

Postdoctoral Research Opportunities at Wake Forest School of Medicine

The **Academic Learning Health System Scholars (aLHSS) Program** at Wake Forest School of Medicine is currently actively seeking postdoctoral fellows (MD, PhD or equivalent) with research interests in the emerging area of *Learning Health System Science*. This NIH-supported TL1 training program is offered through the Wake Forest Clinical and Translational Science Institute (CTSI) and the Division of Public Health Sciences. Designed to **prepare individuals for successful careers in health systems research or healthcare delivery improvement**, the program has the mission to provide the next generation of scholars with the methodological and professional skills to conduct research in the complex environments of health systems and to disseminate and implement the findings from such research into practice.

In addition to conducting embedded healthcare research under the guidance of an interdisciplinary team of mentors, accepted fellows have the opportunity to complete advanced formal coursework (1-year option-*Certificate*, 2-year option-*M.S. degree*), with stipend, tuition, and health benefits provided.

Anticipated start date: July 1, 2022, flexible start dates are possible.

Apply now at <https://ctsi.wakehealth.edu/Education-and-Training/TL1-Postdoctoral-Training-Program>

Questions: Contact: Claudia Olivier, Ph.D. - Education Program Director, CTSI @ colivier@wakehealth.edu.

Meet Our Leader:



Gary E. Rosenthal, MD

Program Director; Professor, General Internal Medicine

- Healthcare delivery innovation
- Multi-institutional research data networks
- Pragmatic trials

My research focuses on the development and testing of novel interventions to improve chronic disease management and acute care delivery using pragmatic research designs. I also play a leading role in the advancing Wake Forest's academic learning health system and in integrating research into clinical practice.

Meet Our Faculty



Janet A. Tooze, PhD
Professor, Biostatistics and Data Science

- Diet Assessment
- Dietary Patterns
- Measurement Error
- Data with Excess Zeroes
- Cancer Prevention and Control

My research focuses on the development of statistical methods for diet assessment, including the development of indices for characterizing dietary patterns, and the assessment of total usual dietary intakes with error prone data. My primary application area is in studies across the cancer continuum, from prevention to survivorship



Kristie Foley, PhD
Professor, Implementation Science

I study how to implement and sustain best and promising practices in primary and oncology care to reduce cancer disparities. My research has been highlighted in the Tobacco Atlas and the Fogarty International Center's Global Health Matters as a model for translating science into practice and policy to address the global burden of tobacco-induced diseases.



David P. Miller Jr., MD, MS
Professor, General Internal Medicine

- Cancer Prevention and Control
- Patient Decision Aids
- Digital Health Interventions

I have over 15 years of experience developing and testing digital health interventions focused on cancer screening in vulnerable populations. My work has included a systematic review of clinic-based computer-assisted instruction, randomized controlled trials of computer and web-based patient education programs/decision aids, pilot studies with mobile devices in socioeconomically disadvantaged patient populations, and the creation of innovative web-based curricula for health professionals.



Eric S. Kirkendall, MBI, MD
Professor, Pediatrics – Hospital Medicine

- Biomedical Informatics - Applied Clinical Informatics
- Healthcare Innovation
- Medical Devices and Advanced Analytics
- Patient Safety

Working at the intersection of people, processes, and technology, I am interested in improving healthcare and patient outcomes by using health information technology to maximize patient safety and quality in clinical care delivery, data management and novel application or software development.



Jeff D. Williamson, MD
Professor, Gerontology and Geriatric Medicine

- Rapid Integration of Discovery into Care
- Alzheimer's Disease and Related Dementias
- Chronic Disease and Disability
- Care Models of Older People

My research interests focus on understanding relationships between chronic disease, such as hypertension, diabetes and maintaining brain health and physical function in aging adults, the prevention of aging-related loss of independence, and on developing research methods for including elderly persons in clinical trials.



Thomas Karr Houston II, MD
Professor, General Internal Medicine

- Health informatics
- Implementation Science

I direct the Academic Learning Health Systems program in Internal Medicine. In that role, I work to integrate research and clinical operations. My research focuses on change (change at the health system, provider and patient level), and change assisted by technologies. My research portfolio has been supported by NCI, NHLBI, AHRQ, PCORI, VA, and others.



Stephen M. Downs, MD, MS
Professor, Pediatrics

- Medical Informatics
- Clinical Decision Support
- Decision and Cost-Effectiveness Analysis

My work is at the interface of decision sciences and medical informatics where I have published extensively in the areas of decision analysis, cost-effectiveness analysis, utility theory, and computer-based clinical decision support over the last 30 years.



Stephanie S. Daniel, PhD
Professor, Family and Community Medicine

- Child and adolescent psychiatric disorders
 - Community-based and community-driven research
 - School-based health and mental health care
 - Risk and course of suicidal behaviors over the lifespan
 - Treatment and prevention interventions for suicidal behaviors
 - Impact of suicidal behaviors on family members
- Familial & environmental factors influencing child & adolescent development
 - Longitudinal research methods (mixed methods)
 - Intervention/Treatment development methods

I am a licensed clinical psychologist and mental health researcher. My primary research interests focus on risk and trajectories associated with suicidal behavior; interventions for individuals at risk for suicidal behavior; school-based mental health interventions; and familial, social, and environmental risk and protective factors as they relate to parent well-being and child and adolescent emotional and behavioral development. I have expertise in recruiting and maintaining both clinical and community samples, and in the implementation of longitudinal, intervention development, and community-based participatory (CBPR) research methods, for which I have received over 25 years of continuous extramural research funding.



