

PharmD Honors Research Program Handbook (*Updated 09.18.23*)



Skaggs School of Pharmacy
and Pharmaceutical Sciences

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Introduction

The PharmD Honors Research Program (PHRP) of the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) aims to enrich the Doctor of Pharmacy (PharmD) curriculum by offering students the opportunity to design, execute, and present a research project. The PHRP is designed for select students of strong academic merit who choose to pursue a longitudinal research project in addition to the required curriculum. Students in the program complete *hands-on* original research using contemporary and advanced scientific methods under the direction and guidance of a faculty mentor. Students successfully completing the PHRP will be recognized at graduation on their transcript and diploma as having “Graduated with Honors in Research.” Students often find the PHRP to be an avenue towards expanded career opportunities and specialization.

Successful completion of the PHRP requires 300 hours of research, participation in yearly progress reports, a final presentation of research results, and a high-quality manuscript formatted to submit to a professional scientific journal. It is an expectation of the PHRP that the results of projects completed by the students within the program will contribute to poster and/or oral presentations given by the student at local and national meetings and/or will be included in a manuscript for publication in a professional scientific journal. However, the PHRP can still be successfully completed if the research results are negative or if the project goals change due to situations beyond the student and mentor’s control as long as all program requirements are met.

Program Goal and Objectives

Goal: To provide students who have demonstrated strong academic performance and motivation with an opportunity to expand their career options into pharmacy research.

Objectives of the program for eligible students are to:

- 1) Provide an opportunity for students to develop research skills through active participation in an original research project. These skills include, but are not limited to, research design, study execution, presentation and dissemination of results.
- 2) Enable students to receive individual mentorship in pharmacy research with faculty that align with the students’ interests and career goals.
- 3) Develop students’ independent creative and critical thinking by fostering analytical reasoning skills through applied research activities.
- 4) Enhance leadership by providing opportunities for students to cultivate their verbal and written scientific communication skills and presenting their research project as an oral presentation and written manuscript.

Program Administration

The program is administered by the PHRP Committee of the SSPPS under the guidance of the Associate Dean of Academic Affairs. Committee members include faculty members from the Departments of Clinical Pharmacy and Pharmaceutical Sciences.

Admission Eligibility Requirements

1. Academic, professional, and ethical standings meriting continuation in the professional PharmD program
2. Maintenance of GPA ≥ 3.0
3. Enrollment in the professional Doctor of Pharmacy program, including the North American or International Trained PharmD Pathways (NTPD, ITPD, respectively).

Students in their P1 and P2 educational years are encouraged to apply. Applications from students in their P3 or P4 educational years will be considered on a case-by-case basis by PHRP Committee. Students in their P3 and P4 educational years are required to clearly delineate that they will be able to satisfactorily complete the proposed research project by the presentation deadline (no later than March 15th of the P4 year) given the time commitment required.

Distance Degrees and Programs (NTPD, ITPD): Pharmacy students with GPA ≥ 3.0 after their first semester in any of the distance degrees and programs' PharmD curricular pathways (NTPD or ITPD) may be eligible for consideration for admission into the Honors Program. Due to the flexible nature of these pathways, students may qualify if their academic advisor deems them to have one year or more remaining in their curricular plan.

Eligible Projects

The project must be developed by the student in collaboration with the mentor. Both student and mentor must agree to the project topic and scope, timeline, expected outcomes, mentor-student responsibilities, and communication expectations.

The project may be in the disciplines of basic sciences, translational sciences, clinical sciences or practice, outcomes research, public health, healthcare administration, social sciences, or educational research as they relate to the field of pharmacy.

The project must encompass at least 300 hours of effort toward the research including, but not limited to literature search, submission of COMIRB requirements, data collection and interpretation, and writing of manuscript drafts. This 300-hour is equivalent to ~10 hours of work per week for two semesters. Completion of projects must be feasible for this time frame.

