DIVISION OF
GERIATRIC MEDICINE
ANNUAL REPORT

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**DIVISION OF GERIATRIC MEDICINE**

Our mission is to enhance the health of older adults, by providing superb clinical care, training others to do the same, and conducting research to ensure that tomorrow’s care is better than today’s.

With the national declines in funding, we have increasingly relied on innovation as our primary strategy for achieving our goals. This year, although the advent of COVID-19 effectively divided the year into two parts, it also showcased each of these aspects. Highlights are described below, and details are provided in the sections that follow.

**Clinically,** prior to COVID, we enhanced our shared savings program with UPMC’s Health Plan; by adding patients, exceeding quality benchmarks, and improving efficiency, we saved >$1 million. In addition, we built on the success of our telemedicine efforts, which had previously reduced unplanned nursing home transfers, contributed to our two successful $20 million CMS Innovation Center grants, and led UPMC Enterprises to sponsor our creation of Curavi Health™: in FY19, CuraviHealth acquired a New York telemedicine company; it now serves >150 nursing homes in 14 states and recently merged with 2 other companies to form Arkos.

We also employed several initiatives to help UPMC reduce readmissions: (1) we expanded our Geriatric Trauma Service, which provides a proactive approach to >2000 older trauma patients admitted annually to UPMC Presbyterian (PUH); propensity analyses showed that we cut readmissions by 42%. (2) Our delirium prevention (HELP) program at UPMC Shadyside continued to cut readmissions hospital-wide, consistent with its prior performance (JAGS 2018). (3) With radiology, we devised a new program to reinsert PEG tubes in NH patients and avoid ED visits. (4) We initiated a novel transition service for older TAVR and heart failure patients discharged to NHs. (5) With orthopedics, we enhanced our Fracture Liaison Service (JBMR 2017) to ensure that, in addition to fracture repair, older patients receive appropriate therapy for osteoporosis; the service, which reduced recurrent fracture from 10% to 1.5%, is now the model for the National Osteoporosis Foundation, and we are working with UPMC Health

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When COVID arrived, we were well-positioned to lead key initiatives to help vulnerable older adults.

We initiated eConsults and successfully transitioned our own patients to telehealth bringing visit volumes and quality metrics to pre-COVID levels by June. We provided medical management to all of UPMC’s 35 post-acute facilities, 24/7. We helped UPMC to create and deploy “swat teams” to test its SNF patients on-site, and we assisted its hospitals with difficult transfer decisions.

We employed our telemedicine expertise to link the City's EMS service to ED doctors, enabling them to test patients on-site and avoid the need for ED transport. By galvanizing Pitt’s healthcare students, we were also able to respond to the state’s plea to help the 600 post-acute facilities in Western PA with concerns regarding PPE sourcing, testing, management, admission, and transfer decisions. In turn, the program’s success provided an opening to work with legislators to craft and unanimously pass a bill that allocated $175M to create a similar program statewide, allowing us to partner with local healthcare systems to lead it in the west. These efforts also forged alliances which—combined with Pitt’s expertise in virology and our own in SNF research—enabled us to respond to NIH’s requests to assist with COVID research focused on frail seniors, including trials of convalescent plasma, vaccines, and diagnostic testing.

Finally, one of our faculty members, Dave Nace, was asked to join the White House Coronavirus Commission for SNF Quality and Safety.
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Division of Geriatric Medicine
Plan to scale it.

We also continued two novel ambulatory geriatric subspecialty services: geriatric cardiology and geriatric chronic pain, and we partnered with nursing to sustain our delirium prevention rooms, both at UPMC PUH and Mercy hospitals. We also continued working with UPMC Mercy to create a **Geriatric Center of Excellence**; in FY20, Mercy achieved NICHE and Geriatric Emergency Department certification as well as Age-Friendly Health System recognition. Finally, we recruited a new Clinical Chief and a clinician, and we were again highly ranked by *U.S. News and World Report*.

**Educationally**, we again filled our fellowship and T32 slots with excellent trainees. We substantially enhanced our rotation for medical residents, and our new geriatric pharmacist launched a widely circulated “Phast Phacts” newsletter. We also expanded and enhanced our required interdisciplinary medical school training course which now comprises >200 students from 10 healthcare disciplines; the course is led by Dr. Rollin Wright who also published her innovative hospitalist and dementia teaching modules in *Annals of Internal Medicine Online*. Finally, our **Pepper Center** provided a university-wide leadership training program for junior faculty members in aging.

In **research**, we found that: (1) a low-intensity multifaceted educational approach can reduce inappropriate antibiotic use by 25% in nursing homes and cut the incidence of C Diff by two-thirds (*Nace, JAMA Int Med*); (2) nearly 40% of patients discharged from hospital to a nursing home suffer an adverse event, the majority of which could be prevented (*Handler, JAMA Int Med*), (3) the state of the art approach to preventing falls among seniors at highest risk is of limited benefit (STRIDE [Greenspan, Resnick], *N Engl J Med*); (4) hospitals’ focus on preventing falls is misguided and should instead focus on maintaining mobility (*Rubin, JAGS*); (5) among incapacitated ICU patients, discussions often fail to include the patient’s own values and preferences (*Scheunemann, JAMA Int Med*); (6) by contrast with women aged 50-70, among those over age 80 who have taken a bisphosphonate for 5 years, it is more cost-effective to continue the drug for 5 years than to take a drug holiday (*Greenspan, Osteop Int*); (7) focusing on both nocturia and a behavioral approach to enlarge bladder capacity could provide a safer and possibly more effective approach to insomnia than drugs (*Tyagi, JAGS*); (8) contrary to USPSTF guidelines, screening for intimate partner violence among older women is warranted given its prevalence and impact (*Makaroun, JAMA Netw Open*); and (9) changing the paradigm of preclinical testing should improve the relevance of such testing for novel Alzheimer’s drugs (*Rizzo, Alz Dement*).

In addition, we continued our collaboration with Dr. Toren Finkel and UPMC’s **Center of Excellence in the Biology of Aging**, expanded our NIH-funded Center of Excellence in Long-Term Care Research, and renewed our T32 in Gerontology as well as our NIH Center of Excellence in Aging, the **Pepper Center**. Finally, faculty members secured new NIH funding, won research awards; continued to serve on editorial boards as well as advisory boards of NIH, CDC, ACIP, AGS, and NOF, and as consultants to CMS, HEDIS and NQF, as well as the state. And Dr. Nace was appointed to the White House Coronavirus Commission for Safety and Quality in Nursing Homes.

**Pittsburgh VA/GRECC**: After receiving a prestigious GRECC 20 years ago, our VA reallocated its geriatrics services to other service lines. In April, it decided to rethink this approach and named one of our faculty members, Steve Handler, to the newly-created position of ACOS for Geriatrics. Dr. Handler will remain a key Division faculty member, and we will partner with him to build on the considerable accomplishments of our existing GRECC faculty. In fact, our first success was the joint recruitment in May of Jennifer Pruskowski, PharmD, an outstanding geriatric pharmacist.
We focus on prevention and management of the complex medical and psychosocial problems that afflict older adults.

Even excluding our VA efforts, we are responsible for thousands of ambulatory visits and hospital discharges, and nearly 15,000 long term care visits at 13 different facilities. In addition to our clinical volume, which is large for an academic geriatric Division, our effort comprises several special features:

- **Physician Excellence**: 15 of our faculty are now in America’s Top Docs and/or Best Doctors in America. And, of <50 UPMC physicians (of >7500) to receive UPMC’s Award of Excellence in 2020, 3 were from our faculty.
- **Vertically-Integrated Care, Across the Entire Health Care Spectrum** for thousands of our patients.
- **Chronic Care Management (CCM)**: We were the first NCQA-certified Patient Centered Medical Home designed specifically for geriatric patients (Gennari A et al. Cleveland Clin J Med 2012; 79: 359-66). We have now augmented it by creating a program to manage patients with multiple chronic conditions in compliance with the new CCM billing code. The program is based on patient goals, involves all members of the care team, and is designed to anticipate and avert problems in our most complicated patients.
- **Group Visits**: For >15 years, Dr. Towers has led one of the first such programs in an academic center.
- **Integrated Geriatric Subspecialty Care**: Consultative care is provided by fellowship-trained geriatricians, many of whom have additional training in cardiology, chronic pain, gait/mobility, sarcopenia, falls, osteoporosis, pulmonary/critical care, sleep disorders, incontinence, rheu-
Geriatric Pharmacists and Social Workers: Our geriatric pharmacists review medications, provide education, and counsel patients (cf: Gavini, Gennari, Ruby, *Consult Pharm* 2015;30:153). This service is especially important for patients recently discharged from the hospital or SNF and for those on warfarin. Our social workers serve both inpatients and outpatients. They help with care transitions, family conferences, and end of life/palliative care discussions. They also provide resources to address care deficits and financial issues, and they educate patients and families on a variety of topics including dementia and insurance coverage.

Emergency Care. Both UPMC Magee and UPMC Mercy now screen for delirium in every older patient in the Emergency Dept., and pharmacists review the medications of every patient with a positive screening test.

Hospitalist and Consult Services. At Shadyside, we staff a geriatrics hospitalist service and a consult service.

HELP Program: Based on Dr. Inouye’s program and led by Dr. Rubin, this service prevents delirium, reduces readmissions, and saves >$7 million/yr since 2008 at UPMC Shadyside (Rubin, *JAGS* 2006, 2011, and 2018)

UPMC Presbyterian (PUH) Geriatric Trauma Service. Dr. Scandrett initiated this service in 2016 to meet the needs of >2000 older patients admitted annually to our Level 1 trauma hospital. Readmissions were cut 42%.

Fracture Liaison Service (UPMC PUH-Shadyside). Dr. Greenspan created this national model to ensure that, in addition to surgical repair, those with a fracture are evaluated and treated for osteoporosis (*JBMR* 2017).

Telemedicine Service for all of our institutionalized residents, both after hours and on weekends.

Teledementia service created by Dr. Rossi for VA patients and caregivers too far away to come to Pittsburgh

Transitional Care Management/Readmission Prevention. Each of our patients is contacted within 48 hours of hospital discharge to review their progress, medications, unanticipated problems, and plans for medical follow-up. *Uniquely, we have a similar process for our patients discharged from SNFs.* In addition, for each readmission, the clinicians involved (PCP, hospitalist, NH physician, pharmacist, social worker, and/or home care) strive to identify interventions to prevent future readmissions, both at the patient and the system level.

Advanced Heart Failure. A new unit, created at UPMC’s Canterbury SNF, is led by Drs. Hassan and Mathier and designed to reduce readmissions following discharge of patients with TAVR or advanced heart failure.

Program for All-Inclusive Care of the Elderly (PACE). Directed by one of our adjunct faculty and working closely with the Division, this multisite program allows frail elderly to continue living at home.

Nursing Home (NH) and Assisted Living. We provide care for hundreds of these residents, as well as training and medical leadership for more than 3 dozen facilities to improve care and reduce unnecessary admissions.

Provision of Non-Reimbursable Services. Our readmission prevention service, an anticoagulation program for frail patients, Lifeline® even for those unable to pay, 55 Alive (to assess driving safety), and respite care.
QUALITY IMPROVEMENT INITIATIVES

Our initiatives focus on each relevant setting. Some highlights include:

**Ambulatory Care**

**Telemedicine.** With COVID restrictions, we have incorporated telemedicine visits into clinical practice and plan to continue offering these visits to our high-risk patients next year. We also began offering *eConsults in EPIC*, which enables us to provide geriatric coverage to medical practices in surrounding and more remote areas.

