AGING INSTITUTE
Sowing Seeds for More Rewarding Lives

UPMC Senior Services
University of Pittsburgh
“Those who allege that old age is devoid of useful activity ... are like those who say that the pilot does nothing in the sailing of his ship, because, while others are climbing the masts, or running about the gangways, or working at the pumps, he sits quietly in the stern and simply holds the tiller. He may not be doing what younger members of the crew are doing, but what he does is better and much more important.”

“It is not by muscle, speed, or dexterity that great things are achieved, but by reflection, force of character, and judgment.”

“In these qualities old age is usually not only not poorer, but is even richer.”

_Cato Maior, De Senectute_
_Cicero_
_Loeb Classical Library, 1923_
AGING INSTITUTE: A CATALYST FOR CHANGE

The Aging Institute of UPMC Senior Services and the University of Pittsburgh bridges science and service to improve the medical and psychosocial care of older adults and their family members. In this first annual report, we highlight our work addressing the promotion of healthy aging, the expansion of supportive and palliative care services for older adults, and the reduction of unplanned hospital admissions from skilled nursing facilities. This work builds upon partnerships forged between colleagues at UPMC, UPMC Health Plan, and leading scientists and clinicians at the University of Pittsburgh.

At the core of the Institute lies this partnership. We believe that the complexity of the challenges facing us demands collaboration between colleagues with excellence in operational, clinical, financial, and scientific matters pertinent to the care of older adults.

What we do in Pittsburgh matters not only here: the high proportion of older adults in our population mirrors what the rest of the nation will look like over the next one to two decades. Our commitment to evaluating what we do yields valuable lessons for a nation struggling to develop better, scalable, and more cost-effective models of care.

Further, our efforts to educate the workforce illustrate practical approaches to enhancing the competence and dedication of the nation’s health care workforce in geriatrics.

This report also highlights our academic mission as embodied in two major programs: our seed money support for early-stage investigators doing multidisciplinary aging-related research, from bench to bedside to community and back; and our educational outreach to improve the skills of clinicians and family caregivers in meeting the needs of older adults. We present information on the National Institutes of Health (NIH) sponsorship of aging-related research at the University of Pittsburgh, and we highlight some of the key themes and publications of its scholars in aging.

In closing, we thank our UPMC and University of Pittsburgh sponsors for their support of the Institute’s service and academic missions. This sponsorship makes possible the Institute’s role as a catalyst for change: in the ways we think about and implement care for older adults and their families, in interdisciplinary education in geriatrics, and in multidisciplinary research spanning the basic mechanisms of healthy and pathologic aging to preventive and health-promoting interventions.

We acknowledge with gratitude the financial support and administrative leadership of UPMC, including Elizabeth Concordia, President, Hospital and Community Services Division, and Diane Holder, President, Health Insurance Division. With equal gratitude, we acknowledge the financial support and vision provided by each of the deans of the University of Pittsburgh Schools of the Health Sciences: Thomas Braun, DMD, PhD, School of Dental Medicine; Clifford Brubaker, PhD, School of Health and Rehabilitation Sciences; Donald Burke, MD, Graduate School of Public Health; Jacqueline Dunbar-Jacob, PhD, RN, FAAN, School of Nursing; Patricia Krubath, PhD, School of Pharmacy; and Arthur S. Levine, MD, Senior Vice Chancellor for the Health Sciences and Dean, School of Medicine. Finally, we extend our sincere thanks to Patricia Beeson, PhD, Provost of the University of Pittsburgh, and James Maher, PhD, the immediate past Provost, for their support and engagement in the mission of the Aging Institute.

Charles F. Reynolds III, MD

Director, Aging Institute of UPMC Senior Services and University of Pittsburgh

UPMC Endowed Professor in Geriatric Psychiatry

NIH-funded Center of Excellence in Preventive and Treatment

John A. Hartford Foundation Center of Excellence in Geriatric Psychiatry

University of Pittsburgh

MISSION

The Aging Institute of UPMC Senior Services and the University of Pittsburgh will provide integrated, comprehensive, and timely access to a full range of services for aged persons and the public. It offers state-of-the-art educational programs for the public and health care professionals, and promotes innovative research on aging to understand its causes and concomitants, both social and biological, as well as how best to intervene in illnesses associated with the aging process.
AGING INSTITUTE OVERVIEW

The good news is that in the United States and worldwide, people are living longer than ever before in history. But as they age, older adults — particularly those age 85 and beyond — will require unparalleled economic, medical, social, and health care resources. Discovering and implementing ways to help older adults enjoy longer, healthier, and engaged lives is the aim of the Aging Institute of UPMC Senior Services and the University of Pittsburgh.

BUILDING ON A TRADITION OF EXCELLENCE

In the Pittsburgh metropolitan area, the increased needs of an aging community are already evident, with nearly 18 percent of our population age 65 or older — 40 percent higher than the national average.

