



STUDENT RESEARCH AND SCHOLARLY ACTIVITY POLICIES

Overview

Michigan State University College of Osteopathic Medicine (MSUCOM) supports the academic and scholarly pursuits of its students and faculty. The Medical Student Research Program at MSUCOM provides an ecosystem where osteopathic medical students are given the knowledge and skills, opportunities, mentorship, and funding to conduct research and scholarly activity. The program consists of courses, structured research opportunities under faculty mentorship, research funding, statistical support, presentations at conferences, and co-authored publications.

Policy

This policy specifically addresses the research and scholarly activities of students in the Doctor of Osteopathic Medicine program at MSUCOM.

1. Student Research and Scholarly Activity

- a. Students in the Doctor of Osteopathic Medicine program are not required to complete a research or scholarly activity project. However, MSUCOM emphasizes research and scholarly activity and is committed to assisting students in pursuing these opportunities.

2. Responsible Conduct of Research Training

- a. Each MSUCOM student is required to complete a longitudinal, co-curricular educational series in the Responsible Conduct of Research (RCR).
- b. Face-to-face instruction developed by MSUCOM basic research, clinical research, administrative and support faculty/staff will be used. This will be complemented by MSU IRB (Institutional Review Board) training and CITI (Collaborative Institutional Training Initiative) online modules.
- c. Completion of the required training and online modules is tracked for each student by the MSUCOM Office of Enrollment Services and Student Records, and is a requirement for degree conferral as noted in the MSUCOM Policy for Retention, Promotion, and Graduation.

3. Research opportunities:

- a. MSUCOM does not require students to complete a research or scholarly activity project as a requirement of its Doctor of Osteopathic Medicine program. However, MSUCOM is committed to assisting students in pursuing these opportunities.
- b. MSUCOM students may pursue research and scholarly activities in areas of individual interest. Faculty mentors are available at each site to provide guidance. All research proposals must

- conform to MSU research and institutional review board (IRB)/ Institutional Animal Care & Use Committee (IACUC) policies and procedures. Students may not serve as principle investigators for projects reviewed or approved by MSU IRB/IACUC.
- c. MSUCOM students may participate in research and scholarly activities in partnership with faculty of MSU and MSUCOM, clinical faculty and residents within the Statewide Campus System network, and approved faculty from other institutions.
 - d. MSUCOM students may earn credit for research and scholarly activity projects through enrolling in a research elective. Details for electives during the preclerkship and clerkship programs are available on the MSUCOM website under “Electives”.

4. Research and Scholarly Integrity

- a. In pursuing research or scholarly activity, the student will be expected to conduct this work in an ethical manner and in compliance with applicable policies and procedures. These may include, but are not limited to
 - i. MSU Institutional Review Board (IRB) policies and procedures
 - ii. Human subject protection
 - iii. Policies on use of animals in research
 - iv. HIPAA and patient confidentiality
 - v. FERPA and student record confidentiality
- b. For research projects, the Principal Investigator, or PI, has overall responsibility for the conduct of the research. The PI's responsibilities include, but are not limited to:
 - i. Obtaining approval from regulatory committees such as Human Research Protection Program, Institutional Animal Care and Use Committee (IACUC), and Office of Environmental Health & Safety (EHS)
 - ii. Determining authorship and acknowledgement credit for presentations and publications
 - iii. Complying with MSU policies related to data ownership, control, and access.
- c. In addition, the PI should ensure that all members of the research team have been trained to fulfill their responsibilities to the project, follow the approved plan for conducting the research, and comply with relevant laboratory and research policies. Michigan State University requires that faculty members sign off as PIs for this purpose, but student and faculty investigators share the responsibility for complying with policies related to research ethics. For student-initiated research projects, the student should prepare the relevant applications with assistance from a faculty mentor.
- d. The MSU Guidelines on Authorship shall be used to determine authorship, order of authors, and acknowledgement credits for both faculty-initiated and student-initiated research projects.

