Although Alzheimer’s is not a contagious disease, it is no exaggeration to describe the current and projected incidence of the disease as a modern-day plague. The number of affected individuals – currently estimated at 5.7 million living Americans (www.alz.org/) – is expected to increase dramatically as our population grows older in the coming decades. To avert a public health crisis, researchers have been working feverishly to find an effective treatment for Alzheimer's disease (AD). This has not been an easy task.

In the past year, three major AD clinical trials have been stopped early because interim data analyses concluded that the investigational drugs were not able to slow or halt the progression of the disease. The message from these trials is 2-fold: the treatments should be started earlier in the course of the disease, and multiple therapeutic targets should be explored. Let’s consider each of these options.

First - we know that the course of AD is long – indeed, changes in the brain often begin decades before clinical symptoms appear. Often by the time the patient or family becomes concerned, the disease has progressed too far to be effectively treated. Consequently, clinical trials have turned increasingly to starting treatment as early as possible, in a phase that is called preclinical AD. These prevention trials are generally longitudinal studies in which patients are treated and followed for several years. Whether the treatment is effective or not is determined by such things as brain scans and spinal taps (which yield 'biomarkers' of disease), and by assessments of cognitive abilities.

Second - the pathology of AD is well understood, but preventing it based on current knowledge has proven challenging. Recent trials have targeted both the production and clearance of the Aβ protein, the substance that becomes abnormal and clumps into characteristic 'plaques' in the brain. While we have no resounding successes to report, promising compounds are currently being tested in clinical trials. In addition, other studies are targeting the second major protein associated with AD, the tau protein, whose build-up is associated with the behavioral changes seen in AD. Furthermore, while we know that Ab and tau are central to AD, there are other changes in the brain such as inflammation that might respond favorably to treatment. It is too soon to know which of these strategies will succeed and which will fail, but we are confident that an effective treatment will ultimately emerge from clinical trials.

Why, after the failure of so many previous investigational medicines, should anybody participate in a clinical trial? Where else can you receive constant attention from a team of first-rate clinicians and researchers? Where else can you help to validate science in its unrelenting race to eradicate AD? Where else can you help meet the challenge to prevent or cure the disease and secure an AD-free future for your children, their children, and for the rest of humanity?
Patients and families have told us that coordination of both memory care and primary care would help us better serve our patients. In 2014 two generous donors provided gifts to the Nell Hodgson Woodruff School of Nursing and the Emory School of Medicine Department of Neurology. As a result, Integrated Memory Care Clinic (IMCC) was developed. This new model of providing care to our dementia patients is designed to address both primary and dementia care needs in the same location. Our goal is to promote the optimal physical, mental, emotional and spiritual well being of our patients and their families by addressing all of their care needs.

As part of the Integrated Memory Care Clinic, specialized advanced-practice nurses provide care for all patients’ medical and dementia care needs, with physician providers available to see patients as clinically indicated. Primary care services provided include: chronic condition care (for diseases such as diabetes, high blood pressure, and hypothyroidism); prevention screening and immunizations; and advanced care coordination with home and community-based services. Dementia care services include treatment for dementia, depression, and other brain conditions, as well as educational and support groups for patients and families.

The National Center for Quality Assurance (NCQA) recognized the IMCC as a top-tier Patient Centered Medical Home (PCMH). The PCMH is a model of care that emphasizes care coordination and communication to transform primary care into the type of care designed to meet the needs of patients and families. Research has shown that medical homes can lead to higher quality care and lower costs while improving patients, families and providers experience of care. The IMCC has been open less than two years and is already a top-rated clinical program for patient experience, as described by patients and families.

The IMCC is a service for people who have a confirmed dementia diagnosis and are willing to transfer all of their primary care to the IMCC. Comprehensive primary care should occur close to home. IMCC patients must live within an hour’s drive of our clinic at Executive Park. To learn more about the IMCC please call 404-712-6929.

