

**The University of Texas MD Anderson Cancer Center UTHealth
Graduate School of Biomedical Sciences**

Petition to Candidacy for the Master of Science Degree

Instructions to Students

When to file

- End of your 1st year **OR** when the minimum of 6 SCH of Research in Biomedical Sciences has been satisfied;

This petition should be submitted after you have:

- identified, in conjunction with your Advisory Committee, a research problem suitable for a Master's level thesis;
- identified all course work to be included in the M.S. degree program;
- met formally* with your Advisory Committee and obtained their approval of your program of work and thesis topic.

*Note This form can be submitted following your first Advisory Committee Meeting or following satisfaction and approval of the committee's recommendations for your thesis project.

This petition must be submitted to the Office of Academic Affairs, GSBS, BSRB 3.8344, within two years of admission to the M.S. or Ph.D. program. You will not receive credit for any thesis work until you have been admitted to candidacy.

Instructions

- Complete the section on page 1 of the petition concerning your Program of Work, prepare the summary describing your thesis research (page 2), and sign the Student Code of Conduct Acknowledgement and Pledge (attached to this form).
- Return a copy of the entire petition, signed by the Advisory Committee Chair, to the Office of Academic Affairs.

Outcome

The Assistant Dean of Academic Affairs will certify the petition and forward it to the members of the Academic Standards Committee for consideration at the next scheduled meeting of the Committee. If your petition is approved you will be notified shortly after the meeting that you have been admitted to candidacy.

TEMPLATE FOR SPECIFIC AIMS PAGE FOR PETITIONS FOR CANDIDACY

Specific Aims

Title of Project

Your name

Advisor's name

(I) Approximately 1/3 of a page of **background and significance**. In this section of the Aims, you should cite important references, and perhaps findings from your own laboratory, to indicate what is known about your particular field of study, what is not known, and what you plan to uncover as part of your research. The inclusion of irrelevant information is not necessary, so, therefore, your ability to read the literature and discern what are important publications, findings, etc. is crucial to your training.

(II) A very clearly stated **hypothesis**, best set apart by bolding or underlining. You may have a hypothesis for each aim or one overarching hypothesis. If the latter, include it at the end of the background and significance. Suitable language may be, "We hypothesize that the xyz protein acts as a negative regulator of apoptosis in pancreatic cancer cells". The hypothesis need not be longer than 1-2 sentences.

(III) Clearly stated **specific aims**, set apart by numbering, and perhaps bolding or underlining. Aims are usually one sentence in length, should always be based on the hypothesis, and are written in the format of a standard grant, e.g. "To determine..", "To quantify..", "To assess..", etc. Writing specific aims is not only good science, but is an art form. Being able to write good specific aims may put you in good stead if and when you ever write a grant, and so you should begin learning how to write them at this training stage. Good aims are neither too vague or too narrow. A good specific aim should describe science that would take a year to accomplish (on average). Too vague might be, "To characterize the interactions of the XYZ protein with cellular proteins during apoptosis." This could easily take *quite* a long time (i.e. years). Remember that those who evaluate your aims are quite experienced in science, and so easily understand how long good science takes to accomplish. The NIH will simply not fund you for a three year grant if each aim realistically would take 5 years to accomplish! Similarly, too narrow might be, "to determine if the XYZ protein can be observed on Western blots using the Y21 antibody." Realistically, the latter should take a few weeks, and so is not a suitable aim as much as a technique. A technique is not an aim, unless it is the development of a totally novel technique for your field of study, and even then it is usually not a good aim (the NIH usually wants you to develop the technique before you write the grant!). I cannot stress enough that learning to write good specific aims is vitally important to your future career, whether it be in academia or industry. It is worth spending considerable time writing the best aims. Dean Stancel, who is outstanding at writing grants, has stated repeatedly that he often spends two weeks on the specific aims portion of a grant alone—they are well worth that investment of time!. Usually the first thing a reviewer looks at when you submit a grant is your aims. If they are not suitable, he/she knows that the rest of the grant will also not be suitable, and your grant will receive a lower score.

(IV) **Brief methodology**. After each aim, give a very brief description of how you plan to accomplish the aim. For example, saying, "We shall spin cells at 10,000 x g, and re-feed them with serum-free medium for 24 hours." is too detailed. Better: "Cultures shall be metabolically labeled and radioactively labeled protein populations determined by gel electrophoresis and autoradiography." This is perhaps the least important part of the Specific Aims page, but should not be overlooked. The Academic Standards Committee wants to know that you know how to do your project.

Also:

This page should be typed in 11 or 12 size font

This portion of the petition should be limited to one page!

References are not necessary

The ASC dislikes the absence of a clear hypothesis, confusing or unclear writing, aims that do not clearly result from the hypothesis, the absence of methodology, and specific aims that run to more than one page.