Nicholas M. Pajewski, PhD

Associate Professor, Biostatistics and Data Science

- Biostatistics
- Applied Clinical Informatics
- Randomized Clinical Trials
- Hypertension
- Frailty
- Cognition / Dementia

I am a biostatistician and clinical trialist with experience in large, multi-site randomized trials, largely focused on pharmacologic management of common chronic cardiometabolic diseases in older adults. My research also centers around pragmatic uses of the Electronic Health Record, with a particular focus on applications of the deficit accumulation model of frailty for clinical decision support.



Brian J. Wells, MD, PhD

Associate Professor, Biostatistics and Data Science Biomedical Informatics

- Biomedical Informatics
- Prediction Modeling
- Mobile Health (mHealth)
- Electronic Health Records
- Diabetes Mellitus, Type 2
- Consumer Health Informatics

I use electronic health record data for cohort identification, electronic phenotyping, risk prediction, and causal inference. I am directly targeting high risk patients with personalized treatment recommendations.



Mara Z. Vitolins, DrPH

Professor, Epidemiology and Prevention

- Nutrition/diet and lifestyle modification
- Health Promotion
- Obesity
- Diabetes Mellitus, Type 2-Pre-diabetes
- Women's Health –Postmenopause
- Cancer prevention and control
- Diet assessment methodologies

I have a long-standing commitment to developing and implementing nutrition and lifestyle interventions to improve health and well-being. My 25 years of involvement in intervention trials has been extensive and has involved designing trials, developing intervention materials and manuals for leaders and participants, delivering aspects of the intervention to participants, and overseeing adherence and retention efforts.



Justin B. Moore, PhD, MS

Associate Professor, Implementation Science

- Physical Activity
- Healthy Eating
- Obesity Prevention & Treatment
- Implementation & Dissemination Science

I conduct community-engaged research in clinical and community settings focused on the dissemination and implementation of evidence-based strategies for the promotion of healthy behaviors in underserved populations across the lifespan. I

have conducted traditional randomized clinical trials and community-based cluster randomized trials examining the implementation and effectiveness of behavioral interventions for the prevention and treatment of obesity, and observational epidemiologic studies examining the correlates and determinants of health behaviors related to cardiovascular disease and related comorbidities.



Sarah A. Birken, PhD

Associate Professor, Implementation Science

- Implementation of evidence-based practices
- Health care organization and delivery
- Cancer survivorship
- Theory selection and application
- Qualitative methods
- Mixed methods
- Survey research

My research focuses on translating evidence into practice. Specifically, I study middle managers' role in implementing evidence-based practices, the implementation of innovations in cancer care, improving care coordination, and the selection and application of implementation theories.



Kristina Henderson Lewis MD MPH SM

Associate Professor, Epidemiology & Prevention

- Obesity prevention & treatment
- Health services research
- Electronic health record datasets
- Commercial insurance claims datasets

I am a practicing internal medicine physician who conducts research in the prevention and treatment of obesity. I am particularly interested in leveraging the efficiency and real-world applicability of large healthcare datasets such as electronic

health records and claims to study and improve patient outcomes.



Amresh Hanchate, PhD
Professor, Social Sciences and Health Policy

- Health economics
- Health policy impact
- Healthcare costs and cost effectiveness evaluation
- Use of large administrative and claims data

My research involves the evaluation of healthcare policies and clinical interventions, with a focus on vulnerable subpopulations. My ongoing studies examine the impact of the US Affordable Care Act insurance expansions on disparities in healthcare access and outcomes, unintended consequences of performance-based payment programs, the effects of the ambulance diversion on disparities in access to emergency department care and the impact of North Carolina Medicaid transformation to managed care. I have long-standing experience in the use of large administrative and claims data. I serve as the Director of the Program in Health Services Research.



Stephanie Taylor, MD, MS
Associate Professor, Internal Medicine

- Healthcare Delivery Innovation
- Using “Big Data” for predictive analytics and causal inference
- Decision Analysis
- Pragmatic Clinical Trials
- Implementation Science

My research program uses a variety of methodologies to improve the management and outcomes of patients with sepsis across the continuum of care, by optimizing early hospital care and establishing best-practice care in the transition and recovery periods. I have broad interest in improving outcomes for patients with any acute or critical illness. My research is supported by the NIH and Duke Endowment.



Kathryn E. Callahan, MD, MS
Associate Professor, Gerontology and Geriatric Medicine

- Frailty
- Chronic Disability and physical function
- Care Models for older adults
- Implementation Science

My research focuses on developing, testing, and implementing scalable and sustainable care models for older adults with frailty; my vision is a healthcare system with integrated, geriatrics-informed evidence-based care pathways that promote older adults’ independence and function while avoiding burdensome healthcare utilization.



Yhenneko Taylor, PhD, MStat

Associate Professor, Center for Outcomes Research and Evaluation (CORE)

- Health Disparities
- Maternal and Child Health
- Care Delivery Innovation
- Access to care

As Assistant Vice President with the Center for Outcomes Research and Evaluation at Atrium Health, I lead a multidisciplinary team that applies mixed methods approaches and advanced data science to answer critical health system questions.

My research emphasizes access to care and outcomes of pregnancy, social determinants of health and health care needs of vulnerable populations.