**Chronic Care Management (CCM).** For patients with frailty and/or multimorbidity, we develop a care plan in the context of their goals, life expectancy, and functional status. By using this information to develop an action plan and to reach out between office visits to assess progress, we qualify for CMS’ chronic care billing code. This enables us not only to defray the costs but also to provide targeted, multidisciplinary care from pharmacists, social workers, and CRNPs to additional patients, as well as same day appointments and continuity of care between care settings. These initiatives led to a 97% score on CG CAHPS. Based on our success, other departments have now begun to implement the model.

**Transitional Care Management.** In FY19, to determine whether Medicare’s new TCM billing code could enable us to further improve our transitional care, we hired a pharmacy technician to identify, track, and coordinate transitions for all of our patients discharged from a hospital, rehabilitation facility, or SNF. This year we shifted the task to our LPNs who ensure that each patient is called within two business days of discharge to address questions, unexpected problems, and any anticipated difficulty in returning for follow-up within two weeks. The program has been well received by patients, staff, and physicians, and it won the “2019 People’s Choice” award at the UPMC PUH-SHY Quality Fair. By tracking its efficacy and cost, we hope to be able to systematize the program and disseminate it.

**Depression.** We continue our CRNP-led depression screening and management program. Based on the PROSPECT study, which was developed by our geropsychiatrists’ (JAMA, 2004), we screen each of our patients with the PHQ-2, followed as needed by the PHQ-9. A positive score triggers the provider to evaluate and treat the patient according to an algorithm that we adapted with input from our geropsychiatrists. Patients are followed for 6-12 months by an interdisciplinary team that monitors response and assists with problem-solving.

**Annual Wellness Visits.** To offer this valuable service to more patients, in FY20 we began scheduling patients to automatically see a CNP before or after their routine PCP visit. The focus is on preventive services, immunizations, diet and exercise, and advance directives. We continue to garner top scores for preventive services across UPP.

**Dementia Care Assessment and Management Initiatives.** Funded by HRSA’s Geriatric Workforce Enhancement Program (GWEP), we (Dr. Wright, Dr. Nace, and Ms. Jones) collaborated with Geriatric Psychiatry (Dr. Whyte) and the School of Nursing (Dr. Mathews) to develop and pilot a new dementia assessment program using CMS’ newly-approved cognitive assessment and non-face to face prolonged service codes. We are now expanding the program by training additional providers and by...
offering cognitive impairment eConsults to scale it across the UPMC Health System.

Emergency Care

In 2015, we and our colleagues in the Magee-Women’s Emergency Department became one of just two US programs selected to work with leaders from the American College of Emergency Physicians and the Society of Academic Emergency Physicians to improve care of older emergency patients. Funded by the Hartford Foundation, our first project began with development of a quality improvement program to enhance detection and management of delirium. Repeated QI cycles improved nurse-administered screening of older adults from 33% to >90% and the rate of physician confirmatory testing to 85%, with a positive screen triggering a pharmacist review of medications. To enhance reliability, we incorporated the tools and process into the EMR, which also enabled us to disseminate the program to UPMC Mercy. We are now developing a standardized care plan for admitted patients and refining educational tools for patients and family. Follow up of patients with a positive score is underway to determine who can be safely discharged from the ED and the support required. A presentation of the MWH ED experience was accepted at SAEM conference in May 2020. A second project recently began to improve pain management for geriatric patients. The goal is to train ED physicians to provide regional anesthesia with femoral blocks for patients with hip fractures.

Inpatient Care

Magee Acute Care and Transitions Program (ACT). Our program was based on two tenets: optimal geriatric care requires anticipating problems and preventing them, and improved systems can help to do so. Led by Dr. Visoiu, over 8 years we identified new problems in medication reconciliation (Marcum et. al. J Am Geriatr Soc 2015 [2 articles]), expanded and enhanced our Geriatric Consult Service, and worked with orthopedics to improve protocols for all fracture patients. Within 2 years, we documented ≥50% reduction across the entire medical service in ALOS, falls, complications, and readmissions (cut to 10%), which we sustained for years. Unfortunately, faced with staff turnover, an unforeseen faculty shortage, and increased demand for our help on the UPMC PUH Trauma service, we had to suspend the MWH ACT although we continue to provide UPMC Magee with inpatient Geriatric consults.

Delirium Reduction. Led by Dr. Visoiu, we worked with leaders in psychiatry, nursing, ED, and IT to design a Pathway to improve the approach to delirium in older patients. The goal is universal screening, prevention, and enhanced interprofessional management, from the ED to the wards. As described above, we integrated ED screening of all patients >65 years old. Unexpected departures of key faculty and UPMC’s CMIO delayed further intervention, so we switched our focus to reducing nursing documentation, partnering with UPMC’s CNO (Lorenz) and CQO (Minnier). We found that documentation could be substantially streamlined; for instance, we reduced required nurse documentation for a new admission from 36 electronic screens to 8. The hope was to use the freed up time to enable enhanced screening and intervention – not only for delirium but for other problems as well. Unfortunately, the initiative was suspended owing to UPMC’s new partnership with Microsoft and anticipated changes in the EMR. Fortunately, under Dr. Rubin’s leadership, the successful HELP program continues to reduce delirium at Shadyside on 11 wards (JAGS, 2017). In addition, under Dr. Tadic’s leadership, and with support of two grants from the Beckwith Foundation, we worked with nursing at UPMC Mercy to implement a delirium screening and prevention program for the medical service as well as a new activity room for demented patients who are at increased risk for delirium; both have been effective.

Supportive Services Program. Developed in partnership with UPMC’s Health Plan and the Section of Palliative Care, early analyses proved that this program improved care and saved over $500,000/ year. Based on its success at UPMC’s PUH, Dr. Tadic launched a new base at UPMC Mercy in FY14.
where, over the past 6 years, it has also generated a demand for consults on patients not insured by the Health Plan. Both sites are staffed by a nurse who is backed up by faculty members from geriatrics and palliative care. By identifying and consulting proactively on high risk patients, our goal is to minimize complications, ensure a seamless post-discharge transition, and reduce readmissions.

**Geriatric Medicine Trauma Consult Service at PUH.** We continue providing geriatric consultation for high risk patients at PUH, in partnership with general medicine. Propensity analyses by the Wolff Center in FY18 documented a 42% reduction in readmissions for such patients despite being selected for increased vulnerability. In FY20, we initiated a Geriatric Trauma Morbidity & Mortality conference, which generated quality improvement opportunities to: (1) improve delirium management; (2) revise order sets to reduce deliriogenic prescribing (e.g., remove diphenhydramine from the platelet transfusion order set); and (3) reduce inappropriate cervical collar use in frail older adults.

**Fracture Liaison Service (FLS).** As national pressure mounts to decrease length of stay, most fracture patients are now discharged without assessment or treatment of the underlying cause. With extramural funding, Dr. Greenspan designed this novel service, which increased bone density screening in such patients from 9% to 72% and appropriate medical treatment from 4% to 45%. This would have translated into an improved rating in the HEDIS measure from 1 star to 4 stars. More importantly, it was accompanied by reduction in the re-fracture rate from 10% to 1.3%. Based on these results, UPMC has supported the program which is now the model advocated by the National Osteoporosis Foundation.

**Home Care**

**Living at Home** (Dr. Rodriguez, Medical Director). This team-based preventive program collaborates with PCPs to provide advanced care coordination for roughly 500 high risk community-dwelling elderly with evidence of inadequate social support and cognitive and functional compromise. Nurses and social workers make home visits to assist with managing medications, keeping medical appointments, arranging in-home and community services, and defining goals of care. Results have been excellent (Castle, Resnick. *J Applied Gerontol* 2014), and participation in the program has been consistently associated with lower rates of emergency department visits, hospitalizations, and institutionalization.

**Long-Term Care (LTC)**

**COVID-19.** The Division played a critical role in COVID-19 management at LTC facilities, both within and beyond UPMC. Working with UPMC Senior Communities, we established a COVID-19 Command Center along with policies and processes to minimize infection. As of June 19, only one resident had become infected in UPMC’s 36 facilities on 21 campuses. The lack of secondary cases reassured staff of the effectiveness of our PPE plans and usage. Also, in collaboration with the Wolff Center and Senior Communities, we implemented a PCR testing program. By July, 2020, >6000 tests had been completed (2100 residents and 3900 staff) with 0.85% and 0.77% positivity rates, respectively.

**Impact beyond UPMC.** The Division’s work was shared with PA’s...
Departments of Health and Human Services, and was also used to establish national guidance for long-term care (LTC) facilities through AMDA (paltc.org/COVID-19) and the CDC. In addition, it helped create a public-private collaboration with the PA Department of Human Services that we were asked to lead: the Educational Support and Clinical Coaching Program for Southwest PA (ESCCP-West UPMC). ESCCP provided consultative support and facility assessment related to COVID-19 to all 600+ regional long-term care facilities. It also served as a learning opportunity for medical and nursing students who participated in the outreach and consultations. Moreover, based on program’s success, PA House Speaker Turzai asked us to submit a similar statewide proposal. The resulting Act 24 is providing $175 million to six regional health systems. Funds will be used over 6 months for testing, onsite assessment, and advanced clinical management in the Commonwealth’s 1900 LTC facilities. UPMC and AHN are together overseeing the 600 facilities in SW and NW Pennsylvania.

Reducing Unplanned Admissions. Led by Drs. Nace and Handler, in collaboration with UPMC Senior Communities, we created a comprehensive program to reduce unplanned admissions from nursing homes (NHs) to the hospital. It focuses on 4 issues: a) better understanding of patients’ care goals, b) earlier detection of deterioration, c) improved team communication, and d) use of clinical care pathways. The program reduced unplanned admissions across UPMC-owned NHs by 45%, from 4.9/1000 patient days in Jan 2010 to 2.7 in June 2013, with subsequent plateau. Its success led to our receiving a $19 million CMS Innovation Award (“RAVEN”) to implement and evaluate the program in 20 non-UPMC facilities. Based on success of the new program, which netted savings of $5 million (Inger, Health Affairs 2017), CMS awarded us another $20 million to sustain the intervention in the same 20 NHs, replicate it in another 20 NHs, and test a new payment model for all 40 NHs that pays both them and their practitioners to provide higher-level care on site. The RAVEN program will continue through October 2020.

Telemedicine. Led by Dr. Handler, and in coordination with Curavi, in FY19 we expanded our telemedicine service still further. Acquisition of New York’s TripleCare has enabled us to now cover >150 NHs across 14 states. In addition, we expanded our hours of coverage, from 84 to 108 hours of night and weekend coverage per week. As of July, 2020, our combined entity has conducted more than 65,000 consults resulting in >12,000 avoided hospitalizations.

Teledementia. Led by Dr. Rossi, we continued our innovative VA teledementia program (JAGS 2017) and added more VA partners from across the country. Together they are utilizing national VA and CMS databases to evaluate the novel program’s health impact, as well as its effect on polypharmacy and under-prescribing. In 2017, Dr. Rossi added a new component: telesupport for those who care for these challenging patients. The program has decreased caregiver burden, and in FY20 she began expanding the intervention into patient’s homes.

