


Name of Policy: College of Medicine & Life Sciences: Research by Medical Students Policy Number: 3364-81-04-015-01 Approving Officer: Dean, College of Medicine & Life Sciences Responsible Agent: Dean, College of Medicine & Life Sciences and Vice President for Research Scope: Students in M.D. Program	 Revision date: February 1, 2019 Original effective date: 02/29/12
<input type="checkbox"/> New policy proposal	<input checked="" type="checkbox"/> Minor/technical revision of existing policy
<input type="checkbox"/> Major revision of existing policy	<input type="checkbox"/> Reaffirmation of existing policy

(A) Policy statement

The University of Toledo is bound by numerous federal, state and local regulations governing all research, regardless of the source of funding (i.e., internal as well as external). These include (1) use of human subjects, specimens, or medical records; (2) use of autopsy/cadaveric material; (3) use of animals; (4) use of radioisotopes and other hazardous or infectious materials; and (5) use of recombinant DNA.

A number of University of Toledo Health Science Campus (UTHSC) policies are especially important to individuals conducting UTHSC-related research, whether or not an external sponsor is involved. Every student investigator should be familiar with those policies that address relevant aspects of the project(s) involved. Policies of particular importance to research include, but not limited to, the following:

POLICY TITLE	NUMBER	POLICY TITLE	NUMBER
Organizational Structure & Administrative Responsibilities	3364-15-08	Conflict-of-Interest	3364-70-01
Research and Sponsored Programs	3364-70-22	Hazardous Waste Disposal	HM-08-000
Human Subjects in Research	3364-70-05	Infectious Waste Disposal	HM-08-019
Animal Subjects in Research	3364-70-10	Use of Radioisotopes	Rad. Safety Manual
Integrity in Research and Scholarship	3364-70-21	Respiratory Protection Program	S-08-034
Patent Policy	3364-70-04	Chemical Hygiene Plan	HM-08-026
Recombinant DNA	3364-70-06	Responsible Conduct of Scholarship and Research	3364-70-02
Biohazardous Substances	3364-70-06	Delegation of Signatory Authority	3364-40-08
Travel Support for Research Presentations	3364-81-04-015-02		

For UT-sponsored research, the research must be planned and carried out under the sponsorship of a UT faculty member eligible to serve as a Principal Investigator on UT IRB and/or IACUC applications. Additional investigators at UTHSC or other institutions may be involved as collaborating sponsors. Students who conduct research at non-UT locations must follow the University of Toledo policies and procedures for collaborative research and any applicable research policies of the sponsoring institution.

The basic principle underlying all research is integrity. Scientists have a responsibility to provide research results of high quality; to gather facts meticulously, to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models; and to report new knowledge through appropriate channels. Co-authors of research reports must be well enough acquainted with the work that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself. Plagiarism is unethical, and when done in the context of reporting research results, represents one form of scientific misconduct. To consciously incorporate the words or ideas of others, either verbatim or through paraphrasing, without appropriate acknowledgment is unacceptable in science and the scientific literature. For more information, see UT policy 3364-70-02 "Responsible Conduct of Scholarship and Research".

Summer Research after Year One

Medical students who, following year one evaluation, are in good academic standing, may carry out defined research projects during the summer semester. Students who have INCOMPLETE and/or FAIL or WITHDRAW FAIL status in one block may participate in the UTCOM Medical Student Summer Research Program only if the Vice Dean, the Associate Dean for Pre-Clinical Medical Education and the block director all agree that it would be compatible with activities planned to remedy deficiencies. Students who have INCOMPLETE and/or FAIL or WITHDRAW FAIL status in two or more blocks will not be permitted to participate in the Medical Student Summer Research Program.

Research for Third and Fourth Year Students

Students may carry out defined research programs in the third or fourth academic years if the proposal has been approved by all appropriate parties. Third year students who have an opportunity to participate in a unique research experience during the third academic period may meet with the Associate Dean for Student Affairs to request a modification of their required clerkship schedule.

(B) Purpose of policy

The purpose of this policy is to establish the guidelines and procedures for University of Toledo medical students interested in conducting research.

(C) Scope

This policy applies to all UT medical students engaged in research conducted on any of the UT campuses, as well as research conducted off-site at an affiliated institution. The requirements outlined under the Project Approval Process also apply to faculty research mentors participating in the Medical Student Summer Research program.

