



*Course title	Medical Scholarly Research						
Course number	MHUM 823.BCS						
*Term/course availability	September to May, no meeting times scheduled during university holidays, spring or winter breaks.						
*Number of weeks	Minimum of 3 weeks and maximum of 8 weeks per academic year, flexible longitudinal schedule. Schedule must be selected before the start of the elective by completing Medical Scholar Research Pathway Program (MSRPP) proposal.						
*Course type	<table border="0" style="width: 100%;"> <tr> <td>X Clinical</td> <td>X Non-Clinical</td> <td>X Research</td> </tr> <tr> <td></td> <td>X Self-Directed</td> <td>X Longitudinal</td> </tr> </table>	X Clinical	X Non-Clinical	X Research		X Self-Directed	X Longitudinal
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	X Self-Directed	X Longitudinal					
Additional description on type of course	<p>This elective is designed for medical students in good academic standing interested in actively engaging in scholarly research in clinical or non-clinical settings following a self-directed learning pedagogy under the mentorship of a physician, health care professional, faculty member and/or professional research mentor. The longitudinal timeline will be arranged in consultation with the research mentor <i>1 month</i> prior to elective registration in OASIS. Students are allowed to excuse research hours for the weeks that they have scheduled National Board of Medical Examiners (NBME) exams. Excused weeks must be specified in the MSRPP proposal timeline.</p>						
*Meeting times and location	<p>The medical student is responsible for setting up research meetings with their research mentor(s). Meetings to assess deliverable completion (as specified in grading section) must be requested by each student by contacting Dr. Conover or Dr. Nigli by email 2 weeks in advance to set-up appointments.</p>						
*Prerequisites	<p>X Matriculation to Texas A&M Medical School X Completion of pre-clerkship (or basic science) curriculum or completion of a MSRPP MSE pathway X Students must be in good academic standing throughout the elective.</p>						
*Enrollment capacity	20 medical students						

Course Description

* Course description: This elective is designed for medical students wishing to participate in scholarly research through the Medical Scholar Research Pathway Program during their second, third or fourth year of medical school. Medical students design a scholarly research project that fits a longitudinal timeline. Credit hours must not exceed 10 credit hours per academic year. Course credit will be calculated based on time dedication to a research project, for example, for a total of 40 hours (1 week) of research contact time is required to receive 1.25 credit hours.

*Indicate what a typical weekly course schedule might look like: The schedule will be arranged in consultation with a research mentor and will be determined prior to registration. Call Schedule (please describe): N/A

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
AM							
PM							

Instructor Information

	<u>Elective Director</u>		<u>Program Coordinator</u>
Name	Gloria M. Conover, PhD	Name	Selina Nigli, PhD
Telephone number	979-436-0215	Telephone number	979-436-0336
Email address	gconover@tamu.edu	Email address	nigli@tamu.edu
Office hours	2:00-3:00, Tue/Th or by appointment	Office hours	9:00-10:00 MWF or by appointment
Office location	HPEB 1031	Office location	HPEB 1034

Learning Outcomes & Objectives

- 1) Principles and Guidelines for Curriculum Development: <http://medicine.tamhsc.edu/policies/pdf/curriculum-principles-guidelines.pdf>
- 2) Assessment Methods MUST be used from the following list: <http://medbiq.org/curriculum/vocabularies.pdf>
- 3) COM Medical Education Program Objectives (MEPO's): <http://medicine.tamhsc.edu/academic-affairs/curriculum/objectives/>

Objective – The student will be able to:	Taught (T) and / or Evaluated (E):	Assessment Method:	Medical Education Program Objectives
Devise an action plan to design a research project aligned with career development goals and residency plans after medical school. Demonstrate ability to carry out independent research (data collection, data analysis, data interpretation, presentation of results in an oral and written form).	Evaluated	AM11: Oral presentation of original research project. Disseminate research findings in a poster / oral presentation at a local and/or national conference. Some clinical research projects will be evaluated by reviewing a manuscript of a patient case that is ready for publication in a peer review journal.	<p>K1: Demonstrate knowledge around the prevention, diagnosis, treatment, management, cure, and palliation of medical conditions</p> <p>K2: Describe the anatomy, histology, pathology, pathophysiology of the human body as it pertains to the individual organ systems</p> <p>K4: Demonstrate the foundation science background necessary to promote quality patient care</p> <p>S7: Communicate effectively, orally and in writing, with patients and their families, colleagues, and other health professionals</p> <p>AB5: Strive for personal excellence in all areas of the learning and medical environment and commit to engage in life-long learning to improve patient care</p>

Textbook and/or Resource Material

Course materials and educational resources will be assigned by the research mentor in consultation with the Office of Medical Student Research. The assignment of reading materials, videos and online modules will be determined according to the research goals for each medical student project and it will be based on the approved Medical Scholar Research Pathway Program (MSRPP) proposal for the Medical Scholar Researcher (MSR) pathway.