Approvals

Name of student: _____

Advisory Committee Chair:

The Committee members indicated below met on _____(date) to consider the M.S. candidacy petition submitted by the student named above. The Committee has considered the student's program of work and research proposal and has found them appropriate for the M.S. degree. The Committee recommends the student be admitted to candidacy for the M.S. degree, and approves the composition of the Supervisory Committee as listed on page 3 of this petition.

Advisory Committee (names to be listed by student or Chair)

Approved, Advisory Committee Chair

Date

For students in the Medical Physics Program:

The Medical Physics Program Steering Committee has approved the program of work, the thesis proposal, and the composition of the Supervisory Committee for the student named above and recommends admission to candidacy for the Master of Science Degree in Biomedical Sciences.

Approved, Steering Committee Chair

Date

Assistant Dean of Academic Affairs:

I certify that the records contained in the Program of Work are correct and the proposed Program of Work satisfies all requirements for the Master of Science degree program.

Approved, Assistant Dean for Academic Affairs

Date

Academic Standards Committee Chair:

The Academic Standards Committee has approved the program of work, the thesis proposal, and the composition of the Supervisory Committee for the student named above and recommends admission to candidacy for the Master of Science Degree in Biomedical Sciences.

Approved, Academic Standards Committee Chair

Date

Return to Office of Academic Affairs, GSBS, BSRB 3.8344

**Code of Conduct for Students of the
Graduate School of Biomedical Sciences**

PRINCIPLES

Scientific research is the search for truths about our physical and natural world. This search can succeed only if it is carried out with the highest levels of integrity and honesty. Simply put, the search for truth must itself be truthful.

These same principles apply to students preparing for careers in scientific research. Their studies and their research must be conducted with absolute honesty and integrity. This Code of Conduct describes the behaviors that characterize academic honesty and integrity and, conversely, those behaviors that violate the standards of both The University of Texas System and the Faculty of the Graduate School of Biomedical Sciences. Further information is provided on the consequences of unacceptable behavior and what responsibilities students have for encouraging appropriate behavior on the part of others.

THE UNIVERSITY OF TEXAS SYSTEM RULES ON STUDENT CONDUCT

The University of Texas System Board of Regents has promulgated, in its Rules and Regulations (Part One, Chapter VI, Section 3), a set of guidelines concerning student conduct and discipline. These guidelines include the following:

- Sec. 3.1 "The component institutions shall adopt rules and regulations concerning student conduct and discipline...Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations and the rules of the component institution."
- Sec. 3.22 "Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts."

THE UT-HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

In compliance with the Regents' Rules, the Graduate School of Biomedical Sciences of The University of Texas - Houston has set forth the following definitions and regulations concerning scholastic dishonesty:

1. Confirmed cases of cheating, plagiarism, or dishonesty in research are grounds for dismissal from the Graduate School.
2. Cheating is defined as either receiving aid or offering aid on examinations and quizzes. Unless a professor specifically states it is acceptable, it is considered cheating to either receive or give help on class papers and assignments.
3. Plagiarism means:
 - (a) knowingly submitting work as one's own when it contains direct or paraphrased quotes from another source;
 - (b) knowingly using someone else's ideas and presenting them as one's own.
4. Dishonesty in research includes deliberately fabricating, falsifying or distorting data and/or research protocols.

CONSEQUENCES OF UNACCEPTABLE BEHAVIORS

Once an allegation has been made that a student has committed an act of scholastic dishonesty, the Rules of the Regents are followed. These Rules (Sections 3.4 - 3.6) specify the manner in which the investigation is conducted, the rights of the student concerning due process, the appeals that the student may make, and the disciplinary actions that may be taken. Penalties may range from disciplinary probation to a failing grade in a course to expulsion from the school.

STUDENTS' RESPONSIBILITIES FOR THE CONDUCT OF OTHERS

In addition to insuring that their own work is above reproach, researchers and scholars have a collective responsibility for the integrity of the scientific enterprise. One aspect of this responsibility entails an intolerance for inappropriate or dishonest behaviors on the part of their colleagues. Students, as future research scientists have the same responsibility. Accordingly, GSBS students should not hesitate to report what they believe are instances of scholastic dishonesty to the appropriate instructor or Dean. However, under this Code of Conduct, a GSBS student has no formal or binding obligation to report such incidents.

ACKNOWLEDGEMENT AND PLEDGE

GSBS students are expected to read this Code of Conduct and sign the pledge below before starting classes in the Graduate School and at the time of petitioning for advancement to candidacy:

I acknowledge that I have read the Code of Conduct for GSBS students and understand its objectives and principles.

I understand that I am responsible for knowing and obeying the rules and regulations of The University of Texas Board of Regents and the UT - Houston Graduate School of Biomedical Sciences as they pertain to scholastic dishonesty.

I understand that if I am found guilty of an act of scholastic dishonesty, the penalties can be severe, including expulsion from the School.

Accordingly, I pledge that I will neither give nor receive unauthorized help on any examination, paper, or assignment that requires individual responsibility and that I will be scrupulously honest in the conduct of my research and the presentation of my research results.

Name of student

Signature

Date