5. Institution of Record

- a. Michigan State University shall be the institution of record for any publication, presentation, or other public dissemination of results for research conducted at MSU or using MSU resources. No other institutions, including future institutions where a student or faculty member works at the time of presentation/publication, shall be included in a presentation/publication unless the

other institution contributed significantly to the project. This policy does not preclude listing the student's or faculty member's current address for correspondence.

- b. Students may engage in research and scholarly activity in collaboration with individuals at clinical training sites. When a student is assisting with scholarly work conducted in these locations, the institution where the research or scholarly activity is being performed or where the study has been approved by an institutional review board will be considered the institution of record.

6. Authorship

- a. The [MSU Guidelines on Authorship](#) shall be used to determine authorship, order of authors, and acknowledgement credits for both faculty-initiated and student-initiated research projects.

7. Management and Ownership of Data

- a. The MSU Guidelines on Research Data shall be used to determine investigator responsibilities related to ownership of, management of, and access to research data. Please see the Research Integrity Officer's website for more details at <https://rio.msu.edu/research-data>.
- b. Research data include but are not limited to raw data recorded in any format, computer records and printouts, videotapes, audiotapes, photographs, laboratory notebooks, and field notes and journals. MSU is the owner of the scientific records for projects conducted at the university, under the auspices of the university, or with university resources. Therefore, the original copies of all such data must be maintained at MSU, including data from student-initiated research projects.
- c. The PI is the custodian of the data, with responsibility for ensuring the accuracy of the scientific record, the confidentiality of the data and the physical condition and security of the data. In addition, the PI is responsible for retaining the research data for not less than three years after the submission of the final project report or publication (whichever occurs last). Furthermore, the PI is responsible for protecting intellectual property resulting from the research and responding to allegations of misconduct in research or financial conflicts of interest (both situations may warrant retaining research data for longer than three years). For student-initiated projects, research data must be retained at least until the degree is awarded or until it is clear that the student has abandoned the work.
- d. The PI is responsible for determining who may have access to research data and under which conditions. When students or faculty members involved in research projects at MSU leave the university, they may take copies of research data for projects on which they have worked.

8. Research Misconduct Procedures

- a. Michigan State University has developed procedures concerning allegations of misconduct in research and creative activities.
- b. The procedures are administered by the University Research Integrity Officer, and are published on their website at <http://rio.msu.edu>.

9. Human subjects research and Institutional Review Board (IRB)

- a. All research involving humans need to be submitted to MSU IRB. Applications are submitted through the [Click™ Research Compliance System](#) to comply with standards and regulatory requirements.
- b. Students may not serve as PI's for research projects submitted to the MSU IRB, but may be listed as secondary investigators. A student who has completed CITI training may contribute to the MSU IRB application after designated by the PI.
- c. More information on the MSU IRB may be found at <https://hrpp.msu.edu/help/submit/human-research.html>

10. Animal subjects research and Institutional Animal Care and Use Committee (IACUC)

- a. All research involving live vertebrate animals needs to be submitted to IACUC to comply with standards and regulatory requirements.
- b. For more information, please visit the IACUC website at <https://animalcare.msu.edu/iacuc/about-iacuc.html>

11. Scholarly activity involving surveys of fellow students

- a. To promote quality of the research/scholarly activity and to avoid over-surveying of students and faculty, the Research Office will review internal surveys (initiated by MSUCOM faculty and students) as well as external survey requests from outside MSUCOM.
- b. MSUCOM students who propose to undertake research or scholarly activity which involves surveying fellow osteopathic medical students at MSUCOM must first go through the MSU IRB process with a faculty member serving as PI.

12. DO-PhD program:

- a. MSUCOM students who wish to pursue more extensive research studies may apply for a dual degree through the MSUCOM DO-PhD program. Detailed information is available on the MSUCOM website.