

Elective Research Rotation

Guidelines and Requirements:

Interests of the student will determine the specific nature of the research being performed. Clinical, educational, health policy, outcomes, and basic science research, as well as other types of studies, are allowed.

Student research can consist of any of the following types of studies: a single-case study, a multiple-case study, a retrospective study, a prospective study, a survey study or a meta-analysis.

Although no restrictions are placed on the maximum number of research projects in which a student is allowed to participate, a maximum of seven weeks is allowed for an officially registered research elective. All other research activities will need to be conducted during personal time. This time can be divided across two adjacent academic years (for example, 4 weeks in the third year and 3 weeks in the fourth year).

The initial weeks of the Elective Research Rotation (up to four) may be used for didactic instruction and development of the research proposal. If human subjects are to be used in the proposed research, then Institutional Review Board review of the proposal and all associated documents will be required. Prior to submitting any materials to a hospital compliance or research office, students are required to contact the CORE Research Office (coreresearch@oucom.ohiou.edu; 740-593-2380). If applicable, it is expected that a proposal be ready for submission to the IRBs of the student's CORE hospital and, subsequently, to Ohio University, as well as to any relevant funding agencies, by the end of this first period.

Approval of a second block of time will be contingent upon several factors, such as successfully clearing the IRB process and obtaining funding for the research proposal, if applicable. Typically, this second block of time is used to initiate the study's protocol, gather data, perform data analyses, and prepare a final manuscript. For larger studies, this short amount of time may not be adequate to complete all necessary steps of a project. Because research is a longitudinal process, it may be necessary to continue working during your "free time" on the project concurrently during subsequent rotations as well. Approval to remain an active participant in the research is contingent upon research activities not conflicting with rotation requirements. Variations in the rotation schedule will be negotiated with the student's CORE assistant dean.

Students electing to register for a research rotation will be expected to manage all aspects of their study. This may require the student to meet with other students, faculty, or support personnel from the CORE Research Office to discuss progress and problems. If needed, distance-learning equipment can be used to facilitate such meetings. Students will also meet regularly with their research advisor and their CORE assistant dean, to confirm that research goals are being met. Students are responsible for arranging any and all necessary meetings.

Selecting a Research Advisor

CORE assistant deans and/or personnel from the CORE Research Office can help students to identify and select a research advisor. In some cases, it may be determined that more than one advisor is appropriate (combining a content expert with someone who

has research expertise). The choice of a research advisor will be subject to the approval of the CORE assistant dean. The CORE Research Office maintains a centralized research database for the CORE system. Students interested in finding out what projects are currently underway at a given hospital should contact the CORE Research Office (coreresearch@oucom.ohiou.edu; 740-593-2380).

Completion Requirement

In order to receive credit for a research rotation, students must submit a final paper to the CORE Office. The purpose of this 3- to 5-page paper is to document the achieved learning objectives and/or pedagogical components of the research elective. Typically, this paper is independent of and in addition to the research paper resulting from the actual research.

Application and Registration Process for a Research Elective

Students planning to register for a research elective rotation are required to complete an application form, located under Item 4 at <http://ohiocoreonline.org/content/view/122/176/>. This application must include clear and explicit objectives that the student plans to achieve during the rotation.

Completed forms should be submitted to the following persons, in this order:

1. A mentor physician or advisor (signature required), and then to
2. The student's CORE Administrator (CA). The CA will process the request and will secure a signature from appropriate CORE assistant dean. If at any time during the registration/review process a request is denied, the student will be contacted. The CA will forward the application to the CORE Research Office, where a statistician will review the request. If approved, the CORE Research Director will sign the application and forward the submission to the Associate Dean for Pre-Doctoral Education. Upon the approval and signature of the Associate Dean, the student will be contacted by the CORE Research Office and permission to proceed will be granted.
3. The Associate Dean for Pre-Doctoral Education will forward a copy of the approved application to the Records Management Associate so that the student will be appropriately registered for OCOM 891.
4. Upon receipt of approval for a proposed research elective/rotation, students are required to register their projects/papers with the CORE data management system, located at <http://dbms.ohiocoreonline.org/mainersf.html>. All student-based research projects or scholarly works MUST be registered with the CORE data management system. This simple, online submission process usually requires about five minutes. Failure to do so may limit a student's access to research support services (such as statistical support, funding, poster design, etc.).

