

Solomon Carter Fuller: The First African American Psychiatrist and Alzheimer's Research Pioneer

By: Abena Dinizulu, BS



Solomon Carter Fuller, undated. Source: Collection Boston University Alumni Medical Library

Solomon Carter Fuller was born on August 11, 1872, in Monrovia, Liberia. His father, Solomon C. Fuller Sr., was a freed slave from Norfolk, Virginia, who had purchased his freedom—and that of his family—before emigrating to Liberia under the auspices of the American Colonization Society. They were among the 18,000 Black Americans who resettled in West Africa between 1820 and 1867, seeking freedom and educational opportunity in the face of discrimination. In Liberia, Solomon Sr. prospered as a carpenter and tobacco farmer, and in 1861 he married Anna Ursula James, the daughter of medical missionaries whose commitment to healing and community welfare shaped the family's ethos. Encouraged by the example set by his maternal grandparents, young Solomon developed a curiosity about the human body and mind. At age seventeen, he traveled to North Carolina to enroll at Livingstone College. He graduated in 1893 and, despite the steep odds Black students faced in securing medical training, he gained admission to the Long Island College Hospital's medical program in New York. By the fall of 1894, Fuller transferred to Boston University School of Medicine.

continued on next page

Upon Fuller's graduation in 1897, he met Dr. George Adams, superintendent of Westborough State Hospital. Dr. Adams offered Fuller an internship in the hospital's new pathology laboratory. Although Fuller was well qualified for the job, he soon encountered a stark reminder of institutional racism. After his first year, he received a small pay raise from twenty-five to thirty dollars, and soon discovered that a newly hired white physician, with less experience, earned fifty dollars from the outset. Undeterred, Fuller recognized the value of his position and completed a two-year internship at Westborough. During this time, he conducted postmortem examinations to explore neuropathological foundations of neurological and psychiatric disease. These methods were still new in American mental hospitals, which at the time often only offered custodial care. As a result of his studies, Fuller was soon appointed Hospital Pathologist and Instructor in Pathology at Boston University. Believing that true medical progress demanded experimentation and observation, he immersed himself in postmortem examinations, tissue sectioning, and microscopic slide preparation.

In 1900, Fuller took a leave of absence to pursue advanced neuropathological research under Dr. Edward K. Dunham, a leading pathologist, at the Carnegie Laboratory in New York, the first pathology and bacteriology lab in the U.S. and part of the Bellevue Hospital Medical College. Fuller returned to Boston University eager to apply his newfound skills in a clinical setting. In 1904, he petitioned Boston University for leave to study in Germany, where he would have the opportunity to conduct research with some of the best researchers in the world. Germany's prominence in pathology was driven by significant advancements in microscopy and the development of cutting-edge histological techniques. At the Royal Psychiatric Hospital at the University of Munich, Fuller came under the tutelage of Dr. Emil Kraepelin, a renowned psychiatrist whose emphasis on careful classification and systematic data collection would influence Fuller's style of research. In Munich, Fuller met Dr. Alois Alzheimer, Kraepelin's protégé and director of the Histopathological Laboratory. Alzheimer, impressed by Fuller's prior experience, accepted him into the "Privatissimum" course — an exclusive training program for five foreign graduate research assistants.

Alois Alzheimer and Solomon C. Fuller seated; Source: New York Public Library Digital Collections.

During this period, Alois Alzheimer closely observed Auguste Deter—the first patient diagnosed with what we now know as Alzheimer's disease—and in 1907 he described the histopathological signatures of this disease, including what we now know as amyloid plaques. Upon returning to the U.S. in 1905, Fuller resumed his work at Westborough Hospital and in 1907 published a detailed description of histopathological changes in subjects with dementia. In 1912, he published the first comprehensive review of Alzheimer's disease, in which he reviewed eleven known cases, including Alzheimer's original case and the ninth case that he had discovered. Comparing autopsies at Westborough Hospital, he observed plaques not only in older adults with dementia but also in those without psychiatric symptoms, and even in a younger patient who did not have psychosis. Concluding that these "peculiar structures" did not define one singular mental disorder, Fuller underscored dementia's complexity and provoked further inquiry into Alzheimer's research.