Dementia Care Management Initiative. Since 2011, the Division has led the Pennsylvania Dementia Care Partnership, which has effected a 30.1% decrease in antipsychotic use statewide. In addition, by emphasizing an interprofessional approach in our own UPMC Senior Communities facilities, we have reduced antipsychotic use across our own facilities to 14.6%, and the rate at two-thirds of our facilities is now below the state average.
Antimicrobial Stewardship. Under Dr. Nace’s leadership, and funded by AHRQ, the Division is spearheading new approaches to antimicrobial stewardship in long-term care. First, he helped to develop a national antimicrobial toolkit (https://www.ahrq.gov/nhguide/index.html). Second, he and his colleagues completed the Optimizing Antibiotic Stewardship in LTC Settings (OASIS) project, which involved 12 sites in Wisconsin and PA. Employing a systems approach, they compared antibiotic prescribing workflows at each site. After identifying problems in communication and collaboration between nursing staff and prescribers as the highest priority, the team developed and implemented a post-prescribing review (“antibiotic timeout” [Ramly, JAGS 2020]). Third, since suspected UTI is the leading cause of inappropriate antibiotic use in the LTC setting, Dr. Nace launched the “Improving Outcomes of UTI Management (IOU)” project. As part of this study, the team developed the first evidence-based guidelines for diagnosis and treatment of uncomplicated cystitis and tested them in 25 facilities (12 intervention and 13 control sites). The intervention led to a 27% reduction in inappropriate treatment of asymptomatic bacteriuria, a 17% reduction in overall antibiotic use for UTI, and a 67% reduction in C. difficile infections, all without a change in mortality or hospitalizations (Nace et al, JAMA Intern Med 2020). The guidelines and tools have now been disseminated to all of the original control sites and to two more dissemination cohorts, reaching >50 homes across the country. Based on this work, Dr. Nace received a 2019 grant from the PA Department of Health to train nurses, prescribers and pharmacists to use the Modified Medication Appropriateness Index for Uncomplicated Cystitis (MMAI-UC), a modified version of a tool used in the IOU study. This work is important because current measures of antibiotic stewardship report utilization but not the more important aspect – appropriateness of use. Dr. Nace’s team is now working to study implementation of the MMAI-UC as a quality measure with possible incorporation of the tool into the National Healthcare Safety Networks (NHSN) reporting system. For this work, Dr. Nace and his team received the 2019 ABIM/AMDA Choosing Wisely Champion award.

Optimal Influenza Vaccines for Older Adults. The Division is collaborating with the Pittsburgh Vaccination Research Group to evaluate the effectiveness of different influenza vaccines in non-frail, pre-frail, and frail older adults. Led by Dr. Nace, this research is also investigating the impact of sarcopenia in vaccine response.
CLINICAL LOCATIONS

1. UPMC Benedum Geriatric Center—UPMC Montefiore
   3459 Fifth Avenue, 4 East
   Pittsburgh (Oakland), PA 15213

2. UPMC Senior Care—UPMC Shadyside
   Shadyside Medical Building
   5200 Centre Avenue, Suite 405
   Pittsburgh (Shadyside), PA 15232

3. University of Pittsburgh Osteoporosis Prevention and Treatment Center
   Kaufmann Medical Building
   3471 Fifth Avenue, Suite 1110
   Pittsburgh (Oakland), PA 15213
RESEARCH ACTIVITIES

Our goals are to: conduct cutting-edge research to improve the health of older adults and train the next generation of investigators to do the same. Areas of inquiry include biology of aging, mobility/falls, frailty/sarcopenia, cardiology, chronic pain, osteoporosis, polypharmacy, incontinence, insomnia, rehabilitation, elder abuse, telemedicine, and long term care. Our funding contributed to Pitt’s being among the nation’s top recipients of NIH funding in aging.

Our faculty was again recognized for its research. More than 50 of their abstracts were accepted for presentation at annual meetings of the American Geriatrics Society, Gerontological Society of America, and AMDA. Dr. Scheunemann won DoM’s Research Day Award for Health Services/Epidemiology, Dr. Makaroun won AGS’ Presidential Poster Award for Epidemiology, Dr. Gurkar spoke at the TEDxPittsburghWomen event on chronological versus biological aging, and Dr. Nace received the 2019 ABIM/AMDA Choosing Wisely Champion award.

Division faculty also served on editorial boards and as visiting professors, committee chairs, and keynote speakers at national and international meetings. For instance, Dr. Newman is Editor of the Journal of Gerontology: Medical Sciences, and Dr. Nace is Associate Editor of JAMDA; Dr. Greenspan is President of the National Osteoporosis Foundation. Drs. Greenspan and Newman served on NIA’s Board of Scientific Counselors and NIA’s External Advisory Council, respectively, while Dr. Greenspan served on NIA’s Clinical Trials Advisory Panel; and Dr. Forman served as Chairman of the American Heart Association’s Committee on Older Populations.

Current Division-led research: (1) NIH Centers/Program Projects: a P30 Pepper Older American’s Independence Center (Greenspan), a T32 to train in geriatrics/gerontology (Greenspan/Finkel), a Center of Excellence in Chronic Pain (Weiner), and a Leadership K07 to create a Long-term Care Research Network (Greenspan); (2) NIH R01/R56/R21s: Nitrite for HFP EF, and a modified approach to geriatric rehab (MACRO; both R01s [Forman]), PREVENTABLE (Forman, site PI), CNS mechanisms mediating treatment response in overactive bladder, and brain mechanisms involved in urge incontinence (two R01s, Resnick), pathophysiology and behavioral therapy of nocturia (two R21s, Tyagi), CNS mechanisms underlying situational
TRACTS AWARDED

94% Public Health Service

RESEARCH EXPENDITURES
FY16-FY20

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Division of Geriatric Medicine
urgency (R21, Clarkson), neural resilience in mobility impairment (Rosano/Hanlon), zoledronic acid for osteoporosis in institutionalized elderly (R01, Greenspan/Nace/Resnick), efficacy of denosumab for osteoporosis in long-term care (R01, Greenspan/Nace/Resnick), innovative approach to geriatric osteoporosis (R01, Greenspan), a PCORI trial of home- vs. center-based cardiac rehabilitation (Forman); STRIDE, a pragmatic NIH/PCORI-funded trial to prevent injurious falls among high risk elderly (Greenspan/Resnick); R00 supplement (Gurkar); (3) CMS/CMMI-funded: RAVEN to reduce SNF transfers (Handler/Nace); (4) VA: role of hip arthritis in chronic low back pain (Weiner), development and validation of clinical prediction rules in seniors with lumbar spinal stenosis (Weiner), patient-centered vs. image-directed treatment of chronic low back pain (Weiner), a telemedicine approach to improve care of community-based dementia patients (Rossi), and elder abuse in veterans (Makaroun); (5) Career Development: Dr. Nadkarni’s K23 on Alzheimer’s; Dr. Scheunemann’s K08 on ICU Survivors; (6) AHRQ grants: reducing adverse drug events in nursing homes (Handler/Hanlon), improving outcomes of UTI in long-term care facilities (Nace), telemedicine to transform medical review for high-risk drugs in the nursing home (Handler), and two complementary grants to devise and implement a novel antibiotic stewardship intervention for nursing homes (Nace); (7) Pitt/UPMC funding: factors involved in premature and delayed aging using next generation DNA sequencing (Greenspan/Resnick); transcranial stimulation to treat urge incontinence (Clarkson), and medical marijuana and chronic pain in older adult (Nadkarni/Weiner).

Collaborations with non-Division PIs include: (1) P01/P50s: Alzheimer’s (ADRC, Lopez/Rodriguez, Nadkarni), Molecular Transducers of Physical Activity Centers [MotrPAC, Forman/Jakicik]; sarcopenia mechanisms (SOMMA, Forman/Newman/Nadkarni); mechanisms of stochastic damage of aging (Robbins/Perera), new approaches to urinary tract dysfunction due to spinal cord injury (Kanai/Perera); biomechanical, biological and behavioral phenotypes (Weiner/Sowa); (2) R01s: a task-specific approach to improving gait and mobility (Brach/Perera), osteoporosis risk in smokers (Greenspan/Bon), activating patients with osteoporosis (Saag/Greenspan), aging’s impact on urethral function (Resnick/Birder), impact of obesity on body composition, gait, and function in older adults (Cham/Perera), assessing the impact of improved vitamin D status on vascular health and metabolic syndrome risk (Rajakumar/Greenspan), Reducing Sedentary Behavior RESET BP (Kline/Perera); investigating exercise-associated gains in neurocognition (Forman/Erickson); metformin for pulmonary hypertension (Forman/Simon) (3) R56/R21/R24/R18s: biomarkers to predict lung function decline in physiologically normal smokers (Perera/Sciarba), establishment of the research infrastructure to facilitate analyses of Medicare Advantage plans (Gurwitz/Greenspan), dissemination of a diabetes prevention program in seniors (Venditti/Greenspan), and a PCORI-funded trial to examine exercise for fracture prevention in community elderly (Greenspan/McTigue) and another to devise and evaluate a novel group exercise program to reduce falls in assisted living facilities (Brach/Perera); (4) K01: to devise a falls risk monitoring algorithm using a data mining technique (Boyce/Perera); (5) 3 VA Merit Reviews: patterns, determinants, and consequences among veterans receiving opiates from VA and non-VA sources (Gellad/Hanlon), improving safety and appropriateness of prescribing for demented veterans who receive drugs within and outside of the VA (Hanlon/Gellad), and cumulative CNS drug dosage and serious fall injuries (Hanlon,Thorpe) (6) Pitt/UPMC Funding: Toolkit for nursing home care (Handler/Harris), immune fingerprinting signatures in predicting successful aging (Greenspan/Perera/De Vallejo).

Our research training grants support junior faculty, fellows, and medical students. Our T32, which was recently refunded, now includes collaboration with the Aging Institute and an initiative with Dr. Jonassaint, Vice Chair of Diversity and Inclusion, to recruit URM trainees. Dr. Studenski’s former NIH K07 Leadership Award created an enduring Concentration in Aging Research for Pitt’s Clinical Research Training Program. Our Pepper Center incorporates an REC core, led by Dr. Resnick, which trains junior faculty in leadership and administration. And, Drs. Nace and Wright collaborated on the university’s HRSA-funded Geriatric Education Center (GWEP).
Faculty Research Interests and Activities

Neil Resnick, MD  Division Chief

A Professor of Medicine and Division Chief, Dr. Resnick focuses his research on the pathophysiology and therapy of geriatric syndromes. He serves as PI and Co-I for NIH-funded multidisciplinary studies of urinary incontinence that incorporate physiologic, neuroimaging, clinical, pharmacological and behavioral research aims. In addition, he serves as PI for two foundation-funded initiatives to develop system-based approaches to prevent, detect, and treat delirium in hospitalized patients. He is also a Co-Investigator on Dr. Greenspan's research in geriatric osteoporosis, including her R01-funded studies in the nursing home and a PCORI-funded study of falls. Finally, he co-directs the Research and Career Development Core of the NIH-funded Pittsburgh Older Americans Independence Center, and he leads the Older Adult Research Network for the Pittsburgh Clinical and Translational Science Institute (CTSI).