Requirements

In order to receive academic credit for any and all research rotations, students must

1. be in good academic standing,
2. meet all of the requirements for an elective rotation, and
3. submit a 3- to 5-page written paper to the CORE Office, outlining the research experience, objectives achieved, and educational value gained by the rotation. This

paper must be received within 2 weeks of the conclusion of the research rotation. If this paper is not submitted, a grade of “I” (Incomplete) will be earned for the rotation.

Students should begin the application process at least two (2) months prior to the academic quarter in which they intend to register, so that adequate time is allowed for processing, applying for, and registering the research rotation.

Types of Research

Students are allowed to design and implement retrospective and/or prospective research studies. Such works require the inclusion of a research mentor. A colorful graphic that outlines the various steps involved in clinical research can be accessed at <http://www.ohiocore.org/research/publications/OCCTICLifeCycleGraph.pdf>.

All research that involves living human subjects is required to be submitted to an institutional review board (IRB) for consideration. Such submission is neither optional nor negotiable. Students are strongly urged to contact the CORE Research Office for guidance regarding IRB submissions.

Retrospective research studies are based on data that already exist, such as medical records, surgical records, databases, or registries. Typically, retrospective studies qualify for a level of IRB review known as Exempt Status. Do not let the name fool you. Exempt Status does not mean that submission to an IRB is not required. Instead, it means that the proposed study will be reviewed in a significantly shorter amount of time than usually required for other studies. **Failure to properly route human-based research protocols through all applicable IRB offices can result in very serious consequences, such as prohibition of publication or public dissemination of research findings, loss of academic credit, and/or university sanctions.**

The following list of documents usually applies to retrospective studies. All materials should be routed through the CORE Research Office PRIOR to formal submission at any given hospital/site.

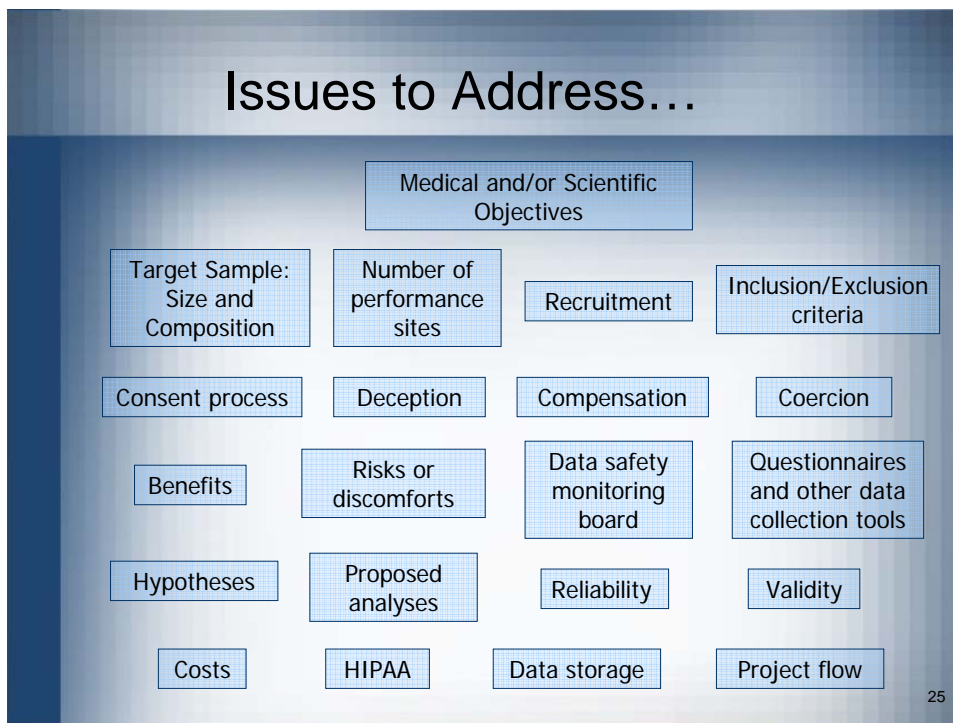
1. A valid and up-to-date certificate of IRB training for each and every member of a given research team is required prior to IRB review. Certificates are awarded upon successful completion of an online training program; the program is located at <http://www.ohiou.edu/research/compliance/citiprogram.html>. Typical time to complete this IRB training program is 2 hours.
2. A research protocol. Some IRBs don't require a formal protocol to be submitted...but many do. It is always better to have this document in place, whether required or not, because it helps guide the development of the planned research. A protocol is to a research project as a blueprint is to a building. It provides written documentation of every aspect of a planned study. Research protocols typically consist of three main sections: Introduction/Background, Methodology, and References. Additional information on these three sections is included later in this document.
3. An IRB application form for the hospital at which the data will be collected. A list of IRB forms for CORE hospitals is available under Section V at <http://ohiocoreonline.org/content/view/121/175/>. If your site is not listed, please contact the CORE Research Office for direction.
4. A data collection sheet. Typically, this document is created either in Excel (with