Fuller's research laid the groundwork for understanding dementia beyond the conventional framework of the time. He not only introduced Alzheimer's findings to the American medical community but also expanded upon them, raising questions about the role of senile plaques and neurofibrillary tangles in dementia. His work challenged the widely accepted notion that arteriosclerosis was a primary driver of dementia, opening avenues for investigating alternative mechanisms of cognitive decline.

Although Fuller played a key role in advancing Alzheimer's research, institutional barriers limited his opportunities for advancement. Fuller resigned from Westborough Hospital in 1919 and spent the next chapter of his career at Boston University Medical School, teaching pathology in the Departments of Neurology and Psychiatry. As the only Black faculty member at the time, he was paid less than his white colleagues and was never placed on the official payroll. Despite this, he devoted himself to mentoring a new generation of physicians, including those recruited for the African American Veterans Hospital in Tuskegee, Alabama. In his final years at Boston University, he led the Neurology department without ever being formally named its chair. Then, in 1933, after a white junior colleague was promoted to full professorship and appointed head of the department, Fuller chose to retire. He continued to practice neurology and psychiatry until 1944 when he lost his eyesight due to diabetes. He died in 1953 at the age of 81. Reflecting on the discrimination he faced, Fuller once noted, "With the sort of work that I have done, I might have gone farther and reached a higher plane had it not been for the color of my skin." And yet, he pressed on, forging a path for others and leaving an imprint on both neurology and psychiatry. For Black History Month, his story reminds us that the pursuit of knowledge, paired with resilience and determination, can transcend barriers and inspire future generations.

References

1. Kaplan, M. (2005). *Where My Caravan Has Rested: The Story of Dr. Solomon Carter Fuller.* University Press of America.
2. Mayo Clinic. (2022, February 15). *Black History Month – Honoring Dr. Solomon Carter Fuller.* Mayo Clinic News Network.https://newsnetwork.mayoclinic.org/discussion/black-history-month-honoring-dr-solomon-carter-fuller/
3. Most, D. (2023, February 16). Why the Story of Solomon Carter Fuller Matters to BU-and for Black History Month. https://www.bu.edu/articles/2023/story-of-solomon-fuller-bu-black-history-month/
4. Mohammed H. Recognizing African-American contributions to neurology: The role of Solomon Carter Fuller (1872-1953) in Alzheimer's disease research. Alzheimers Dement. 2021 Feb;17(2):246-250. doi: 10.1002/alz.12183. Epub 2020 Dec 15. PMID: 33325137; PMCID: PMC7986064.

About the Editor

Abena Dinizulu is the Outreach Program Coordinator at the Alzheimer's Disease Research Center (ADRC), where she oversees outreach, recruitment, and engagement efforts. She is passionate about improving the representation of minority groups in research. Having grown up in New York City, she understands the barriers many face in accessing healthcare and preventive services, which drives her commitment to ensuring that future interventions and treatments are culturally appropriate for the city's diverse populations. She collaborated with ADRC researchers and the Community Advisory Board to put together this special edition of Mind Matters for Black History Month. This newsletter highlights both historical and ongoing contributions to Alzheimer's research and showcases researchers at the ADRC who continue to inspire future generations.

SECTION 2

Dr. Omonigho Michael Bubu: Advancing Science Through Research and Mentorship

By: Carolina Boza Calvo, MSc, and Abena Dinizulu, BS

Omonigho Michael Bubu, MD, PhD, MPH, is a physician-scientist with clinical and research training in neurology, neuropsychiatry, neuro-epidemiology, and public health. Dr. Bubu embodies resilience, leadership, and a relentless pursuit of health equity. As an Associate Professor of Psychiatry, Neurology, and Population Health at NYU Langone Health, his journey is defined by a deep commitment to addressing disparities in cognitive health and advancing the science of Alzheimer's disease prevention. Born and raised in Nigeria, Dr. Bubu's earliest encounters with Alzheimer's disease came not from textbooks but through the lived experience of witnessing its impact on a loved one. This formative chapter inspired a life's mission, to unravel the complexities of cognitive health and advance the well-being of aging populations. His research explores the relationship between sleep and Alzheimer's disease, with a focus on Black/African American populations.