Study Sections

• Ad Hoc Reviewer, Division of Research Grants, NIA/NIH, 1983-present
• Ad Hoc Reviewer, Gerontology and Geriatrics, NIA/NIH, 1988-present

Advisory Committee Memberships and Leadership Positions

• Member, Scientific Advisory Board, Simon Foundation, 1984-present
• Member, Abstract Review Committee, American Geriatrics Society, 1985-present
• Member, Scientific Advisory Board, American Federation of Aging Research, 1989-present
• Reviewer, Gerontological Society of America, 1989-present
• Member, Advisory Committee, Alliance for Aging Research, 1991-present
• Member, Advisory Committee, Geriatric Research Education and Clinical Center (GRECC), Pittsburgh VA Health System, 1999-current
• Co-Director, Pennsylvania American Geriatrics Society CME course: Clinical Update in Geriatric Medicine, 2000-present
• Member, Board of Directors, American Geriatrics Society, Pennsylvania/West Virginia AGS Chapter, 2000-present
• Member, Council of State Affiliates, American Geriatrics Society, 2003-present
• Advisor, CMS/Medicare Innovation Advisors Program, 2014-present
• Member, Editorial Board, Current Geriatrics Reports, 2014-present
• Co-Chair, Council of State Affiliates Representative, American Geriatrics Society, 2018-present
• Member, Board of Directors, American Geriatrics Society, 2018-present

Professional Affiliations and Society Memberships

• Member, Gerontological Society of America, 1981-present
• Member, Urodynamics Society, 1982-present
• Member, American Urological Association (Affiliate Member), 1985-present
• Member, Governing Board, Simon Foundation, 1986-present
• Member, Long Term Care Committee, University of Pittsburgh, 1999-present
• Member, National Mentoring Program, American Geriatrics Society, 2005-present
• Member, Board of Directors, Pittsburgh Regional Health Initiative (PRHI), 2012-present
• Member, Board of Directors, Jewish Healthcare Foundation, 2012-present

Editorships

• Member, Editorial Board, Current Geriatrics Reports (Springer), 2014-present

Major Lectureships and Seminars

• Speaker, AHRQ/PCORI, Improving Care for Women with UI, New York, NY, 2019
• Member, Invited Panel, American College of Physician, “Meet the Professor”,

Division of Geriatric Medicine
1990-present
• Invited Lecturer, Pennsylvania American Geriatrics Society, Update in Geriatric Medicine, Pittsburgh, Pennsylvania, 2000-present

Honors and Awards
• Best Doctors in America, Best Doctors Inc, 1992-present
• Top Doctors in America, Castle Connolly’s Guide to America's Top Physicians, 2000-present
• Best Doctors, Pittsburgh Magazine, 2002-present

Huai Y. Cheng, MD, MPH, MS
Trained in basic, clinical, and epidemiological research, Dr. Cheng is now interested in conducting medical education research in geriatrics curriculum development and evaluation and systematic review. Additionally, he is also interested in decision making and EBM in value- and preference-based prescribing and de-prescribing when treating elderly patients multiple co-existing conditions and complex needs. Dr. Cheng also conducts research in innovative geriatric practice models.

Professional Affiliations and Society Memberships
• Member, American Geriatric Society, 2000-present
• Member, American Medical Director Association, 2001-present
• Member, Gerontology Society of America, 2011-present
• Member, Alliance for Academic Internal Medicine, 2014-present
• Member, The Association for Medical Education in Europe, 2018-present

Becky D. Clarkson, PhD
Originally trained as a medical physicist, Dr. Clarkson uses her experience of developing clinical tests and diagnostic tools to integrate brain imaging and bladder provocation to understand and treat bladder dysfunction related to higher control mechanisms. Her NIH-funded research focuses on environmental triggers of urinary leakage and using MRI to characterize the central neural control system of the continence mechanism. She is currently using the findings from this research as the basis for developing therapies for urgency incontinence which focus on bladder control, specifically behavioral therapies, and brain stimulation methods.

Advisory Committee Memberships and Leadership Positions
• Co-Chair, Brain Bladder Research and Imaging Network, 2016-present

Professional Affiliations and Society Memberships
• Member, Institute for Physics and Engineering in Medicine, 2004-present
• Member, International Continence Society, 2007-present

Major Lectureships and Seminars
• Invited Speaker, Neurogenic Bladder Research Group (NBRG) Meeting, 2019
• Presenter, Swiss Continence Foundation, 7th Annual International Neuro-Urology Meeting, Zürich, Switzerland, January 2020

Daniel E. Forman, MD
A Professor of Medicine, Dr. Forman is dually trained in geriatrics and cardiology. He holds appointments in both Divisions at UPMC as well as in both the Geriatrics Research Education and Clinical Center (GRECC) and the Cardiology Division at the Pittsburgh VA. With NIH funding, he is studying the benefit of nitrate capsules for fatigue and function in older adults with heart failure and preserved ejection fraction. In two other NIH projects, he is studying the impact of exercise on skeletal muscle gene transcription (Molecular Transducers of Physical Activity in Humans [MoTrPAC]) and the impact of exercise training on cognition (Investigating Gains in Neurocognition in an Intervention Trial of Exercise [IGNITE]). At the VA, he is comparing the impact of different training regimens
(strength, aerobic, and inspiratory muscle training) on skeletal muscle morphology, gene expression, and functional capacity. He is also researching the utility of prehabilitation in frail elderly prior to abdominal and cardiothoracic surgery. Finally, Dr. Forman is funded by PCORI to devise novel strategies to improve cardiac rehabilitation, especially methods to improve enrollment, adherence, and value for complex, older cardiovascular patients.

**Study Sections**
- Grant Reviewer, NIH/NHLBI, 2019
- Scientific Reviewer, NHLBI UG3/U24 study section, 2019
- Abstract Reviewer, American Heart Association National Meeting, Philadelphia, PA, 2019-2020
- Abstract Reviewer, American College of Cardiology National Meeting, New Orleans, LA, 2019-2020
- Program Committee Leader, American Association for Cardiovascular and Pulmonary Rehabilitation National Meeting, Portland, OR, 2019-2020
- Scientific Reviewer, VA Rehabilitation Research and Development Service, 2019-2020

**Advisory Committee Memberships and Leadership Positions**
- Inaugural Chair and Member, Geriatric Cardiology Section, American College of Cardiology, 2009-present
- Chair, Advocacy Workgroup, Geriatric Cardiology Section, American College of Cardiology, 2014-present
- Chair, International Workgroup, Geriatric Cardiology Section, American College of Cardiology, 2014-present
- Member, Council on Clinical Cardiology (CLCD) – Council Leadership Committee, 2015-present
- Chair, Council on Clinical Cardiology, Older Populations Committee, American Heart Association, 2016-present
- Member, Council on Clinical Cardiology, Cardio Respiratory Fitness Registry, 2017-present
- Member, Healthy Lifestyle Institute, University of Pittsburgh, 2017-present
- Member, Program Committee, American College of Cardiovascular and Pulmonary Rehabilitation, 2018-2021
- Chair, cardiovascular track AACVR annual meeting (3-yr appointment), American Association of Cardiovascular and Pulmonary Rehabilitation, Chicago, IL, 2018-present
- Member, Tenured Faculty Promotions and Appointments Committee, University of Pittsburgh, 2018-present
- Member, Older Populations, American Heart Association, 2019-2020
- Advisory Panel, Veterans Affairs, Cooperative Studies Program Coordinating Center, 2020
- Member, Prevention Section, American College of Cardiology, 2020

**Professional Affiliations and Society Memberships**
- Member, Data Safety and Monitoring Board, REHAB-HF, National Institute of Aging, 2014-present
- Committee Member, Cholesterol Guideline Committee (American Geriatric Society representative), Guideline committee, American College of Cardiology/American Heart Association, 2017-2019
- Faculty Member, F1000 Prime, Geriatric Cardiology, 2017-present
- Member, Medical Subspecialties Section, American Geriatrics Society, New York, New York, 2017-present
- Member, Research Committee, American Geriatric Society, 2018-2021
- Member, Executive Committee, Pittsburgh Claude D. Pepper Older Americans Independence Center, University of Pittsburgh, Pittsburgh, PA, 2018-present
- Member, American Geriatrics Society, 2019-2020
• Fellow, American College of Cardiology, 2020
• Fellow, American Heart Association, 2020
• Member, American Association of Cardiovascular and Pulmonary Rehabilitation, 2020

**Editorships**
• Guest Editor, *Clinics of Geriatric Medicine*, 2020
• Reviewer, *Journal of the American Geriatrics Society*, 2020
• Editorial Board, *Journal of Cardiopulmonary Rehabilitation and Prevention*, 2016-present
• Member, *Journal of the American Geriatrics Society, Cardiology*, 2016-present
• Editorial Board, *The Journal of Gerontology: Medical Sciences*, 2017-present
• Guest Editor, *Circulation*, 2017-present
• Guest Editor, *Journal of the American College of Cardiology*, 2018-present

**Major Lectureships and Seminars**
• Invited Participant, NIA: A Gerocentric Approach to Heart Failure with Preserved Ejection Fraction in Older Adults, Bethesda, MD, 2019
• Invited Speaker and Program Chair, NIA U13 conference, Washington, DC, 2019
• Invited Speaker and Chair of Cardiology Panel, Annual Update in Geriatric Medicine, University of Pittsburgh, Pittsburgh, PA, 2019
• Invited Speaker, Lifestyle Institute, University of Pittsburgh, Pittsburgh, PA, 2019
• Invited Speaker, Aging and Cancer Brainstorming Workshop, University of Pittsburgh, Pittsburgh, PA, 2019
• Invited Speaker, 15th International Congress of Update in Cardiology and Cardiovascular Surgery (UCCVS), The American Heart Association, Antalya, Turkey, 2019
• Invited Speaker, NHLBI Cardiovascular and Pulmonary Rehabilitation Investigators Meeting, Bethesda, MD, 2019
• Invited Speaker, Mid-Atlantic Capital Cardiology Symposium, Washington, DC, 2019
• Invited Speaker (3 presentations), American Association of Cardiovascular and Pulmonary Rehabilitation, Annual Meeting, Portland, OR, 2019
• Keynote Speaker, American Geriatrics Society, Annual Meeting, Portland, OR, 2019
• Meyers Visiting Professor of Geriatric Medicine, University of Massachusetts School of Medicine, Worcester, MA, 2019
• Visiting Professor, University of Vermont School of Medicine, Burlington, VT, 2019
• Invited Speaker, Lifespan Cardiology Grand Rounds, Brown University, Providence, RI, 2020
• Invited Speaker, Annual Update in Geriatric Medicine, University of Pittsburgh, Pittsburgh, PA, 2020
• Invited Speaker, GRECC, VAPHS, Pittsburgh, PA, 2020
• Invited Speaker, NHLBI Workshop, Bethesda, MD, 2020
• Invited Speaker, Barnes Jewish Hospital, Cardiovascular Grand Rounds, 2020 (cancelled due to COVID-19)

**Susan L. Greenspan, MD**
Director of UPMC’s Osteoporosis Prevention and Treatment Center and Director of Bone Health at Magee Women’s Hospital, Dr. Greenspan is dually-trained in Geriatrics and in Endocrinology. Her research focuses on geriatric osteoporosis, including its pathophysiology, evaluation, and treatment. Her current R01s focus on osteoporosis in institutionalized elderly, including new treatment modalities and new assessments of bone strength. In addition, she is PI of our NIH-funded Pepper Center, our NIH T32 Pitt Integrated Clinical and Geroscience Research Training Program, and has a K07 that has developed a research registry and network for research in senior communities. A former member of NIH/NIA’s Board of Scientific Counselors, she now serves on NIA’s Clinical Trial Advisory Panel. She is also President of the National Osteoporosis Foundation and a member of its Board of Trustees.
Aditi U. Gurkar, PhD

Dr. Gurkar’s interest is in understanding the biology of aging and age-related diseases. Her NIH-funded research focuses on identifying the signaling mechanisms that drive aging in response to endogenous DNA damage. By defining these molecular mechanism(s), she hopes to identify novel therapeutic targets that can be exploited to extend healthspan.

