

Emory University Receives National Institute of Aging R01 Grant to Study Cognitive Empathy Training in Dementia Caregivers

ATLANTA, GA (September 6, 2024) – Emory University’s Nell Hodgson Woodruff School of Nursing is proud to announce that Professor Ken Hepburn, PhD, who serves as the Multi Principal Investigator (MPI), in collaboration with Principal Investigator and Project Director (MPI/PD) James Rilling, PhD, Professor of Psychology at Emory, has been awarded a prestigious R01 grant from the National Institute of Aging (NIA). The \$3.5 million grant will fund a groundbreaking study titled “Effect of Cognitive Empathy Training on Dementia Caregivers”, aimed at enhancing cognitive empathy in caregivers of individuals living with Alzheimer’s disease and other forms of dementia.

In 2023, an estimated 6.7 million Americans age sixty-five and older were living with Alzheimer’s disease. The majority of these individuals are cared for at home by family members, who face considerable challenges in managing the complex emotional and physical needs of people living with dementia (PLWD). The chronic stress of caregiving has been associated with negative mental health outcomes such as depression and anxiety, and even elevated levels of proinflammatory biomarkers, which are linked to a higher risk of age-related diseases.

Dr. Hepburn, an expert in caregiving and aging, and Dr. Rilling, an expert in social cognitive neuroscience, will lead a research team exploring the impact of cognitive empathy training—an intervention designed to help caregivers adopt the mental perspective of PLWD, enabling them to better understand what their loved ones are thinking and feeling. The innovative approach is anticipated to improve the mental health and immune function of caregivers while simultaneously reducing inflammation levels, which are heightened by the stress of caregiving.

The research project will recruit family caregivers of people living with dementia for a randomized controlled trial. Participants will be assigned either to receive cognitive empathy training or a control condition. During the 10-day training period, caregivers will take daily photographs of their loved ones and caption the photos to describe what they believe the PLWD is experiencing, thinking or feeling. The exercise is then repeated periodically over six months. Caregivers will complete pre- and post-intervention assessments measuring perceived caregiver burden, depression, anxiety, and relationship quality with their care recipient, along with providing blood samples for analysis of inflammatory biomarkers and immune function.

In addition to mental health benefits, the researchers will investigate how cognitive empathy training influences caregivers' biological responses. Brain function will be measured using fMRI, focusing on areas associated with cognitive empathy while caregivers view photos of their loved ones. The ultimate goal is to understand how cognitive empathy training strengthens caregiver well-being at both the psychological and biological levels.

The research could have wide-reaching implications for millions of family caregivers who often suffer in silence while supporting their loved ones through the difficult journey of dementia. If successful, cognitive empathy training could be a cost-effective, scalable intervention to improve the quality of life for both caregivers and care recipients alike.

Ken Hepburn is a tenured Professor. His work recognizes the central role that families, friends, and communities play in caring for the increasing – and increasingly diverse – number of persons living with

Alzheimer's disease and similar dementia illnesses and helping them to remain as independent as possible in their communities. He sees family caregivers as occupying what is, in effect, a clinical role – or, really, an amalgam of a variety of clinical roles. As such, caregivers need training and education to help them understand the conditions with which they are dealing, to strengthen their own sense of competence to enable them to approach the role with confidence, and to develop strategies for caregiving that take the strengths and deficits of the care recipient into account. He and colleagues from a very wide range of disciplines have developed and tested programs designed to strengthen the capacity of informal caregivers to function effectively in their caregiving role in a manner that preserves their own health and well-being. They have drawn from the work of Albert Bandura in designing psychoeducation programs that strengthen caregivers' sense of self-efficacy for caregiving. Through a series of projects that, with support from the National Institute on Aging (NIA), the National Institute of Nursing Research (NINR), and the national Alzheimer's Association, Hepburn and his colleagues have established the evidence base for the Savvy Caregiver Program and Tele-Savvy (an online version of Savvy), psychoeducation programs for caregivers of persons with Alzheimer's disease and other dementia disorders. Hepburn is the co-Director of the NIA-supported Emory Roybal Center for Dementia Caregiver Mastery (<https://www.emorycaregiving.org/>), an NIA-sponsored program to provide support for projects that pilot interventions designed to promote caregiving competence and confidence (mastery) in a variety of dementia caregiving contexts and situations. He is also Director of Research in the Woodruff Health Science Center for Health in Aging (<https://aging.emory.edu/>)

For more information on Dr. Ken Hepburn, visit his [faculty profile](#). To learn more about the R01 Grant Award, visit the National Institute of Aging [website](#).

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