Dr. Bubu's journey in the US academic research began during his training at the Rollins School of Public Health at Emory University, where he first explored health behaviors, including sleep, as risk factors for cognitive decline. During his doctoral training at the University of South Florida, he examined rest-activity patterns and sleep-wake cycles as predictors for Alzheimer's disease. At NYU Grossman School of Medicine, working with Dr. Ricardo Osorio, he honed his expertise in the intersection of sleep and neurodegenerative diseases.

At the heart of Dr. Bubu's work lies the Aging Research in Sleep Equity and Dementia Prevention Program (ARISE-DP), an initiative he founded in 2019. The program is built on a foundation of innovative research that examines how sleep-related risk factors contribute to Alzheimer's disease disparities. ARISE-DP focuses on culturally tailored solutions, including the development of point-of-care diagnostics and targeted interventions to improve sleep health in underserved communities. The program uses a framework of community-based participatory research, which prioritizes the inclusion of communities in every stage of the research process. Through its groundbreaking research, ARISE-DP has identified potential novel therapeutic targets, such as improving slow-wave sleep and addressing vascular risk factors, that hold promise for reducing Alzheimer's disease risk in vulnerable populations. Dr. Bubu's NIH and foundation grants further this work, focusing on sleep, cardiovascular risk factors and their role in cognitive decline disparities between Black and white populations. A cornerstone of ARISE-DP is its mentorship pipeline, which supports underrepresented scholars at all career levels, from high school to undergraduate students to faculty members. Dr. Bubu has fostered an environment where emerging researchers receive hands-on training and guidance to excel in the field of neuroscience and sleep equity. His mentorship philosophy emphasizes collaboration, skill development, and networking, inspired by the guidance he received throughout his career. As a mentor, he embodies the spirit of giving forward, guiding PhD candidates, postdoctoral fellows, and medical students along their academic and professional journeys. In 2024, his dedication to mentorship was recognized with the Outstanding Mentor Award, the highest honor conferred by the NYU Grossman School of Medicine for research postdoctoral mentorship. His mentees celebrate him for fostering an environment of independence, collaboration, and mutual respect.

Dr. Bubu (center) with the ARISE-DP team

As we celebrate Black History Month, Dr. Bubu's story resonates deeply with the legacy of trailblazers like Dr. Solomon Carter Fuller. Through their work, they remind us that progress is not just about discovery but also about opening doors for those who follow. Dr. Bubu's journey is a narrative of resilience, mentorship, and innovation. His contributions to the mission of NYU Langone's Alzheimer's Disease Research Center and the broader field of public health underscore the impact of combining scientific excellence with commitment to community. As he continues to inspire and lead, Dr. Bubu ensures that the seeds of knowledge and hope he plants today will flourish for generations to come.

SECTION 3

Vascular Dementia in African American Populations

By: Carolina Boza Calvo, MSc, and Arjun Masurkar, MD, PhD

Vascular dementia (VaD) is a cognitive disorder caused by compromised blood flow to the brain, leading to brain damage and subsequent cognitive decline. It is the second most common form of dementia, after Alzheimer's disease (AD). Research indicates that African Americans (AA) are at a higher risk for developing VaD compared to other ethnic groups. Regarding the factors that may contribute to these differences there are important questions still unanswered. Evidence shows that the increased risk may be largely attributed to a combination of genetic, environmental, and lifestyle factors which might influence the development of cardiovascular diseases (CVD), such as hypertension, diabetes, and stroke, all of which are known to contribute to the development of VaD.