Advisory Committee Memberships and Leadership Positions

- Co-Preceptor, Grant-Writing Workshop, Department of Medicine, University of Pittsburgh, 2019

Editorships

- Reviewer, eLife, 2019
- Reviewer, Mechanisms of Aging and Development, 2019
- Reviewer, PLoS One, 2019
- Reviewer, DNA Repair, 2014-2019

Major Lectureships and Seminars

- American Heart Association, American Heart Association Scientific Session, Philadelphia, PA, November 2019
- TEDx, Pittsburgh, PA, 2019
- International Student Congress of (bio)Medical Sciences, Netherlands, June 2020

Professional Affiliations and Society Memberships

- Member, American Aging Association, 2019-present,
- Member, Society for Redox Biology and Medicine, 2019-present

Study Sections

- Grant Reviewer, Aging Institute-Hillman Cancer Center Pilot Funds, 2019
• Judge, Smiddy Undergraduate Research Award (Florida International University), 2020
• Judging Committee, Department of Medicine Annual Research Day, 2020
• Grant Reviewer, The Dutch Research Council (NCO), 2020

Steven M. Handler, MD, PhD
An Associate Professor of Geriatrics, Dr. Handler also holds appointments in Biomedical Informatics and in Clinical and Translational Research. In addition to his role as Director of Geriatric Telemedicine Programs, he serves as Medical Director for Telemedicine and Health Information for the RAVEN (Reduce AVoidable hospitalization using Evidence-based interventions for Nursing facilities in Western Pennsylvania) CMS Innovation Award. A practicing geriatrician, Dr. Handler’s primary research focuses on medication and patient safety, telemedicine, and clinical decision support systems for older adults in the post-acute and long-term care setting.

Advisory Committee Memberships and Leadership Positions
• Member, Pennsylvania Medical Directors Association (PMDA), 2004-present
• Steering Committee Member, Long-Term Care Research Network, American Medical Directors Association (AMDA), 2006-present
• Member, Health Information Technology (HIT) Subcommittee, American Medical Directors Association (AMDA), 2008-present
• Developer, Institute for Healthcare Improvement (IHI), Trigger Tool for Measuring Adverse Drug Events in the Nursing Home, 2009-present
• Member, Telehealth Advisory Committee, University of Pittsburgh/UPMC, 2012-present
• Member, University of Pittsburgh/UPMC, Beckwith Clinical Transformation Program, 2012-present
• Safety Expert Panelist, Center for Medicare and Medicaid Services’ (CMS) Innovation Center, F-329 (Unnecessary Drugs) Guidance for State Surveyors Redesign Committee, 2012-present
• Member, Center for Medicare and Medicaid Services’ (CMS) Innovation Center, Enhanced Care and Coordination Provider (ECCP) Medical Director Council, 2013-present
• Member, University of Pittsburgh Graduate School of Public Health, Executive Leadership Committee, Center for Pharmaceutical Policy and Prescribing (CP3), 2013-present
• Member, PatientOrderSets.com, Long-Term Care Expert Advisory Group, 2014-present
• Technical Expert and Physician Lead, Physician and Patient Safety, Centers for Medicare and Medicaid Services (CMS)Raising Awareness for Reducing Adverse Events in Nursing Homes Campaign, 2014-present
• Member, Executive Committee for Quality Prescribing Campaign, AMDA/Society for Post-Acute and Long-Term Care, 2015-present
• Member, PA Dept. of Health, Taskforce on Quality Improvement in Nursing Home Regulation and Oversight, 2015-present
• Member, University of Pittsburgh/UPMC, Telehealth Operations Committee, 2015-present
• Member, National Quality Foundation (NQF), Framework Development to Support Measure Development for Telehealth, 2016-present
• Matter Expert, West Health Institute, Subject telemedicine and co-author of Implementing Telehealth in Post-Acute and Long-Term Care Settings (PALTC), 2019-present
• Member, AMDA, PA House of Delegates, 2019-present
• Technical Expert/Advisory Panel, Agency for Healthcare Research and Quality (AHRQ), Patient Safety Network, 2020-2025
• Member, University of Pittsburgh/UPMC, Surgical Hip Femur Facture Treatment (SHFFT)
Postoperative Group

Professional Affiliations and Society Memberships

- Member, American Medical Informatics Association, 1998-present
- Member, American Geriatrics Society, 2000-present
- Member, Society for Post-Acute and Long-Term Medicine (AMDA), 2002-present
- Member, Improvement Science Research Network, 2010-present
- Member, Southwestern Pennsylvania Partnership for Aging (SWPPA), 2010-present
- Member, American Telemedicine Association (ATA), 2014-present
- Member, Pennsylvania Medical Society, 2014-present
- Member, Allegheny Medical Society, 2014-present
- Member, Pennsylvania Geriatrics Society, Western Division, 2016-present
- Member, Pennsylvania Medical Society, eHealth and Health IT Task Force, 2016-present

Editorships

- Reviewer, The American Journal of Geriatric Pharmacotherapy, 2003-present
- Reviewer, The Journal of the American Medical Directors Association, 2006-present
- Reviewer, The Journal of the American Geriatrics Society, 2006-present
- Reviewer, Pharmacoepidemiology and Drug Safety, 2007-present
- Reviewer, The Journal of the American Medical Informatics Association, 2008-present
- Reviewer, SpringerPlus, 2013-present
- Reviewer, Nephrology Dialysis Transplantation, 2014-present
- Reviewer, Health Affairs, 2017-present

Major Lectureships and Seminars

- Invited Speaker, Elder Care, Elder Care Symposium, Williamsport, PA, 2019
- Invited Speaker, UPMC St. Margaret, Geriatric Medicine Grand Rounds, Pittsburgh, PA, 2019
- Invited Speaker, LeadingAge/CAST, LeadingAge/CAST, Baltimore, MD, 2019
- Invited Speaker, Real Time, Annual Summit, Baltimore, MD, 2019
- Invited Speaker (2 presentations), American Academy of Home Care Medicine Annual Meeting, Chicago, IL, 2019
- Invited Speaker (3 presentations), Society for Post-Acute and Long-Term Care Medicine (AMDA) Annual Symposium, Atlanta, GA, 2019
- Poster Presentation, Research Day, Department of Medicine, University of Pittsburgh, Pittsburgh, PA, 2019
- Invited Speaker, Department of Biomedical Informatics Colloquium Series, University of Pittsburgh, Pittsburgh, PA, 2020
- Invited Speaker, National Consortium of Telehealth Resource Centers, Penn State Project, ECHO COVID-19 Series, Webinar, 2020
- Invited Speaker, AMDA Webinar Series, 2020

Joseph T. Hanlon, PharmD, MS

An Emeritus Professor of Medicine, Dr. Hanlon is also a geriatric pharmacist and health scientist with both the Center for Health Equity Research and Promotion (CHERP) and the Geriatric Research Education and Clinical Center (GRECC) at the Pittsburgh VA. His research focuses on three themes: 1) drug-related problems, 2) racial disparities in medication use, and 3) drug-induced geriatric syndromes. He serves as a Co-I and Consultant on a number of federally funded grants and on the editorial boards of four journals.

Shuja Hassan, MD

Dr. Hassan provides primary care and consultative services to older adults at UPMC Senior Care-Shadyside. He is board certified in Internal Medicine and Geriatrics. Dr. Hassan is also the Medical
Director at UPMC Canterbury Place, a long-term care facility.

**Advisory Committee Memberships and Leadership Positions**
- Co-Director, Pennsylvania/W. Virginia American Geriatrics Society Annual Conference, Clinical Update in Geriatric Medicine, 2000-present

**Professional Affiliations and Society Memberships**
- Member, AMDA, 2001-present
- Member, Pennsylvania Geriatrics Society, 2004-present

**Major Lectureships and Seminars**
- Presenter, Update in Geriatric Medicine, PA Geriatrics Society, Pittsburgh, PA, March 2020

**Honors and Awards**
- Best Doctors, *Pittsburgh Magazine*, 2016-present

**Mary P. Kotlarczyk, PhD**
Dr. Kotlarczyk is a Research Assistant Professor of Medicine and Associate Director of the Osteoporosis Prevention and Treatment Center. Dr. Kotlarczyk is also a current Scholar of the Pittsburgh Claude D. Pepper Older Americans Independence Center. Her research focuses musculoskeletal health and physical function in older adults, particularly those residing in long-term care communities.

**Advisory Committee Memberships and Leadership Positions**
- Co-facilitator, Pittsburgh Claude D. Pepper Center Leadership and Cultural Coaching Workshop Series for Junior Faculty, 2017-present
- Member, Early Career Faculty Workgroup for the Pepper Older Americans Independence Center (OAIC) Coordinating Center, 2018-2020

**Professional Affiliations and Society Memberships**
- Member, Pittsburgh Claude D. Pepper Center Long-term Care Workgroup, 2015-present
- Member, American Geriatrics Society, 2015-present
- Member, Gerontological Society of America, 2015-present
- Member, American Society for Bone and Mineral Research, 2015-present
- Member, American Geriatrics Society, Osteoporosis Special Interest Group, 2016-present
- Member, American Geriatrics Society, Junior Faculty Research Special Interest Group, 2017-present
- Member, Pittsburgh Claude D. Pepper Center Muscle Aging Workgroup, 2019-present

**Editorships**
- Scholar, *Journal of the American Geriatrics Society* Junior Reviewer program, 2017-2019
- Ad Hoc Reviewer, *Journal of the American Geriatrics Society*, 2017-present

**Lena K. Makaroun, MD, MS**
As a geriatrics health services researcher at the VA Pittsburgh Center for Health Equity Research and Promotion and a Pepper Scholar at the University of Pittsburgh Claude D. Pepper Older American Independence Center, Dr. Makaroun studies social influences (“determinants”) of health for older adults, with a particular focus on inter-personal violence, elder abuse, trauma and caregiving. She has an additional interest in studying firearm ownership and safety in older adults with dementia. Dr. Makaroun’s work focuses on improving detection of elder abuse and developing evidence-based, multi-disciplinary interventions to improve outcomes for this population.