Project Funding Limitations

A PHRP student or project may receive funding from merit-based fellowships or scholarships. However, a PHRP student may NOT receive personal remuneration for conducting a PHRP project. For example, a student cannot be paid by an employer/preceptor for time spent on the research project.

Program Completion Requirements

The PHRP Committee is responsible for designating that a student has successfully completed the requirements of the program.

The requirements for completion of the PharmD Honors Program include:

- 1) Student has maintained a GPA ≥ 3.0 .
- 2) Student is not under review by the Scholastic Appeals and Advancement Committee and/or has not been found to have violated the Student Ethics and Conduct code by the Student Ethics and Conduct Committee.
- 3) Student has completed a PHRP project as certified by the PHRP Committee as outlined under Student Responsibilities.

Student Responsibilities

1. **Identification of faculty mentor:** It is the responsibility of the student to identify a faculty mentor to facilitate the development of the Honors Research Project.
 - a. Prospective students can review the faculty profiles on the SSPPS website to identify potential faculty mentors in their research area of interest.

- i. SSPPS faculty members are not obligated to accept students. Therefore, it may take discussion with multiple faculty members to successfully identify a mentor.
 - ii. If a prospective student is interested in performing the PHRP research project under the guidance of an external preceptor or faculty member with a primary appointment in another school on campus, the student must identify a faculty mentor from the SSPPS faculty to serve as a liaison for the project.
 - iii. If the prospective student is unable to identify a faculty mentor, they may seek guidance from the PHRP Committee. However, there is no guarantee that the committee will successfully identify a mentor.
2. **Project development:** It is the responsibility of the prospective student to work with the faculty mentor to develop the PHRP research project from its inception to completion. The student is responsible for taking primary ownership of the project.
 - a. Projects must align with both the faculty mentor and prospective student's research interests.
 - b. The student must develop a research project jointly with the mentor, including a project proposal.
 - i. The project may be a small, independent project or the project may contribute to a larger project within the faculty mentor's research.
 - ii. The project proposal must be written by the student and include a research proposal, a timeline for completion, and a letter from the mentor(s) regarding their willingness to participate in the project (see Honors Project Proposal template).
3. **Submission and Review of Project Proposal:** It is the responsibility of the student to submit a complete project proposal to the PHRP Committee.
 - a. **Submission timeline:** PHRP Proposals are accepted for review on a rolling basis.
 - b. **Notify PHRP Chair:** The student must email the PHRP Chair at SOP-pharmd.honorsresearch@cuanschultz.edu regarding their interest to participate in the PHRP. The Chair will grant the student access to the PHRP Canvas page where the student can upload the project proposal.
 - c. **Review process:** The PHRP committee will review the proposal using an evaluation rubric (see Appendix A) and provide comments within 2 to 4 weeks of receiving the proposal.
 - i. There are three possible outcomes:
 1. Accept – student can begin the PHRP Project immediately.
 2. Revise – student and mentor need to revise the project proposal for re-evaluation after addressing comments from the PHRP committee.
 3. Reject – student and mentor need to modify the project to align with the PHRP requirements, improve the feasibility of the project, or provide more contextual information in the project proposal before resubmission to the PHRP committee.
 - ii. If a revision is requested, the student and mentor have 2 weeks to resubmit the proposal. If the revision is not submitted, the student is not accepted into PHRP, and their application will be considered withdrawn.
4. **PHRP Project Progress:** It is the student's responsibility to work with their faculty mentor to ensure adequate progress is made on the project.
 - a. The project must be completed with a final manuscript submitted, and final presentation given **no later than March 15th of the P4 year (or final APPE year for NTPD/ITPD students)**. Students are encouraged to present their completed projects earlier.
 - b. **Electives Available for Completing Research:** The PHRP student is encouraged to use electives to complete the research projects. Options include:
 1. P4 (or NTPD/ITPD equivalent) APPE elective rotation as research elective
 2. Enrollment into an Honors Thesis Study Course (when available)
 3. Both 1 & 2
 - c. **Communication with the Project Mentor:** The student is expected to maintain communication with the PHRP project mentor on a regular basis, respond to the mentor in a timely manner, and communicate with the mentor to discuss any difficulties with the completion of the PHRP project.
 - d. **Communication with the PHRP Committee:** The student will be assigned a PHRP committee member who functions as a liaison between the student and the PHRP committee. Students are expected to respond to the committee member in a timely manner and reach out to the committee member should difficulties arise with the completion of the PHRP project.