Hypertension is one of the most significant risk factors for VaD in AA. Studies have shown that AA are more likely to have high blood pressure, often diagnosed at an earlier age, and are less likely to have their hypertension under control. This contributes to a higher risk of stroke, which can lead to cognitive impairment and eventually VaD.

These risk factors are intensified by disparities in healthcare access and opportunities for early intervention, which may delay the diagnosis and treatment of underlying conditions. African Americans, along with Hispanics, are also more likely to be diagnosed later in the VaD progression, which significantly impacts the effectiveness of treatments. There are also concerns about the underrepresentation of AA in clinical research on dementia, contributing to a lack of tailored treatments and recommendations.

Over time, exposure to vascular risk factors can injure the brain and result in white matter hyperintensities (WMH), which are often markers of vascular brain injury. White matter consists of brain tissue made up of nerve fibers that allow brain cells to quickly send and receive messages. WMH are areas of abnormal white matter that appear as bright spots on MRI. Understanding WMH is crucial as they are indicative of the type of brain injuries that can lead to cognitive decline. To better understand the etiology of WMH and Alzheimer's disease and other dementias, such as VaD, across diverse populations, the NYU Alzheimer's Disease Research Center (ADRC) has joined forces with 16 other research centers in a nationwide initiative called "Diverse Vascular Cognitive Impairment and Dementia – Diverse VCID." Led by the University of California, Davis, this initiative aims to explore how vascular health impacts cognitive function. The study uses advanced brain imaging and blood-based techniques to examine changes in brain function. Through monitoring specific CVD and AD biomarkers, our goal is to improve our ability to diagnose and treat WMH in ethnically and racially diverse older adults, before it leads to cognitive impairment or dementia. In summary, VaD is a growing concern in the African American population, exacerbated by health disparities, cardiovascular risk factors, and challenges in diagnosis and care. Through research, we expect to better understand the risk factors for VaD, specific biomarkers, and improve the awareness of the importance of early detection in ethnically and racially diverse populations.

SECTION 4

Brain Donation and the Fight Against Alzheimer's Disease

By: Rev. Kimberly L. Detherage, Esq.

Katherine S. Detherage, PhD, RN, CNAA (left), Dorothy S. Dowe, RN, MSN (center), Rev. Kimberly L. Detherage, Esq.(right).

On April 3, 2023, my aunt, Dorothy S. Dowe, RN, MSN, passed away from Alzheimer's Disease at the age of 91. After receiving the call about her passing, my mother, Katherine S. Detherage, PhD, RN, CNAA, turned to me and said, "Dot was very courageous. Very brave." Initially, I thought my mother was referring to the many challenges my aunt overcame during her life—growing up in segregated Louisville, KY; becoming a widow while raising young children; and pursuing her education as an older adult. But that wasn't it. According to my mother, my aunt's bravery lay in her decision to donate her brain to the University of Kentucky for research.

As a nurse for over thirty years and a mental health professional for over thirteen, my aunt was deeply aware of the impact Alzheimer's Disease has on individuals and families. She did everything in her power to protect herself from the disease. Every Sunday, she tackled The New York Times crossword puzzle, often collaborating with my mother, believing that keeping her mind sharp might ward off cognitive decline. She was outgoing, full of life, a lover of theatre and travel, and an exceptional cook.

When she learned that she had Alzheimer Disease's she was devastated. She recognized the gaps in research and information about Alzheimer's in African Americans. Determined to make a difference, she joined a research study at the University of Kentucky Alzheimer's Disease Center, often driving one to two hours each way to participate. She went a step further and signed documents to donate her brain upon her death. Like many African Americans, my aunt experienced an initial mistrust of research and organ donation—rooted in a history of unethical medical practices, lack of education, and religious beliefs. Yet, she overcame these doubts, hoping her participation and donation would help improve research, treatment, and prevention for African Americans.