(D) Procedure

1. Identifying Opportunities for Research

Several options are available to medical students who are interested in conducting research. Students may: (1) undertake summer research projects, generally between the first and second years; (2) carry out projects with a limited scope and time commitment during the scheduled curriculum period and/or during scheduled breaks; or (3) participate in approved elective research clerkship(s) during the third and fourth years. Students interested in more long-term full-time research may (1) apply for enrollment in a dual degree program at UT (M.D./Ph.D., M.D./M.S., etc.) or (2) delay graduation in order to undertake full-time research at UTCOM, the NIH, or another institution, which would generally require an academic leave of absence. These various options may be combined to suit the goals and abilities of individual students.

Students may explore these options by discussion with faculty members, the Vice Dean, Associate Dean for Graduate Studies, the Senior Associate Dean or Associate Dean for Student Affairs, the Vice President for Research, or the Associate Dean for Research. The major requirement is to identify one or more faculty members who can provide appropriate facilities, technical guidance, and intellectual stimulation for the type of project to be conducted.

Another resource for identifying research opportunities is the Office of Research and Sponsored Programs (RSP) located in Room 2102 of the Center for Creative Education Building. Students may have accounts to use all capabilities of our subscription opportunity database to look for research funding and fellowships.

Virtually all information, policies, forms, etc. that you may need from RSP are available from that office's website: www.utoledo.edu/research.

2. Project Approval Process

- a. Once a student identifies a research mentor and develops a research proposal, institutional committees must review and approve research protocols BEFORE the research begins. Human subject research must be reviewed by one of the Institutional Review Board (IRB)s. Animal research protocols must be reviewed and approved by the institutional Animal Care and Use Committee (IACUC). The Institutional Biosafety Committee (IBC) reviews research involving infectious agents and biohazardous materials. Any research utilizing radioisotopes or radiation emitting equipment is reviewed by the Radiation Safety Committee, etc.). These proposals should be submitted to the appropriate regulatory committee for review at the convened meeting that occurs at least two months in advance of the proposed starting date.
- b. If extramural support is being sought to fund the project or to support a stipend for the student, the grant proposal must be submitted through and reviewed by the Office of Research and Sponsored Programs (RSP). Proposals should be submitted to RSP for review at least a week in advance of the grant submission deadline.

3. Support for Research

- a. Funds to support the salaries of medical student researchers participating in the Medical Student Summer Research Preceptorship Program are provided through the Federal Work Study Program and other college support. Institutional funding is not available for project support for medical student research unless specifically allocated to a faculty research sponsor.
- b. External project and stipend support (e.g., grants and fellowships) may be available through a number of external sponsors, including the Alpha Omega Alpha Medical Honor Society, The Arnold P. Gold Foundation, the American Medical Association, the American Heart Association, the National Institutes of Health, and pharmaceutical companies. In addition to following the application guidelines for the funding agency, students are subject to UT policies related to grant submissions, most of which are detailed in Policy No. 3364-70-22: "Principal investigator's responsibilities on sponsored projects."
- c. Support for travel for students to present the results of their research at regional and national meetings is available.

<p>Approved by:</p> <p><u>/s/</u> Christopher J. Cooper, M.D. Executive Vice President for Clinical Affairs, Dean of the College of Medicine and Life Sciences</p> <p><u>April 4, 2019</u> Date</p> <p><i>Review/Revision Completed by:</i> <i>Dean, College of Medicine & Life Sciences</i> Vice President for Research Vice Dean, Undergraduate Medical Education Associate Dean for Clinical Undergraduate Medical Education Associate Dean for Preclinical Medical Education Chair, Medical Student Research Committee</p>	<p>Policies Superseded by This Policy: None</p> <p>Initial effective date: 08/25/85</p> <p>Review/Revision Date:</p> <ul style="list-style-type: none"> • 08/25/86 • 08/13/87 • 08/22/89 • 08/15/90 • 10/01/91 • 02/24/94 • 07/01/95 • 08/01/96 • 04/01/98 • 03/26/99 • 08/18/03 • 09/17/04 • 04/22/07 • 12/30/11 • 02/29/12 • 03/05/12 • 02/01/19 <p>Next review date: 02/01/2022 (three years from most recent revision/review date)</p>
---	--