**Study Sections**
- Ad Hoc Reviewer, VA Center for Health Equity Research and Promotion Competitive Pilot Award Program, 2019-present
Advisory Committee Memberships and Leadership Positions
• Member, Geriatric Division Education Committee, University of Pittsburgh, 2019-present
• Member, PA Department of Human Services, Department of Health COVID Education Support Clinical Coaching Program, April 2020-present

Professional Affiliations and Society Memberships
• Member, American Geriatrics Society, 2009-present
• Member, American Medical Association, member, 2013-present
• Member, Gerontological Society of America, 2017-present
• Member, Board of Directors, American Geriatrics Society, 2018-present
• Member, PA Geriatrics Society, Western Division, 2018-present
• Member, Investment Committee, American Geriatrics Society, 2019-present
• Member, Engagement Task Force, American Geriatrics Society, 2020-present
• Member, PA Medical Society, 2020-present

Editorships
• Ad Hoc Reviewer, JAMA Internal Medicine, 2019-present
• Ad Hoc Reviewer, Journal of the American Geriatrics Society, 2019-present

Major Lectureships and Seminars
• Presenter, UPMC Mercy Hospital Medicine Grand Rounds, Pittsburgh, PA, November 2019
• Presenter, National VA Emergency Medicine Monthly Call, Virtual, January 2020
• Presenter, Update in Clinical Geriatrics Review Course, University of Pittsburgh Medical Center/American Geriatrics Society, Pittsburgh, PA, March 2020
• Presenter, Futures Without Violence National Conference, 2020 (cancelled due to COVID-19)
• Presenter, American Geriatrics Society Annual Scientific Meeting, 2020 (cancelled due to COVID-19)

David A. Nace, MD, MPH
Dr. Nace is an Associate Professor of Medicine whose research focuses primarily on infectious disease in long-term care, particularly antimicrobial stewardship, vaccine preventable diseases, and outbreak prevention and response. He is the PI of the Improving Outcomes of UTI Management in LTC Study, an AHRQ funded dissemination and implementation project. As part of the IOU project Dr. Nace’s team developed guidelines for the diagnosis and treatment of uncomplicated cystitis in nursing home residents and is testing the implementation of these guidelines in a national cohort of nursing homes. Dr. Nace’s team received the AMDA/ABIM Choosing Wisely Campaign Award in March 2019 for this work. Dr. Nace is now leading work to develop a potential antibiotic stewardship quality measure that can be used by facilities and physicians. This would be the first quality measure that describes appropriateness of antibiotic prescribing as opposed to the existing crude utilization measures. This pilot work is being funded by the PA Department of Health. Dr. Nace is Co-PI on a CD-funded study evaluating the humoral and cellular response to the influenza vaccine in a cohort of adults 50 years and older by frailty status. He is also conducting a Pepper Center-funded pilot study to evaluate the impact of sarcopenia on humoral and cellular response among older adults. He serves as Co-Medical Director for our recently-renewed $39 million CMS Innovations Award project (RAVEN), which has developed innovative approaches to reducing unplanned hospital transfers from nursing homes. Finally, he collaborates with other Division researchers on a variety of NIH, AHRQ, and foundation-funded studies of older adults regarding infection control, osteoporosis, adverse drug events, palliative...
care, interprofessional training, and quality assessment and improvement.

Advisory Committee Memberships and Leadership Positions
- Chair, PMDA Public Policy Committee, 1997-present
- Chair, UPMC Senior Communities PT Committee, 2006-Present
- Chair, Pennsylvania Dementia Care Partnership, 2012-present
- Vice Chair, AMDA Public Policy Committee, 2015-present
- Vice President, AMDA – The Society of Post-Acute and LTC Medicine, 2018-2019
- Chair, Public Policy Committee, AMDA – The Society of Post-Acute & Long-Term Care Medicine, 2019-2020
- President-Elect, AMDA – The Society of Post-Acute and LTC Medicine, 2019-2020
- Member, UPMC, COVID-19 Leadership Team - Post-Acute & Long-Term Care, 2019-present
- Member, Secretary of Health’s Advisory Health Board, 2019-present
- Member, CDC Healthcare Infection Control Practices Advisory Committee (HICPAC), Long-Term Care Advisory Group, 2019-present
- President, 2020-2021, AMDA – The Society of Post-Acute and LTC Medicine, 2020-2021
- Advisory Lead, Pennsylvania Department of Human Services COVID-19 Educational Support and Clinical Coaching Program (ESCCP) West-UPMC Lead, 2020-present
- President, 2020-2021, AMDA – The Society of Post-Acute and LTC Medicine, 2020-2021
- Member, AMDA COVID-19 Task Force, 2020-present

Professional Affiliations and Society Memberships
- Member, UPMC Senior Communities Board of Directors, 2004-Present
- Member, UPMC Influenza Task Force, 2004-Present
- Member, UPMC Health System Infection Control Expert Work Group, 2009-Present
- Member, UPMC Health System PT Committee, 2012-Present
- Member, Department of Medicine, Clinical Directors Council, 2012-Present

Editorships
- Abstract Reviewer, GSA, 1999-Present
- Reviewer, American Journal of Geriatric Pharmacotherapy, 2004-Present
- Reviewer, Infection Control and Hospital Epidemiology, 2004-Present
- Reviewer, Vaccine, 2010-Present
- Reviewer, Annals of Internal Medicine, 2010-Present
- Associate Editor, JAMDA, 2018-present

Major Lectureships and Seminars
- Invited Speaker, Florida State University, Advances in Post-Acute & Long-Term Care Symposium, Tallahassee, FL, August 2019
- Presenter, UPMC Susquehanna Williamsport, Eldercare Symposium, Williamsport, PA., September 2019
- Invited Speaker, ID Week 2019, Washington, DC, October 2019
- Invited Speaker, PMDA Annual Symposium, Hershey, PA, October 2019
- Presenter, Public Policy Spotlight, FMDA Best Care Practices in the PALTC Continuum, Orlando, FL, October 2019
- Presenter, Philadelphia Department of Health, Healthcare Associated Infections Meeting, Philadelphia, PA, October 2019
- Presenter, RAVEN Leadership Day, Pittsburgh, PA, October 2019
- Presenter, Department of Medicine Grand Rounds, University of Pittsburgh, Pittsburgh, PA, January 2020
- Presenter, Update in Geriatric Medicine, PA Geriatrics Society, Pittsburgh, PA, March 2020
- Invited Speaker, AMDA Annual Symposium, Virtual National Conference, April 2020
- Presenter, University of Pittsburgh Medical Center, Medicine Grand Rounds, Pittsburgh,
Neelesh K. Nadkarni, MD, PhD
An Assistant Professor of Medicine and of Neurology at the School of Medicine, Dr. Nadkarni is a Principal Investigator of the study that examines the influence of Alzheimer’s disease and cerebral small-vessel disease on walking, thinking, and cognitive-motor interactions in cognitively normal mobility unimpaired older adults. He is also a PI on two pilot studies, one that examines the effect of cannabis on gait and cognition in older adults with chronic pain, and another on the relationship between cardiac amyloidosis and cerebral amyloidosis in healthy older adults. He is also co-investigator at the Alzheimer's Disease Research Center involved in several studies in Alzheimer's disease and actively collaborates with faculty in Neurology, Psychiatry, and Radiology in the School of Medicine, in the School of Rehabilitation Sciences, and in the Graduate School of Public Health at the University of Pittsburgh.

Study Sections
- Reviewer, Alzheimer’s Association International Conference, 2020,
- Reviewer, Human Amyloid Imaging Annual International Conference, 2020

Advisory Committee Memberships and Leadership Positions
- Member, UPMC Shadyside, 2018-present

Professional Affiliations and Society Memberships
- Member, Royal College of Physicians and Surgeons of Canada, 2009-present
- Member, American Geriatrics Society, 2018-present
- Member, International Society to Advance Alzheimer’s Research and Treatment (ISTAART), 2018-present

Editorships
- Ad hoc reviewer, Neurology, 2004-present
- Ad hoc reviewer, Journal of the American Geriatrics Society, 2005-present
- Member, Journal of Gerontology and Medical Sciences, 2012-present
- Ad hoc reviewer, Alzheimer’s Research & Therapy, 2017-present
- Ad hoc reviewer, Journal of Alzheimer’s Disease, 2019-present

Major Lectureships and Seminars
- Presenter, Alzheimer’s Association International Conference, Los Angeles, CA, 2019
- Presenter, Human Amyloid Imaging, 2019 Annual Conference, Miami Beach, FL, 2019

John Naumovski, MD
Dr. Naumovski developed a Geriatric/Post Acute and Long Term Care Rotation for the Family Medi-
cine residents at Charles Morris Nursing and Rehabilitation. They learn how to manage these types of patients, to become members of the Interdisciplinary Team, and to communicate with each of the involved health care professionals (RN/PT/OT/ST/SW).

**Advisory Committee Memberships and Leadership Positions**
- Member, Quality Assurance and Performance Improvement, 2019-present
- Member, Task Force, Question writing, ABIM, Geriatrics Section, 2019-present

**Professional Affiliations and Society Memberships**
- Member, American Geriatrics Society, 2013-present
- Member, AMDA, 2014-present

**Honors and Awards**

**Anne B. Newman, MD, MPH**
Dr. Newman is the Distinguished Professor and Chair of the Department of Epidemiology, with a secondary appointment as Professor of Medicine in Geriatrics. A member of NIH/NIA’s National Advisory Council on Aging, she is Principal Investigator for several large population studies and clinical trials and also serves as Director of the Center for Aging and Population Health at the Graduate School of Public Health. In addition, she collaborates with Dr. Greenspan as Co-PI of our Pepper Center, with Dr. Hanlon in the Health ABC Study, and with Dr. Nadkarni on the LIFE Study and the ENRGISE Study. Her research focuses on the factors associated with disability and healthy aging.

**Advisory Committee Memberships and Leadership Positions**
- Member, Advisory Board, NIH/NIA Baltimore Longitudinal Study of Aging (BLSA), 2005-present
- Member, Scientific Advisory Board, The Irish Longitudinal Study of Aging (TILDA), 2009-present
- Member, External Advisory Committee, ALLHAT (Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial), 2011-present
- Member, External Advisory Committee, KURE (Korean Urban Rural Elderly) Study, 2012-present
- Member, National Advisory Council on Aging (NACA), National Institute on Aging, 2014-present

**Editorships**
- Editorial Board, *Journal of Aging and Health*, 2010-present
- Editor-in-Chief, *Journal of Gerontology: Medical Science*, 2016-present

**Elizabeth A. O’Keefe, MD**
Dr. O’Keefe is an Associate Professor and Clinician-Educator with experience in many fields of Internal Medicine and Geriatrics derived from years of medical practice in the United Kingdom and South Africa. She has several publications relating to functional bowel disease in the elderly and has served as a reviewer for *Journal of the American Geriatrics Society*.

**Advisory Committee Memberships and Leadership Positions**
- Chair, VA VISN 4 Dementia Committee, 2019-present
- Member, VA VISN 4 RECICE Committee, 2020

**Major Lectureships and Seminars**
- Presenter, GRECC Core Geriatric Lecture Series, VA Pittsburgh Healthcare System, Pittsburgh, PA, September 2019
- Presenter, Update in Internal Medicine Conference, UPMC, Pittsburgh, PA, October 2019
- Presenter, Healthcare Disparities in Adults with Intellectual Disabilities and Dementia
Honors and Awards
• 2020 Excellence in Patient Experience Award, University of Pittsburgh Medical Center, 2020
• Best Doctors, Pittsburgh Magazine, 2013-present

David A. Pasquale, DO
Dr. Pasquale provides geriatric primary care and consultative services at the Benedum Geriatric Center located in UPMC Montefiore Hospital.

Advisory Committee Memberships and Leadership Positions
• Member, University of Pittsburgh, Geriatric Tract Residency Committee, 2020
• Member, University of Pittsburgh, Geriatric Education Committee, 2020

Professional Affiliations and Society Memberships
• Member, American Geriatric Society, 2020
• Member, American Osteopathic Association, 2020

Honors and Awards
• Best Doctors, Pittsburgh Magazine, 2016-present

KPG Subashan Perera, PhD
Dr. Perera is a Professor of Medicine and Biostatistics with special interest in clinical trials, aging, time series analysis, item response theory, data mining, and predictive modeling. His work has involved estimating criteria for clinically meaningful change in physical performance measures of the elderly, examining their association with future outcomes using large data sets, and using item response theory to analyze rating scales used in elderly populations. Dr. Perera also co-leads the Data Management, Analysis, and Informatics Core of our Pepper Center, in addition to serving as co-investigator for multiple grants funded by the NIH, AHRQ, and within and outside of the Division.

