Federal Grant Goes Toward Frailty Research

The federal government has awarded investigators at The Johns Hopkins University’s schools of medicine and public health a multimillion-dollar, 5-year grant to continue research designed to identify the causes of frailty in older adults, and speed the development of interventions to slow or stop it.

The $5,779,078 grant renews funding of the Johns Hopkins Claude D. Pepper Older Americans Independence Center (OAIC), a federally designated center of excellence that is one of only 14 such university sites nationwide supported by the National Institute on Aging. The centers are named for a longtime Democratic member of Congress who championed support for older adults.

At Johns Hopkins, the focus of OAIC research efforts over the past decade has concentrated on frailty. Understanding the underlying biological roots of this age-related vulnerability and identifying potential preventive and treatment strategies are the target of the multidisciplinary OAIC team.

Recent discoveries at the OAIC have included insights into the changes in mitochondria, the impact of chronic inflammation, and the consequences of decline in multiple physiological systems with advancing age.

The OAIC also funds the training of researchers focused on the problems of older adults, and to date, nearly 60% of junior researchers given such funding have gone on to successfully compete for federal grants of their own.


Memory Screenings & Alzheimer’s Candlelight Ceremonies to be Held in November

With the nation increasingly focused on memory concerns as the population ages, the Alzheimer’s Foundation of America (AFA) is recruiting health care professionals to participate in its 11th annual National Memory Screening Day on November 19. On this day, AFA teams up with nurses, nurse practitioners, pharmacists, physicians, social workers, and other health care professionals to offer free, confidential memory screenings and educational materials at local sites across the country.

AFA provides screening sites with a free toolkit of materials to carry out the initiative, including screening tools, marketing collateral, and educational materials. The face-to-face screenings consist of a series of questions and tasks and take 5 to 10 minutes to administer. Screeners emphasize that results are not a diagnosis and encourage individuals who score poorly as well as those who still have concerns to pursue a full medical examination.

In addition to National Memory Screening Day, AFA also offers an annual National Commemorative Candle Lighting Weekend of Prayer, an event to remember and honor Americans who have been or will be affected by Alzheimer’s disease or related illnesses. The event—which this year takes place November 15 to 17—invites local organizations to hold inspirational ceremonies in their communities, uniting individuals from coast to coast as they light “candles of care.”


Anxiety Medication Use Higher Among Caregivers

According to a report released by Express Scripts, the stress associated with providing unpaid care for a sick or disabled adult can create
additional detrimental effects on the caregiver’s health, leading to a 29% greater use of anti-anxiety medications compared to non-caregivers.

The research finds use of medications to treat conditions for which stress is the common denominator, including high blood pressure, depression, anxiety, and ulcers, is higher among caregivers, with the widest difference seen in the use of medications to treat anxiety.

The study, available online at http://www.DrugTrendReport.com, pairs an analysis of Express Scripts’ prescription drug claims data with a telephone survey of more than 12,000 commercially insured individuals ages 18 to 65. The research also suggests:

- Adherence rates for caregivers who take an antidepressant agent are relatively worse than for non-caregivers (67% versus 73%). Across all health conditions, 64% of caregivers are adherent to their medication therapy, compared to 68% of non-caregivers.
- Caregivers are more likely to rate themselves in poorer health compared to non-caregivers (15% versus 12%), and a higher proportion of caregivers report being unhappy (5.3% versus 3.5%).
- Only one in five caregivers reside in the same household as the patients in their care. More than half (52%) live within 15 miles of their primary care recipient, and another 27% live more than 15 miles away.
- At the time of the survey, approximately 36% of caregivers had increased the amount of care they provided in the past month; 15% had decreased the amount of care. Caregiving is a long-term endeavor: 8.5% of caregivers reported they were new to the role and only 3.8% said they stopped providing care in the past month.
- The average age of caregivers is 52, and most are women (63% women versus 37% men).

Low Vitamin D Levels in Older Adults Could Contribute to Mobility Limitations

Vitamin D-deficient older adults are more likely to struggle with everyday tasks such as dressing or climbing stairs, according to a study in the Journal of Clinical Endocrinology & Metabolism.

Using data from an ongoing Dutch cohort study (The Longitudinal Aging Study Amsterdam), the researchers examined two groups—762 people ages 65 to 88, and 597 people ages 55 to 65—over the course of 6 years. Using blood test results, the participants were split into groups with the highest, moderate, and lowest vitamin D levels. To assess mobility limitations, participants were asked about their ability to perform routine tasks, including sitting down and standing up from a chair or walking outside for 5 minutes without resting.

Among the older group of participants, people with the lowest vitamin D levels were 1.7 times more likely to have at least one functional limitation compared to those with the highest vitamin D levels. In the younger cohort, individuals with low vitamin D levels were twice as likely to have at least one physical limitation.

Although the majority of the people in the older cohort’s top two vitamin D groups did not report any physical limitations, 70% of the people with the lowest vitamin D levels had at least one limitation. In addition, the study found vitamin D-deficient individuals were more likely to develop additional limitations over time. The older cohort reported more mobility issues after 3 years, whereas the younger cohort developed additional limitations over the course of 6 years.

Risk Factors in Late Adolescence Could Lead to Early-Onset Dementia

A study of Swedish men suggests nine risk factors, most of which can be traced to adolescence, account for most cases of young-onset dementia (YOD) diagnosed before age 65, according to a report published by JAMA Internal Medicine.

The study included 488,484 Swedish men conscripted for mandatory military service from September 1969 through December 1979 with an average age of 18. During a median follow up of 37 years, 487 men were diagnosed as having YOD at a median age of 54. Significant risk factors for YOD included alcohol intoxication (hazard ratio [HR] = 4.82); stroke (HR = 2.96); use of antipsychotic agents (HR = 2.75); depression (HR = 1.89); father’s dementia (HR = 1.65); drug intoxication other than alcohol (HR = 1.54); low cognitive function at conscription (HR = 1.26); low height at conscription (HR = 1.16); and high systolic blood pressure at conscription (HR = 0.90), according to the results. Collectively, these factors accounted for 68% of the YOD cases identified.

The results also indicate that men with at least two of the nine risk factors and in the lowest third of overall cognitive function had a 20-fold increased risk of YOD during follow up.


Grandparent-Grandchild Relationship Affects Well-Being

A new study shows that grandparents and grandchildren have real, measurable effects on each other’s psychological well-being long into grandchildren’s adulthood. The study also revealed that giving tangible support to or receiving it from their grandparents affected the psychological well-being of grandparents but not grandchildren. **Tangible support**, also called **functional solidarity** or **instrumental support**, includes anything from rides to the store and money to assistance with household chores and advice.

According to the study, the results of which were presented at the annual meeting of the American Sociological Association, grandparents who experienced the sharpest increases in depressive symptoms over time received tangible support, but did not give it. The results support that if a grandparent gets help but can’t give it, he or she feels badly. Comparatively, the researchers found that grandparents who both gave and received tangible support experienced the fewest symptoms of depression over time.

In their study, the researchers used data from the Longitudinal Study of Generations, a survey of 3- and 4-generation U.S. families that included seven waves of data collection between 1985 and 2004. The sample was composed of 376 grandparents and 340 grandchildren. The average grandparent was born in 1917 and the average grandchild in 1963, making them ages 77 and 31, respectively, at the midpoint of the study in 1994.

In terms of the study’s implications, the research suggests that efforts to strengthen families should not stop with the nuclear family or focus only on families with younger children. Extended family members, such as grandparents and grandchildren, serve important functions in one another’s daily lives throughout adulthood. The study also indicates that helping older people remain functionally independent may aid their psychological well-being.

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