- e. **Maintaining PHRP Eligibility:** The student is required to meet the criteria below to participate in the PHRP program. Failure to maintain these criteria will lead to dismissal from the PHRP program.
- i. Enrollment in the Doctor of Pharmacy program.
 - ii. Maintenance of a GPA ≥ 3.0
 1. Students placed on academic probation or are suspended by the Scholastic Appeals and Advancement Committee will be dismissed from the program and will not be allowed to re-enroll.
 - iii. Maintenance of academic, professional and ethical standards in accordance to the requirements of the PharmD program.
 - iv. Attendance and participation in PHRP meetings and presentations during P1-P3 year (or NTPD/ITPD equivalent)
 - v. Evidence of satisfactory progress on the PHRP project as evaluated from research-in-progress reports, discussion with the PHRP mentor, and/or the PHRP committee.
- f. **Required Milestones:**
- i. **PHRP Research-in-Progress (RIP) Report:** The student will submit a RIP report every fall and spring semester while the project is active (see Appendix B report template).
 - ii. **PHRP RIP Presentation:** The student will provide a RIP presentation every fall semester while the project is active. The student's mentor, other PharmD students (P1-P3s, NTPD/ITPD) and faculty are invited to attend the RIP presentation.
 - iii. **PHRP Student-Mentor Relationship Evaluation:** The student and mentor will complete a student-mentor relationship evaluation every fall and spring semester. This includes an evaluation of their communication, and any challenges encountered. All responses will remain confidential within the PHRP committee.
 - iv. **Attendance of final Project Presentations:** The student is required to attend at least one final project presentation by other PHRP students during their P1-P3 educational years. This allows the student to see examples of final project presentations delivered.
 - v. **Final Manuscript Submission:** The student is required to submit a final manuscript in a publishable format at least 2 weeks prior to their final presentation (**no later than March 1st of their P4 educational year**)
 1. Examples of successful PHRP Project Manuscripts are available in Canvas.
 2. The final manuscript needs to be in an appropriate format for submission to a professional scientific journal. The student will work with the mentor to decide an appropriate target journal for formatting purposes.
 3. The student will be the primary writer of the manuscript and is expected to obtain feedback on the manuscript content from the mentor.
 4. The final manuscript will be evaluated by the PHRP committee using an evaluation rubric (see Appendix C).
- g. **Final PHRP Project Presentation:** The student is responsible for formally presenting their completed Project no later than March 15th of the P4 (or NTPD/ITPD equivalent) educational year.
1. Other faculty, and PharmD students are invited to attend the final presentation.
 2. The presentation is required to be in an appropriate format for a professional presentation.
 3. The presentation length is no longer than 20 minutes and contain the following information:
 - a. Background
 - b. Premise/Hypothesis/Question
 - c. Methods including statistical analysis
 - d. Results
 - e. Interpretation/Discussion
 - f. Strengths and limitations of the study
 - g. Conclusion
 - h. Future Directions
 - i. Reflections on Participating in PHRP
 - i. Thoughts about study timeline
 - ii. Accomplishments