grid lines imposed) or Word (again, in grid format). The top row (along the top of each column) should correspond to each measure or variable mentioned in the protocol.

5. A copy of your hospital's HIPAA statement. This can usually be obtained from your hospital's Admissions Office. It usually is presented in the form of a pamphlet.

Prospective Research To obtain a list of required documents for a specific prospective research proposal, students are encouraged to contact the CORE Research Office. Required paperwork varies from project to project because of design differences and elements of risk. The following list of documents typically applies to prospective studies. This list is intended to give students an idea of the magnitude of the undertaking and is not complete.

1. A valid and up-to-date certificate of IRB training for each and every member of a given research team. These documents are required prior to IRB review. Certificates are awarded upon successful completion of an online training program; the program is located at <http://www.ohiou.edu/research/compliance/citiprogram.html>. Typical time to complete this IRB training program is 5 hours.
2. A complete research protocol. Samples of protocols can be requested from the CORE Research Office. Typical protocols consist of three sections: an Introduction, a section on Methodology, and a section of References. Issues that should be addressed in the Methodology section of a research protocol are presented in the following graph.



3. An IRB application form for the hospital at which the data will be collected. A

- list of IRB forms for CORE hospitals is available under Section V at <http://ohiocoreonline.org//content/view/121/175/>. If your site is not listed, please contact the CORE Research Office for direction.
4. IRB approval letters from all involved hospitals (once the project has been reviewed and approved).
 5. An IRB application form for review at Ohio University. This is required for ALL student-based research endeavors.
 6. Consent and/or assent forms, if relevant for the proposed research.
 7. Recruitment text and/or a recruitment plan, if applicable.
 8. Copies of surveys, questionnaires, tests or any other psychometric measurement instrument.
 9. A data collection sheet, if applicable. Typically, this document is created either in Excel (with grid lines imposed) or Word (again, in grid format). The top row (along the top of each column) should correspond to each measure or variable mentioned in the protocol.
 10. A copy of your hospital's HIPAA statement. This can usually be obtained from an Admissions Office. It comes in the form of a pamphlet.

Research Support Services

Students are encouraged to contact the CORE Research Office to inquire about funding possibilities. Applications for research funds can be made to the CORE Research Committee. For additional information, review Item 6 at <http://ohiocoreonline.org//content/view/123/177/>. Allowable expenses and funding guidelines, as well as step-by-step instructions for requesting funds are provided at this site.

Poster templates have been created and posted on the CORE Research website. These templates provide standard layout for research posters. Three different templates are located at <http://ohiocoreonline.org//content/view/123/177/>. Before a template can be used, it must first be downloaded and saved to a hard drive or other disk. Once saved, then text, photos, charts, and graphs can be entered into the template. When all additions have been made to the template, the new document must be saved before emailing to coreresearch@oucom.ohiou.edu. Your poster will be edited, printed, and mailed to you. There is no charge for these services.

The CORE Research Office is staffed to provide methodological, statistical and editorial support to CORE members (students, interns, residents, program directors, and CORE faculty). These services include, but are not limited to, the following: power analyses, research design strategies, statistical analyses and data interpretation, editorial services, and poster production. Students requiring any of these services are requested to contact the CORE Research Office as early into the research process as possible. These and other CORE support services are contingent upon projects being registered with the CORE data management system and being properly routed through the IRB process.