

Alzheimer's and Memory Disorders Program



↑ The specialists at the Alzheimer's and Memory Disorders Program at Barrow Neurological Institute dismiss the “diagnose and adios” mentality of so many in the medical community.

THE ALZHEIMER'S AND MEMORY DISORDERS PROGRAM at Barrow Neurological Institute, led by Anna D. Burke, MD, is committed to providing comprehensive clinical care and wraparound services for patients with memory disorders. They go well beyond the often seen “diagnose and adios” approach to memory disorders by addressing both the medical needs and non-medical needs of patients.

While the Alzheimer's specialists at Barrow are caring for patients today, they are also conducting research to find the treatments of tomorrow. Barrow played an instrumental role in the studies that led to the first new treatment for Alzheimer's disease to be approved by the Food and Drug Administration in nearly two decades. In addition to Alzheimer's disease, the team specializes in frontotemporal degeneration and is a Lewy Body Dementia Association Research Center of Excellence.



18+

active
clinical trials



1,087

outpatient
clinic visits



3,172

patient and caregiver
lives impacted
through outreach



16

states reached
through outreach
programs

BARROW NEUROLOGICAL INSTITUTE BY THE NUMBERS



CLINICAL IMPACT

77,600+

total number of patients
seen at Barrow annually

22,200+

telemedicine visits

5,700+

brain and spine surgeries



GLOBAL IMPACT

11

research fellows and
visiting scholars from
Brazil, Columbia, India,
Ireland, Pakistan, Russia,
Thailand, and Turkey

OUTREACH & SUPPORT PROGRAMS

Treating Alzheimer's disease and other forms of dementia requires a multifaceted approach. The Alzheimer's and Memory Disorders Program brings care, comfort, and dignity to those suffering from dementia and support to their loved ones through outreach services.

- **Care partner support groups** for Alzheimer's disease, frontotemporal degeneration, and Lewy body dementia.
- **Memory Cafés**, offered in both English and Spanish, provide safe, stimulating activities for patients and respite for care partners.
- **Dementia with Dignity** virtual workshop series provides care partners with information, practical tips, and support to overcome challenging aspects of providing care.
- **Creating My Way, Day-By-Day** workshop series provides crucial decision-making information to the care partners of patients with early to moderate dementia.
- **Fall and Spring Care Partner Symposiums** allow care partners to learn from experts in the field about a variety of topics, including love languages, the impact of stress, how to embrace humor, and renewed hope during a time of challenge.
- **Music, Movement, and Memory** classes include movement exercises, memory and hand-eye coordination games, and other activities.

Barrow recently welcomed Amy McLean, DNP, to the Alzheimer's and Memory Disorders team. She will be leading the development of an educational program for general practice physicians to improve their ability to diagnose, manage, and support patients with dementia.

RESEARCH ADVANCES

The Alzheimer's and Memory Disorders Program continues to make advances in research, with 18 active clinical trials and two more pending. Their approach to research focuses on three main pillars: prevention, early diagnosis, and treatment options for every stage of the disease.

Prevention: Finding new prevention therapies for highly at-risk populations may translate into better treatments for Alzheimer's disease in general. For example, individuals with Down syndrome are seven times more likely to develop Alzheimer's disease than the general population. The Alzheimer's and Memory Disorders team has led clinical trials focused on developing a novel vaccine that will slow, and hopefully prevent, the development of Alzheimer's disease in people with Down syndrome.

Early diagnosis: Predicting the rate of disease progression in patients with subjective memory complaints and mild cognitive impairment to Alzheimer's disease remains a challenge. Barrow neuropsychologists, in partnership with experts in imaging technology, are investigating whether simple measures such as slower completion of a finger-tapping test can predict which patients are more likely to progress to Alzheimer's disease. This test is inexpensive to conduct and can potentially provide results quickly, leading to earlier treatments and interventions for Alzheimer's disease and related dementias.

Treatment options: The Alzheimer's and Memory Disorders Program studies various approaches to disease-modifying treatments, including monoclonal antibodies against pathological protein targets such as amyloid and p-tau, medications reducing excitotoxicity that will help minimize damage to the brain cells, and therapies that improve cognitive function by stabilizing tau proteins. They continue to be a leader in pushing the boundaries of care through novel neurosurgical approaches, such as deep brain stimulation for Alzheimer's. Additionally, they conduct neuro-imaging, biomarker, and observational trials to gain a greater understanding of the disease and to better tailor future therapies. Yonas Geda, MD, is leading the Brain Health Clinic and Research Program, which focuses on lifestyle modifications that can be made to prevent dementia.

ON THE HORIZON

One of the most challenging and painful parts of the journey with dementia is when a loved one no longer recognizes their spouse of 50 years or their children and grandchildren. That is why Rita Sattler, MSc, PhD, and Elliott Mufson, PhD, are looking at an RNA binding protein called TDP-43 in the specific area of the brain in Alzheimer's patients that controls facial recognition. The protein plays a role in other neurodegenerative diseases, and this project would allow them to explore a new avenue of treatments. To fund this and other pilot projects, there is a \$350,000 challenge grant, which means all gifts up to \$350,000 will be matched, doubling the impact of each donation.

The Alzheimer's and Memory Disorders Program has welcomed back Marwan Sabbagh, MD, after he spent three years at the Cleveland Clinic in Las Vegas, Nevada. Dr. Sabbagh is returning as a part of Dr. Burke's team.

BARROW NEUROLOGICAL INSTITUTE BY THE NUMBERS



RESEARCH

320+

active research
studies

791

patients enrolled
in clinical trials

\$11.7 MILLION

in federal research
grant support



DONOR IMPACT

\$28 MILLION

total distributed to Barrow
Neurological Institute,
including:

\$21 MILLION

designated to specific
centers/programs

\$5 MILLION

for basic, clinical, and
translational research

\$1.7 MILLION

for endowed research chairs



The Alzheimer's and Memory Disorders Program takes care of the patient and their family, while searching for new treatments and cures.

THANK YOU FOR YOUR SUPPORT

We cannot thank you enough for the support you have given to the Alzheimer's and Memory Disorders Program. Your generosity has allowed us to build a program unlike any other in the country and provide wraparound support for care partners as they care for their loved ones with dementia.

Our incredible outreach and patient support team, which is funded 100 percent by philanthropy, has gone above and beyond to meet the needs of both patients and their care partners. Our equally impressive research team has made great strides in the past year, with 18 clinical trials currently active. You helped make this possible. On behalf of the whole Alzheimer's and Memory Disorders team, thank you for your generosity and dedication.

With gratitude,

Anna D. Burke, MD
Karsten Solheim Chair for Dementia
Director of Alzheimer's and Memory Disorders Division
Director of Neuropsychiatry
Department of Neurology
Barrow Neurological Institute

The mission of Barrow Neurological Foundation is simple: to be the catalyst of our donors' passion for transformation by providing the resources for Barrow Neurological Institute to achieve its mission of saving human lives through innovative treatment, groundbreaking research, and by educating the next generation of the world's leading neuroclinicians.