- iii. What was learned during PHRP experience
 - iv. What would be done differently if one could start again
 - j. The student is expected to have received feedback on the presentation format and content from their mentor(s) prior to the final presentation.
- 4. The student is expected to be thoroughly knowledgeable about the PHRP research project, including, but not limited to, the premise of the research, how the research was performed, the data that was generated and interpreted, development of conclusions and future directions, etc.
- 5. The presentation will be evaluated by the committee using a rubric (see Appendix C)
- 5. PHRP Withdrawal:** The student is responsible for communicating their decision to withdraw from the PHRP program in writing to the PHRP Committee Chair and their PHRP faculty mentor.
 - a. The student is encouraged to discuss challenges with completing the PHRP project and reasons for withdrawal with their PHRP Committee faculty liaison or PHRP Committee Chair as well as the PHRP mentor before formally withdrawing from the PHRP.
 - b. If the student decides to withdraw from the PHRP program, they expected to communicate this decision with the PHRP mentor verbally as a professional courtesy before ending the research project.

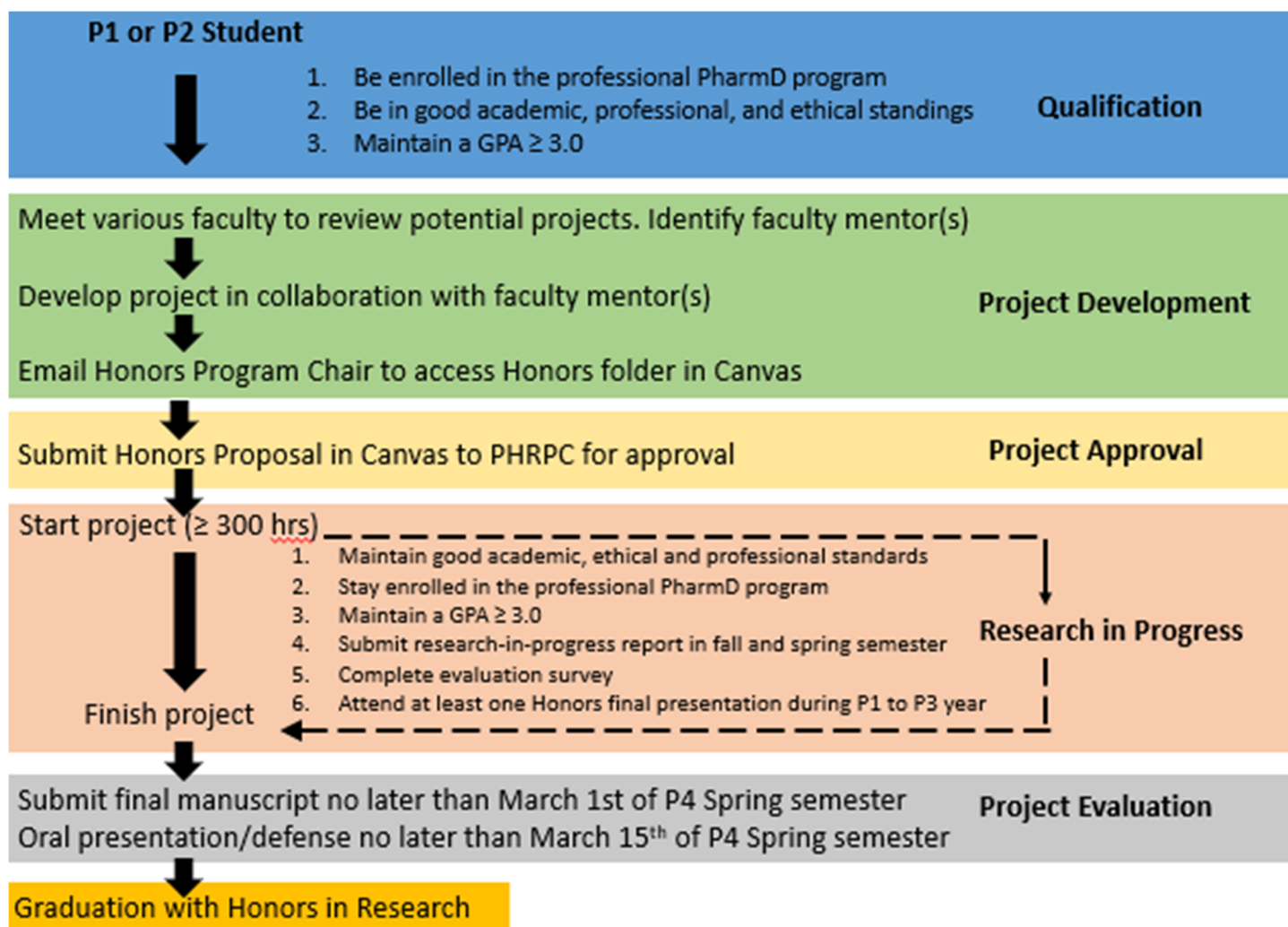
Mentor Responsibilities

- 1. Commitment to PHRP Student:** The mentor is expected to support the research goals of the PHRP student mentee throughout the duration of the project.
 - a. This commitment includes regular meetings with the student in-person or via zoom; provide timely, frank, honest, and constructive feedback; respecting the student's limited knowledge of research and educational responsibilities; willingness to teach research concepts; and respectfully working through conflict.
 - i. SSPPS faculty are not obligated to accept PHRP students. If the mentor feels like they cannot commit appropriate time and/or resources to a PHRP student, it is their prerogative not to do so.
