



The Center on Aging at Fifty: Continuing to Lead

By George L. Maddox, PhD

In October 2005 Duke celebrated the 50th anniversary of the pioneering Center for the Study of Aging and Human Development that Bud Busse and his colleagues built. The Duke Center was the only one of the five initially funded by the National Institutes of Health that survived and flourished for over half a century as an all-university, multidisciplinary center integrating research and training in the service of older adults.

The Center's design in the 1950s anticipated correctly the emergence of Duke as a major national research institution. The Center's emphasis on multidisciplinary anticipated a dominant perspective in contemporary research. State-of-the-art computing and statistical consultation assisted Center investigators. And an animal facility, initially developed primarily for Center postdocs and investigators, attracted scientists from across the campus to the purpose-built Aging Center building. As an organization that intended to serve the entire university, the Center shrewdly involved the administrative and intellectual leadership of the university in an advisory council appointed by the university president. The Aging Center promoted the concept of "One Duke" in which the Medical Center and Arts and Sciences shared the goals of translating ideas into education and community service.

The Center from its beginning also anticipated a contemporary initiative at the university, the Duke-Durham Partnership. The annual lecture series that brought a broad range of scholars and scientists to the campus to discuss issues of health and well-being in later life attracted the interest of both community residents and academics. And the participation of community residents in the Center's Study of Normal Aging proved to be popular. Citizens were proud to be identified as participants in the Study of Normal Aging.

A team of experienced site visitors from the National Institute of Aging who evaluated the Center's Postdoctoral Research Program in 1989 confirmed that something special had occurred at Duke: "The Duke Center," they reported, "has produced very successful programs with a visible history of impressive cross-disciplinary research by a strong, productive faculty working in a multidisciplinary environment."

Dan Blazer, MD, PhD, current chair of the University Council on Aging and Human Development, reached a similar conclusion about the continuing strength of Center in 2008: "The Center has sustained its distinctive commitment as an all-university program to multidisciplinary longitudinal research that effectively translates research into training and service."

Longitudinal Multidisciplinary Research Continues

The tradition of multidisciplinary longitudinal research has continued to be strong at Duke. As the Center's signature longitudinal research on normal aging came to an end in 1980, Erdman Palmore and colleagues reported a 10-year follow-up of

the OARS study population in Durham County, North Carolina. The study focused specifically on the functioning of the "oldest old," adults 85 years of age and older, anticipating interest in the growing segment of the population at increased risk for requiring social and health services (JG 40:244). The findings suggested minimal decline in social functioning and moderate decline in activities and in physical and mental functioning. Expectedly, socioeconomic status was a key predictor of aging well.

In the 1980s Blazer and his colleagues began three inter-related epidemiological studies of the health and well-being of older adults that became a central focus of longitudinal research in the Aging Center. The initial Established Populations for Epidemiologic Studies of the Elderly (EPESEs) focused on medical



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care access and utilization by a large sample of adults 65 and older in a five-county area of Piedmont North Carolina. African Americans were over-sampled (e.g., JAGS, 2006:54(3), 5002-6). Over the period of a decade, the evidence indicated that patterns of medical care provision and use remained relatively stable, although the use of antidepressant medication increased. This study morphed easily

into a cooperative agreement with comparable EPESE studies in Massachusetts, Connecticut, and Iowa. The Duke component of the study permitted a comparison of urban and rural differences in health care needs and utilization of older adults (e.g., Blazer & Hybels JAGS: 52:12, 2052-6).

When the MacArthur Foundation began its Successful Aging project under the leadership of Jack Rowe, Blazer was the sole psychiatrist/epidemiologist on the team guiding the project.

Postdoctoral Research Training

The Center's Postdoctoral Research Training Program, now in its fifth decade of support by NIH, has benefited from the leadership of distinguished program directors and mentors who have trained over 200 fellows, most of whom have pursued careers in gerontological research and training.