For more than three decades, the University of Pittsburgh and UPMC have explored the challenges — and opportunities — of an aging population. Their collective efforts have resulted in groundbreaking advancements in medicine, public health, education, and health care delivery. (See accompanying story, Pittsburgh's Rich History of Aging on page 7)

Today, the pioneering work now underway at many schools and departments of the University of Pittsburgh makes it one of the leading recipients of aging research funding by the National Institutes of Health (NIH). U.S. News & World Report ranks its geriatric medicine program among the top 10 in the nation.

UPMC — also ranked by U.S. News & World Report among the "nation’s best" hospitals — offers a wealth of programs designed to maximize the health and independence of older adults through its clinical hospitals, network of senior living facilities, and community-based programs that deliver medical and social service support.

Recognizing the rich opportunities for greater synergy that exist between the University of Pittsburgh and UPMC in the field of aging, the newly-reconfigured Aging Institute of UPMC Senior Services and the University of Pittsburgh was launched in July 2010. Building on the outstanding foundation established by its predecessor — the University of Pittsburgh Institute on Aging — the Aging Institute has been realigned to promote even greater engagement between UPMC and the University of Pittsburgh.

PARTNERSHIPS FOR A NEW MODEL OF CARE FOR THE AGING

This year, America’s first baby boomers turn 65; by 2030, more than 72 million “aging boomers” will be 65 or older. Perhaps most surprising is that the fastest-growing population in our country today is adults age 85 and older.
EVOLVING IN RESPONSE TO CHANGING NEEDS

Using a three-pronged approach of education, service, and research, the Aging Institute is dedicated to preparing older adults — and all their caregivers — for the long and progressive journey of aging. Its agenda is set through the input of key representatives from UPMC and the University of Pittsburgh through its 22-member Board of Directors and 12-member Executive Committee.

Its efforts include:

• Increasing the quality and quantity of aging-related research by providing information sharing and networking opportunities for researchers in diverse disciplines, engaging in dialogue to identify and prioritize areas of greatest need, and providing seed funding for multidisciplinary research initiatives

• Advancing the translation of research into clinical practice through expanded cooperative alliances between the University of Pittsburgh and UPMC

• Expanding the numbers of health care professionals with expertise in caring for older adults through educational training and programming

• Fostering the clinical practice of geriatrics — including interprofessional geriatric teams

• Serving as a resource for information and referral for health care professionals, caregivers, and the elderly

PITTSBURGH’S RICH HISTORY OF AGING

_The Aging Institute’s mission is rooted in the visionary work of others._

The groundbreaking contributions of the University of Pittsburgh and UPMC in aging research, education and training, and health care delivery have directly touched — and often transformed — the lives of hundreds of thousands of older adults.

Credit for that remarkable legacy rests with Thomas Detre, MD (1924-2010), who believed that health care for older adults could best be provided through a multidisciplinary care model that emphasized the translation of knowledge, derived from research, into everyday clinical practice.

Dr. Detre first became interested in the effects of aging on the brain while chief of psychiatry at Yale-New Haven Hospital. Five years after arriving in Pittsburgh in 1973, he convinced Monica Blumenthal, MD, PhD, to lead a new department of geriatric psychiatry at Western Psychiatric Institute and Clinic.

While geriatrics may have arisen in psychiatry at the University of Pittsburgh, it soon was clear to Dr. Detre that the complex problems facing older adults demanded a much more comprehensive and interdisciplinary approach.

Under his visionary leadership, gifted physician-scientists and health professionals came to Pittsburgh to undertake aging research; the Division of Geriatric Medicine was established; other aging-related research began to take shape in virtually all 16 schools of the University of Pittsburgh; and UPMC evolved into one of the region’s leading health care providers.

Spurred by the tremendous dedication of resources to the field of aging being made by the University of Pittsburgh and UPMC, the University of Pittsburgh Institute on Aging (UPIA) was established in 2002 to more strategically link and leverage the research, educational, and clinical resources of the two entities.

Under the direction of Neil Resnick, MD, and Richard Schultz, PhD, UPIA’s innovative programs helped raise a new level of awareness about the issues of aging, regionally and nationally. Its many accomplishments included:

• Securing funds from various community and governmental constituencies for clinical programs and training

• Facilitating aging research and initiating the seed grant program

• Developing numerous initiatives to improve the quality of care for the older adult

• Creating a comprehensive portfolio of training programs in aging — including Ageless Wisdom and certificate programs — for both professionals and caregivers

Today, many of the initiatives first introduced by UPIA continue to flourish under its successor, the Aging Institute of UPMC Senior Services and the University of Pittsburgh, and Drs. Resnick and Schultz remain integral members of the Aging Institute’s Executive Committee.
PUTTING THEORY AND RESEARCH INTO CLINICAL PRACTICE

In the field of aging, a wealth of new knowledge is continually being created through research activities at the University of Pittsburgh and throughout the country. The untapped opportunity is to find meaningful and measurable ways to test and apply this new science in clinical settings throughout UPMC to respond to the health concerns of older adults. The involvement of UPMC Health Plan with the Aging Institute helps to ensure that models of care are both scalable and financially reasonable.

