The Indiana University Geriatrics Program cannot lay claim to being the oldest or the biggest or the most recognized academic geriatrics program in the country. In fact, we are relatively new to the scene of geriatrics. While some programs entered middle age over a decade ago, we still count our years in single digits. Despite our youth, we are blessed with a proud ancestry, an exciting present, and a challenging future. I would like to tell you more about our past, present, and future and how we are building a program in academic geriatrics that will ride the crest of the age wave.

The IU Geriatrics Program is the product of a collaboration between three partners: the Indiana University School of Medicine which is home to one of the oldest and largest general internal medicine divisions in the country; Wishard Health Services which is a large urban public health care system serving the Marion County community; and the Regenstrief Institute for Health Care, an international leader in medical informatics. These three partners have nearly a 40 year history of collaboration in community health care, medical education, and primary care research. However, as was true in the rest of the country, these programs were increasingly strained by the health care needs of an aging population. The leadership of these programs recognized the need for system redesign. Innovation was necessary so that we could more effectively apply the principles of geriatrics to the care of our older adult patients, teach these principles to the next generation of physicians, and develop new knowledge through aging research.

The genesis of our Geriatrics Program in primary care, community health, and health services research not only recognizes our institutional strengths, it also builds for a future where the majority of older adults will be cared for in primary care settings. By taking the best from our past, we are making a difference in the lives of our patients in the present, and building a dynamic geriatrics program for the 21st century.
RESEARCH

Scientists in the Indiana University Center for Aging Research are working to close the gap between knowledge and practice. Much has been learned about improving the independence and function of older adults but this knowledge is often difficult to apply in practice. Recognizing that most care for older adults will be provided by primary care physicians, scientists in IU-CAR are collaborating with colleagues in clinical care, medical education, and medical informatics to improve the care of older adults in primary care practices.

Primary care physicians seek new resources and new strategies to help them care for their older adults patients. While knowledge is necessary, it is typically insufficient to assure that the right treatments get to the right patients. This is true because of the multiple other factors that govern whether appropriate care is delivered to the appropriate patients. Some of these factors reside in the provider, but others are characteristic of patients or inherent in the health care system. Perhaps more importantly is the fact that these factors are interactive, and overly simplistic or deterministic intervention models have proved ineffective. Thus, our research typically employs multi-faceted and/or longitudinal interventions within the context of complex and dynamic health care systems. Conducting this type of research requires a strong infrastructure, an interdisciplinary team, a close relationship with the leadership of the health care system, and a capacity to develop new methodologies in study design, measurement, and analysis.

One example of this type of study is the NIA supported clinical trial, “Geriatric Resources for Assessment and Care of Elders” (GRACE) which studies the effectiveness of a collaborative model of team care as compared to usual care in improving functional outcomes among community-dwelling low-income older adults. The intervention involves a geriatric nurse practitioner and social worker caring for the vulnerable older adult in collaboration with the primary care physician and in consultation with a geriatric team. The specific components of GRACE include: a) targeting of elders at risk; b) collaborative expertise in geriatrics; c) integration into primary care; d) coordination of care across all sites of care; e) integration of data systems that support clinical practice and facilitate longitudinal monitoring; and f) institutionally endorsed clinical practice guidelines.

We are also collaborating on research on Alzheimer’s disease, late life depression, congestive heart failure, and osteoporosis, among others. We have developed a research program on improving physical activity in older adults, and we are collaborating with community partners to study new strategies to change lifestyle behaviors. We are also developing a formal program of “gero-informatics” in order to unleash the potential of information technology and decision-support on the complex health care needs of older adults.

Redesigning health care systems to better support the work of primary care physicians will result in better health care for older adults and ultimately improve the independence of older adults. This is an ambitious research agenda for a young aging research program. However, we are building for the future, and we are assembling a wonderful team of collaborators willing to put their shoulder to the wheel.
The IU Geriatrics Program provides geriatrics education at all levels of training—medical students, residents, fellows, and continuing education for faculty and practicing physicians. Our goal is to provide a training experience across the continuum of health care and across the continuum of health. Students see not only older adults with functional impairment, but also older adults who have aged successfully. Notably, we are conducting research on innovative educational methods so that our geriatrics education programs are evidence-based.

Medical Students
Indiana University School of Medicine is the second largest medical school in the country with 280 medical students per class and nine state-wide campuses. During the preclinical years, half the students are assigned to the Indianapolis campus. With funding awarded by the Hartford Foundation, we are using standardized patients to introduce the concepts of successful aging to medical students during their first year. Standardized patients are employed during the second year to teach modifications necessary in the history and physical examination of older adults. During the third and fourth years, students are provided with Web-based instruction, small group discussions about the Web content, and clinical applications.

