

STUDENT RESEARCH AND SCHOLARLY ACTIVITY POLICIES

INTRODUCTION

Engaging in research and scholarly activities is a fundamental aspect of medical education for osteopathic medical students. These activities not only contribute to the advancement of medical knowledge but also foster critical thinking skills and professional values essential for future physicians in their careers in medicine, academia, and research.

In the first-year pre-clinical Osteopathic Doctoring Courses, students gain an understanding of the building blocks needed to develop research skills. Topics such as evidence-based practice, study design, hypothesis testing, statistics and interpretation of results are addressed. In the second-year curriculum, a Journal Club Series lets students apply such skills through scientific literature interpretation, building their capacity for future research activities.

Starting in their first year, TUCOM students are also given opportunities to engage in structured research activities under the guidance and mentorship of Touro faculty, and/or partners at local academic institutions and medical centers. The COM Department of Research funds student stipends and partially supports their research activities and presentations at local and national conferences.

REASON FOR POLICIES

The policies governing research and scholarly work aim to guide students in their academic and professional development. These policies support educational objectives, proper funding and resource management, and effective student mentorship and guidance. In addition, these policies ensure that research is conducted in accordance with ethical guidelines, that it complies with national laws and regulations, and that student researchers adhere to safety protocols and ensure compliance with regulatory requirements to minimize risks. By adhering to established policies and engaging in relevant research, students contribute to the advancement of medical knowledge and the betterment of patient care. These policies will be reviewed periodically to ensure their effectiveness and alignment with the college's research goals and objectives. When participating in research, students acknowledge their understanding of, and agreement to comply with, the provisions outlined in these policies. For inquiries, students may contact the COM <u>Associate Dean of Research</u>.

TUCOM Students	
Dean, Associate and Assistant Deans	Faculty
Department Chairs	Prospective and Active Adjunct Faculty

WHO SHOULD READ THESE POLICIES

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POLICIES

The policies outlined below govern the research and scholarly activities of TUCOM medical students.

1. Student Research and Scholarly Activity

TUCOM students are not required to engage in research or scholarly work. While scholarly activity is not a degree requirement, students are highly encouraged to contact the Associate Dean of Research for assistance in identifying research opportunities aligned with their interests and goals.

2. Research Opportunities

TUCOM students can participate in research and scholarly work under the mentorship of TUCOM or TUC faculty, adjunct clinical faculty and residents at our core clinical sites, and approved faculty from other academic or research institutions. Research opportunities may include, but are not limited to, laboratory-based research, clinical research, translational research, public health research, and medical education research.

- <u>On-campus research</u>: TUCOM students are highly encouraged to pursue research opportunities aligned with their interests and academic/career goals. An up-to-date listing of TUCOM faculty and their research projects is distributed to students every semester and posted to the student intranet. Students can also contact the <u>Associate Dean of Research</u> for guidance in securing a mentored research experience.
- <u>National Research Programs for Medical Students</u>: In the Fall semester, students are also provided with a curated list of National Medical Student Research Fellowships they can apply for; most of these programs are offered in the summer and are geared towards first year medical students, but some are ongoing/year-round and available to all medical students.
- <u>Research Electives and Clinical Distinction</u>: TUCOM students can earn credit for research and scholarly activity by enrolling in a Pre-Clinical Research Elective, a Clinical Research Elective and/or a Clinical Distinction course.
 - Information regarding the Pre-Clinical Summer Research Elective is available in the TUCOM Curriculum Catalog.
 - Information regarding the Clinical Research Elective is available in the TUCOM Clinical Rotation Manual. A proposal must be submitted to the CED via CED Connect for review and acceptance by the Department of Research, via the rotation request form.
 - Information regarding the Clinical Distinction Courses is available at <u>https://clinicaldistinction.com/.</u> A proposal must be submitted to the faculty member sponsoring the Clinical Distinction via the <u>project contract form.</u>
- <u>Pre-doctoral Research Fellowship Program</u>: This program encourages the development of future medical scientists by providing one year of full-time, mentored research training to students who have demonstrated an interest in and commitment to research. The specific

opportunities available will vary depending on the research field and the fellow's goals and interests. The program is available to students who have completed their OMS-2, OMS-3 or OMS-4 years, and extends the student's medical education by one year. Students interested in the Pre-doctoral Research Fellowship Program should contact the Associate Dean of Research for details about the application and selection process.