PUTTING SCIENCE INTO PRACTICE

To address the challenge of translating research into patient care, the Aging Institute developed three workgroups during its first year of operation that target significant clinical care issues of elderly patients:

- Expanding access to palliative care services for older adults
- Promoting healthy aging through attention to bone health
- Reducing unplanned hospital admissions from skilled nursing facilities

Each workgroup uses a team leadership approach, with assigned clinical, evaluation, and administrator leads, as well as broad-based representation from the University of Pittsburgh, UPMC Community Provider Services, and UPMC Health Plan.

Thus far, the workgroups have defined the scope of their tasks, and created detailed structures for both implementation and measurement. And while specific to aging, each group’s activities also promise to yield valuable insights in other areas of health care.

AREA ONE:
Palliative Care for Older Adults

Goal: To improve access of older adults to palliative care services across the care continuum. See page 30 for workgroup members.

Palliative care can be extremely effective in relieving suffering and improving the quality of life of elderly adults experiencing chronic pain or other debilitating conditions. Traditionally delivered in a hospital setting, palliative care brings together the expertise of an interdisciplinary team of health care providers, such as physicians, nurses, social workers, and pharmacists.

The creation of more scalable, cost-effective models for palliative care outside the hospital setting would offer tremendous advantages to older adults locally, nationally, and internationally.

Toward that goal, this workgroup — in collaboration with the Geriatric Education Center of Pennsylvania and the new UPMC Palliative and Supportive Institute — is seeking ways to improve access to palliative services in UPMC’s long-term care facilities by:

- Developing and providing staff education on palliative care and how it differs from hospice care
- Revising skilled nursing facility policies and practices to reflect a palliative care approach to establishing goals of care
- Enhancing palliative care practices within each skilled nursing facility
- Increasing the adoption and use of the Pennsylvania Orders for Life-Sustaining Treatment (POLST) form, which specifies the types of medical treatment that a patient wishes to receive towards the end of life
- Opening the channels for dialogue on palliative care among patients and their families so they can plan for the future and establish goals for care
**AREA TWO: Healthy Aging/Bone Health**

**Goal:** To promote osteoporosis management for older women who have experienced a fracture.

See page 31 for workgroup members.

The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by nine out of every 10 health plans to monitor performance on care and service. The HEDIS measures identify existing gaps in care nationwide. One key standard is the management of osteoporosis after a fracture, which can include undergoing a bone density test and/or receiving a prescription to treat or prevent osteoporosis. Such treatment has been shown to dramatically reduce the risk of future fractures by as much as 40 to 60 percent.

The members of this Healthy Aging workgroup are developing unique strategies to build awareness, promote osteoporosis management, and prevent additional fractures for women over age 65. Their plan of action includes:

- Increasing the number of women over age 65 within the UPMC Health Plan network who receive osteoporosis screenings, counseling, interventions, and treatments through participation in a new pilot program, Mature and Secure from Falls and Fractures
- Decreasing the risk of falling among women who have had a fracture through screenings, counseling, interventions, and treatments
- Identifying and resolving any barriers to osteoporosis management and treatment among the priority population

**AREA THREE: Unplanned Admissions**

**Goal:** To implement best practices to decrease unplanned hospital admissions in UPMC skilled nursing facilities by 20 percent.

See page 32 for workgroup members.

One in five Medicare beneficiaries experience an unplanned admission within 30 days of hospital discharge. Residents of skilled nursing facilities are among those most likely to be readmitted, because they tend to be sicker and frailer than adults who return directly to their homes after hospitalization.

Studies have shown that significant reductions in unplanned admissions can be achieved by improving the continuity of care in nursing homes, and by enhancing communications about a patient’s condition between direct care staff — typically certified nurses assistants (CNAs) and nurses.

To help promote such reductions, the workgroup on Unplanned Admissions is working with UPMC skilled nursing facilities by:

- Promoting consistent assignment of clinical staff to the same patients (ideally 80 percent of the time), with the goal of having eight or fewer direct care providers in a one-month period
- Improving and standardizing clinical management and communication at each skilled nursing facility through the introduction of best practice tools such as “Stop and Watch,” designed to help CNAs easily monitor and share information on any changes in a resident’s habits, appearance, and behavior
- Enhancing communication among CNAs, nurses, and physicians who care for residents in skilled nursing facilities
- Enhancing communication and care coordination between skilled nursing facilities and hospital acute care services

**AGING INSTITUTE EDUCATIONAL PROGRAMMING**

**PROMOTING GREATER UNDERSTANDING AND ENHANCED CARE**

As we age, our bodies respond differently, from how we eat and sleep, to how we are affected by medications or recover from an injury. To recognize and respond to these differences, those at the frontline of care — health care professionals and service providers — must better understand the special needs and considerations of aging minds and bodies.
The Aging Institute offers a wide spectrum of tailored educational programs designed to increase awareness and provide training in basic skills relevant to the aging process. Its primary focus is on strengthening the critical thinking and clinical skills of UPMC health care professionals so that they can respond with excellence and sensitivity to the needs of older adults.