In delivering her eulogy at her funeral I discussed her decision to donate her brain and emphasized the importance of African American participation in Alzheimer's research and organ donation. In the Protestant faith, there is no prohibition against organ donation—it is, in fact, an act of care and love for others. However, I later learned that my aunt's sons didn't want this mentioned or included in the funeral program—a reluctance, perhaps, influenced by the same mistrust many in our community feel. This averseness underscores the challenges we face. African Americans are nearly twice as likely to develop Alzheimer's as non-Hispanic Whites. Despite making up 13% of the U.S. population, only 5% of African Americans participate in research studies. The disparity extends to organ donation as well. In 2020, African Americans comprised 28.5% of the candidates waiting for organ transplants but only 13% were donors. Brain donation rates are even lower. We must take action. By participating in research studies—through testing, imaging, blood draws, questionnaires, and exams—we lend our voices to the process. We help researchers better understand the cultural, linguistic, and social dynamics of African American communities, allowing them to adapt research and interventions to better serve us.

Ten months after my aunt's passing, her daughter, Judith Malone, received a seven-page report from the University of Kentucky Alzheimer's Disease Research Center detailing their findings. My aunt's courage and bravery call on us, as African Americans, to take the leap into research participation, helping pave the way for prevention, treatment, and one day, a cure.

Rev. Kimberly L. Detherage, Esq. serves as Pastor of St. Mark A.M.E. Church and Dean of the A.M.E. New York Conference Ministerial Institute. She is the Chair of the Multi-Cultural Advisory Board of NYU ADRC.

SECTION 5

The Relationship Between Anxiety and Alzheimer's Disease Plasma Biomarkers

By: Mark A. Bernard, PhD

Dr. Mark A. Bernard at NYU Langone's Alzheimer's Disease Research Center lab

Alzheimer's disease (AD) is well-known for its effects on memory and executive function, but emerging research reveals another, it's impact on mood. In a recent study, we investigated how anxiety can affect AD biomarker levels at different stages of the disease. Biomarkers are clinical measurements used to predict or evaluate the status of a disease. For example, think of blood pressure or cholesterol levels as biomarkers that describe an individual's heart health. When accurately identified and measured, biomarkers can help diagnose and monitor a disease and determine its response to treatment. In our study, we aimed to unravel the mystery of how AD progresses in both its early and later stages by looking at AD plasma biomarkers in people with and without anxiety.

Neuropsychiatric symptoms, such as anxiety, depression, and apathy, are hallmarks of AD. Among these, anxiety is especially common, affecting nearly half (49%) of individuals who report subjective cognitive decline, which is often one of the earliest symptoms of AD. Therefore, the presence of anxiety at this stage suggests that it could serve as an important early-stage diagnostic criterion. As the U.S. population ages and the number of people with AD increases, the need to understand how the disease develops at early stages—and to develop tools for its earlier detection and monitoring before the symptoms appear—becomes even more critical.

In AD research, recent technological advancements have facilitated precise analysis for AD biomarkers in blood plasma, creating opportunities for faster, more affordable, and less invasive disease monitoring compared to methods like PET brain scans or cerebrospinal fluid (CSF) analysis. The field of blood-based AD biomarkers is advancing rapidly, with potential future integration into routine clinical practice. The question is no longer if simple blood tests for AD will be available, but when.

Anxiety has been linked to clinically relevant AD biomarkers, such as those detected through PET and CSF biomarkers, but its relationship to blood-based biomarkers remained largely unexplored—until now. The key goals of our study were to determine how these biomarkers changed with the presence of anxiety, at which stages of the disease, and which specific plasma biomarkers were indicative of this relationship.

To examine the link between anxiety and AD plasma biomarkers, we evaluated 197 participants along the AD spectrum, from normal cognition to AD dementia. What we found was fascinating: anxiety was significantly associated with changes in only one specific ratio of AD-related proteins in blood plasma—a ratio of tau to amyloid beta 42 levels (tau/Aß42). Specifically, this ratio was significantly elevated (by 66%) in people with AD and anxiety compared to AD subjects without anxiety. As part of our study, we also investigated participants with depression but did not observe the same relationship. Moreover, this change was not observed at other stages of the disease.