The recognized success of this program in facilitating multidisciplinary research is well-illustrated in the career of David Madden, PhD. Madden, who began as a Center RTP fellow in 1977, has remained at the Center as professor of medical psychology and as director of the Center's successful interdisciplinary Cognitive Psychology Lab, which has trained 13 fellows. The lab, which focuses on the cognitive neuroscience of aging, draws on the theory and methods of neuropsychology, experimental psychology, and brain imaging. Madden's lab also connects with other labs at Duke, such as



the Center for Cognitive Neurosciences, the Brain Imaging and Neurosciences Center, and the Visual Cognition Lab, and with similar laboratories at Harvard, Wayne State, and Washington & Lee universities.

Translating Research into Evaluated Service

The Center's programs that translate research into service have aged well:

• In Geriatrics

The Duke Center continues to stress ways to assist older adults to age well in the community. In 1972 the Older Americans Resources and Services (OARS) program was created to promote community alternatives to institutionalization for frail older adults. Physicians, nurses, pharmacists, social workers, and physical therapists were trained to work as a team to make home visits and recommend clinical care when appropriate.

The OARS Geriatric Evaluation and Treatment Clinic (GETC), now in its fourth decade, continues to thrive as a component of the Division of Geriatrics administered by the Aging Center. This clinic of Duke University Medical Center assists older adults and their families in the initial evaluation and provision of appropriate care and referral for specialized care when necessary. In December 2007 Kenneth Schmader, MD, then director of the GETC, evaluated the 10,000th patient seen in that clinic since its inception. This multidisciplinary clinic continues to be an important training site for the Division of Geriatrics.



Kenneth Schmader, MD

Training in Geriatrics at Duke has increased significantly in recent decades. The GRECC program at the Veterans Administration over the past two decades has trained over 100 geriatricians, most of whom now train other geriatricians to practice and teach in academic medical settings. In 2004 a grant from the Donald W. Reynolds Foundation increased Duke's potential for training in geriatrics significantly. Reynolds awarded a total of \$12 million to create a consortium including Duke, Johns Hopkins, UCLA, and Mount Sinai medical centers for the development of geriatric clinician-educators. Experienced geriatricians at Duke train two fellows in the program each year. They also have hosted 14 training sessions involving 60 visiting faculty scholars in geriatrics from other institutions, mentoring them in curriculum design and implementation in geriatrics and providing a follow-up consultation.

The Duke Division of Geriatrics has consistently been ranked among the top five in the *U.S. News & World Report* and in 2004 was ranked third among academic programs. And with the appointment of Center director Harvey Cohen, MD, as chair of the Duke Department of Medicine, Duke has the rare distinction of having a major figure in the field of aging chairing a department of medicine.

Geriatrics research in the Pepper Center continues the legacy of multidisciplinary longitudinal research focusing on functional assessment and on understanding and preventing functional decline in late life.

In 1989 a Geriatric Education Center (GEC) was formed with a grant from the U.S. Health Resources and Services Administration. The primary purpose of the GEC was to provide clinically based geriatric training to health care professional of various disciplines. The training was organized into 13 modules on various topics, such as multidisciplinary geriatric assessment, memory disorders and neuropsychiatry, geriatric exercises, and long-term care management. The GEC trained several hundred physicians and other health professionals from the Southeast during its 10 years at the Center on Aging.

The Department of Psychiatry offers fellowships in geriatric psychiatry and care for the clinically depressed.