Given the tremendous demand nationwide for trained geriatric professionals, the Institute’s efforts to advance the credentials of health care staff in UPMC hospitals and senior communities offer the added benefit of increasing the competitiveness of our region’s clinical workforce and supporting infrastructure. One expression of this commitment is the Aging Institute’s annual scholarship program, which helps UPMC employees to pursue graduate studies in the University of Pittsburgh’s Gerontology Certificate program. Its first recipients include a health care professional dedicated to aging services and a young health care professional with an interest in integrating aging and technology in her work. (See story on page 15.)

Additionally, the Aging Institute offers programs focused on increasing the awareness of family and home-based caregivers, and interested members of the community.

NOTE: Many of the Aging Institute’s current educational programs were developed by its predecessor, the University of Pittsburgh Institute on Aging (UPIA). Participant numbers therefore reflect involvement since each program’s inception.

PROGRAMS FOR HEALTH CARE PROFESSIONALS

Ageless Wisdom

Building awareness of the physical challenges that come with aging is the focus of the Institute’s geriatric sensitivity training program, Ageless Wisdom. Participants experience aging through exercises that simulate what it is like to handle everyday tasks while dealing with aging-related changes such as vision and hearing loss, and mobility and balance issues. The program is offered in two-hour and four-hour formats. The longer program offers more in-depth discussion and simulations in caring for older adults with advancing dementia, late-life anxiety, and depression.

Program Highlights:

• More than 8,000 western Pennsylvanians have participated in Ageless Wisdom training sessions
• To date, 89 people have been certified through the Ageless Wisdom Train the Trainer program, including 36 trainers added this year at UPMC McKeesport, UPMC Health Plan, UPMC Senior Communities, Redstone Highlands, St. Anne Home, Bethlen Communities, The Residence at the Hilltop, Community College of Allegheny College, and the Geriatric Education Center
• At UPMC McKeesport, more than 600 employees took part in training sessions between April and June 2011
• Ageless Wisdom training sessions have been conducted at Magee-Womens Hospital of UPMC, Hillman Cancer Center, UPMC Health Plan, UPMC Senior Communities, and UPMC St. Margaret
• Ageless Wisdom sessions are routinely provided to students in UPMC’s Schools of Nursing at UPMC Mercy, UPMC McKeesport, UPMC St. Margaret, and UPMC Shadyside

FOSTERING CARING, GERIATRIC PROFESSIONALS FOR THE FUTURE

According to the American Geriatric Society, nearly 9,000 geriatricians are in practice today. But by 2030, our nation will need at least 36,000 physicians to meet the needs of an aging America. Equally key is a host of other geriatric health care professionals, whose ranks include nurses, social workers, nutritionists, psychologists, pharmacists, and therapists.

As part of its efforts to encourage young people to enter the geriatrics field, the Aging Institute participates in the Health Careers Scholars Academy, a unique summer program offered to gifted high school students by the University of Pittsburgh.

These bright teenagers from across the state spend four weeks examining issues and careers in health care. Students who choose the geriatrics concentration are offered an in-depth look at geriatrics and aging from staff members at the Aging Institute and the Geriatric Division of Medicine at the University of Pittsburgh.

Through various sessions, students explore aging issues such as chronic pain and mood disorders, falls and difficulty walking, memory problems and dementia, and other complex health problems affecting the elderly. They also gain an understanding of the challenges of aging and loss of independence through hands-on exercises demonstrating the impact of vision and hearing loss, arthritis, and other forms of disability.

Based on pre- and post-surveys administered to this year’s academy participants, there were marked gains in the students’ interest in geriatrics as a career, increasing from 4.2 percent to 17.4 percent.

The Aging Institute will continue to support this and other programs to encourage the younger generation to enter this increasingly vital field of health care.
Gerontology Certificate Program

The Aging Institute’s Gerontology Certificate Program is targeted primarily at building the skills of nursing home staff members who provide direct bedside care to the frail elderly. Focusing on the biological, psychological, and sociological aspects of aging, the program offers a three-day track for nursing assistants and a four-day track for nurses.

Program Highlights
- Currently, 204 UPMC nurses and nursing assistants have earned gerontology certification through the Aging Institute. Most were nurses participating in the Gerontology Advancement Program at UPMC Senior Communities.
- Another 160 nurses and nursing assistants were trained through an initiative with the Westmoreland Investment Board.

Preparation for Gerontological Nurse Certification

According to the American Nurses Credentialing Center (ANCC), less than 1 percent of all nurses in the United States are certified as geriatric nurses. To encourage registered nurses (RNs) and licensed practical nurses (LPNs) to pursue this important credential, the Aging Institute offers a review course that prepares them to sit for the ANCC’s gerontological nurse certification examination.