Study Section
• Member, Urology and Nephrology Clinical Small Business Applications Special Emphasis Panel, NIDDK, 2018-present
• Abstract Reviewer, GSA Annual Scientific Meeting, April 2020
• Member, Patient-Centered Outcomes Research Institute COVID-19 Merit Review Panel, June 2020

Professional Affiliations and Society Memberships
• Member, External Data and Safety Monitoring Board: Mechanistic Approach to Preventing Atrophy and Restoring Function in Older Adults Trial, 2014-present
• Member, Data and Safety Monitoring Board: Long-term effects of weight loss and supplemental protein on physical function, 2016-present
• Member, Data and Safety Monitoring Board: Sedentary Time and Aging Research (STAR) Program Project, 2017-present
• Member, Data and Safety Monitoring Board: Hip Muscle Power, Lateral Balance Function, and Falls in Aging, 2018-present

Eric G. Rodriguez, MD, MPH
Dr. Rodriguez is an Associate Professor of Medicine who serves as a Co-Investigator on grants related to the study of Alzheimer’s disease.

Advisory Committee Memberships and Leadership Positions
• Member, NIH Data and Safety Monitoring, Mindfulness, Education, and Exercise for
Cognitive Function study, 2016-present

Professional Affiliations and Society Memberships
• Rater, McMaster Online Rating of Evidence, 2014-present

Honors and Awards
• Best Doctors, Pittsburgh Magazine, 2014-present
• Best Doctors in America, Best Doctors, Inc., 2014-present

Michelle I. Rossi, MD, MPH
Dr. Rossi’s research focuses on appropriate medication use in older adults, chronic pain in older adults, and development and evaluation of new models of care in older adults (i.e., innovative models of dementia care and driving safety assessment). Her teaching activities include a variety of clinical, didactic, and mentoring interactions with medical students, residents, and fellows, as well as teaching non-physician clinician trainees (nurse practitioner, physician assistant, psychology, pharmacy, speech therapy, occupational therapy, physical therapy, social work, speech therapy, audiology) in geriatric medicine topics. Dr. Rossi is the current Associate Director for Clinical Care with the GRECC of the VA Pittsburgh Healthcare System. She is the Director of the Geriatric Evaluation and Management (GEM) Clinic at the VA Pittsburgh Healthcare System, which is an interdisciplinary outpatient consultative clinic that provides frail older veterans with comprehensive geriatric assessment. She also directs the VA Dementia Clinic and the VA TeleDementia Clinic, which provide care to veterans with dementia and support to their families over the course of their illness. In addition, Dr. Rossi is Medical Director of the VA Geriatric Driving Safety Clinic, which uses an interdisciplinary team to assess driving safety in veterans with cognitive decline.

Advisory Committee Memberships and Leadership Positions
• Chair, VA Pittsburgh Healthcare System, VISN 4 Dementia Committee, 2019-present

Professional Affiliations and Society Memberships
• Committee Member, VAPHS IRB, 2017-present
• Member, VA Pittsburgh Healthcare System, VISN 4 RECICE Committee, 2020

Major Lectureships and Seminars
• Lecturer, GRECC Core Geriatric Lecture Series, VA Pittsburgh Healthcare System, Pittsburgh, PA, September 2019
• Lecturer, 2019 Update in Internal Medicine Conference, University of Pittsburgh Medical Center, Pittsburgh, PA, October 2019
• Lecturer, Healthcare Disparities in Adults with Intellectual Disabilities and Dementia Panel, American Academy of Developmental Medicine and Dentistry Annual meeting, June 2020

Honors and Awards
• Chief of Staff Clinical Excellence Award, VA Pittsburgh Healthcare System, 2019

Fred H. Rubin, MD
A Professor of Medicine, Dr. Rubin’s research has focused on evaluating the adaptability, sustainability, and impact of Dr. Sharon Inouye’s Hospital Elder Life Program (HELP). He has shown that it is as effective at preventing delirium at UPMC Shadyside, a large community-based hospital, as it was in the academic setting in which it was first developed and that it can decrease readmissions. By demonstrating both its efficacy and cost-savings, he has convinced hospital management to incorporate the program into its annual budget.

Study Sections
• Grant Reviewer, Beckwith Foundation, 1998-present
• Grant reviewer, Shadyside Hospital Foundation, 2019-present
Advisory Committee Memberships and Leadership Positions

- Chair, Clinical Faculty Appointments and Promotions Committee, Department of Medicine, UPSOM, 1999-present
- Member, American Geriatrics Society Co-Care HELP, 2019-present
- Member, Planning Committee, UPMC and PA American Geriatrics Society, Update in Geriatric Medicine, 2019-present
- Member, Planning Committee, Update in Internal Medicine, UPMC, 2019-present
- Moderator, Medicine Grand Rounds, UPMC Shadyside, 2019-present

Editorships

- Reviewer, JAMA Surgery, 2019
- Reviewer, Archives of Gerontology and Geriatrics, 2019

Major Lectureships and Seminars

- Invited Lecturer, Annual International Hospital Elder Life Program Conference, 2019
- Lecturer, Update in Internal Medicine, UPMC, Pittsburgh, PA, October 2019
- Lecturer, Urology Grand Rounds, University of Pittsburgh School of Medicine, Pittsburgh, PA, December 2019
- Lecturer, Medicine Grand Rounds, UPMC Shadyside, Pittsburgh, PA, January 2020
- Lecturer, Medicine Grand Rounds, UPMC, Pittsburgh, PA, January 2020
- Lecturer, Update in Geriatric Medicine, UPMC and PA Geriatrics Society, Pittsburgh, PA, March 2020
- Lecturer, Geriatric Medicine Spanish Society, Albacete, Spain, April 2020 (cancelled due to Covid-19)
- Lecturer, Medicine Grand Rounds, UPMC Shadyside, Pittsburgh, PA, April 2020

Honors and Awards

- Top Doctors in America, Castle Connolly's Guide to America's Top Physicians, 1992-present
- Best Doctors in America, Best Doctors, Inc., 1996-present
- Best Doctors, Pittsburgh Magazine, 2017-present
- Physician Excellence Award, University of Pittsburgh Medical Center, 2020

Leslie P. Scheunemann, MD, MPH

An Assistant Professor of Medicine with dual training in geriatrics and in pulmonary/critical care, Dr. Scheunemann receives support as a Pepper KL2 Scholar through the Geriatric Division’s NIA Pepper Grant. Her research focuses on developing and testing transitional care interventions to improve health, functioning, and quality of life among older adults who survive critical illness and their family caregivers.

Advisory Committee Memberships and Leadership Positions

- Member, Ethics and Conflicts of Interest Committee, American Thoracic Society, 2015-present
- Director, Geriatrics Area of Concentration, University of Pittsburgh, 2016-present
- Member, Occupational Therapy Advisory Committee, Department of Occupational Therapy, University of Pittsburgh, 2019-2020
- Director, University of Pittsburgh Medical Center, Trauma Consult Service, 2020-present

Professional Affiliations and Society Memberships

- Member, American Geriatrics Society, 2009-present
- Member, American Thoracic Society, 2009-present
- Member, Aging and Geriatrics Special Interest Committee, American Thoracic Society, 2017-present

Division of Geriatric Medicine
• Member, Junior Faculty Research Group, American Geriatrics Society, 2017-present

Editorships
• Ad Hoc Reviewer, Critical Care Medicine, 2010-present
• Ad Hoc Reviewer, American Journal of Geriatric Psychiatry, 2018-present
• Ad Hoc Reviewer, Annals of Internal Medicine, 2018-present
• Ad Hoc Reviewer, Journal of Pain and Symptom Management, 2019-present
• Ad Hoc Reviewer, Annals of the American Thoracic Society, 2020

Major Lectureships and Seminars
• Poster Presenter, American Geriatrics Society Annual Meeting, Annual Meeting, Portland, OR, 2019
• Invited Presenter, Claude D. Pepper Older Adult Independence Center, Annual Meeting, Hi Impact Publication Session, April 2020

Honors and Awards
• Health Services / Epidemiology Research Award, University of Pittsburgh, Department of Medicine Research Day, Pittsburgh, PA, 2019
• Top Reviewer 2019, Annals of Internal Medicine, 2019

Stasa D. Tadic, MD, MS
An Associate Professor of Medicine, Dr. Tadic has remained involved in the study of geriatric urinary incontinence. Formerly supported by an NIA K23 Career Development Award, he is a member of the Geriatric Continence Research team (Drs. Resnick, Griffiths, and Clarkson). Although now more focused in the clinical arena, he continues to play a role in the group’s efforts.

Advisory Committee Memberships and Leadership Positions
• Academic Chief, Geriatric Medicine, UPMC Mercy, 2015-present
• Team Member and Co-Author, Beckwith Institute QI project Delirium Progressive Medical Unit, 2016-present
• Team Member and Co-author, Beckwith Institute QI project Delirium Dementia Room, 2016-present

Professional Affiliations and Society Memberships
• Member, American Geriatrics Society, 2004-present
• Member, American Delirium Society, 2018-present

Adele L. Towers, MD, MPH
Dr. Towers’s research interests are the study of healthcare financing and dementia prevention and treatment.

Study Sections
• Member, AHRQ HSQR, 2017-present

Advisory Committee Memberships and Leadership Positions
• Co-Chair, Allegheny County Medical Society Annual Fundraising Gala, 2014-present
• President Elect, Allegheny County Medical Society, 2018-2019
• Member, Ursuline Support Services, Board of Directors, 2018-present
• Member, UPMC Health Plan P&T Committee, 2018-present
• Member, Pennsylvania Health Care Cost Containment Council (PHC4), 2018-present
• President, Allegheny County Medical Society, 2019-2020
• Member, AHIMA Governance Task Force, 2019-present
• Chair, Allegheny County Medical Society, 2020

Major Lectureships and Seminars
• Chair and Panel, RISE, RISE West Summit, San Diego, CA, September 2019
• Speaker, The National Association of ACO's, NAACOS Webinar, October 2019
• Panel, HEDIS & QI, HEDIS & QI Summit, Miami, FL, October 2019
• Panel, RISE, RISE Risk Adjustment Forum, Scottsdale, AZ, November 2019
• Presenter, Healthcare Payments Innovations, Phoenix, AZ, February 2020
• Presenter, Health Fidelity, Upstream Risk Adjustment: Better Care Plans & Revenue Capture Live Webinar, March 2020

**Honors and Awards**
• Best Doctors, *Pittsburgh Magazine*, 2016-2019

**Shachi Tyagi, MD, MS**
An Assistant Professor of Medicine, Dr. Tyagi is supported by an NIH-R21 Grant. Her research interests include nocturia and geriatric insomnia, including their causes, treatment, and impact, both on each other and on the risk of falls.

**Keisha Ward, MD**
Dr. Ward provides geriatric primary care and consultative services at the Benedum Geriatric Center.

**Professional Affiliations and Society Memberships**
• Member, American Geriatric Society, 2017-present
• Member, Long Term Care Committee, Division of Geriatrics, 2017-present

**Debra K. Weiner, MD**
A Professor of Medicine with training in geriatrics, rheumatology, and acupuncture, Dr. Weiner researches chronic pain. She is PI of two VA Merit Review studies: 1) a multisite pilot study designed to improve management of chronic low back pain (CLBP) in older adults and 2) a multisite prospective cohort study to ascertain predictors of outcome in veterans undergoing decompressive laminectomy for lumbar spinal stenosis. She is PI (along with Dr. Neelesh Nadkarni) of a Pepper Center-funded pilot project evaluating the impact of medical marijuana on mobility and cognitive function in older adults. She also collaborates on NIH-funded studies that evaluate the contribution of hip osteoarthritis to pain and function in older adults with CLBP and that develop pain education programs for pre-professional students. Finally, she is Co-Director of the University of Pittsburgh’s NIDA-funded Center of Excellence in Pain Education.