• In Gerontological Nursing

The Center and the Duke University School of Nursing have maintained a productive relationship over many years. Nurses have been continuously involved in the Center's research, training, and service programs. Virginia Stone, RN, PhD, a senior



Linda George, PhD

follow at the Center and an early advocate of gerontological nursing, facilitated the participation of nurses in the Center's OARS program. Two of her students became senior fellows themselves at the Center: Mary Ann Matteson, RN, PhD, a member of the OARS multidisciplinary team, and Eleanor McConnell, RN, PhD, authors of *Gerontological Nursing*, a textbook now in its third printing. Carol Hogue, RN, PhD, a nurse-investigator focusing on the epidemiology of injury in late life, was a member of the Center's Longitudinal Studies interdisciplinary research team. And the late Elizabeth Clipp, RN, PhD, had a distinguished career at Duke which began as a Center postdoc with Linda George, PhD, associate Center director. A member of the Duke Department of Medicine, a core investigator of the Durham VA GRECC, and director of a research program supported by NIH, she published



widely recognized studies of trajectories of health across the life course, informal care of the chronically ill, and end-of-life issues.

• In Family Support

The Center's Family Support Program, created by Lisa Gwyther, continues to be recognized as both a local and national resource in assisting families to care for the person with Alzheimer disease (AD). The nationally recognized annual forums organized by Gwyther continue to draw standing-room-only audiences to authoritative presentations on advances in the development and treatment of AD. And the program's publication, *The Caregiver*, is received by over 20,000 subscribers. But meeting local needs also remains a priority. A telephone hotline responds to inquiries from local and state caregivers, and support group meetings are regularly convened in the Center.



Eleanor McConnell, RN, PhD

• In Education

Although the Center has never developed degree programs in gerontology, the educational objectives of the university have been served in a variety of ways. Faculty identified with the Center have regularly taught courses and mentored undergraduate and graduate student research in a variety of departments. And ongoing commitment of the Center to undergraduate education began in 1985 when a multidisciplinary concentration of courses in human development was developed by the Aging Center for Trinity College undergraduates. This program became a model widely copied in other undergraduate concentrations at Duke, and has thrived for over two decades as an introduction of undergraduates to issues in human aging. The related foundation-supported Leadership in an Aging Society Program has offered interdisciplinary mentored internships to over 200 undergraduate, graduate, and professional students with career interests in gerontology and geriatrics.

The joint commitment between the Aging Center and Duke Continuing Education in 1977 to promote lifelong learning received national recognition on the 30th anniversary of the Duke Institute for Learning and Retirement. The Osher Foundation used this anniversary to announce a \$2-million endowment for the Duke Institute and an award of an additional \$250,000 for operating expenses of Duke's pioneering contribution to lifelong education for older adults, which currently serves more than 1,200 older adults in the community each year.

A Legacy of Leadership

The long history of the Center's leadership in research, training, education, and service in gerontology and geriatrics continues. The Center has contributed six presidents of the Gerontological Society of America, including its current president; three presidents of the American Geriatric Society; four members of National Advisory Councils of NIH; two members of the National Institute of Medicine; and a president and a secretary general of the International Association of Gerontology.

Past Is Prologue

For over a half century the all-university Aging Center has demonstrated the effective translation of multidisciplinary research into education and service. Center research has continued to document the changing dynamics of biological, psychological, and social factors that affect the health and well-being of populations over time. The Center's acclaimed multidisciplinary Postdoctoral Research Training Program is now in its fifth decade. Experience with longitudinal research and research training and its translation into effective service is particularly relevant for two recent initiatives of the university: The Duke Global Health Initiative and the Duke Institute on Care at the End of Life. Both these initiatives have important educational, training, and service components whose integration with research has historically been a commitment and strength of the Aging Center.

The Geriatric Division, administered by the Center in cooperation with the Veterans Administration Medical Center, will continue to promote medical training and services through its training programs and the Pepper Center's applied research, designed to improve the functional status and quality of life of adults as they age. The Osher Lifetime Learning Institute at Duke, in whose design and funding the Aging Center participated, continues in its fourth decade as an acclaimed national model. The Center's undergraduate concentration in human development and its related mentored internship program provide an established model of interdisciplinary education for undergraduates of particular relevance for the university.

The Aging Center was designed and continues to be an extraordinary resource as Duke enters a new era of global health initiatives. ■