



AGING WITH GRACE? HELP FROM TRANSLATIONAL RESEARCH, BLENDING SCIENCE WITH SERVICE

The Cornell Institute for Translational Research on Aging (CITRA)

In recent years, it has become common to highlight the positive aspects of "successful aging." Both scholarly and popular reports emphasize pathways to good health, well-being, social integration, and life quality in the later years. However, it is also unfortunately true that many people spend the final years of their lives with serious limitations resulting from chronic disease and disability. Advanced age is correlated with a higher incidence of cognitive impairment, psychiatric disorders, chronic disease, and social isolation.

The contradiction between the ideal of optimal physical and mental functioning, and the unfortunate reality of the vulnerability some older persons face, has provided the impetus for a strong applied focus in the field of gerontology. One of the major challenges facing the field is *research translation*. Government and foundations have spent hundreds of millions of dollars for basic research on aging, but these studies often do not result in concrete benefits for older persons and their families.

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The Cornell Institute for Translational Research on Aging (CITRA) aims to improve the process of translating theory and basic research from the behavioral, social, and medical sciences into practical outcomes that benefit older persons. Directed by Karl A. Pillemer, Human Development, and Mark S. Lachs, Medicine, Chief of Geriatrics, CITRA's focus is on applied research and intervention studies to help answer specific questions: What services and resources work well to solve the problems experienced by older individuals and their families? What strategies are best for promoting independence, reducing physical vulnerability, and easing psychological distress? How can people in late midlife and beyond remain involved in meaningful roles and social relationships?



As part of Cornell's Bronfenbrenner Life Course Center and one of five nationwide Edward R. Roybal Centers for Research on Applied Gerontology, CITRA has taken on a new multidisciplinary structure. For the past 10 years, CITRA has been funded by the National Institutes of Health. This past fall, its funding was extended for another five years. The current five-year period covers a new collaboration with the Weill Cornell Medical College. This allows Cornell's Ithaca researchers to join forces with the Weill Cornell Medical Center's Center for Aging Research and Clinical Care, and the Institute for Geriatric Psychiatry.

Through this partnership, CITRA can more effectively unite numerous resources in social science research, medical education, and clinical care to promote research that links investigation with application. The new collaboration provides outstanding clinical sites for intervention research, as well as infusing Cornell's academic programs in geriatric psychiatry and medicine with a new perspective from the social sciences. It maximizes and extends the federal funding through the efficiencies of common pilot programs, training grants, clinical sites, faculty, and other tangible resources.

Organized around a philosophy of multidisciplinary cooperation among scientists with basic or applied interests, CITRA is one of the most extensive cross-campus collaborations taking place at Cornell. Findings from basic research inform applied research projects and intervention field studies. Using information from these studies, CITRA gerontologists work with policymakers and provider groups to develop programs to improve attitudes, behaviors, and living circumstances. The programs are evaluated rigorously and scientifically before they are shared with the people who will implement them with older persons and their families and communities.

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CITRA's Approach

CITRA's approach to outreach and extension work differs from other programs significantly. Some outreach is completely practice-based: programs originate in the ideas and needs of people who practice in the field. Typically, these programs are not evaluated using scientific methods, such as randomized, control group designs. CITRA tests interventions and programs scientifically before information about them is disseminated so that rigorous evaluation can show that the programs work. CITRA researchers require a published peer-reviewed journal article on the program and methods before the dissemination. The researchers believe that attempts to improve the human condition should be based on scientific evidence.

The engagement of community stakeholders early in the research process is an important feature of the Cornell Roybal Center. This acknowledges the complex, multidimensional needs of older people and the agencies that serve them. Such a participatory research model is more likely to result in pragmatic interventions that have a realistic chance of adoption by the varied providers who come in daily contact with older people and who are in a position to use and promote such interventions. This group includes social service workers, community case managers, home care providers, nurses, and primary care physicians. Research is therefore planned with the needs of end-users in mind.

