

<p style="text-align: center;">Application for Research Elective Instructions Michigan State University College of Human Medicine</p>
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Third and fourth year CHM students are eligible to take one-, two- or four-week research electives. These are full-time clerkships dedicated to research, with a 40 hr per week commitment. The research elective provides students with an intensive mentored research experience. Please contact the Director of Student Programs for scheduling an elective and for questions on the number and type of electives available.

The research elective involves participating in a research project under the direction of a Faculty Research Mentor, completing individualized assignments related to research such as submitting a research proposal, and writing a final summary of the research experience.

Expectations and Requirements

Students who are accepted for a research elective are expected to work on their research project *40 hours per week for the duration of the elective.*

- Student must complete the Research Elective Application including a 2-3 page narrative of the Research Proposal and Plan. Poorly written proposals will not be approved.
- Student must submit a completed and signed Research Mentor form
- Research work must be worthy of a passing grade
- Research should be conducted during regularly scheduled semesters
- Research Mentor will be responsible for guiding the intellectual course of the student's work
- Attend a weekly mentoring session with the Research Mentor where project progress and the next week's activities are discussed
- Institutional Review Board (IRB) approval must be granted before data collection involving human subjects begins
- Tracking of Responsible Conduct of Research training must be completed. See: <https://research.chm.msu.edu/students-residents/rcr-completion-form>
- Complete a Research Summary at the end of the elective that includes a revised version of the research proposal and plan (application instructions section), a description of the activities and results of the research elective activities
- Evaluation form completed and signed by the Research Mentor and submitted to the Community Campus Research Director or Director of Student Programs. The Community Campus Research Director is responsible for reviewing and giving approval for a passing grade.

Application Instructions

1. Prepare a Research Proposal and Plan and submit it to your Community Campus Research Director. Make sure your Research Mentor has reviewed and approved your proposal and plan. The document should be a 2-3 page narrative that includes the following:
 - a. **Background and Significance** - describe the problem you will address; why the research is important based on preliminary literature review with citations; and describe how your research will contribute to new knowledge.
 - b. **Specific aims** – state the research question you will try to answer and the goal of your research; describe in specific, measurable terms what you will investigate; state your hypothesis.
 - c. **Student's role in the research** – describe specific activities you will be involved in during the project and the knowledge and experience you will gain.
 - d. **Learning objectives** – describe learning objectives during this elective
 - e. **Research design and methods** – describe how you will conduct the research; whether the study is retrospective or prospective; whether you will gather primary data or use secondary data; describe the primary outcome measures and independent variables; discuss how subjects will be recruited and the target number of subjects, the inclusion and exclusion criteria, and human subjects protections; and describe how the data will be collected, managed and analyzed.

2. If you are conducting research involving living human subjects in any capacity, material of human origin, or existing data originally collected from human subjects, you will need to obtain human subjects approval from the IRB of the institution where you will be conducting the research. If the project does not have IRB approval yet, or you are not sure whether IRB approval is required for your project, contact the IRB or your Community Campus Research Director.
3. All students conducting research must complete Responsible Conduct of Research (RCR) training PRIOR to starting the project to be in compliance with the MSU Graduate School, NIH and NSF funding. Provide verification of RCR training as part of your application packet and to your Faculty Mentor by printing out the form from the RCR Tracking System. For more information about RCR go to <https://research.chm.msu.edu/students-residents/rcr-completion-form>
4. The Research Elective must be approved by the Research Director for your campus. Email the project narrative and Research Elective Application form to your Community Campus Research Director or Director of Student Programs to request approval. Research Electives **MUST BE APPROVED** by the Community Campus Research Director prior to the start of the rotation. Failure to complete and submit the required paperwork and receive approval prior to the start of your rotation may result in no credit being earned for the experience.