Offered twice yearly, this review course also is open to nurses who are interested in simply increasing their competencies and skills working with older adults. Speakers cover issues of concern when caring for older adults, such as urinary incontinence, geriatric syndromes, end of life, long-term care, and mental health. Informed professionals in virtually every field — medical, legal, mental health, financial, nutrition, pharmaceutics, social services and more — are needed to advocate for and ensure access to quality care, resources, and support.

I AM HERE: Interventions for Assessment of Mental Health in Elders with Resources and Education

I AM HERE is an interactive training program focusing on six critical mental health issues: depression, anxiety, suicide, substance abuse, delirium, and dementia. Developed in partnership with the Geriatric Education Center of Pennsylvania, I AM HERE is a series of six, 30-minute sessions with tips for caregivers on how to screen, assess, and manage these difficult situations.

Geriatric Resource Nurse (GRN) Program

The Geriatric Resource Nurse (GRN) Program is considered by NICHE (Nurses Improving Care for Healthsystem Elders) as essential to improving geriatric care nationwide. This educational and clinical intervention model prepares staff nurses to serve as the clinical resource on geriatric issues for other nurses on their unit.

The Aging Institute’s intensive, eight-hour GRN class focuses on building the skills and competencies nurses need to work with older adults in an acute care setting, and to assume a leadership role in advising peers on their bedside care.

Program Highlights:
- To date, 45 registered nurses from Magee-Women’s Hospital of UPMC and UPMC Montefiore have been trained as geriatric resource nurses.
- UPMC McKeosport is currently in the process of applying for NICHE certification, and it intends to implement the Geriatric Resource Nurse model. Currently, there are no NICHE hospitals in western Pennsylvania.

2011/12 AGING INSTITUTE SCHOLARSHIP RECIPIENTS

Nurturing a New Generation of Leadership in Geriatrics

Dozens of considerations are typically involved when caring for older adults, from medical and legal, to social and financial. Informed professionals in virtually every field — medical, legal, mental health, financial, nutrition, pharmaceutics, social services and more — are needed to advocate for and ensure access to quality care, resources, and support.

To encourage full-time UPMC employees to play a leadership role in these efforts, the Aging Institute offers two $2,500 scholarships annually toward studies in the University of Pittsburgh’s innovative Graduate Gerontology Certificate. Developed in collaboration with the Aging Institute, the University Center for Social and Urban Research, and the College of General Studies, the certificate brings together diverse interdisciplinary perspectives to achieve better care and new solutions in geriatrics.

Sandy Gilmore has worked for 13 years as a community geriatric outreach nurse with the UPMC’s Living-At-Home program, but she’s been a nurse for a quarter century. Her position takes her to 42 different homes each week — from patient homes, senior centers, and retirement communities — where she does geriatric assessments, screenings, and more for the seniors in her care.

“I’ve wanted to begin the Gerontology Certificate program for quite some time now,” she says. “I’m especially interested in the opportunities it offers to connect with professionals in other disciplines. I know I can learn from the perspectives of others to help my patients enjoy the best possible quality of life.”

Reality Price is currently pursuing her master’s in Health Information Management at the University of Pittsburgh in the School of Health & Rehabilitation Sciences, while working full-time at UPMC as a data and research coordinator at Western Psychiatric Institute and Clinic of UPMC.

She has a special interest in telemedicine’s potential in addressing the health care needs of older adults.

“I’m a long-distance caregiver for my grandfather, who lives independently in Arizona, and that relationship has really shown me the immense challenges faced by older adults and their families,” she explains. “Technology is going to play an increasingly important role as baby boomers age. I see the Gerontology Certificate as the first step in combining my interests in geriatrics with technology to deliver new solutions.”
Navigating the health care system today — as a patient or as a health care professional — can be daunting. And for older adults and their caregivers, gaining quick access to appropriate information and community resources can be particularly overwhelming, especially when facing complex medical problems, and emotional or financial crisis.
The Aging Institute Information and Referral Line provides access to information, services, and resources for older adults, caregivers, researchers, educators, and professionals through advocacy services focused on guidance and support.

The Aging Institute differs from other support line models because each call is handled personally by a licensed social worker who provides appropriate counseling and support based on a thorough needs assessment.

- During this past year, the Information and Referral Line served more than 330 clients
- Clients served have included caregivers, seniors, physicians, nurses, social workers, hospitals and social service agencies, and students and job seekers interested in geriatric health care
- The Information and Referral Line also serves as a resource for UPMC employees through the system's employee assistance program, LifeSolutions
- Although the majority of calls have come from the western Pennsylvania area, other calls also have been received from throughout the United States, and from Canada and Norway
- Call times have ranged from 10 minutes to two hours in length

Offered free of charge, the Information and Referral Line handles a variety of questions and concerns from callers with wide-ranging needs, such as:

- A wife needing advice because her elderly husband continues to drive even though his vision is progressively getting worse
- A friend to the full-time caregiver of an elderly aunt who is looking for assisted living facilities to tour

Linking callers to information and community assistance is just part of the services provided via the Information and Referral Line. Understanding that many callers are frustrated, desperate, and overwhelmed by financial strains and a lack of family support, the Aging Institute's licensed social worker takes time to fully evaluate the client's needs and establish trust. Efforts are made to screen for depression, medication compliance, signs and symptoms of infections, and other important geriatric conditions.