3. Research Funding

The Department of Research will facilitate student research and scholarship by providing limited internal grants that support student stipends, research supplies and travel to present at professional conferences. Internal Research Award Proposals for Student Research (IRAP-SR) are small, competitive awards to support the development of student research skills, and to enhance the research and scholarship of students working under the mentorship of a faculty member in the College of Osteopathic Medicine. Funds are distributed based on need and merit, from the COM annual research budget.

TUCOM students and faculty are informed of the annual IRAP-SR cycle and related deadlines in early Spring, for research to be conducted during the summer months. While students are encouraged to draft proposals under their faculty mentor's guidance, it is the faculty mentor's responsibility to review and submit the final IRAP-SR proposal(s) to the Department of Research.

<u>Program expectations</u>: Students are expected to present their findings at Touro University California's Annual Research Day and are highly encouraged to submit and present their work at a professional conference. Dissemination of findings in a peer-reviewed journal is also highly encouraged.

Funding to support student travel at conferences:

The TUCOM Research Department will budget annually for its students to present their research at local and national meetings. Fund distribution will be approved based on a first-come, first-served selection process. Our goal is to fund as many students as possible, so requests should only include the funds necessary to present at the conference.

Students wishing to apply for funding must read in its entirety the "Student Travel Info" document posted to the student intranet, for information on all procedures and rules they must follow to be reimbursed. The following rules will apply:

- Requests for travel support must be submitted only once abstracts are accepted, but not before.
- Only one (1) student will be funded per abstract presentation. Typically, that will be the first author. Another student author may be funded, with the approval of the Associate Dean of Research, if the first author cannot attend.

- Students must be in good academic standing to attend meetings to present their research; this will be confirmed with the Academic Affairs department.
- Any individual student will be funded for a maximum of one meeting per fiscal year.
- A student wishing to be funded to attend a meeting must provide their abstract, details of the meeting as per the standard TUC Travel and Conference Request Form, a Request for Travel Reimbursement for Research Conferences form and (if an absence will occur) an approved excused absence, to the Research Manager of the College of Osteopathic Medicine.
- Expense coverage is limited to economy airfare, lodging for the time a student is actively presenting their research, typically 1 night up to \$250, ground transportation up to \$100, and conference registration fees at student rates.
- The Associate Dean of Research will make funding decisions based on the quality/impact of the research to be presented and the availability of funding.

4. Requirements for Engaging in Research and Scholarly Work

To be eligible to participate in any research activities, a TUCOM student <u>must</u> be in good academic standing and comply with all academic requirements, including the ability to dedicate sufficient time to research activities without compromising their academic obligations. While not a comprehensive list, research opportunities may include laboratory-based research, clinical research, translational research, outcomes research, public/community health research, medical education research and AI research. Depending on the research field, students may be required to possess certain skills, knowledge and/or qualifications relevant to the research area.

To ensure the above criteria are met, TUCOM students wishing to engage in research **MUST** complete the "Medical Student Research Request Form, regardless of the type and setting of the scholarly activities. This form will be reviewed by the <u>Associate Dean of Research</u> for official recognition by the College of Osteopathic Medicine.

First-and-Second-Year Students (Pre-Clinical Students)

Pre-clinical students are required to notify the Department of Research about their research and scholarly activities by following these steps:

- 1. Complete the PDF version of the "Medical Student Research Request Form", available in the student handbook and on the student intranet portal.
- 2. Students must provide details on their potential research and scholarly activities according to the form instructions.
- Students must seek a research mentor(s) to support their research and scholarly work. The research mentor(s) will review the research proposal and sign the Medical Student Research Request Form.
- 4. Students will submit their completed "Medical Student Research Request Form" and related

attachment(s) via this <u>link</u>, for further review and evaluation by the Department of Research.

Third-and-Fourth-Year Students (Clinical Students)

Clinical students are required to notify the Department of Research about their research and scholarly activities by following these steps:

- Complete and submit the "Medical Student Research Request Form" through the CEDConnect portal prior to registering for a two-week or four-week research elective rotation. This form, available in the student handbook and on the student intranet portal, will be routed to the Department of Research for review to ensure all research requirements are met.
- 2. Once the request is reviewed and has been approved, the Clinical Education Department (CED) will be notified to enroll the student in an elective research rotation.