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Partners in Caregiving Project

Close ties to the community enable CITRA to utilize New

York City's fertile environment for applied research and intervention studies. Settings include ethnically diverse New York City social service agencies, meals on wheels programs, senior centers, home care programs, and ambulatory internal medicine practices frequented by older adults. Cornell's Weill Medical

College and New York Presbyterian (its teaching hospital) have longstanding, trusted relationships with these providers.

CITRA's primary community collaborator is the New York City Council of Senior Centers and Services (CSCS). A subcontractor in the CITRA grant, CSCS is a citywide organization that coordinates the activities of member agencies throughout the five boroughs of New York City. It is a very well-established organization. CSCS has more than 265 member organizations in all boroughs, reflecting all New York City neighborhoods; these agencies serve more than 300,000 older people. To provide guidance to CITRA, CSCS identified and encouraged aging services leaders to participate on a Community Advisory Committee.

CITRA focuses on applied research and intervention studies to help answer questions:

- What services and resources work well to solve the problems experienced by older individuals and their families?
- What strategies are best for promoting independence, reducing physical vulnerability, and easing psychological distress?
- How can people in late midlife and beyond remain involved in meaningful roles and social relationships?

An Example of CITRA's Approach

CITRA researchers work in the New York City community with several projects that will create new knowledge to inform practice.

Exemplifying CITRA's approach is a study of home-delivered meal programs for seniors—a study that blends research expertise in nutrition and scientific surveys with a pressing community need. Through the Community Advisory Committee, CITRA staff learned of a project in which older adults in New York City are about to become participants in a natural experiment in nutrition. In fall 2004, 600 seniors changed from daily home-delivered meals (HDM, such as meals-on-wheels) to less frequent delivery of frozen meals that can be heated in a microwave. It is possible that this change

In CITRA's new multidisciplinary structure, the center has joined forces with the Weill Cornell Medical College's Center for Aging Research and Clinical Studies and the Institute for Geriatric Psychiatry, linking social sciences research, medical education, and clinical care in order to promote research that unites investigation with application.



Mark Lachs, Medicine, Chief of Geriatrics, Weill Cornell Medical College



Weill Cornell Art & Photo



Karl Pillemer, Human Development



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could have positive outcomes—allowing seniors more choice in when to consume meals. In contrast, the change might lead to less effective use of the food delivered, poorer nutrition, and loss of social contact with the person who delivers the meals.

As CITRA researchers considered these possibilities, it became clear that this major decision was being made *in the absence of data*. Do home-delivered meals providers offer benefits beyond nutrition, such as social support? Will all older adults have the memory and manual dexterity to get their meals out of the plastic and into the microwave? Will the change compromise health or well-being? Alternatively, will the transition occur smoothly, with no negative consequences? There is no evidence of reliable research on these issues to inform a decision.

CITRA responded to this opportunity and created an applied research project to estimate the effects of transitioning older adults from daily, delivered hot home meals to less frequently delivered frozen home meals. The study will also identify a subset of older adults who are at risk in transitioning to such a program. CITRA affiliate, Edward Frongillo, Nutritional Sciences, spearheads the project. With CITRA codirector Elaine Wethington, graduate student Megan Henry, and collaborators in the New York City Citymeals Program, Frongillo is designing a

survey in which they will examine diverse medical, functional, and psychosocial outcomes. The survey will provide a profile of the recipients of home-delivered meals and examine their progress over time.

CITRA focuses on investigator development, helping to train and encourage researchers who are committed to the careful translation of basic knowledge into practical outcomes. CITRA sponsors a pilot grants program, offers an ongoing seminar for investigators, and provides methodological assistance and one-on-one mentoring. CITRA's intent is to have the experience gained in the institute become useful beyond the field of aging, particularly in creating a better marriage of science and service.

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CITRA researchers work in the new York City community with several projects that will create knowledge to inform practice. One example is a study on home meal programs for seniors.

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