

**THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE
MEDICAL STUDENT RESEARCH SCHOLARSHIP
PHASE II DOCUMENT INSTRUCTIONS**

The **RESEARCH PROPOSAL** must be submitted online via the MDSR website and is to be **written in your own words** and include:

1. **TITLE:** It should be short and informative to the non-expert.
2. **MENTOR'S LETTER:** Outline the “**Research Training Plan**” for the applicant, describe the skills and techniques that the student will learn, and explain how this particular student is suited/prepared for this project.
 - a. What personal qualities, capabilities, and skills does the applicant possess which will enhance success of the project?
 - b. What research or laboratory experience do they bring to the project?
 - c. Evaluate the student's academic record.
 - d. What commitment to supervision and lab safety of the fellow will you provide?
 - e. If the application is not funded or only partially funded will you be able to provide supplementary funds?
 - f. Have you identified other potential sources of funding for the student?
 - g. Please offer assurance of the project's compliance with research regulatory guidelines.
 - h. Who will be the immediate daily supervisor (and title) if not you?
 - i. If the proposed research is exempt from IRB or IACUC protocol requirements, please provide documentation with your letter of support. Documentation of IRB/IACUC protocol approval of the project is required *in advance* to review the application.
3. **PROJECT SUMMARY/ABSTRACT (not to exceed 150 words):** Briefly describe what will be done. Describe the proposed *research training plan* for achieving the stated learning goals. This section should be informative and understandable to a scientifically literate reader.
4. **STUDENT PERSONAL STATEMENT:** (Not to exceed 150 words) Use the Personal Statement to explain your motivation to pursue research training. If you have research experience, explain how an additional experience will enhance your career and what you hope to learn from the experience. If you have little or no research experience, explain what led you to the scholarship program and how you hope to benefit from the research experience.
5. **LEARNING OBJECTIVES/TRAINING PLAN: (Not to exceed 200 words)** A description of the skills and techniques that the student will learn (including who will provide said training), and explain how this particular student is suited for and will be prepared to complete the project. Learning objectives should articulate the specific, measurable things each student will know and be able to do upon completion of the research project.

6. **RESEARCH PLAN (not to exceed 3 pages):**
 - a. **Specific Aims:** Identify what hypothesis will be tested by this research project. What specific question(s) will be answered? Attach a list of 1-3 broad, long-term objectives and the goal of the specific research proposed, e.g. to create a novel research model, to develop a new methodology, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, develop new technology etc.
 - b. **Background Information:** What work has been done by others in the field? Where does your project fit into the “big picture?” What is the project’s significance? Attach a brief sketch of the background leading to the present application. Critically evaluate existing knowledge and specifically identify the gaps that the project is intended to fill. Discuss the significance of your project to human health.
 - c. **Preliminary Studies:** Provide a succinct account of published and unpublished results (previous work in the mentor’s laboratory) that supports the rationale for this project.
 - d. **Experimental Design & Methods:** Describe the plan of experiments. Include a description of the conceptual or clinical framework for the research design, procedures, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. Describe any novel concepts, approaches, tools, or technologies for the proposed studies.
7. **ENVIRONMENT & RESOURCES (not to exceed 150 words):** Briefly describe what resources and facilities are necessary to accomplish the specific aims you have outlined. Clarify access to the necessary resources (e.g., lab space, database access and training, statistical analyses).
8. **EXPERIMENTAL DUTIES ON THE PROJECT (not to exceed 150 words):** List duties you will be responsible for on the project. **DO NOT** submit a proposal in which your role is **primarily clerical, data entry, or technical**. Such projects are not considered valuable research experiences.
9. **TIMETABLE:** Provide an approximate timetable for executing the research project. Short-term summer projects may begin as early as **May 1** and continue through **August** (before classes begin). All **final reports** for short term projects are due roughly **10 days after the first day of classes**. If you wish to perform full-time research over a period of 1 year, you must include approval for a leave of absence by Associate Joanne Lynn as part of the application. Final reports for all year research experiences are due **June 20** the following year.
10. **REFERENCES (not to exceed 1 page):** Provide an appropriate number of references from the scientific literature. This need not be an exhaustive review.
11. **NIH BIOSKETCH of the Mentor:** Please request a 4-page NIH biographical sketch from your mentor and include with your application. A blank form is on the MDSR website; other formats will not be accepted.