(Please note, this process does not apply to the pre-doctoral research fellowship program, which has its own application and selection process).

5. Institutional Policies Applicable to Research and Scholarly Work

The institutional policies that govern research and scholarly work ensure that all research activities are conducted ethically, responsibly, and in accordance with both legal and professional standards. Adhering to these policies upholds the integrity of our institution and fosters a culture of safety and scientific rigor. When engaging in research, TUCOM students will be expected to conduct their work ethically and in accordance with policies and procedures applicable to their scholarly work. These may include policies pertaining to the TUC Institutional Review Board; the protection of human subjects; the ethical use of animals and the confidentiality of participant data. Their purpose is to ensure TUCOM students are equipped with the necessary knowledge and skills to conduct research responsibly, ethically, and safely.

- i. <u>CITI Training Modules</u>: Most training can be found on the Collaborative Institutional Training Initiative (CITI) website. The CITI Program provides training for faculty, students and staff who are involved in the design and conduct of research. Lab Safety, Blood Borne Pathogens, Institutional Biosafety Committee (IBC), Institutional Animal Care and Use Committee (IACUC) and Institutional Review Board (IRB) training courses are all provided through the (CITI) and are self-service. The web-based training course(s) needed will depend on the type of research students engage in. All student researchers must have completed the appropriate training before starting work on a project. <u>Students should consult with their faculty mentor regarding the training modules appropriate to their research</u>. Below is a sampling of CITI courses available:
 - Biomedical Research Basic/Refresher course
 - Social & Behavioral Research Basic/Refresher course
 - Responsible Conduct of Research (covers topics including, but not limited to, research ethics, data management, and regulatory compliance)

- Lab Chemical Safety
- OSHA Bloodborne Pathogens
- Health Information Privacy and Security (HIPS) for Students and Instructors

Accountability for Research training:

- Students will be informed by their research mentor of the training requirements they must complete before beginning their research activities.
- It is the faculty mentor's responsibility to maintain up-to-date records of CITI certification documentation.
- Students who fail to complete the required training(s) within the specified timeframe may be ineligible to participate in research activities until the requirements are fulfilled.
- Faculty mentors are responsible for verifying that their student researchers have completed the necessary training before allowing them to engage in research projects.
- ii. <u>Institutional Review Board (IRB) Approval</u>: Before initiating a project that involves human subjects, TUCOM students and their faculty mentor must ensure the project has been approved by the IRB.

<u>Student-Initiated Studies</u>: In the case of studies initiated by students, student PIs must identify a TUC faculty principal/co-investigator or sponsor (non-research role) of the study since the TUC IRB does not permit protocols submitted only with student investigators. A student may be listed as the PI of the study, but a faculty member must also be listed on the protocol in one of the roles above. Faculty may be full-time TUC faculty or adjunct, e.g., clinical site preceptor. Examples include Clinical Distinction, MSMHS Research Internship, Global Health research, etc.

6. Institutional Affiliation and Reporting Research/Scholarly Work

All research publications, presentations or other forms of dissemination of research findings for research conducted and/or supported by TUCOM should include a clear statement of the student's affiliation with *Touro University California College of Osteopathic Medicine*. When appropriate and permitted, students should use the Touro University California logo on posters, slides, and other presentation materials.

<u>Reporting of Research/Scholarly Work</u>: As soon as a citation is available, TUCOM students **MUST** report their research publications, presentations or other forms of dissemination of research findings using the student <u>scholarly activity reporting form</u>.

7. Research Misconduct

Touro University California is committed to maintaining integrity and transparency in research endeavors. In carrying out its research mission, all members of the university engaged in research are expected to adhere to the highest standards of research integrity to protect the accuracy and reliability of the research record and published results. The Research Misconduct Policy applies to all research and scholarship conducted within the university community, irrespective of the funding source, if any. In addition, the terms "research" and "scholarship" are broadly construed, including activities ranging from scientific experimentation to creative expression, regardless of the discipline.

TUC's <u>Research Integrity Officer (RIO)</u> has the primary responsibility for implementing the institution's policies and procedures on research misconduct. The Research Misconduct Policy is published on the TUC website.