Internal Medicine and Medicine Pediatrics Residents
All residents complete a one-month block rotation in geriatrics during their second or third year of training. The goal of the rotation is to teach fundamental knowledge and skills in the care of older adults and to foster positive attitudes towards them. During the rotation, residents care for patients on the Acute Care for Elders (ACE) Unit, in the IU Center for Senior Health, House Calls, and Extended Care Services. Funding from the Robert Wood Johnson Foundation is being used to create Web-based modules for resident education in geriatrics during their intern year. A randomized controlled trial is being conducted comparing the clinical acumen of residents after the Web-based intervention versus traditional reading materials covering the same content. Standardized patients introduced unannounced into residents’ continuity clinics serve as a proxy for real patients to assess the clinical application.

Fellows
Fellows complete one year of training for primary care private practice or two or more years of training for academic careers in Geriatric Medicine. Graduates from the program have pursued a variety of career paths and have achieved a 100% pass rate on the Certificate of Added Qualifications Examination. Fellows who pursue the two year track are required to complete a research project by the end of their fellowship and have presented the project at regional and national meetings.

Faculty
The Faculty, Geriatrics Interest Group Physicians, and the Senior Care support staff participate in many opportunities for ongoing continuing medical education (CME). The main CME activity is the weekly IU Geriatrics Conference which hosts guest speaker presentations covering a variety of older adult clinical issues and monthly research work-in-progress presentations.
CLINICAL PROGRAMS

Four clinical venues comprise Senior Care at Wishard. These sites of care span the continuum of care, including the inpatient Acute Care for Elders Unit, the IU Center for Senior Health, House Calls for Seniors, and the Extended Care Service.

The Acute Care for Elders model combats the functional decline that may occur as a result of an acute illness and hospitalization. The four key elements of an ACE program are a specially designed environment; patient-centered care, including nursing care plans for rehabilitation and prevention of disability; planning for patient discharge to home; and review of medical care to prevent iatrogenic illnesses. The ACE interdisciplinary team, including a geriatrician and gerontological clinical nurse specialist, collaborate with the attending physician and medical team to address functional and psychosocial issues concomitant with treatment of the acute illness.

In 1998 ACE concepts and the geriatrics interdisciplinary team approach were implemented at Wishard Memorial Hospital, and in May of 2001 Wishard opened a newly renovated 24-bed ACE Unit. Nearly 600 patients received care from the ACE team during the past year.

The IU Center for Senior Health was established in 1998 to provide outpatient geriatrics consultation and primary care to frail older adults with the complex medical and psychosocial problems that cause dependency in activities of daily living.

The center’s interdisciplinary consultation team — a geriatrician, clinical nurse specialist, and social worker — complete a comprehensive geriatric assessment, share the findings with the patient and family, discuss recommendations, and provide resource materials. The patient’s primary care physician receives a complete summary and recommendations. The center expanded into multi-specialty consultation in 1999.

Older adults value the convenience of one-stop-shopping, the comfort of the senior-friendly environment, and a plan of care that gathers resources — medical, social, community — to help maintain functional status and promote quality of life. In the past year, the IU Center for Senior Health had approximately 3,000 visits and served over 600 patients.

The main goal of House Calls for Seniors is to reach the homebound who otherwise would not receive needed medical care. A team comprised of a geriatrician, geriatrics nurse practitioner, and social worker make home visits and review their patients together each week. Bridge House Calls also provides home visits to patients discharged from the hospital or skilled nursing facility to safely “bridge” these seniors back to primary care. Operated by Wishard Health Services and IU Medical Group, the program is limited to elderly patients who live near Wishard Memorial Hospital. Approximately 180 patients received over 750 visits last year by the House Calls team.

The Extended Care Service provides rehabilitative, palliative, or long-term care to patients unable to live independently. A geriatrician and a geriatrics nurse practitioner team up to care for patients in more than 25 skilled care facilities surrounding Wishard Health Services. The team coordinates care with Wishard Memorial Hospital, the outpatient clinics, and community agencies. Over the past year, IU Geriatrics providers made nearly 6,500 visits to approximately 500 nursing home residents through the Extended Care Service.
COMMUNITY PARTNERSHIPS

The IU Geriatrics Program has made a clear commitment to improving the quality of life of older adults in our local community. We believe that models developed and tested in Indiana will prove effective in other communities. Notably, the community is not simply a target of our program — they are partners in our shared mission.

**Senior Connection** is a free membership program for adults aged 55 or older that focuses on promoting the health and well-being of older adults. Senior Connection offers a variety of benefits and services to help older adults maintain their health including: free parking for health care visits, 10% cafeteria discount, health education seminars, discounted activities at the YMCA, assistance with health insurance, discounts for eyeglasses, and a direct phone line for information and assistance in locating resources.

