

### Department of Geriatrics

### **Annual Report**

2016

Larry Lawhorne, M.D. Professor and Chair

Statement from the Chair

The Department of Geriatrics was established as an independent department in the Wright State University Boonshoft School of Medicine (BSOM) in July 2006. Establishing the department showed great insight on the part of the school in that the school and the major donors supporting the effort realized the impact that the aging of America would have on the health care system. As the founding chair of the Department of Geriatrics, I have been fortunate to have strong support from the Dean's Office and the chairs and leaders in other departments across the school.

Faculty members in the Department of Geriatrics are engaged in clinical practice and in teaching medical students, residents, and geriatric medicine fellows across settings of care. Specifically, the department provides clinical care and teaching by carrying out inpatient consults at Miami Valley Hospital, delivering ambulatory care in its outpatient clinic at Miami Valley Hospital South, providing skilled and long term care services in nursing facilities, and attending frail older adults in assisted living facilities and in their own homes.

Now in its eleventh year, the department has strong connections with many community organizations, most notably the Area Agency on Aging PSA 2, the Alzheimer's Association Miami Valley Chapter, Montgomery County Adult Protective Services, and the Montgomery County Frail Elderly Services Advisory Committee.

The flagship project for the department continues to be interdisciplinary teaching funded by the Ohio Department of Medicaid and coordinated through the Ohio Colleges of Medicine Government Resource Center. This funding, which comes from the Medicaid Technical Assistance and Policy Program (MEDTAPP), supports the department's efforts to have students, residents, and fellows work with faculty preceptors in the hospital, outpatient clinic, patients' homes, assisted living facilities, and nursing homes to provide medical and psychiatric care for vulnerable older adults. These visits are anchored by weekly interdisciplinary team (IDT) meetings that provide an opportunity to discuss challenging cases in more detail, apply evidence-based principles, demonstrate to learners the added value of an interdisciplinary approach, and engage learners in Quality Assurance and Performance Improvement (QAPI) activities.

Funded members of the IDT include community health workers, social workers, geriatricians, psychiatrists, pharmacists, and Advanced Practice Registered Nurses (APRNs).

Funding through MEDTAPP has enabled the department to achieve the following:

- 1. Precepted, mentored, and graduated Geriatric Medicine fellows.
- 2. Precepted home visits to frail older adults with multiple medical and neuropsychiatric conditions for 3<sup>rd</sup> and 4<sup>th</sup> year medical students, APRN students, and Family Medicine residents.
- 3. Precepted hospital, nursing home, and clinic visits for 4<sup>th</sup> year medical students, APRN students, and Internal Medicine residents.
- 4. Precepted nursing home and clinic visits for Family Medicine residents and provided the residents with experiences with local organizations including Area Agency on Aging, Alzheimer's Association, and Adult Protective Services.
- 5. Incorporated clinical and policy issues related to the care of frail older adults into teaching sessions in the Department of Psychiatry and the Department of Geriatrics.
- 6. Provided opportunities for 4th year medical students, APRN students, pharmacy students, Internal Medicine residents, and Geriatric Medicine fellows to be active participants in IDT meetings, to learn about developing and monitoring patient-centered interdisciplinary goals, and to use QAPI to improve quality of care.
- 7. Demonstrated to all team members and learners the value of successfully integrating the Community Health Worker into IDT activities, including home visits to assist dual eligible patients in accessing community resources and assistance to caregivers in addressing their own issues and concerns.
- 8. Created the Department of Geriatrics *MEDTAPP IDT Archives*, which contain deidentified cases that have been discussed in weekly IDT meetings and illustrate salient features that inform the delivery of high quality, cost effective care for dual eligible patients with complex medical and neuropsychiatric conditions often complicated by the social situation in which care is delivered.

In summary, the Department of Geriatrics can look back over its first decade with a strong sense of accomplishment in its clinical activities across settings of care, its commitment to teaching medical students, residents and fellows, and its strategic alignment with community agencies and organizations. As the department enters its second decade and with the anticipated arrival of its next chair, Dr. Dan Swagerty, in April of 2017, we celebrate what we have accomplished but look forward to building our research division, strengthening faculty development, and incorporating interdisciplinary geriatrics care into the new curriculum.

