

# **Scholarly Concentration in Trauma**

Co-directors:

Charles Cox, M.D.

Lillian Kao, M.D.

Charles Wade, PhD

Overview:

Traumatic injuries are the leading cause of death in the ages of one to forty-five, and the leading cause of loss of life expectancy. Trauma also represents a major economic burden with an estimated cost of \$670 billion dollar per year in health care and lost productivity. The care of the patients with traumatic injuries encompasses all aspects of medicine.

Purpose/Goals:

The Trauma Scholarly Concentrations Program overall goal is to enrich the experience of medical students through learning, and scholarly activities, specific to the interdisciplinary health-related topic of trauma during years 1-4.

- Complement and enhance the students required curriculum
- Provide role models, mentorship, and guidance for students' academic and personal development
- Increase interdisciplinary interactions
- Provide a longitudinal educational experience through structured and experiential learning activities
- Support student scholarship

Program activities encourage the student's acquisition of expertise in an interdisciplinary, health-related area, the development of critical thinking and analytical skills, the improvement of oral and written communication skills, the enrichment of self-directed learning skills, and the production of scholarly products.

Student selection process:

During their first year students will submit an application which is located on the Scholarly Concentration website: <https://apps.uth.edu/scholarlyconcentrations/>. Admission will then be dependent upon review by a committee comprised of Scholarly Concentration in Trauma faculty, including the co-directors. This committee will be responsible for assisting the student identify a mentor (if needed), monitoring the student's progress, and designing an individual core curriculum for the student. Only students in good academic standing will be admitted. Six students will be admitted each year.

## Trauma Concentration Requirements (Didactic and Experiential)

### **Year 1**

Identify a mentor, form Advisory Committee of 2-3 faculty members in area of interest, plan summer research project.

Apply for support to the Summer Research Program.

Perform summer research project with mentor between Year 1 and Year 2.

During the summer attend Grand Rounds in the trauma focus area of interest.

Attend lab meetings, seminars, etc. as required by mentor and area of focus.

*Optional:* "Shadow" mentor or clinicians.

### **Year 2**

Continue research with mentor.

Formulate a curriculum of study approved by the Advisory Committee.

Attend lab meetings, seminars, etc. as required by mentor and area of focus..

Join a scientific society (as student) in area of interest.

Attend and/or present research at a regional or national meeting.

### **Year 3**

Continue research activities.

Continue the individual curriculum of study approved by the advisory committee.

Attend lab meetings, seminars as required by mentor and area of focus.

Present research at National meeting.

Clinical rotation(s) should be performed in a trauma discipline.

Summer elective(s) should be in a trauma discipline.

### **Year 4**

Senior elective(s) should be in Trauma-related area.

Attend lab meetings, seminars as required by mentor and area of focus.

Present their final project orally during a monthly departmental research meeting.

Submit publication to peer reviewed journal.

### Suggested Didactic Courses

The specific courses for each student will be determined by the interests of the student and the advice of individual's mentor and advisory committee.

GS210061 Critical Thinking in Science; Mattox, William. One semester hour. Summer annually.

<https://gsbs.uth.edu/academics/courses/course-detail.htm?id=bb7b0ece-7e7d-43dc-8380b893d70305e6>

Introduction to Clinical Research

Introduction to Translational Research

These classes and several others are offered by the Center for Clinical Research & Evidence-Based Medicine at the Medical School under the direction of Dr J. Tyson <https://med.uth.edu/crebm/clinical-research-education/clinical-research-curriculum/>

Additional classes of interest are available through the Center for Surgical Trials and Evidence-based Practice (C-STEP) program. <https://med.uth.edu/pediatricsurgery/research/research-centers-and-programs/cstep/>

### Scholarly Concentration Faculty Mentor

Faculty Name	Contribution to Concentration	Department
Charles Cox, MD	Co-director, project mentor	Pediatric Surgery
Lillian Kao, MD	Co-director, project mentor	Acute Care Surgery
Charles Wade, PhD	Co-director, project mentor	Acute Care Surgery
Lillian Kao, MD	Project Mentor	Acute Care Surgery
Charles Wade, PhD	Project Mentor	Acute Care Surgery
Christopher T. Stephens, MD	Project Mentor	Anesthesiology
Bentley J. Bobrow, MD	Project Mentor	Emergency Medicine
Huimahn A. Choi, MD	Project Mentor	Neurosurgery
Ryan S. Kitagawa, MD	Project Mentor	Neurosurgery
Georgene W. Hergenroeder, PhD	Project Mentor	Neurosurgery
Joshua Gary, MD	Project Mentor	Orthopedic Surgery
Catherine G. Ambrose, PhD	Project Mentor	Orthopedic Surgery
Charles S. Cox, MD	Project Mentor	Pediatric Surgery
Mary E. Aitken, MD, MPH	Project Mentor	Pediatrics
Gerard E. Francisco, MD	Project Mentor	Physical Medicine and Rehabilitation
Joy M. Schmitz, PhD	Project Mentor	Psychiatry and Behavioral Sciences