Biomedical Informatics Research Rotation Guidelines

Goals:

The goal of the research rotation is that PhD students gain exposure to various research opportunities available in the program. Some PhD students enter the program with no research experience. The purpose of the rotation is to provide them with insight into the research process early in the program before (or while) they begin taking a full slate of classes during the first two years. By the end of the second year in the PhD program, students should be ready to identify a mentor that they wish to work with. If the faculty member agrees to mentor the student, s/he should also have one or more ideas for a research topic that falls within the scope of that mentor's research.

Faculty members are not expected to train all students to make significant contributions to an existing project. Students will choose from one of three options depending on previous research experience, skills and qualifications. Through a series of benchmarks (see suggestions below), the students will have the opportunity to interact with faculty outside of the classroom and to learn how a project is designed and implemented. New PhD students are expected to participate in two research rotations during their first year.

Duration:

Each of the two rotations will last for one academic quarter. Even if students feel that they wish to base their dissertations on the first term's rotation, they are encouraged to complete the second rotation in order to gain additional training. If they wish to continue a rotation for an additional term, they will need to consult with the PhD Program Director. Students are encouraged to begin the first rotation (and register for BMI 601 Research Rotation) during the summer term preceding the first year of classes. This option is recommended for all PhD students so that they may gain early exposure to current project. In addition, their time will not be divided among the research rotation and a full-time schedule of classes as they are required to take only 5 credits summer terms.

Number of credits:

The student will register for 1-2 credits of BMI 601 Research Rotation each quarter and is expected to spend 3-5 hours per credit on the project. Students may participate in two research rotations at the same time during summer term. The number of Research Rotation credits during fall, winter or spring should not exceed a total of 2 since the student will be carrying a full course load. Students may take up to 5 credits of Research Rotation summer term if they are not taking any other classes.

Expectations:

All new PhD students will be required to attend faculty research presentations scheduled as part of the department's summer internship program. Students will also be provided with the *Faculty Research Interests* document to learn about current faculty research

projects. In addition, students will choose one from the following types of rotation, based on the student's prior research experience:

Option 1. Buffet – attending project team meetings, seminars and lectures to learn about a number of ongoing projects in the department. The research advisor for this option would be the advisor first assigned to the student upon matriculation.

Option 2. Shadowing – shadowing a faculty member as they work on a current project.

Option 3. Working on a project – if the student has the necessary qualifications to actively participate in a project upon entering the program, s/he will be matched with the appropriate mentor/project.

Students should schedule regular meetings with their research advisors at least one hour per week to gain an understanding of the research being conducted. This may include review of recent research, papers, goals of the project, design, methodology, or other topics as appropriate.

Deliverables:

Deliverables will vary by type of rotation (1, 2 or 3 above), will be determined in discussion between the advisor and the student and will be listed on the "50X/60X Form" before the term begins.

Possible assignments might include:

Option 1. Buffet –

- Complete Compass Responsible Conduct in Research (RCR) training: https://ohsu.csod.com/client/ohsu/default.aspx
- Review Modules 1-7, 9, 11, 13 of eIRB online training: http://www.ohsu.edu/research/rda/eirb/wbt/
- Scan IRB Manual: http://www.ohsu.edu/research/rda/eirb/docs/eIRB%20User%20Manual.pdf
- A short (one page) write-up summarizing each presentation attended.
- Conduct a literature search at the advisor's direction.
- A log of all activities, including date and name of activity.
- Others as determined by the advisor

Option 2. Shadowing –

- Review Modules 1-7, 9, 11, 13 of eIRB online training: http://www.ohsu.edu/research/rda/eirb/wbt/
- Scan IRB Manual: http://www.ohsu.edu/research/rda/eirb/docs/eIRB%20User%20Manual.pdf

- A short (one page) write-up summarizing each shadowing session.
- Include follow-up questions for subsequent meetings.
- Complete 2 or 3 short (2-3 page) writing assignments such as critiquing a recent journal article.
- Conduct a literature search at the advisor's direction.
- A log of all activities, including date and name of activity.
- Others as determined by the advisor

Option 3. Working on a project -

Review Modules 1-7, 9, 11, 13 of eIRB online training: http://www.ohsu.edu/research/rda/eirb/wbt/

- Scan IRB Manual: http://www.ohsu.edu/research/rda/eirb/docs/eIRB%20User%20Manual.pdf
- Complete 2 or 3 short (2-3 page) writing assignments such as critiquing a recent journal article.
- A final report on the research rotation experience.
- Create an outline of a project proposal.
- Conduct a literature search at the advisor's direction.
- Present a 20-minute summary of their experience with PowerPoint slides.
- A log of all activities, including date and name of activity.
- Others as determined by the advisor

Choosing a research advisor:

- Students selecting **Option 1** will be assigned an advisor upon matriculation. This faculty member will serve as the research advisor for Option 1. Students need to submit a signed "50X/60X Form" to the program coordinator prior to registration.

- Students selecting **Option 2** will review the *Faculty Research Interests* document and the *Research Rotation Projects* document to identify a mentor they would like to shadow. They then need to contact that faculty member asking to shadow them. When the student has found a faculty member who has agreed to act as a mentor for the term, students need to submit a signed "50X/60X Form" to the program coordinator prior to registration.

- Students selecting **Option 3** will be matched with an ongoing project based on their skills and experience. Students are also encouraged to contact other faculty members not included in the *Research Rotation Projects* who may have an available project. When the student has found a faculty member who has agreed to act as a mentor for the term, students need to submit a signed "50X/60X Form" to the program coordinator prior to registration.

Evaluations:

The research advisor will evaluate the student's participation in the research training process on a Pass/No Pass basis. Students are expected to keep scheduled appointments, maintain a log of activities, turn assignments in on time, and ask questions when they do not understand something. In addition to the grade, faculty will complete a one-page rotation form evaluating the student's capacities/participation in several activities. Students will review the evaluation and add their comments to the form. When the student and the research advisor have signed the form, they will submit it to the program coordinator.