# Programs/Divisions

Name of Division or Program	Director	Dates
Geriatrics Fellowship	Dr. Steven	2008 –
Family Medicine Resident	Swedlund	Present
Education		
Internal Medicine Resident	Dr. Irina	2015 –
Education	Overman	Present
Medical Student Education	Dr. Karen	2016 –
	Kirkham	Present
Long-Term Care	Dr. Laura	2013 –
Services	Bedrossian	Present
Hospital Consultation	Dr. Kristy Zechiel	2012 –
Service		Present
Outpatient Services	Dr. Larry Lawhorne	2006 –
		Present
Research	Dr. Matthew	2015 –
	Peterson	Present

# Fully Affiliated Faculty

Larry Lawhorne, MD (BSOM 1.0 FTE)  Steven Swedlund, MD (BSOM 1.0 FTE)  Irina Overman, MD (BSOM 0.5 FTE)  Karen Kirkham, MD (BSOM 1.0 FTE)  Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Maty Jo Trout, Pharm D, BCPS  Medical Education  Medical Education	Name and Academic Position	Clinical Interests	Research Interests
Steven Swedlund, MD (BSOM 1.0 FTE)  Irina Overman, MD (BSOM 0.5 FTE)  Karen Kirkham, MD (BSOM 1.0 FTE)  Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Mary Jo Trout, Pharm D, BCPS  Medical Education	Larry Lawhorne, MD		Wearable Sensors
Irina Overman, MD Irina Overman, MD (BSOM 0.5 FTE)  Karen Kirkham, MD (BSOM 1.0 FTE)  Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Medical Education  Frailty  Stewardship in  Long Term Care  Medical Education	(BSOM 1.0 FTE)	Disease	
Irina Overman, MD (BSOM 0.5 FTE)  Karen Kirkham, MD (BSOM 1.0 FTE)  Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Irina Overman, MD (Older Adult  Hospital Care of the Medical Education  Frailty Stewardship in Long Term Care  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education	Steven Swedlund, MD		Medical Education
(BSOM 0.5 FTE)  Colder Adult  Karen Kirkham, MD (BSOM 1.0 FTE)  Coutpatient Care of the Older Adult  Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Colder Adult  Nursing Home Antibiotic Care of the Stewardship in Colder Adult  Frailty (BSOM 0.2 FTE)  Maty Jo Trout, Pharm D, BCPS  Coutpatient Care of Medical Education  Medical Education  Medical Education  Medical Education	(BSOM 1.0 FTE)	Syndromes	
Karen Kirkham, MD (BSOM 1.0 FTE)  Cristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Mary Jo Trout, Pharm D, BCPS  Outpatient Care of the Medical Education Medical Education Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education	Irina Overman, MD	Hospital Care of the	Medical Education
(BSOM 1.0 FTE)  Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  the Older Adult Hospital Care of the Medical Education Older Adult  Care of the Stewardship in Long Term Care  Frailty Metabolomics  Medical Education  Medical Education	(BSOM 0.5 FTE)	Older Adult	
Kristy Zechiel, MD (Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Mary Jo Trout, Pharm D, BCPS  Hospital Care of the Medical Education  Medical Education  Medical Education  Medical Education  Medical Education  Medical Education	Karen Kirkham, MD	•	Medical Education
(Employed by Wright State Physicians, 0.6 FTE)  Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Mary Jo Trout, Pharm D, BCPS  Older Adult  Older Adult  Older Adult  Care of the Older Adult  Care of the Older Adult  Frailty Frailty Metabolomics  Medical Education	(BSOM 1.0 FTE)	the Older Adult	
Physicians, 0.6 FTE)  Laura Bedrossian, MD Nursing Home Antibiotic (Employed by Wright State Care of the Physicians, 1.0 FTE) Older Adult Long Term Care  Matthew Peterson, PhD Frailty Frailty (BSOM 0.2 FTE) Frailty Metabolomics  Mary Jo Trout, Pharm D, BCPS Polypharmacy Medical Education	Kristy Zechiel, MD	Hospital Care of the	Medical Education
Laura Bedrossian, MD (Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD (BSOM 0.2 FTE)  Mary Jo Trout, Pharm D, BCPS  Nursing Home Care of the Older Adult  Care of the Older Adult  Frailty Frailty Metabolomics  Medical Education	` . , , , ,	Older Adult	
(Employed by Wright State Physicians, 1.0 FTE)  Matthew Peterson, PhD Frailty Frailty Metabolomics  Mary Jo Trout, Pharm D, BCPS Polypharmacy Medical Education			
Physicians, 1.0 FTE)  Older Adult  Long Term Care  Matthew Peterson, PhD  (BSOM 0.2 FTE)  Metabolomics  Mary Jo Trout, Pharm D, BCPS  Polypharmacy  Medical Education	Laura Bedrossian, MD	· ·	
Matthew Peterson, PhD Frailty Frailty (BSOM 0.2 FTE) Metabolomics  Mary Jo Trout, Pharm D, BCPS Polypharmacy Medical Education	` ' ' ' '	Care of the	•
(BSOM 0.2 FTE) Metabolomics  Mary Jo Trout, Pharm D, BCPS Polypharmacy Medical Education	Physicians, 1.0 FTE)	Older Adult	Long Term Care
Mary Jo Trout, Pharm D, BCPS Polypharmacy Medical Education	Matthew Peterson, PhD	Frailty	Frailty
	(BSOM 0.2 FTE)		Metabolomics
(DOOM OF ETE)	Mary Jo Trout, Pharm D, BCPS	Polypharmacy	Medical Education
(BSOM 0.2 FTE)	(BSOM 0.2 FTE)		