**Study Sections**
• Ad Hoc Reviewer, Grant Applications, NIH, 2013-present

**Advisory Committee Memberships and Leadership Positions**
• Member, VAPHS Pain Committee, 2009-present
• Member, American Chronic Pain Association, 2011-present
• Associate Director, UPMC Geriatric Medicine Fellowship, 2014-present
• Acting Associate Director, Education and Evaluation – VAPHS GRECC, 2018-present
• Member, UPMC Division of Geriatric Medicine Education Committee, 2019-present

**Professional Affiliations and Society Memberships**
• Member, American Geriatrics Society, 1989-present
• Member, Gerontological Society of America, 1992-present
• Member, American College of Physicians, 1992-present
• Member, International Association for the Study of Pain, 1997-present
• Member, American Pain Society, 1998-present
• Member, American Academy of Pain Medicine, 1999-present
• Member, Editorial Board, Pain Medicine, 2000-present
• Member, American Academy of Medical Acupuncture, 2001-present
• Fellow, American College of Physicians, 2013-present
• Member, American Medical Association, 2019-present

**Editorships**

• Senior Editor, *Pain Medicine*, 2011-present

**Major Lectureships and Seminars**

• Presenter, Cornell University, Translational Research Institute on Pain in Late Life, Webinar presentation, July 2019

**Honors and Awards**

• Chief of Staff Clinical Excellence Award, VA Pittsburgh Healthcare System, 2019

**Rollin M. Wright, MD, MA, MPH**

An Assistant Professor of Medicine, Dr. Wright’s interests as a clinician educator include curriculum development and evaluation in geriatric medicine, education research, advanced dementia, interprofessional education, terminal decline, and skilled and long-term care. Her education research is funded by a HRSA Geriatric Workforce Enhancement Program (GWEP) grant.

**Advisory Committee Memberships and Leadership Positions**

• Assistant Chair, American Medical Directors Association Annual Program Planning Committee, 2014-present
• Project Director, HRSA Geriatric Workforce Enhancement Program Project 3 (Advanced Dementia Communication Competency), 2015-2020
• Course Director, Interprofessional Geriatrics Week, 2015-present
• Chair, Awards Committee, Pennsylvania Geriatrics Society-Western Division, 2016-Present

**Major Lectureships and Seminars**

• Speaker, Pennsylvania Geriatrics Society-Western Division, Annual Fall Program, Pittsburgh, PA, October 2019
• Invited Lecturer, Center for Bioethics and Health Law Ethics Consortium, University of Pittsburgh, Pittsburgh, PA, December 2019
• Invited Lecturer, Pennsylvania Geriatrics Society-Western Division, Annual Geriatrics Update, Pittsburgh, PA, March 2020

**Honors and Awards**

• Best Doctors, *Pittsburgh Magazine*, 2016-2019
### GRANTS AND CONTRACTS AWARDED

**July 1, 2019 to June 30, 2020**

#### PUBLIC HEALTH SERVICE

<table>
<thead>
<tr>
<th>INVESTIGATOR</th>
<th>TITLE</th>
<th>AGENCY</th>
<th>ANNUAL DIRECT COSTS</th>
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<td>Investigation of Brain Mechanisms Involved in Situational Urgency Incontinence</td>
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<td>Investigating Gains in Neurocognition in an Intervention Trial of Exercise</td>
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<td>A Phase II Trial of Metformin for Pulmonary Hypertension in Heart Failure with Preserved Ejection Fraction</td>
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<td>Nitrite Therapy to Improve Mitochondrial Energetics and Physical Activity in Older Adults</td>
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<td>Forman, Daniel</td>
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<td>NIA/California Pacific Medical Center</td>
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<td>Forman, Daniel</td>
<td>Molecular Transducers of Physical Activity Clinical Centers</td>
<td>NIAMS</td>
<td>$48,864</td>
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<td>Greenspan, Susan</td>
<td>Autoimmunity and Emphysema and Risk of Osteoporosis in Smokers</td>
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<td>Innovative Approach to Geriatric Osteoporosis</td>
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<td>$206,393</td>
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<td>Maintenance of Skeletal Integrity in Frail Elders - Phase 2</td>
<td>NIA</td>
<td>$375,743</td>
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<td>Greenspan, Susan</td>
<td>Pitt Integrated Clinical and Geroscience Research Training Program</td>
<td>NIA</td>
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<td>Sustaining Skeletal Health in Frail Elderly</td>
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<td>Sustaining Skeletal Health in Frail Elderly (Supplement)</td>
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<td>Prevention of Fractures in Patients with Parkinson's Disease</td>
<td>NIA/California Pacific Medical Center</td>
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<td>Greenspan, Susan</td>
<td>TOPAZ: Trial of Parkinsons and Zoledronic Acid</td>
<td>NIA/California Pacific Medical Center</td>
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<td>Greenspan, Susan</td>
<td>Advancing Geriatrics Infrastructure and Network Growth (AGING) Initiative</td>
<td>NIA/University of Massachusetts</td>
<td>$5,015</td>
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<td>Handler, Steven M.</td>
<td>Developing and Testing an Evidence-Based Toolkit for Nursing Home Care of Residents with Obesity</td>
<td>AHRQ/Magee Womens Research Institute and Foundation</td>
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<td>Handler, Steven M.</td>
<td>Reducing High-Risk Geriatric Polypharmacy via EHR Nudges</td>
<td>NIA/RAND</td>
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<td>Hanlon, Joseph T.</td>
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<td>Nace, David</td>
<td>Improving Outcomes of UTI in LTC Facilities: The IOU Study</td>
<td>AHRQ/Womens Research Institute and Foundation</td>
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<td>Nadkarni, Neelesh</td>
<td>Neurodegeneration in Aging Down Syndrome (NiAD): A Longitudinal Study of Cognition and Biomarkers of Alzheimer’s Disease</td>
<td>NIA</td>
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<td>Weiner, Debra K.</td>
<td>Chronic Back Pain in Older Adults: The Role of Co-Existing Hip Impairments</td>
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## PUBLIC HEALTH SERVICE

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**TOTAL PUBLIC HEALTH SERVICE**  
$5,308,512  
$1,864,601

## VETERANS ADMINISTRATION

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<td>Factors and Outcomes Associated with Inappropriate Prescribing of Phosphodiesterase-5-Inhibitors for Pulmonary Hypertension</td>
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**TOTAL VETERANS ADMINISTRATION**  
$160,593  
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## SOCIETY AND FOUNDATIONS

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<td>Greenspan, Susan</td>
<td>Integrating Patient-Centered Exercise Coaching into Primary Care to Reduce Fragility Fracture</td>
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**TOTAL SOCIETY AND FOUNDATIONS**  
$155,179  
$9,999

**TOTAL**  
$5,624,284  
$1,874,600
TEACHING

In addition to the research training described above, Division faculty members teach trainees at every level, from high school student to practicing physician. We also teach advanced practice providers and trainees in pharmacy, nursing, psychology, chaplaincy, physical/occupational therapy, and social work.

Medical Students
Led by Dr. Wright, we teach an innovative and required week-long inter-professional geriatrics course for >200 students from the schools of medicine (MS-3), nursing, dentistry, pharmacy, and allied health (OT, PT, Speech, Social Work, Nutrition/Dietetics, Audiology, and PAs). Evaluation shows improved knowledge, attitudes, and skills in geriatric medicine and team-based practices. In addition, Drs. Scheunemann and Resnick direct a novel Geriatrics Area of Concentration, which enables medical students to “major” in geriatrics (12 in FY20). In FY20, Dr. Wright mentored 2 medical students; 1 received the 2020 David C. Martin award and was invited to give 2 poster presentations at national conferences. Finally, we sponsor scholarly projects for 3-7 students/year, many of whom are funded by our T32.

Medical Residents
All residents devote 6 weeks to geriatrics training in the clinic, home, hospital, and nursing home settings. In addition, we offer an innovative Geriatrics Track that enables 4-9 residents to “major” in geriatrics in which they base their continuity clinic in geriatrics and also care for panels of home-bound patients. We also offer 4 advanced geriatrics rotations which, in FY20, attracted 3 track residents and 1 non-Track resident. Several of these innovations have been featured at national AGS meetings, including the “Roadmap,” milestones, and pharmacology QI projects as well as a new curriculum to teach residents how to communicate and work with patients and families living with dementia. In addition, Dr. Wright helped mentor 1 track resident and 1 non-Track resident for their education research projects.

Geriatric Medicine Fellowship
In FY20, under Dr. Scandrett’s leadership, we graduated 4 excellent fellows. Each submitted abstracts accepted for presentation at AGS, AMDA, and DOM’s Research Day, and two published articles. Two are continuing in academic geriatric medicine positions, one began an endocrinology fellowship, and one accepted a J1 waiver position as a geriatric hospitalist at a community hospital. Three excellent new fellows matched for FY21, and we are developing a new initiative to recruit more fellows from our own residency program.

Continuing Medical Education (CME)
Recognized by a national award from AGS, our annual CME course again attracted 400 attendees from >20 states. Dr. Greenspan continues to teach programs on osteoporosis which she helped to
create for the American Academy of Family Medicine, ISCD, and the National Osteoporosis Foundation. Several faculty led “Meet the Professor” sessions at national meetings (e.g., ACP, AGS).

Other
We continue to train both Physician Assistant and CRNP students in acute care geriatrics, as well as participating in the University of Pittsburgh Health Scholars Academy. This highly competitive—and highly rated—statewide summer program on aging is comprised of 25 elite high school students from throughout Pennsylvania are selected to participate each year.

Additionally, our faculty author chapters on aging for major textbooks, including *Cecil’s Medicine* (Resnick; Greenspan), *UpToDate (Weiner)*, Braunwald’s *The Heart (Forman)*, and *DiPiro’s Pharmacotherapy (Hanlon)*. Division faculty have also developed national geriatric curricula for surgical sub-specialties, including ENT, urology, and gynecology.
Clinical Fellows
* indicates departing fellow

*Aaiza Aamer, MD, MS
Medical School: Hacettepe University, Turkey
Residency: Lincoln Hospital, New York, NY
Current Position: Barnabus Health Medical Group—Geri Primary Care, Bayonne, NJ

*Ilia Bernstein, BMBS
Medical School: University of Limerick
Residency: Jewish Hospital of Cincinnati
Current Position: Endocrinology Fellow, University of Nebraska

Anita Chandra, MD
Medical School: St. George's University School of Medicine
Residency: Allegheny General Hospital
Current Position: Allegheny General Hospital

*Ravneet Singh Sandhu, MD
Medical School: Saba University
Residency: MedStar Health Internal Medicine, Baltimore, MD
Current Position: Indiana Regional Medical Center, Indiana, PA
Fellow Activities

Aaiza Aamer, MD, MS

Publications


Presentations and Abstracts


Ilia Bernstein, BMBS

Presentations and Abstracts


Anita Shalini Chandra, MD

Presentations and Abstracts

Postdoctoral Fellows

* Indicates departing fellow

*Rachel Jantea, MD
Mentors: Rollin Wright, MD, MA, MPH, and Debra Weiner, MD
Dr. Jantea designed a collaborative-practice curriculum for health profession students and providers caring for older adults on a neurological trauma unit at UPMC. She is studying its impact on educational and healthcare outcomes.
ONE-YEAR

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Shuman V, Coyle PC, Perera S, VanSweing2020


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