To learn more about the IMCC please call 404-712-6929.
Thank you all for continuing to support *A Family Affair*. The 8th annual *A Family Affair* was hosted by Pearlann and Jerry Horowitz was held at the Cherokee Town and Country Club in Atlanta on Thursday evening, November 16, 2017.

This past year we were pleased to honor Dr. Allan Levey and the family scientists at the Emory Alzheimer's Disease Research Center who work tirelessly to find a cure for this disease. As the Director of the ADRC, one of just 11 ADRCs in the Country, Allan collaborates with researchers from over 20 schools and departments across Emory University as well as with researchers at Georgia Tech, Georgia State and Morehouse Universities. His willingness to collaborate extends beyond Georgia’s borders, to scientists throughout our county, in Europe and in Asia. Allan’s goal is to recruit and persuade as many brilliant minds as possible to focus on curing this disease, harnessing their collective brainpower to unravel the mystery of Alzheimer's. For information about the 2018 Dinner, contact Natalie Zellner at 404-712-2084 or email Natalie.Zellner@emory.edu.

Alzheimer disease (AD) afflicts millions of people in the United States—one in eight Americans over age 65—and accounts for approximately $200 billion in direct healthcare costs and $210 billion in unpaid caregiving each year. By 2050, AD prevalence is projected to be 11 million to 16 million. Research is currently focused on the prevention or delay of AD onset through other means, such as changes in lifestyle and treating other chronic health conditions. On Tuesday, October 23rd we will focus on health topics in neurology, sleep, and depression. We will share information about risks assessments, disease prevention and therapeutic advances. Registration is open to the public and we encourage you to reserve your space TODAY. Visit [www.emory16thforum.eventbrite.com](http://www.emory16thforum.eventbrite.com). Be sure to invite a friend, colleague or loved one to this comprehensive, interdisciplinary forum. Call Cornelya Dorbin at 404-712-1416 to register.
According to the latest projections, by 2050, our world will experience the sobering reality of 131 million people with dementia. By then, many of today’s adults will develop Alzheimer’s disease or a related dementia—unless research can change that course. NIA already funds a wide range of trials designed to test interventions that may be effective against dementia. Do today’s results offer promise of a better future? How can we improve these studies to meet the challenge of this global health priority? While research moves forward, what can we tell the public and clinicians today about actions they might take to protect cognitive health?

**A literature review—and a second opinion**

To answer these questions, the NIA launched a two-part study in 2015, designed to review and comment on the state of the science on age-related cognitive decline, mild cognitive impairment, and Alzheimer’s-type dementia. The NIA asked the Agency for Healthcare Research and Quality (AHRQ) to conduct an evidence review, so that it could take advantage of AHRQ’s rigorous and well-respected Evidence-based Practice Centers (EPC) program. To provide a second opinion on the literature review and to make suggestions about what advice to give the public about cognitive interventions, the NIA engaged the National Academies of Sciences, Engineering, and Medicine (NASEM) to establish a committee of experts that would review AHRQ’s findings. The committee considered the EPC findings, along with current and future research opportunities and literature not included in the evidence review (such as studies of risk-factor associations), after which it offered recommendations on public health messaging and research gaps.

**What do we know?**

The AHRQ report found that most interventions “showed no evidence of benefit to delay or prevent” cognitive decline, mild cognitive impairment, or dementia. However, some cognitive training—specifically the approach used in the NIA-funded Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) study—improved performance in the cognitive domain trained, but benefits rarely extended to other cognitive domains. The investigators are continuing to follow-up on longer term outcomes. In addition, the review suggested that though most results for physical activity interventions showed no benefit, the pattern of these results suggested that some benefit is possible. These findings applied to adults with normal cognition.

The NASEM committee then took these results in hand—and as instructed by the NIA, considered additional research from observational studies. The NASEM recommendations pointed to “encouraging but inconclusive” evidence for three types of interventions: cognitive training, blood pressure management in people with hypertension, and increased physical activity. Because research on health outcomes tells us that people should be managing their blood pressure and engaging in regular physical activity, the findings are consistent with what many public health experts and communicators already are already promoting.