- 2. Project Development:** The mentor is expected to work with the student to develop the research project. The student is responsible for taking primary ownership of the project, but the mentor must be involved with the project from its inception to completion.
 - a. Projects must align with both the faculty mentor and student's research interests.
 - b. The student must develop a PHRP research project with the mentor, including a **project proposal**.
 - i. The mentor is expected to provide guidance on crafting a research project and writing the research proposal.
 - a. the project may contribute to a larger project within the faculty mentor's research. As the student is new to research, the mentor should guide the student in designing a project that can be realistically completed within ~300 hours.
 - ii. The mentor is expected to write a letter of support, expressing their approval of the project proposal and willingness to commit to mentoring the student for the project duration.
- 3. Communication with PHRP Student:** The PHRP Mentor is expected to make a good faith effort to maintain communication with the PHRP student.
 - a. The mentor is expected to clearly define and articulate expectations for effort on the research project to the student. These expectations must be clearly outlined in the PHRP Project Proposal timeline and/or letter of support.
 - b. The mentor is expected to provide frank, honest, and constructive feedback to the student regarding their research proposal, research progress, final manuscript, and final PHRP project presentation.
- 4. Communication with PHRP Committee:** The PHRP mentor is expected to inform the PHRP Committee Chair of on-going and unresolved challenges with completing the PHRP project as soon as problems present themselves.
 - a. These include, but are not limited to, poor communication, lack of effort, missing important meetings by the student etc.
 - i. The PHRP Committee reserves the right to review the progress of PHRP projects and decide whether the project should be terminated.

