



## The Academic Learning Health System Scholars Program

NIH-funded training program (TL1 mechanism) offered through the Wake Forest Clinical and Translational Science Institute (CTSI) and the Division of Public Health Sciences

Program Director:

Gary Rosenthal, M.D., FACP, Tinsley R. Harrison Professor and Chair, Department of Internal Medicine

### 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.*

### Qualified Candidates

Fellows, residents, other individuals with a doctoral degree (M.D., Ph.D., or similar) with interest in conducting research to improve healthcare delivery and patient outcomes.

The program offers highly motivated candidates 1-year or 2-year training options:

### 1-Year Program

#### Certificate

*Learning Health System Science (LHSS)*

Intended for individuals pursuing careers that involve improving healthcare delivery and serving as collaborative investigators

### 2-Year Program

#### Master of Science degree (M.S.)

*Translational & Health System Science (THSS)*

*Focus: Learning Health System Science*

Intended for individuals pursuing careers focused on healthcare research and leading externally funded research grants

## Program Curricular Elements

### *Certificate in Learning Health System Science*

- aLHSS core curriculum
- One mentored research project
- Presentation at national meeting
- First-authored manuscript

### *MS in Translational & Health System Science*

- aLHSS core curriculum
- Elective coursework
- One or more mentored research projects
- Presentations at national meetings
- First-authored manuscripts

## Potential Career Roles for Program Graduates

- Academic positions focused on health services and health systems research
- Lead or collaborating investigator on externally funded research studies
- Clinician-educator positions focused on teaching principles of healthcare improvement
- Health system positions focused on implementing innovative delivery strategies



## Program Description

### Curriculum and Coursework

Designed to build core competencies in conducting Academic Learning Health System research, the curriculum encompasses the following seven competency domains:

#### (1) Systems Science and Organizational Change Management

Understand how health systems are financed and operate and how to apply systems theory to research and implementation

#### (2) Research Questions and Standards of Scientific Evidence

Ask meaningful questions relevant to health system stakeholders and evaluate the usefulness of scientific evidence and insights

#### (3) Health Systems Research Methods

Conduct research in real-world systems using appropriate study designs and analytic methods to assess outcomes of interest to health system stakeholders

#### (4) Biomedical Informatics

Understand the use of information systems in conducting aLHS research and improving patient and health system outcomes

#### (5) Ethics of Research and Implementation in Health Systems

Ensure that research and quality improvement in healthcare settings adhere to the highest ethical and regulatory standards

#### (6) Improvement and Implementation Science

Reduce avoidable variation in process and outcome and ensure the systematic uptake of research findings in a health system

#### (7) Stakeholder Engagement, Leadership, and Research Management

Engage stakeholders in all aspects of the research process and effectively lead and manage

### Research

Trainees will conduct a mentored research project to address a pressing issue relevant to Wake Forest and other health systems. Projects will seek to improve patient outcomes, access to care, or healthcare costs.



### Mentoring

Projects will be guided by teams of experienced faculty who meet with trainees on a regular basis to review progress and assist trainees in navigating obstacles that may arise in conducting research projects in healthcare settings.



### Compensation

Trainees will receive NIH postdoctoral-level stipends and tuition benefits.

Trainees may also be eligible to receive additional support from the sponsoring academic department.



**Start date:** Annually in Summer