**The bottom line for the public**

Indeed, NIA’s national Go4Life outreach campaign very strongly advocates the benefits of exercise for older adults, even at advanced age. We join in all public health messaging aimed at high blood pressure control as well. We also cite research suggesting that keeping the mind active may be beneficial for well-being with age. As the reviewers noted, these are all healthy behaviors we think it important for older adults to engage in anyway. That said, however, in light of these most recent recommendations, we will continue to be cautious in what we convey to the public about evidence for any direct connection of these and other interventions to prevention of cognitive decline, mild cognitive impairment, or dementia. Evidence is emerging in these directions, but much more needs to be learned. We owe it to the public to tell them what we know—and what we don’t yet know—on such topics of enormous interest, which is why we commissioned these independent reviews.

**Messages for improved research, too**

One of the most significant outcomes of the project was the identification of studies that did not meet the strict criteria for inclusion in the evidence review. Specifically, 9,308 of the total 9,448 publications screened by the EPC staff could not be used for further analysis. A number of the screening criteria used by the EPC were related to the quality of the study, such as risk of bias and use of inadequate follow-up time. To this end, the NASEM committee, while noting a range of promising research areas that might continue to be explored, also recommended several methodological improvements for the research community to consider, including but not limited to:

- Identifying higher risk individuals for future studies
- Increasing participation by underrepresented populations
- Testing interventions at younger ages (and with longer follow-up periods)
Georgia Legislation that Affects Older Adults

Stronger Power of Attorney Law
This bill will be critical in protecting Georgians, especially those living with Alzheimer's disease or a related dementia, from financial exploitation. In addition, it will ease burden on caregivers by ensuring a uniform acceptance policy across financial institutions. The bill helps agents by clarifying fiduciary duty and protects third parties who must accept the powers of attorney. You can read the full bill here. Thank you Representative Efstration!

Special Prosecutor
The legislature funded the Prosecuting Attorney's Council for one new prosecutor dedicated to prosecute cases of at-risk adult abuse, neglect and exploitation. Thank you advocates for your voice on this one. Thanks to you many more people will be prosecuted for their crimes against vulnerable adults thus protecting from further abuse.

Georgia Alzheimer Project
The legislature designated $4.12 Million funds for Georgia Alzheimer's Project. GAP will create a network of specialized memory assessment centers around the state to provide all citizens of Georgia with access to expert diagnosis and management of individuals with Alzheimer's disease and related disorders. The Memory Assessment Centers will serve as a resource to which primary care physicians can refer individuals with symptoms of cognitive decline to obtain initial evaluation, accurate diagnosis, and management plan. GAP will also engage and educate primary care providers to proactively identify individuals with early cognitive symptoms and make appropriate referrals to a regional memory assessment Center.

1 Million Increase in home care services—
Finally, $1 Million increase home care services for the CCSP & SOURCE programs for "Alzheimer's and related dementia patients with a confirmed diagnosis. The Community Care Services and SOURCE Programs are Medicaid Waiver Programs offering an array of services to help persons stay in the community. It serves individuals with limited incomes and resources and is a very cost effective program in comparison to nursing home care.

Interested in donating your brain to the Emory Alzheimer’s Disease Research Center?
Participation in the autopsy program through the Emory ADRC requires, at a minimum, a one-time visit to Emory for collection of baseline measures. The visit takes approximately 3 hours and includes:
Consent interview  |  Interviews with the participant and study partner to review  |  Medical history
Family history  |  Current activities and concerns  |  Cognitive testing  |  Physical and neurological exam  |  Retinal imaging (includes dilating eyes, similar to regular eye exams)
Additionally, we will contact you periodically (not more than once per year) to update your research record.
If you would like to participate or have further questions, please call Erin Carter at 404-712-6838 and let her know you are interested in completing a “one-time HONOR visit for autopsy purposes”.