## Teaching

#### **Baccalaureate**

Faculty members in the Department of Geriatrics provide guest lectures in the Department of Social Work in the College of Liberal Arts at Wright State University.

#### Graduate students, including thesis supervision

Dr. Lawhorne served on thesis committees for two graduate students in the School of Professional Psychology Wright State University. One student conducted research on hoarding and the interface between the health care system and the legal system in addressing this common condition. The other is studying the recognition, assessment and treatment of dementia in prisons in Ohio.

Dr. Peterson is a graduate thesis advisor for a student in the Exercise Science Program at the University of Dayton.

#### **Undergraduate medical education**

Classroom teaching focuses on precepting first and second year medical students in their Introduction to Clinical Medicine activities. Faculty members from the department also conduct a Team-Based Learning session on care of the older adult for third year medical students during their third year Family Medicine Clerkship. The purpose of this session is, in part, to prepare students for their required supervised home visit. During this visit students complete an assessment of a home-bound older adult under the supervision of a geriatrician or geriatric nurse practitioner. The visit focuses on identifying and addressing polypharmacy, fall risk, mood disturbances, and cognitive impairment.

Fourth year medical students may elect a 4-week rotation in the Department of Geriatrics during which time they can tailor the rotation to concentrate on any one of the following areas or sample them all: (1) hospital consult service, (2) ambulatory care clinic, (3) nursing facility care, or (4) home care, including in-home hospice services.

#### **Graduate medical education**

All Internal Medicine residents complete a 4-week rotation on our hospital consult service and spend time managing nursing facility patients. They participate in weekly didactics on Thursday afternoons as well as in our interdisciplinary team meetings described in Section 1.

All Family Medicine residents complete two 4-week rotations in the ambulatory geriatrics clinic and on the nursing facility service. They participate in weekly didactics on Thursday afternoons as well as in our interdisciplinary team meetings

described in Section 1. In addition, Family Medicine residents spend time with staff members in local organizations including Area Agency on Aging, Alzheimer's Association, and Adult Protective Services.

Faculty members from the Department of Geriatrics deliver monthly noon conferences for internal medicine residents and students rotating on the internal medicine service. Examples of noon conference topics in 2016 include Driving and Dementia, Polypharmacy, Depression and Grief, and Statins and the Old, Old.

#### Continuing medical education

Faculty members from the Department of Geriatrics deliver monthly Geriatrics Grand Rounds open to all disciplines at Miami Valley Hospital. Examples of Grand Rounds topics in 2016 include Delirium, Advance Care Directives, Transitions of Care, and Fall Risk Reduction.

#### Other

Faculty members from the Department of Geriatrics deliver an annual course on "Discussing Serious Illness." The course is open to all new physicians-in-training in all specialties in the Dayton area with the objective of helping them become more comfortable delivering bad news and helping patients and their families through the process.

## Scholarly Activity

#### **Funded grants**

Preparing the Workforce for Ohio's Medicaid Population. MEDTAPP Health Care Access (Ohio Department of Medicaid). Pl: Larry Lawhorne. \$464,619 in SFY 2016 and \$464,619 in SFY 2017.