5. **PHRP Project Progress:** The PHRP mentor is expected to contribute to and attend all PHRP student progress milestones.
- a. **Assessment of Project Goals:** The mentor is expected to periodically re-evaluate the project goals to ensure it continues to be feasible within 300 hours of student effort, it can be completed within the proposed timeline, and is the best use of their PHRP research experience.
 - i. The mentor is expected to make a good faith effort to provide the student with a project that can be completed, even if it requires a change in research question.
 - 1. Changes to the research project and the reasoning behind the changes needs to be clearly communicated to the PHRP student and the PHRP Committee Chair.
 - b. **Research-in-Progress (RIP) Report:** The mentor is expected to contribute to and verify the information within the RIP report submitted while the PHRP project is active.
 - c. **Research-in-Progress Presentation:** The mentor is expected to attend the student's RIP presentation(s) while the PHRP project is active.
 - d. **PHRP Project Mentoring Relationship Evaluation:** The mentor is expected to complete a student-mentor evaluation every fall and spring semester while the PHRP project is active. All responses will remain confidential by the PHRP committee.
 - e. **Final Manuscript Submission:** The mentor is expected to provide guidance to the student in writing a quality manuscript in an appropriate format for submission to a professional journal.
 - i. The manuscript is due at least 2 weeks prior to the final presentation (**no later than March 1st of the P4 (or NTPD/ITPD equivalent) educational year**)
 - ii. The manuscript will be evaluated by the PHRP committee using an evaluation rubric (see Appendix C).
 - iii. The mentor is expected to make a best faith effort to aid in the completion of the manuscript, but it is the student's responsibility to write and submit the manuscript to the PHRP committee in a timely manner.
 - f. **Final PHRP Project Presentation:** The mentor is expected to provide guidance to the student in crafting and giving a professional presentation.
 - i. The presentation must be completed **no later than March 15th of the P4 (or NTPD/ITPD equivalent) educational year**
 - ii. The presentation will be evaluated by the PHRP committee using an evaluation rubric (see Appendix C)
 - iii. The mentor is expected to make a best faith effort to aid in the crafting of the presentation, but it is the student's responsibility to deliver the final presentation to the PHRP committee.
 - f. **Final Mentor Project Evaluation:** The mentor is expected to fill out the Project Mentor Evaluation Form prior to the student's final presentation for the committee to take into consideration when deliberating about the student's evaluation towards achieving Honors for Research.

Figure 1: Schematic representation of the process to participate in PHRP

PHRPC = PharmD Honors Research Program Committee



Application Guidelines and Requirements

Step 1: Brief Email Letter of Intent

Students interested in applying to the PHRP should submit a brief letter of intent/interest to SOP-pharmd.honorsresearch@cuanschutz.edu that contains the following information:

- Student name
- Year in school, program
- Faculty mentor name
- Research proposal title

Once received, the student will be given access to the PHRP Canvas site where complete program information can be found, and proposals are to be submitted (see below).

Step 2: Full Application Proposal

All applications should be uploaded to the PHRP Canvas site by the stated deadlines. Applications must include:

- ☐ **A 1-to-2-page cover letter** written by the student delineating the students goals and objectives (short- and long-term) for pursuing the PHRP, the student's qualifications for the program, and a brief explanation of the project and the name of the project faculty mentor.
- ☐ **A brief letter of support from the SSPPS project faculty mentor** indicating a willingness to supervise the student for the project and a declaration confirming the availability of adequate resources for completion of the project and that the project can be reasonably completed in the time (dates) proposed by the student.
- ☐ **Research proposal** (using the Research Proposal Template) outlining the PHRP project, that includes the following sections:
 - **(Page 1) Title Page:** lists the title of the research project, the PHRP applicant's name and expected graduation year, the name of the faculty mentor(s), and report date (or date of revised proposal if applicable); and a summary statement (a two-sentence description of the purpose of the research)
 - **(Page 2) Abstract:** a 250-word summary of the project.
 - **(Pages 3-6) Research Proposal:** includes the following sections and is appropriately cited using appropriate scientific citation style-
 - **Introduction/Background:** provides background detail regarding what is known on the subject, why the study is important, what relevant work has been reported in the literature, and what is the gap in the field will be addressed by the study. At the end of the Background section, the purpose of the study should be clearly stated in bold font. This section should include references using appropriate scientific citation methods (e.g., AMA format).
 - **Specific Aims and Hypotheses:** a list of objectives that your research will seek to address and hypotheses accompanying these objectives.
 - **Study Methods:** a description of the methods that will be used to address the aims of the project, including inclusion/exclusion criteria (if applicable), data endpoints and data collection methodology, and planned statistical analyses.
 - **Anticipated Results:** provides a description of the anticipated results, and potential pitfalls/limitations and alternative approaches should be discussed in this section.
 - **Study Importance/Innovation:** a description of what the research hopes to achieve, why the research is important, and how it will add to the body of knowledge.
 - **References:** a list of references that have been cited in the proposal (not included in the 3-to-4 page limit).
- ☐ Student project responsibilities must be clearly delineated in a separate paragraph.
- ☐ If additional individuals/collaborators will be involved in the project (e.g., graduate students, PRAs, post-docs, statistician, other collaborators, etc.), the student must list the names of the involved individuals and provide a brief description of their roles in the project.
- ☐ A study timeline for project completion that indicates quarterly milestones and proposed dates of project commencement and completion.