When services and support are found — even well beyond western Pennsylvania — the staff works with these referring agencies to ensure a smooth transition for clients. Follow up calls to and from the Information and Referral Line can continue for months afterwards.

The Information and Referral Line's work with other agencies has created new avenues for reaching out to seniors, and identifying gaps in service and community needs by fostering collaborative relationships with such organizations as LifeSolutions, UPMC for Life, East Liberty Vintage Senior Center, YMCA of Downtown Pittsburgh, Presbyterian Senior Care, and Redstone Highlands Senior Living Communities.

**A CASE STUDY: LINKING CLIENTS TO HELP**

It was love at first sight when Trish and Bob Lockerbie of Avalon met at a New Year's Eve party 34 years ago. They have been together ever since.

But in recent years, Mr. Lockerbie's failing health has forced him to be homebound. Mrs. Lockerbie sought help from several Pittsburgh area resources for their mounting medical and financial issues, but met with little success. By the time she called the Information and Referral Line of the Aging Institute, she was "at her wit's end."

She knew that her husband needed emergency medical attention. But twice, Mr. Lockerbie had turned away the ambulance services she brought to their home, worried about his lack of health care coverage.

In desperation, Mrs. Lockerbie put him on the phone to talk with the Aging Institute's licensed social worker. "After they spent time talking through his concerns, he agreed to go the hospital," says Mrs. Lockerbie. "She even promised to meet us at the emergency department, so she could be sure he was alright."

The Lockerbies' also were given help securing home health services, tips on sliding scale payment options, and local community resources to help them during Mr. Lockerbie's recovery. "I really don't know what we would have done without the help we were given," says Mrs. Lockerbie. "The call that day probably saved my husband's life."
A central part of the mission of the Aging Institute is “to promote innovative research on aging to understand its causes and concomitants, both social and biological, as well as how best to intervene in illnesses associated with the aging process.”

By fostering a collaborative environment of partnership and exchange, the Aging Institute serves as an advocate for the remarkable range of aging-related research occurring every day in Pittsburgh.

PROMOTING RESEARCH

In the areas of geriatric and gerontological research, the Aging Institute has, as its goal, to:

- Help to bridge “research silos” in aging by exploring areas of potential synergy
- Encourage investigators in other disciplines to apply their expertise to aging
- Identify new and potentially fruitful areas of investigation that capitalize on current strengths

The Aging Institute’s efforts to advance this goal include:

- Funding research seed grants, or pilot studies, in gerontology and geriatrics. (See page 22 for more information.) Among the criteria for these awards is a multidisciplinary, translational approach (spanning bench to bedside, and bedside to community), proposed by an early-stage investigator and/or a senior investigator new to the field of aging. Award winners include representatives from various University of Pittsburgh Schools of the Health Sciences
- Involving researchers and scholars from the University of Pittsburgh Schools of the Health Sciences in collaborative workgroups, so that the findings and results of workgroup activities can more readily be included in applied research or evaluation science
- Collaborating with UPMC and the University’s aging-related disciplines, including the humanities, social sciences, economics, law, basic sciences, health care delivery, and health services research. An example of such cooperative research is the pilot grant recently funded by the Institute led by the School of Health and Rehabilitative Services’ Jennifer S. Brach, PhD, PT, on developing exercise programs for older adults within the health care system
- Supporting a forum for researchers across the University spectrum, to share their findings through the annual Celebrating Aging Research Day
- Disseminating research outcomes and presenting relevant topics through forums, seminars, and symposia
- Providing interested researchers and scholars nationally and worldwide with access to information about aging-related studies to benefit senior health care through such platforms as the Institute website (www.aging.pitt.edu), and UPMC Synergies and Aging Connections newsletters

Topics covered span areas of focus, including sources of funding, principal investigators and researchers in aging, as well as University of Pittsburgh Centers of Excellence funded by the National Institutes of Health (NIH), the Veterans Administration (VA), the John A. Hartford Foundation, and the Centers for Disease Control (CDC). These include:

- **Alzheimer Disease Research Center**
  Director: Oscar Lopez, MD; Co-Director: William E. Klunk, MD, PhD

- **Center on Healthy Aging**
  Director: Anne Newman, MD, PhD; Co-Directors: Jane A. Cauley, DrPH and Steven M. Albert, PhD

- **Center of Excellence in Geriatric Medicine**
  Director: Neil M. Resnick, MD

Pittsburgh has long been a center of excellence in NIH-, CDC-, AHRQ-, and VA-sponsored research on aging, from epidemiology and ethics, to mental and public health. In fact, the University of Pittsburgh is among the top recipients of funding in aging research from the National Institutes of Health (NIH).
John A. Hartford Foundation Center of Excellence in Geriatric Psychiatry
Director: Charles F. Reynolds III, MD; Co-Director: Jules Rosen, MD
Center of Excellence in Late-Life Depression Prevention & Treatment
Director: Charles F. Reynolds III, MD; Co-Directors: Mary Amanda Dew, PhD and Steven M. Albert, PhD
Claude D. Pepper Older Americans Independence Centers
Director: Stephanie A. Studenski, MD, PhD
Geriatric Research, Education, and Clinical Center (GRECC)
Director: Steven Graham, MD, PhD

AGING INSTITUTE
2010 & 2011 Seed Grant Recipients
The promotion of relevant, innovative research is an essential part of the Aging Institute’s mission. The Seed Grant program encourages collaborative, multidisciplinary research among junior faculty members in new areas of research in aging that hold the potential of attracting future funding from external sources.

