## Department of Pharmaceutical Sciences Doctoral Dissertation Proposal, Northeastern University

Proposal Title (do not exceed 100 characters including spaces and punctuation):

Presented by: , Candidate

Date to be presented: Time & Location:

This completed document should be distributed to your committee at least 2 weeks prior to the event. For official proposal approval form, please visit the Bouve Current Student Resources Forms Sharepoint (link <u>here</u>)

Dissertation Committee Members:

Chair	
Member	
Member	
Member	
Member	

Submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree

Description. Using the space below, describe the proposal's long-term objectives and specific aims, making reference to its health relatedness. Concisely describe the research design and methods for achieving these goals. Don't exceed the space provided using single-spaced 11-point font.

#### Table of Contents

Title Page and Description	. 1
Resources Available (may be up to 2 pages)	.3
Biographical Sketch	.4
Committee Roles	.4
Research Plan	. 5
Item A, Specific Aims (recommended 2 page maximum)	. 5
Item B, Background and Significance (recommended 4 to 6 page maximum)	. 5
Item C, Preliminary Results (recommended 12 to 16 page maximum)	. 5
Item D, Proposed Studies (recommended 24-32 pages, the totals of Items A-D cannot exceed 50 pages)	. 5
Item E, Bibliography (no page limit) Appendix 1: Publications/abstracts (optional) Appendix 2: Full-sized figures (with legends) or tables if needed Additional Appendices as needed for Animal use, Radioisotopes, Recombinant DNA, and/or Human Subjects	. <b>5</b> 5 5
rinal Appendix. Laboratory Salety framing (Required)	

#### Resources available for this project:

(You may use up to two pages for this part)

Laboratory space (Briefly describe the facilities, their location, and equipment available to you to perform this project):

Animals (If your project involves live animals, please provide an estimate of the numbers used for each species, and state that you have the proper training or will have completed your training before starting your experiments):

Radioisotopes (If your project involves the use of ionizing radiation, briefly document your training here):

Recombinant DNA (If your project involves the use of recombinant DNA, briefly describe how these reagents will be used, and state that you have the proper recombinant DNA and autoclave training):

Human Subjects (If your project involves human subjects, briefly describe how and indicate what training you have or will receive to perform your studies):

Laboratory Safety (State that you have received Laboratory Safety and Chemical Hygiene training):

# Biographical Sketch

List your prior Education, starting with the names and locations of your High School, College, and other Post-Baccalaureate Education, if any. For college and post-baccalaureate studies, indicate your majors.

List any awards and/or honors (optional)

List any publications or abstracts with you as an author (optional)

## Committee Roles

List the members of your dissertation committee, their academic affiliations, and indicate what role you expect each member to play in your dissertation work. (Note that "Reader" is an acceptable response, but if you anticipate a larger role for a member, please briefly describe what that role might be). You may use more pages if needed to complete this part. Note that at least one member must be outside the Department of Pharmaceutical Science. For instructions on how to choose the committee, please review the guidelines on the course catalog (link here).

	Name	Academic Affiliation	Role
Chair:		Department of Pharmaceutical	Provides laboratory & supplies,
		Sciences, Northeastern University	mentoring, chair of my committee, and
Member:			

# Research Plan

Instructions: Organize Items A-D to answer the following questions: What are you proposing to do? Why is the work important? What has already been done? How are you going to do the work? Restrict Items A-D to 50 pages, double spaced, 1/2-inch margins and include a legible copy of all tables and figures with legends within this page limit. Full-sized tables and figures (with legends) may be included in the appendices. Typing must be using a 11-point font with no more than 18 characters per inch (Arial recommended). The font in figure legends may be reduced but must be legible (No less than 8-point fonts allowed for the final reduced size)

Item A, Specific Aims (recommended 2 page maximum). List the broad, long-term objectives and the goal of the specific research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.

Item B, Background and Significance (recommended 4 to 6 page maximum). Briefly sketch the background leading to the present application, critically evaluate existing knowledge, and specifically identify the gaps that the project is intended to fill. State concisely the importance and health relevance of the research described in this application by relating the specific aims to the broad, long-term objectives. If the aims of the application are achieved, state how scientific knowledge or clinical practice will be advanced. Describe the effect of these studies on the concepts, methods, technologies, treatments, services or preventative interventions that drive this field.

Item C, Preliminary Results (recommended 12 to 16 page maximum) Use this section to provide an account of the investigator's preliminary studies pertinent to this proposal.

Item D, Proposed Studies (recommended 24-32 pages, the totals of Items A-D cannot exceed 50 pages). Describe the research design conceptual or clinical framework, 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 new methodology and its advantage over existing methodologies. Describe any novel concepts, approaches, tools, or technologies for the proposed studies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. As part of this section, provide a tentative sequence or timetable for the project. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised.

Although no specific number of pages is recommended for the Research Design and Methods section, be as succinct as possible. There is no requirement that all 50 pages allotted for items A-D be used, but if you have unused space, try to maximize any figures or tables for legibility.

Item E, Bibliography (no page limit) Use a consistent style with complete references that will allow finding the article or book. Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. Make sure that all references in Items A-E are included in the bibliography and that all items in the bibliography are referenced. The use of Endnotes or Reference Manager software is recommended.

Appendix 1: Any abstracts, published papers or manuscripts submitted or in preparation related to this proposal. Appendix 2: Full-sized figures (with legends) or tables if needed

Additional Appendices as needed for Animal use, Radioisotopes, Recombinant DNA, and/or Human Subjects Final Appendix: Laboratory Safety Training (Required)