Course Name: ENRH 129 Summer Research Enrichment Elective

Department: Medical Student Research 301001

Faculty Coordinator: Dr. Rene Galindo

Hospital: All

Periods offered: Summer periods (generally offered between June 1 to August 5th)

Number of students: No limits, no international students

Length: 8 weeks

First Day Contact: Amanda Arista

First Day Time: 8:00 am
First Day Location: PI area

I. Course Description

UT Southwestern Medical School has a long-standing commitment to foster research by its students - both basic and clinical - in conjunction with the faculty at UT Southwestern. The office of the Associate Dean for Medical Student Research is charged with organizing these activities.

Most students participate in research during the summer prior to and/or following their freshman year. Students begin the process of choosing the laboratory in which they will work during the school year, and then finalize this choice and their method of participation (program, paid, or elective) in the spring. The research begins after the school year is over and lasts for approximately 10 weeks. Because students accepted for this elective are receiving transcript notation upon successful completion, they are not paid a research stipend during this period.

II. Course Goals and Objectives:

- a. Medical Knowledge:
 - Medical Students must demonstrate an investigatory and analytic thinking approach to clinical situations based on previously learned medical conditions.
- b. Professionalism: Professionalism
 - i. Medical Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles and a sensitivity to a diverse patient population.
 - 1. Through compassion, integrity, and respect for others and respect for their private patient information by adhere to research protocols and ethics.
 - 2. Commitment to ethical principles through the proper research protocols and training in IRB and HIPAA areas.
- c. Practice-Based Learning and Improvement
 - i. Medical Students must demonstrate the ability to investigate and evaluate their patient care practices, to appraise and assimilate scientific evidence, and continuously improve patient care based on constant self-evaluation and life-long learning. Students are expected to develop skills and habits to be able to meet the following goals:

- 1. Analyze practice experience and perform practice-based improvement activities using a systematic methodology
- 2. Obtain and use information about their own population of patients and the larger population from which their patients are drawn
- 3. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- 4. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness

III. Methods of Instruction

- a. Full time work as a research assistant for 8 weeks with 5 business days for vacation (full-time defined as 40 hrs. or greater week)
- b. Optional attendance at the MED 1037 Introduction to Research Methodology
- c. Writing of a final summary of research experience (see below)
- d. Journal Club Attendance (optional)

IV. Schedule

This enrichment elective will be 8 weeks (including one week of vacation) of full-time research occurring during the Pre-Clerkship summer break. Dates and times of the research are determined by project, negotiated between student and mentor. Note: because there is no academic credit associated with this elective (only transcript notation), students taking this elective neither pay tuition nor are eligible for financial aid.

<u>Before the elective</u>, the Summer Research Elective must be arranged by April 30th with the Associate Dean by the submission of all the information requested below:

- Student/-Mentor agreement- posted on the medical student Research Page. This will be used as the contract that signals the student understands what the mentor expects of them before the summer research elective starts.
- A description of project, detailing your study and what you wish to accomplish. This should include an overview of the hypothesis, the methods that will be employed, and the expected outcomes and analytic methods that will be used. Specific details of the student role in the proposed project should be outlined.

Completed forms should be sent to the Associate Dean for Medical Student Research for approval. The Associate Dean's office will forward the forms to the registrar.

Once the student has been accepted into the elective, credentialing paperwork must be completed and signed prior to the appointment of the student as a student researcher at UT Southwestern. This paperwork will ensure that you receive transcript notation for this elective and have all the appropriate credentials for your lab. Failure to complete the needed paperwork correctly might result in no transcript notation or a delay in access to needed research programs.

<u>During the elective</u>, the medical student should be in the mentor's area for 40 hours a week for the duration of the elective.

At the end of the rotation, the student is to turn in a final summary of their work and the mentor will complete an evaluation of the student before a grade is determined by the Associate Dean.

V. Course Requirements Student Responsibilities

As part of this elective, students will

- 1. Become engaged in a UT Southwestern research project that enhances medical knowledge through the advancement of a scientifically-sound hypothesis
- 2. Be supervised and educated by a UT Southwestern researcher
- 3. Complete all paperwork for credit and credentialing in a timely manner

Mentor Responsibilities

- 1. Assist in developing a research project with the student participant
- 2. Clearly define student research responsibly and goals
- 3. Assist student in getting settled into your area for their research
- 4. Provide appropriate materials and resources for the students (computer space, etc)
- 5. Be accessible for student questions
- 6. Assist in the final write up for the student grade
- 7. Complete an evaluation on the student.

VI. Method of Evaluation of the Student

- Grades will be pass / fail.
- Attendance is required to receive credit for the course as well as a passing evaluation by their mentor.
- Each student must submit a summary of their research experience at the conclusion of the program. The description should include: 1) the problem explored; 2) the hypothesis tested; 3) the methods employed; 4) the results obtained; and 5) the conclusions drawn.

VII. Recommended reading: NA