Longitudinal Metabolomics Signatures of Late-Life Cognition. Wright State Geriatrics Endowment Fund. PI: Matthew Peterson. \$20,000. (R21 submitted to continue the work.)

Hexoskin Validation Study. Wright State Geriatrics Endowment Fund. Co-Pls: Matthew Peterson and Tanvi Banerjee (WSU Engineering). \$20,000. Note: Dr. Banerjee just received a K01 award to continue her work on Hexoskin and other wearable sensors with Drs. Lawhorne and Peterson as mentors.

#### **Publications**

#### Papers in refereed journals

**Peterson, MJ** (2016). "Antecedent and current predictors of performance-based early frailty in midlife and older age: the Fels Longitudinal Study." J Frail Aging 5 (Suppl 1): 41.

**Peterson, MJ**, et al. (2016). "Cardiorespiratory Activity Participation and Strength Mediate the Association between Biomarkers and Functional Limitations." Medicine and Science in Sports and Exercise 48(5) (suppl 1)): 487.

**Peterson, MJ**, et al. (2016). "A novel analytic technique to measure associations between circulating biomarkers and physical performance across the adult life span." J Gerontol A Biol Sci Med Sci 71(2): 196-202.

#### Other recognition

Larry Lawhorne, MD, Editorial Board, Journal of the American Medical Directors Association.

## Summary of Service Activities

#### Student advising

Dr. Lawhorne served on thesis committees for two graduate students in the School of Professional Psychology Wright State University. One student conducted research on hoarding and the interface between the health care system and the legal system in addressing this common condition. The other is studying the recognition, assessment and treatment of dementia in prisons in Ohio.

Dr. Peterson is a graduate thesis advisor for a student in the Exercise Science Program at the University of Dayton

#### Wright State University Boonshoft School of Medicine

Executive Committee (Dr. Larry Lawhorne)

#### Wright State Physicians

Board of Directors (Dr. Larry Lawhorne)

Hospital or affiliated institution [Miami Valley Hospital]

Dr. Steven Swedlund serves as Medical Director of the Hospital Elder Life Program (HELP) at Miami Valley Hospital. This is a comprehensive patient-care program that ensures optimal care for older adults in the hospital. Started by geriatricians at Yale

University School of Medicine, HELP is now in selected hospitals across the country. HELP prevents delirium and loss of functioning by keeping hospitalized older people oriented to their surroundings, meeting their needs for nutrition, fluids, and sleep and keeping them mobile within the limitations of their physical condition.

#### State

Dr. Steven Swedlund is Treasurer for the Ohio Geriatrics Society.

Dr. Larry Lawhorne is a board member of the Ohio Medical Directors Association.

#### **National**

Dr. Larry Lawhorne is a past president of the American Medical Directors Association: The Society for Post-Acute and Long-Term Care Medicine.

#### Other

Board of Directors, Area Agency on Aging PSA 2 (Dr. Larry Lawhorne)

Board of Directors, Alzheimer's Association Miami Valley Chapter (Dr. Larry Lawhorne)

Adviser, Montgomery County Adult Protective Services (Dr. Steven Swedlund)

Chair, Montgomery County Frail Elderly Services Advisory Committee (Dr. Larry Lawhorne)

Member, Montgomery County Levy Council (Dr. Larry Lawhorne)

### Patient Care Summary

Faculty members in the Department of Geriatrics are engaged in clinical practice and in teaching medical students, residents, and geriatric medicine fellows across settings of care as follows:

- The *Inpatient Consult Service* evaluates patients referred by hospitalists, surgical specialists, intensivists, and physical medicine and rehabilitation physicians. Reasons for consultation include dementia, delirium, falls, frailty, polypharmacy, and determination of decisional capacity.
- The **Ambulatory Clinic Service** evaluates older adults as a one-time consult but also provides primary care for a growing number of frail older adults.
- The Nursing Facility Service provides care for short-term rehabilitation for recently hospitalized older adults and long-term care for older adults with multiple dependencies in Activities of Daily Living (ADLs). Our physicians continue to provide care when hospice is needed.

- The Assisted Living Facility Service provides care for older adults in memory support units in the greater Dayton area. Our physicians continue to provide care when hospice is needed.
- The *Homebound Patient Care Service* provides care for frail elders with multimorbidity, many of whom have neuropsychiatric disorders as well. Our physicians continue to provide care when hospice is needed.