<table>
<thead>
<tr>
<th>Research Study</th>
<th>Eligibility</th>
<th>Contact Person</th>
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<tbody>
<tr>
<td><strong>Honor Research Registry:</strong></td>
<td>• Aging people with no memory problems</td>
<td>Erin Carter 404-712-6838</td>
</tr>
<tr>
<td>Longitudinal study of changes in memory and other cognitive skills</td>
<td>• People of any age with MCI, Alzheimer’s disease or other forms of dementia</td>
<td><a href="mailto:erin.carter@emory.edu">erin.carter@emory.edu</a></td>
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<tr>
<td></td>
<td>• Willing to participate in additional research studies</td>
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<td></td>
<td>• Study partner available to participate in visits</td>
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<td><strong>Registry for Remembrance:</strong></td>
<td>• Ethnic individuals of African Ancestry</td>
<td>Cornelya Dorbin 404-712-1416</td>
</tr>
<tr>
<td>An initiative to increase awareness &amp; participation in neurology research</td>
<td>• Aging people over 60 with no memory problems</td>
<td><a href="mailto:cdorbin@emory.edu">cdorbin@emory.edu</a></td>
</tr>
<tr>
<td></td>
<td>• People of any age with mild cognitive impairment, Alzheimer’s disease or other forms of dementia</td>
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<td></td>
<td>• Study partner available to for all visits</td>
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<td><strong>Emory Healthy Aging Study</strong> – This study is the largest clinical research study every conducted in Atlanta. It is designed to further our scientific understanding of how we age, so that we can better understand, prevent and treat diseases of aging.</td>
<td>• ≥ 18 years of age</td>
<td>To participate, simply sign up online at <a href="http://www.healthyaging.emory.edu">www.healthyaging.emory.edu</a>, complete a brief health history questionnaire and occasionally respond to various surveys and complete online memory tasks.</td>
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<td></td>
<td>• Read and speak English fluently</td>
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<td><strong>EXERT</strong> – 18-month study to examine the effects of aerobic exercise on cognition. Subjects with a diagnosis of mild cognitive impairment with be randomly assigned to undergo aerobic exercise or stretching/balance/range of motion training for 4 days/week for 12 months at a local YMCA.</td>
<td>• 65-89 years of age</td>
<td>Tamara Attis 404-712-6914</td>
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<td></td>
<td>• Diagnosis of Mild Cognitive Impairment Study partner available for all visits</td>
<td><a href="mailto:tattis@emory.edu">tattis@emory.edu</a></td>
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<td></td>
<td>• Physically active</td>
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<td><strong>HEART</strong> - 8-month study designed to see if an FDA-approved blood pressure medication may benefit AD prevention in African Americans. Participants will come to Emory for the following procedures: lumbar puncture, vascular ultrasound, blood draws, and cognitive testing.</td>
<td>• African American</td>
<td>Danielle Verble 404-712-7085</td>
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<tr>
<td></td>
<td>• 45 years and older</td>
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<td>• Have or did have a parent with dementia</td>
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<tr>
<td><strong>TRAILBLAZER</strong> – 18-month study with 6 months of safety follow-up using a combination of treatments to lower amyloid beta levels in people with a diagnosis of early AD.</td>
<td>• 55 to 85 years of age</td>
<td>Phyllis Vaughn <a href="mailto:pvaughn@emory.edu">pvaughn@emory.edu</a></td>
</tr>
<tr>
<td></td>
<td>• Diagnosis of mild AD</td>
<td>404-712-6901</td>
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</table>
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To make a gift contact Courtney Harris, Director of Development II, 404.727.5282, courtney.harris@emory.edu

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Address: ____________________________

City: __________ State: ______ Zip: __________

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Address: ____________________________

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c/o Emory Univ. Health Sciences Development

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Atlanta, GA  30329
404-778-3873

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