Molecular and Translational Medicine

**Director/Co-Director:** Yong-Jian Geng, MD, PhD. ([Yong-Jian.Geng@uth.tmc.edu](mailto:Yong-Jian.Geng@uth.tmc.edu))
Jeffrey A. Frost, PhD ([Jeffrey.A.Frost@uth.tmc.edu](mailto:Jeffrey.A.Frost@uth.tmc.edu))

**Mission:** To provide rigorous research and didactic training in the basic, preclinical, and translational sciences of human diseases so that students develop the ability to translate basic and clinical discoveries into better public health and clinical care.

**Maximum Number of Students/year:** 20

**Student selection process:**

During their first year, students will submit an application, through the Scholarly Concentration website ([https://med.uth.edu/oep/scholarly-concentrations-program/](https://med.uth.edu/oep/scholarly-concentrations-program/)). Thereafter, application will be reviewed, applicants interviewed, and letter of acceptance issued by the program directors. The program directors 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.

**Timeline (year by year) for student completion of concentration requirements:**

**Year 1**
- Apply to the program
- Identify a mentor
- Enrollment in a Summer Research Program between years 1 and 2 (for at least 8 weeks, 40 hours a week).
- Attend lab meetings, seminars, and/or journal clubs as required by the mentor
- Attend summer research program lecture series run by the C-STEP program

**Year 2**
- Continue with research
- Continue with individual curriculum of study.
- Attend lab meetings, seminars, and/or journal clubs, as required by mentor and research focus.
- Meet with mentor at least twice

**Year 3**
- Continue with individual curriculum of study.
- Meet with mentor at least twice
- Attend lab meetings, seminars, and/or journal clubs as required by mentor.

Optional: Enroll in the Scholarly Concentration Third Year Elective (SCHO 3030).

**Year 4**
- Senior research elective in area of interest.
- Submit a final written version of the research project to the mentor and program directors.
- Attend lab meetings, seminars, and/or journal clubs as required by the mentor.
Present final project at an appropriate venue (Grand Rounds, Research Seminar, regional/national conference, etc).

**Suggested Didactic Courses.**

(The specific courses for each student will be determined by the interests of the student and the advice of individual advisory committees).

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

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/](https://med.uth.edu/crebm/clinical-research-education/clinical-research-curriculum/)

### Scholarly Concentration Faculty Mentor

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Contribution to Concentration</th>
<th>Department</th>
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<tbody>
<tr>
<td>Yong-Jian Geng, MD, PhD</td>
<td>Co-director, project mentor</td>
<td>Internal Medicine</td>
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<td>Jeffrey A. Frost, PhD</td>
<td>Co-director, project mentor</td>
<td>Integrative Biology and Pharmacology</td>
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<td>Melvin Klegerman</td>
<td>Project Mentor</td>
<td>Internal Medicine</td>
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