Faculty in the IU Geriatrics Program are collaborating with a number of community agencies in joint projects focusing on clinical care, education, or research to improve the health of older adults. These partners include the Marion County Health Department, a network of Indianapolis churches, the YMCA, three large private health care systems serving the metropolitan area, the local Area Agency on Aging, the Visiting Nurse Service, Inc., the local chapter of the Alzheimer's Association, and Indiana State government among many others.

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**IU Geriatrics: A New Generation**

Recognizing not only our recent accomplishments but also our future potential, the Indiana University Geriatrics Program was recently selected by the Association of Directors of Geriatrics Academic Programs (ADGAP) to participate in a program titled **“Developing a New Generation of Academic Programs in Geriatrics.”** Funded by the John A. Hartford Foundation, Inc., this Award will support a major expansion of our academic geriatrics program to the Roudebush Veterans Affairs Medical Center in Indianapolis. Nearly 600,000 Veterans live in Indiana, and approximately 60,000 receive care in the state’s VA facilities.

Support from the ADGAP academic geriatrics program development initiative will be used to establish a series of geriatrics primary care teaching clinics at the VA in collaboration with our colleagues in the Roudebush VA Division of General Internal Medicine. This initiative has the support of the leadership of the VAMC and represents an important first step in our program development at this new site. The geriatrics primary care clinics will be staffed by two geriatricians, both of whom completed their fellowship training in the IU Geriatrics fellowship program. These clinics will serve as an important new site for geriatrics education for our current fellows as well as medical students and internal medicine residents. We have established a Geriatrics Steering Committee that will facilitate strategic planning and geriatrics program development at the Roudebush VAMC. This Committee will organize didactic lectures in geriatric medicine and a Geriatrics Visiting Scholar program. Finally, this Committee will help facilitate collaboration between the IU Center for Aging Research and the VAMC HSR&D Research program. We look forward to a long-term collaboration with the VA as we work toward our shared goal to improve the quality of life of older adults.
IU GERIATRICS PROGRAM FACULTY

**Robin A. Beck, MD**  
Assistant Professor of Clinical Medicine  
Director, House Calls for Seniors  
*Clinical interest is to provide care for frail, elderly patients, especially the homebound; teach residents and students importance of house calls and caring for the elderly, keeping geriatric principles in mind*

**Malaz Boustani, MD, MPH**  
Assistant Professor of Medicine  
Scientist, Center for Aging Research  
Research Scientist, Regenstrief Institute  
*Research and clinical focus is to improve health outcomes of dementia patients with agitated behaviors by providing an individualized multicomponent intervention program*

**Amna Buttar, MD, MS**  
Assistant Professor of Clinical Medicine  
Medical Director, IU Center for Senior Health  
Scientist, Center for Aging Research  
*Interests focus on development and evaluation of clinical programs to provide effective and high quality of care to older adults.*

**Christopher M. Callahan, MD**  
Cornelius & Yvonne Pettinga Scholar in Aging Research  
Director, Center for Aging Research  
Research Scientist, Regenstrief Institute  
*Research focuses on health systems interventions to improve the care of older adults in primary care settings*

**Daniel O. Clark, PhD**  
Associate Professor of Medicine  
Scientist, Center for Aging Research  
Research Scientist, Regenstrief Institute  
*Research focuses on improving behaviors and environments for health promotion over the life course*

**Steven R. Counsell, MD**  
Mary Elizabeth Mitchell Scholar in Geriatrics  
Director, Geriatrics Program  
IU School of Medicine  
Scientist, Center for Aging Research  
*Clinical and research interests are in improving the care of older adults through interdisciplinary team collaboration and health system innovations*

**Teresa M. Damush, PhD**  
Assistant Scientist, Department of Medicine  
Scientist, Center for Aging Research  
Research Scientist, Regenstrief Institute  
*Research interests are disease self-management, and physical functioning and activity among older adults*

**Jeffrey C. Darnell, MD**  
Professor of Medicine  
*Clinical focus is on providing consultative and primary care to frail elderly patients in the outpatient setting and skilled nursing facilities*

**Gregory Gramelspacher, MD**  
Associate Professor of Medicine  
Director, Palliative Care Program  
Wishard Health Services  
*Interests include medical professionalism and the doctor-patient relationship, end of life care, and health care for the underserved*

**Hugh Hendrie, MB, ChB, DSc**  
Professor, Department of Psychiatry  
Scientist, Center for Aging Research  
Research Scientist, Regenstrief Institute  
*Research interests relate to epidemiology of dementing disorders and intervention trials for dementia and depressive disorders in primary care; retirement issues in physicians*
IU GERIATRICS PROGRAM FACULTY