The Seed Grant program, which awards $20,000 to each selected project, was launched in 2007 by the Institute’s predecessor, the University of Pittsburgh Institute on Aging (UPIA).

2011 Award Recipients
Project Title: On the Move: Optimizing Elder Exercise Inside the Health Care System
Principal Investigator: Jennifer S. Brach, PhD, PT
Co-Investigators: Pamela Peele, PhD; Subashan Perera, PhD

Project Title: Development of a Protocol for Disclosing Amyloid Imaging Results in Mild Cognitive Impairment
Principal Investigator: Jennifer Hagerty Lingler, PhD; RN, FNP
Consultants: Scott Roberts, PhD; Keith Johnson, MD; Jason Karlwisch, MD; Amanda Gentry, MPH

Project Title: Inflammation in Cognitive Aging
Principal Investigator: Anna L. Marsland, PhD
Co-Investigator: Peter J. Gianaros, PhD

Project Title: Elucidating the Role of Lamin B1 in Aging Dependent Demyelination
Principal Investigator: Quasar Saleem Padiath, PhD

Project Title: Use of Functional MRI to Validate NIRS Investigation of Brain Control During Urgency and Urge Urinary Incontinence
Principal Investigator: Stasa Tadic, MD
Co-Investigators: Neil Resnick, MD; Werner Schaefer, PhD; Theodore Huppert, PhD; Derek Griffiths, PhD; Becky Clarkson, PhD

Project Title: Neurocognitive Impact of Early Life Ischemia
Principal Investigator: Anna Gandy, PhD
Co-Investigators: Myriam Brouillet, PhD; Magdalena Sipiczki, PhD

Project Title: Determinants of Urinary Incontinence: A Longitudinal Study
Principal Investigator: Andrew Meier, MD; PhD
Co-Investigators: Stephanie Studenski, MD, MPH; Cheryl Rohrer, RN; Maxine Ewing, RN

Project Title: Cortisol and Sarcopenia
Principal Investigator: Fabrisia Ambrosio, PhD, MPT (PI)
Co-Investigators: G. Kelley Fitzgerald, PT, PhD, OCS; Gwendolyn Sowa, PhD, MD; Bret Goodpaster, PhD; Elkie Brown, MD

Project Title: Impaired Lipid Oxidation in Elderly Muscle
Principal Investigator: Bret Goodpaster, PhD
Co-Investigator: Paul Coen, PhD

Project Title: Mechanisms Linking Hot Flashes to Cardiovascular Risk
Principal Investigator: Rebecca C. Thurston, PhD

2010 Award Recipients
Project Title: The Anti-Aging Effect of Electrical Stimulation on Aged Skeletal Muscle Regenerative Potential
Principal Investigator: Fabrisia Ambrosio, PhD, MPT (PI)
Co-Investigators: G. Kelley Fitzgerald, PT, PhD, OCS; Gwendolyn Sowa, PhD, MD; Bret Goodpaster, PhD; Elkie Brown, MD

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DR. ANNE NEWMAN, MD, MPH
“As a young internist interested in public health, I thought aging represented an important frontier in medicine. I started off with specialty training in geriatric medicine; today, it’s my life.”

An internationally known expert in aging and public health, Anne B. Newman, MD, MPH, has shown people how to remain productive, active, and healthy as they age through both her clinical practice and research as a geriatrician and epidemiologist.

According to Dr. Newman, the definition of old age continues to evolve. “When I began my career 25 years ago, old age was defined as 60 and older,” she said. “In 1995, it was 70 and older, and in 2005, we began focusing on age 85 and older. As more and more people reach older age in good health, the need to maintain function becomes increasingly important as a public health goal.”

Dr. Newman’s research focuses on the medical, behavioral, and genetic determinants of healthy aging. One of her projects, Cardiovascular Health Study All Stars, began in 1989 with more than 5,000 men and women age 65 or older. Today, she continues to study the surviving 15 percent of that original cohort who are functional and cognitively intact as they approach their 90s.

Her Health, Aging and Body Composition (Healthy ABC) project started in 1996 with more than 3,000 men and women age 70 or older, who are now in their late 80s. About 40 percent of the participants are African Americans, and they are yielding unique data on the aging African-American community.

Dr. Newman’s newest initiative — The Long-Life Family Study — is international, involving nearly 5,000 people from 500 extended families in the United States and Denmark with multiple family members exhibiting longevity.

“Research shows that healthy aging and longevity are possible. People can and are doing well as they grow older. Dementia and disability are not inevitable,” says Dr. Newman. “We just have to find the right keys. My goal is to discover new knowledge on healthy aging for the next generation.”

UNIVERSITY OF PITTSBURGH
Aging-Related Research Highlights
Following is a sampling that shows the range and diversity of aging-related research now underway at the University of Pittsburgh:

Patient-Oriented Research & Clinical Epidemiology
• Anne Newman, MD, MPH: Genetics and environmental determinants of successful aging: research to prevent disability and maximize active life expectancy
• Richard Schulz, PhD: Health effects of family caregiving and interventions to alleviate caregiver distress and burden; development of tools for measuring suffering and assessment of the interpersonal effects of suffering; development and application of technologies that enhance functioning and promote independence in older individuals

Basic Research
• Steven Hunt Graham, MD, PhD: Neuronal cell death mechanisms in stroke and neurodegenerative diseases; role of oxidative stress and lipids in neuronal apoptosis
• Laura Niedernhofer, MD, PhD: Human progeria and related mouse models
• Paul Robbins, PhD: Biological approaches to understand and treat aging-related degenerative diseases

Translational Research
• William Klunk, MD, PhD, and Chet Mathis, PhD: Development of the most widely used amyloid tracer, PiB in normal controls, mild cognitive impairment and dementia
• Neil Resnick, MD: Lower urinary tract; physiology and control; changes with age; changes that result in incontinence, causes of incontinence; physiological and ultrastructural impact of normal aging on the lower urinary tract; various types of geriatric voiding dysfunction
• Steven Albert, PhD: Determine how the aging services network and related clinical services can function as a public health intervention; primary prevention of falls

Ethics/Decision-Making Research
• Douglas White, MD, MAS: Ethics and decision making in critical illness; empirical research on and normative ethical analysis of decision making for patients with life-threatening illness; quantitative and qualitative methods to examine the process of medical decision making in intensive care units

DR. STEPHANIE STUDENSKI, MD, MPH

“The world of scientific inquiry has developed very differently from the care of the elderly,” says Stephanie Studenski, MD, MPH. “It’s not easy, but the Aging Institute helps close the barrier of translational work by putting knowledge into practice.”

A geriatrician and rheumatologist, Dr. Studenski is one the country’s leading authorities on mobility, balance disorders, and falls in older adults. She is the principal investigator of the Claude D. Pepper Older Americans Independence Center at the University of Pittsburgh, which brings together more than 50 leading researchers from five schools at the University.

“Mobility and balance may not be diseases, but they are fundamental to the health of older people. Successful aging is being able to think and move. When there are problems in those areas, that’s where difficulties begin,” she says. “My job is to bring together people with multidisciplinary skills and perspectives — neurologists, cardiopulmonologists, inner ear and vision specialists, psychologists, even physicists and engineers — to understand how balance works as we age.”

Dr. Studenski is also the principal investigator or co-principal investigator of grants related to the prognostic value of gait speed in older adults, the role of dopamine depletion in falls and balance disorders, a recently completed program project on cancer and aging, and several training grants.

She describes the Aging Institute as “operations central”. “It doesn’t actually conduct the research, but in its role as a resource exchange, the Aging Institute helps maximize the impact of the tremendous research happening in Pittsburgh today and connects it directly to the patient,” says Dr. Studenski.
Growing up in south central Los Angeles, Neil M. Resnick, MD, watched as his physician father and social worker mother dedicated their lives to caring for the indigent of Watts and Compton. The hallmark of Dr. Resnick’s own distinguished career in medicine has been caring for older adults, and studying the causes of their many illnesses, most notably incontinence, osteoporosis, prostatism, and delirium. “It is ironic that despite Medicare coverage, older adults are, in many ways, among the most disenfranchised members of our society today,” he notes.

His current project is the ambitious Acute Care and Transitions (ACT) program now underway at Magee-Womens Hospital of UPMC, which offers a new approach to inpatient hospital care. “ACT asks every department and discipline to play a proactive role in anticipating each patient’s potential problems, and developing a plan of action to avert them,” says Dr. Resnick.

That kind of thinking demands training at every level. To date, more than 200 Magee staff members have completed the Aging Institute’s Ageless Wisdom training program. Nurses are also receiving ongoing instruction in the bedside care of older patients to recognize such issues as delirium, malnutrition, and aspiration risk. Some are participating in the Aging Institute’s Gerontology Certification Review and have attended Geriatric Resource Nurse training. Other staff training includes lunch and learn programs and grand rounds.

Early indicators are promising. “At the end of ACT’s first year, Magee reduced its length of inpatient stays by 20%,” says Dr. Resnick. Additionally, charges dropped 30 percent from the first to last quarter of ACT implementation. Ultimately, it is hoped that what is learned through ACT will help drive improved care for older adults in every hospital setting.