Date Created/Revised: _____ By: _____

Curriculum Committee Subcommittee Approval Date: 10/4/19

Curriculum Committee Approval Date: 10/15/19

Date posted to website: __10/20/19__ By: __JD__

Grading Policies

Students will be granted research contact hours (elective credit) for the time networking with other students at the Medical Research Symposium. Research can be conducted as a research team as specified in the MSRPP proposal. However, note that each medical student must submit their deliverables to the Office of Medical Student Research to receive elective credit.

Grading Scale	
Satisfactory	<p>To pass this elective course, a medical student must:</p> <ol style="list-style-type: none"> (1) Complete deliverables [poster paper, reflection paper and 2 oral presentations, 70%] (2) Attendance to research meetings and research activities (5%) (3) Exhibit professionalism interacting with research team/patients/collaborators (5%) (4) Display ethical conduct in research practices (5%) (5) Participate in research events and discussions (15%) <p>The above items will be evaluated using the COM clinical or non-clinical evaluation forms depending on the details specified in the MSRPP form. Students must complete a course evaluation/assessment survey 7 days before the end of the elective. The deliverables for this elective are: a poster mid-term paper (25%), a mid-term oral presentation (25%), a final written research paper (20%) and a final oral presentation (25%).</p>
Unsatisfactory	<p>Failure of clinical or non-clinical evaluation form or failure to complete 90% of these tasks:</p> <ol style="list-style-type: none"> (1) Failure to present oral presentations (2) Failure to present a research progress at the Medical Research Symposium (3) Failure to attend meetings with the research mentor(s) or the Office of Medical Student Research (4) Failure to submit the reflection paper by the due date (2-weeks before the end of this course).

Reflection Paper	Required
Clinical Evaluation	<p>Pass/Fail</p> <p>Please see https://medicine.tamhsc.edu/, for approved clinical evaluation form.</p> <p>Elective Grade</p> <ul style="list-style-type: none"> <input type="radio"/> Fail - Student fails the elective <input type="radio"/> Pass - Student passes with some weaknesses noted <input type="radio"/> Pass <p>*Comments</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>

Attendance, Make-up Policies, & Remediation

Students enrolled in this course will be required to meet weekly with their research mentor. These meetings may occur by phone or in-person. In-person meetings are required monthly. Remediation will be required if student fails the course due to lack of medical or foundational basic science knowledge, professionalism or ethical issues. Failure will result in student retaking the course. The student handbook can be found here: <http://student-rules.tamu.edu/rule07>. As stated in the TAMHSC – COM student handbook: “Students who miss more than 20% of an elective for any reason (e.g, 2 weekdays during a 2-week rotation or 4 weekdays for 4-week rotation) will require a remediation plan”. Time for unexcused absences may have to be made-up/remediated at the discretion of the Elective Director and must be communicated to Dr. Conover or Dr. Nigli by email.

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Course Topics, Calendar of Activities, Major Assignment Dates

The research mentor and the Office of Medical Student Research will work in collaboration with the medical student to delineate the course research topic areas, schedules, and sought medical educational program objectives. All three parties will contribute to the preparation of a research proposal, as delineated in the MSRPP website <https://medicine.tamhsc.edu/departments/medical-education/msrpp.html>.

The expected learning deliverable for this medical scholarly research elective are: a mid-term poster paper, an oral presentation, a final paper and final oral presentation.

Other Pertinent Course Information

A research mentor(s) will be identified prior to the initiation of this course, based on the self-directed learning research objectives delineated in the MSRPP application. Research mentors and students will work together to draft a completed MSRPP research proposal. The Office of Medical Student Research will coach and advise students in scholarly research topics including: proposal development, presentation design, scientific writing. The services provided by the Office of Medical Student Research are delineated on our website: <https://medicine.tamhsc.edu/departments/medical-education/msrpp.html>.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <https://urc.tamu.edu/ada/>. ***Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.***

COM Professionalism and integrity Statement (Academic Honesty and Plagiarism)

All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component's Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an "F"/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at <http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf>.

Academic Integrity

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For information regarding academic integrity refer to: <http://aggiehonor.tamu.edu> ***“An Aggie does not lie, cheat, or steal, or tolerate those who do.”*** According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website: <http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions>.

E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students' TAMHSC e-mail accounts. Please check the account frequently during the semester for updates. This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU's Office of the Registrar at 979-845-1031. The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at <https://medicine.tamhsc.edu/about/professionalism/conduct-awareness.html#tab-panel-5>. For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: <http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf>. Medical students engaging in research projects that require research compliance and biosafety courses should complete appropriate trainings before starting this elective. The list of required courses should be determined in consultation with the research mentor. For research with human subjects at Texas A&M University refer to information at: <https://rcb.tamu.edu/humansubjects/approvals>.

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