**Siu L. Hui, PhD**
Professor, Department of Medicine  
Biostatistics Director, Center for Aging Research  
Director Biostatistics Section, Regenstrief Institute  

*Research interest is in development of statistical methods and their application to biomedical and health services research questions.*

**Wanzhu Tu, PhD**
Assistant Professor of Medicine  
Scientist, Center for Aging Research  
Research Scientist, Regenstrief Institute  

*Research focus is statistical modeling of health related outcomes in older adult patients.*

**Colleen A. McHorney, PhD**
Professor of Medicine  
Research Director, Center for Aging Research  
Senior Scientist, Regenstrief Institute  

*Research focuses on quality of life and quality of care assessment and advances in methods of measuring patient outcomes.*

**Michael Weiner, MD, MPH**
Assistant Professor of Medicine  
Scientist, Center for Aging Research  
Research Scientist, Regenstrief Institute  

*Research concerns improving quality and delivery of health services for elders and the impact of health information in healthcare.*

**Neil B. Oldridge, PhD**
Professor of PHYSICAL THERAPY and Medicine  
Associate Director, Center for Aging Research  
Research Scientist, Regenstrief Institute  

*Research focuses on rehabilitation, health-related quality of life, and cost effectiveness in cardiovascular disease.*

**Glenda Westmoreland, MD, MPH**
Assistant Professor of Clinical Medicine  
Director of Geriatrics Education  
Scientist, Center for Aging Research  

*Interests are developing and implementing innovative ways to teach geriatric medicine and assessing impact of curricular innovations on delivery of patient care.*

**Usha Subramanian, MD, MS**
Assistant Professor of Clinical Medicine  
Scientist, Center for Aging Research  

*Research focuses on cardiovascular disease—chronic heart failure and ischemic heart disease in the elderly.*

**David Wilcox, MD, CMD**
Associate Professor of Clinical Medicine  
Medical Director, Lockefield Village Health and Rehabilitation Center  

*Interests include wound care, long-term care, and federal & state regulations related to long-term care.*

**Michael Sha, MD**
Assistant Professor of Clinical Medicine  

*Clinical interest is providing geriatric care in the primary care setting and educating trainees in the principals of geriatric medicine.*

**GERIATRIC MEDICINE FELLOWS**

**Cathy Schubert, MD, PGY IV**  
**Youcef Sennour, MD, PGY V**
IU GERIATRICS PROGRAM STAFF

Nurses
Dale Anderson, RN
Ron Erdely, RN, MSW
Jo Groves, RN, MS
Lisa Hovious, RN
Vicki Jerome, LPN
Barbara Mickler, RN

Social Workers
Ann Allen, MSW, LSW
Carole Carver, LSW, MA
Donna Casper, MSW, LSW
Charlotte Deeter, MA, LSW
Linda Kirchhoff, MSW, LSW
Stephen Lind, MS, LCSW
Meredith Wingrove, LSW, MSW

Nurse Practitioners and Clinical Nurse Specialists
Carrie Bone, RN, GNP
Karin Comastri, RN, ANP
Nancy Frass, RN, ANP
Bruce Grau, RN, GNP
Cora Hartwell, RN, ANP
Jeanette Kreger, RN, FNP
Kristin Mather, RN, CS
Trish Moore, RN, CS
Jackie Sullivan, RN, GNP
Mickey Vogel, RN, GNP
Earlie Young-Hale, RN, CS

Senior Care at Wishard
Amy Andrews, Senior Connection Coordinator
Karen Bowers, RN, Nursing Director for Senior Care
David Moller, PhD, Palliative Care
Melanie Muntzinger, MHA, Geriatrics Practice Manager
Beth Nikides, Senior Care Manager
Wanda Powell, RN, ACE Unit Manager
Barbara Resnover, Spiritual Advisor
Megan Shipman, Wellness Coordinator
James Wahls, Senior Connection Manager

IU Center for Aging Research
Greg Abernathy, MD, Clinical Programming Specialist
Dennis Benge, MBA, Accountant
Nancy Nienaber Buchanan, MA, Program Manager
Maria Dibble, MS, Financial Manager
Bridget Fultz, MA, Project Coordinator
Sharon Hopwood, Assistant
Kelly Mastin, Assistant
Anthony Perkins, MS, Biostatistician
Gretchen Ricketts, BSW, Project Coordinator
Timothy Stump, MA, Biostatistician

IU Geriatrics Program Administration
Kathy Frank, RN, MSN, Geriatrics Program Administrator
Peg Kimmet, Executive Secretary
Kate Kress, Geriatrics Education Coordinator
Patty Neureiter, Education Secretary
Maria Surface, Executive Secretary