- Appendix A: Project proposal evaluation form used by the PHRP Committee to review the project
- Appendix B: Research-in-progress report submitted by the student
- Appendix C: Final manuscript and final presentation evaluation form

PharmD Honors Research Proposal Template

(Page 1)

Project Title:

PharmD Honors Research Program candidate:

Expected graduation year:

Faculty mentor (s):

Dates of study: MM/YY to MM/YY

Report date: (or date of revised proposal if applicable)

Study summary statement:

(Page 2)

Abstract: a summary of the project (250 words maximum)

(Page 3-6)

Research Proposal

Introduction/Background

Provides background detail regarding what is known on the subject, why the study is important, what relevant work has been reported in the literature, and what is the gap in the field that your study will address. At the end of the Background section, the purpose of the study should be clearly stated in bold font. This section should be referenced using appropriate scientific citation methods (e.g., AMA).

Specific Aims and Hypotheses: (Maximum of 3 aims)

Include a list of aims that your research will seek to address and hypotheses accompanying these aims.

Study Methods:

Include a description of the experimental approaches/methods that will be used to address the aims of the project. This section should include a data analysis plan and description of how the data will be analyzed (e.g., proposed statistical analysis). For clinical-based projects inclusion/exclusion criteria should be described and if patient numbers for meaningful statistical analyses will be met. For laboratory-based projects a description of techniques and assays that will be used to address the research objectives should be provided.

Anticipated Results:

Include a description of the anticipated results, and potential pitfalls/limitations and alternative approaches.

Study Importance/Innovation:

Include a description of what the research hopes to achieve, why the research is important and how will it add to the body of knowledge.

References:

Include a list of references that have been cited in the proposal (Pages devoted to this section are not included in the 3-to-4 page limit).

Student Responsibilities:

Student must clearly delineate their expected responsibilities throughout the project in a separate paragraph.

Other Collaborators

Student must list the names of other individuals/collaborators (e.g., graduate students, PRAs, post-docs, statistician, other collaborators, etc.) involved in the project and provide a brief description of their roles in the project.

Study Timeline (anticipated):

Include a study timeline for project completion that indicates quarterly milestones and proposed dates of project commencement and completion.

Example of a study timeline:

Date	Activity
MM/YY to MM/YY	COMIRB submission
MM/YY to MM/YY	Patient recruitment
MM/YY to MM/YY	Data collection
MM/YY to MM/YY	Statistical analysis
MM/YY to MM/YY	Write up manuscript
MM/YY	Submit final manuscript
MM/YY	Project presentation
Fall YY	Research in progress report and presentation
Spring YY	Research in progress report

Appendix A: Project Proposal Evaluation Form

PharmD Honors Research Program: Proposal Evaluation Form

To be filled out by PharmD Honors Research Project committee member

Student Name _____ (Class of **)
 Project Title _____
 Project Mentor _____

Overall Recommendation: The proposal should receive 3 or higher rating for each point of the six criteria listed below to be acceptable as is or with revision.