The higher values of this tau/Aß42 elevation in individuals with anxiety suggests that anxiety plays a unique role in AD progression, distinct from other neuropsychiatric symptoms. This finding raises the intriguing possibility that, in the future, a blood-based biomarker profile incorporating tau/Aß42 could serve as an early indicator of heightened AD risk in individuals with anxiety. However, further research is essential to validate this relationship and elucidate the underlying neurobiological mechanisms. As we continue to explore these connections, we remain committed to advancing our understanding of AD and its complex interplay with mental health, with the goal of refining diagnostic tools and therapeutic strategies.

SECTION 6

All Aboard! Caregivers on the Journey to Going Home

By: Dianne Mack, PhD, MS, LCSW

When our loved ones begin to transition, many things happen to their physical bodies and to which caregivers bear witness. Often, depending on the relationship and connection to the individual, caregivers become their medical, social, and familial historians. For some, the caregiver is the sole source of connection to the world, the one person preventing isolation and disconnection. This role is challenging, yet profoundly meaningful, and few capture the essence of this journey as powerfully as Dr. Bonnie Harrison does in her forthcoming book, *Going Home*.

As we celebrate Black History Month, Dr. Harrison's work is particularly significant. A trailblazer in caregiving and mental health, Dr. Harrison has dedicated her career to addressing the unique challenges faced by caregivers, particularly within Black and other communities of color. Her book, Going Home, offers her perspective on caregiving, especially during the final stages of dementia and the transition to end-of-life care.

Dr. Harrison touches on the hard acceptance of family and friends when their loved one stops eating or drinking water. This often heightens anxieties, worries, or fears about what is to come, as we understand how crucial it is to eat and drink water. This is particularly poignant for Black-identified individuals because, where food is not only a source of nourishment. It is a cure or at least symbolic of a cure or comfort for "all so many things."

The importance of incorporating ethno-cultural and spiritual responses to caregiving is essential to the quality of the transitional experience. This belief system and approach are in alignment with Dr. Harrison's philosophies. She explains that as the person in our care nears the end of life, their body requires less physical nourishment and more spiritual energy. At the same time, she emphasizes that caregivers need to sustain themselves with proper nutrition, spiritual energy, and positive relational connections to navigate the demands of caregiving. During this time, if it has not been done already, it is also an opportunity to record memories of care for a later time to help cope with loss as well as grieving, healing, and loving through and after grief.

As we honor Black History Month, Dr. Harrison's work stands as a reminder of the strength, spirituality, and cultural traditions that sustain our communities. Her philosophies challenge us to embrace the caregiving journey as a shared act of love, resilience, and cultural pride. *Going Home* is not only a guide but also a celebration of the caregivers who give so much of themselves in service to others.

About Dr. Bonnie Harrison: *Elnora (Bonnie) Harrison, PhD, MSHS, LMHC, is a well-known and dynamic Licensed Psychotherapist, Educator, and Master Trainer. She develops and facilitates wellness-centered learning experiences for women, men, and gender-diverse groups. A pioneer and a first in her profession and socio-political life, she developed and facilitated the first known counseling service and support groups for HIV/AIDS diagnosed Black Same Gender Loving men & women in NYS. This year marks the release of her landmark book, which will focus on death and dying in Black and other communities from an ethno-cultural perspective. She is an octogenarian, the eldest of five siblings, including two sisters, and the caregiver for one of her sisters who died with dementia and from dementia-related complications. Dr. Harrison says, "Completing the book has done much to help me in more ways than one during my healing process since the recent death of my 'baby' sister Maurice."*

SECTION 7

CAB Spotlight

Meet Our Community Advisory Board (CAB)! Our CAB members advise the ADRC research team on cultural sensitivity and outreach strategies to encourage long-term participation of Black/African Americans in memory and aging studies at NYU Langone Health. Committed to inclusiveness, diversity, and justice, they bring expertise from various fields, serving as a key source of wisdom and a force for positive change.

Rev. Kimberly L. Detherage, Esq. is the Pastor of St. Mark A.M.E. Church and Dean of the A.M.E. New York Conference Ministerial Institute. She also serves as Chair of the Multi-Cultural Advisory Board at NYU Langone ADRC, where she advocates for diversity and inclusion in Alzheimer's research.

Rev. Charles L. Griffin, Jr., an Itinerant Elder in the African Methodist Episcopal Church, serves on the Ministerial staff at Historic Bridge Street AWME Church in Brooklyn, NY, as Minister to Men and New Members. He holds a Master of Divinity in Biblical Theology from Nyack College and is dedicated to serving his community alongside his wife of 24 years, Joann, their two children, and granddaughter Melody.

Dr. Dianne Mack, PhD, MS, LCSW, is the Executive Consultant of Creative Social Solutions, specializing in workforce development, advocacy, and mental health services. She leads the Sustainable Parents Institute & Network (SPIN) and is deeply involved in community health, social justice, and civic engagement. A licensed clinical social worker, psychotherapist, and educator, Dr. Mack is a thought leader in public health and research, with affiliations at institutions like CUNY, Columbia, Fordham, and NYU Langone.

Tyler Ware, MS is a digital marketing professional with expertise in paid media, graphic design, and campaign management. He holds a bachelor's in marketing from Hampton University and a master's in sports management from Brooklyn College. Tyler serves as a Digital Campaign Manager at Schneps Media and is passionate about using his marketing skills to promote the CAB's programs and inspire young people in his community.

Rodeena Stephens, MA is an Associate Professor and Department Co-Chair of Communication, Journalism & Media Arts at SUNY Westchester Community College. She also leads the Communications Department at The Greater Allen A.M.E. Cathedral of New York. A strong advocate for Alzheimer's awareness, Rodeena serves on the NYC chapter of the Alzheimer's Association and NYU ADRC's Community Advisory Board. She is currently pursuing her EdD in Higher Education at Fairleigh Dickinson University.

SECTION 8

Make Music

By: Dianne Mack, PhD, MS, LCSW

The music is in my unconscious mind!" says Gail Houston, a longtime gospel singer and a member of the history-making gospel group The Percells. With over 50 years of experience, Gail has been recognized for her musical contributions, most recently featured in PBS' 2024 holiday special on Kwanzaa. She recounts the story of how she learned to sing, recalling with enthusiasm and excitement her childhood memories—traveling with her singing elders, grandmothers, aunts, uncles, and fictive relatives, all connected through faith and music. Gail describes growing up in the church, surrounded by a family deeply embedded in the music business. Without formal training, she was shaped in the choral rooms and rehearsal spaces by some of the greatest vocalists and instrumentalists. She learned to read rooms, people, and musicians, creating an intuitive connection with those she performs with—if they are truly skilled, she says, they will play to the audience exceptionally well.

My conversation with Gail reminded me of the growing body of research on music's impact on individuals with dementia and its role in enhancing the quality of their care. It also reminded me of the role and value of music for memory making, memory recall, quality of care, and legacy for the bereavement and grief when the person with dementia is declining, dying, or deceased. It reminded me of the times with my father, when he sang, listened to his music, danced with us. When dementia (Lewy body) was taking over his mind and his body, and he could not stand, walk, or dance anymore, he could still hold the Wii remote and click to the music beats on Just Dance with his adult children, grandchildren, and great-grandchild. This year, more than a decade after his passing, we had memories, we had joy, and we had music. Gail speaks of the music in her unconscious mind, the beats, the rifts, the improvisations that she can do and "she just knows how." My father clicked to the rhythm, to the beats, with his "unconscious mind," for his conscious mind had been afflicted with dementia—not completely but significantly—yet he kept playing the music.

There is tremendous research about the therapeutic benefits of music, both in dementia care and as a source of support for caregivers. Music serves as a powerful tool for memory formation, creating connections that transcend time. There is no requirement for skill, expertise, or excellence. Whether one if gifted with virtuosity like Gail Houston or, like myself, has limited musical ability, the accessibility of technology, coupled with creativity, imagination, and intention, makes musical engagement possible. Embrace the moment, make music, and make memories. Bang a few drums, some pots, or just your hands. Play the radio, a song on your phone, create your own beats, play musical games, make tunes in the heart, soul, and minds for today and tomorrow's memories.

About Gail Houston: Gail Houston is a renowned gospel singer and longtime member of The Percells, a groundbreaking gospel group. With over 50 years of experience, she has dedicated her life to preserving gospel music's legacy. In 2019, she was honored for her contributions to the genre, and in 2024, she was featured in a PBS holiday special on Kwanzaa. Beyond music, Gail was also a caregiver for her father, who passed away from dementia-related complications, deepening her appreciation for the power of music in memory, healing, and connection.

SECTION 9

A Taste of West African Flavors

By: Afia Amoako, MPH

Vegan Yassa Tofu (Senegalese-Inspired)

Ingredients:

- 1 block of firm tofu, pressed and cubed
- 2 large onions, thinly sliced
- 3 tbsp lemon juice
- 2 tbsp Dijon mustard
- 3 cloves garlic, minced
- 1 tsp smoked paprika
- 1 tsp black pepper
- 1 tsp salt
- 1 tbsp oil
- ½ cup vegetable broth
- 1 tbsp soy sauce (or tamari for gluten-free)
- 1 tbsp apple cider vinegar
- 1 tsp chili flakes (optional)

Instructions:

1. In a bowl, whisk together lemon juice, mustard, garlic, paprika, black pepper, salt, and soy sauce. Add the tofu cubes and marinate for at least 30 minutes.
2. Heat oil in a pan over medium heat and sauté onions until caramelized, about 10–15 minutes.
3. Add the marinated tofu and cook for another 5 minutes.
4. Pour in vegetable broth, apple cider vinegar, and chili flakes (if using), and let simmer for another 10 minutes.
5. Serve over your favorite grains with steamed vegetables and enjoy!

Afia Amoako, MPH, the creator of *The Canadian African,* is a PhD candidate at the University of Toronto and a passionate advocate for plant-based West African cooking. Her platform, Eat with Afia, explores the intersection of food, sustainability, and culture while reimagining classic dishes through a modern lens. Follow her work at thecanadianafrican.com.

SECTION 10

Meet the New Staff

Carolina Boza Calvo, MSc, is joining the Alzheimer's Disease Research Center as an Outreach Program Coordinator. She holds an MSc degree in Clinical Psychology from Universidad de Iberoamerica in Costa Rica, and her work has focused mainly in the clinical and neuropsychological assessment of early stages of ADRD. Also, she worked as an Instructor Professor at the School of Medicine at the University of Costa Rica. She is passionate about ADRD research in diverse communities, especially Hispanic/ Latino populations, which led her to do an internship at the NYU-ADRC during the fall of 2022. In her free time, Carolina enjoys reading, watching movies and going on hikes in the mountains.

Erika Chillogallo has been volunteering with the ADRC since July 2024, gaining experience in psychosocial facilitation and participant recruitment. As a psychology major at New York University, she explores human behavior, cognition, and emotion. Through her community involvement, Erika recognized the significant gap in mental health resources for the Hispanic/ Latino community, sparking her passion for mental health advocacy. She aspires to integrate her psychology background with research to make meaningful contributions to Alzheimer's studies. In her free time, Erika enjoys painting and capturing moments through photography.

NYU Langone Alzheimer's Disease Research Center
145 East 32nd Street, 2nd Floor
New York, NY 10016
T: 212-263-3257 F: 212-263-2991