1. Strongly Disagree (SD) (Poor/Unacceptable Performance, Failure)
2. Disagree (D) (Barely Acceptable/Substandard Performance)
3. Mildly Agree (MiA) (Average/Acceptable Performance)
4. Moderately Agree (MA) (Good/Above Average Performance)
5. Strongly Agree (SA) (Outstanding/Excellent Performance)

PHARMD INVESTIGATION RESEARCH PROPOSAL

	SD	D	MiA	MA	SA	N/A
	1	2	3	4	5	
Student adequately describes the background and significance of the project.						
Student clearly states the specific aim(s) and hypotheses (questions) for each aim						
The study design and methodology are sound scientifically and justified adequately						
Plan for interpretation of results and conclusions are clearly presented.						
Proposed student responsibilities and efforts are appropriate						
The quality and quantity of the written proposal is adequate						
Proposal reflects the student's work						
Timeline for completion is appropriately defined and is reasonable						

Evaluator Comments (Please comment on strengths, weaknesses, any areas that need to be addressed, etc.)

Proposal Decision: (highlight one): Accept /Revisions Required / Reject

Evaluator Name: _____

Date: _____

APPENDIX B: RESEARCH-IN-PROGRESS REPORT

Research In Progress Report: MM/YY
(Maximum 2 pages)

Student Name: (Class of **)

Faculty Advisor(s) Name:

Co-investigator (if applicable):

Study Title:

Report Date:

- I. Progress**
- II. Reflection on Study Aims**
- III. Reflection on Successes to Date**
- IV. Reflection on Barriers/Challenges Affecting the Study (if applicable)**
- V. Thinking Ahead/Future Directions**

APPENDIX C: FINAL MANUSCRIPT AND FINAL PRESENTATION EVALUATION FORM

PharmD Honors Research Project Final Manuscript and Presentation/Defense Evaluation Form

To be filled out by PharmD Honors Research Project committee member

Student Name: _____ (Class of **)
 Project Title: _____
 Project _____
 Mentor(s): _____

Overall Recommendation: The proposal should receive 3 or higher rating for each point of the six criteria listed below to be acceptable as is or with revision.

1. Strongly Disagree (SD) (Poor/Unacceptable Performance, Failure)
2. Disagree (D) (Barely Acceptable/Substandard Performance)
3. Mildly Agree (MiA) (Average/Acceptable Performance)
4. Moderately Agree (MA) (Good/Above Average Performance)
5. Strongly Agree (SA) (Outstanding/Excellent Performance)

PHARMD HONORS RESEARCH PROGRAM: FINAL MANUSCRIPT EVALUATION

	SD	D	MiA	MA	SA	N/A
	1	2	3	4	5	
Student submitted written report 2 weeks before oral presentation/defense						
Student's written report is of high quality and in a publishable format						
Student adequately describes the background and significance of the project.						
Student clearly states the specific aim(s) and hypotheses (questions) for each aim						
The study design and methodology are sound scientifically and justified adequately						
Student presents results, interpretation of results and conclusions in logical and comprehensive manner						
Student appropriately reflects in Discussion section the impact of results, interpretation of results, strengths/limitations, and future directions						

Evaluator Comments (Please comment on strengths, weaknesses, any areas that need to be addressed, etc.)

PharmD Honors Research Program: Final Presentation

	SD	D	MiA	MA	SA	N/A
	1	2	3	4	5	
Student's presentation/defense is of high quality and presented professionally						
Student adequately describes the background and significance of the project.						
Student clearly states the specific aim(s) and hypotheses (questions) for each aim						
The study design and methodology are sound scientifically and justified adequately						
Student presents results, interpretation of results and conclusions in logical and comprehensive manner						
Student appropriately reflects on the impact of results, interpretation of results, strengths/limitations, and future directions						
Student appropriately answers all questions						
Overall involvement of student and student knowledge of research is evident						

Evaluator Comments (Please comment on strengths, weaknesses, any areas that need to be addressed, etc.)

Overall Determination (highlight one)

- ☐ **Student Successfully Met Program Requirements**
- ☐ **Student Did Not Meet Program Requirement**

Evaluator Name:

Date: