

**UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS**

SCHOOL OF MEDICINE

**DIVISION OF BIOMEDICAL SCIENCES
& GRADUATE STUDIES**

**MANUAL FOR THE
MASTER OF SCIENCE**

AND

DOCTOR OF PHILOSOPHY DEGREES

REQUIREMENTS and REGULATIONS

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1. GUIDELINES FOR THE GRADUATE PROGRAM

The regulations herein contained are written solely for the academic graduate programs within the Division of Biomedical Sciences of the School of Medicine, Medical Sciences Campus (MSC), University of Puerto Rico (UPR). The objective is to provide all biomedical academic graduate programs with consistent minimum requirements. Additional information regarding student academic development can be found within the “Manual de Normas y Procedimientos de la Oficina del Registrador”.

Students within individual degree Programs are expected to satisfy the curriculum, preliminary examinations, qualifying examinations, and dissertation requirements of their particular programs. These requirements are available in the individual Departmental Programs.

A. Admission Requirements:

At present, the Division of Biomedical Sciences (certification #48; 1975-1976) of the Medical Sciences Campus, University of Puerto Rico, offers various specialties in two advanced degrees: (1) Master of Science (MS) and (2) Doctor of Philosophy (PhD) in the following departments:

1. Anatomy & Neurobiology
2. Biochemistry
3. Microbiology & Medical Zoology
4. Pharmacology & Toxicology
5. Physiology

The minimum requirements for admission are:

1. Bachelor's degree (B.S.) or its equivalent from an accredited institution. Higher degrees, such as Master in Science (MS) or Master in Health Sciences (MHS), or professional doctoral degrees, are also accepted in specific situations.
2. Minimum general grade point average (GPA) of 3.0 in a scale of 4.0
3. Minimum grade point average in science courses (GPS) of 3.0 in a scale of 4.0

*The grade point average in science courses (GPS) [science and mathematics courses] of the MS or MHS program, will be considered for the GPS calculation for admission.

**Courses taken as a “Special Student” in the MSC, UPR system or another accredited institution of higher education, cannot be used to calculate the GPS for admission to the program. “Special Student”, as defined by the “Manual del Registrador”, is a student that is not active in the UPR System or any other higher education institution, and has not been admitted to any graduate program, be it at the UPR system or at another accredited institution of higher education. The student must receive an authorization by the Director of one of the five departments indicated above, as well as by the Director of the Graduate Program of the Division for Biomedical Sciences, to take courses within the Graduate Program prior to seeking admission in any of its programs, or for other particular reasons (e.g., updating knowledge in a particular field of expertise needed for the

person's present job)¹. A maximum of 8 semester credits for each of two academic sessions is allowed for special students¹. However, if the courses taken as a special student are approved with a minimum grade of "B" or higher, and the student is eventually admitted to one of the Division's Graduate Programs, some of these courses could be transferred to the student's graduate academic record, if recommended by the Departmental Graduate Committee and the Graduate Program, up to a maximum of 10 credits for a MS program, or 20 credits for a PhD program. For students who have an MS or MHS degree, or who are in an MS program and want to apply for admission to a PhD program, the procedures in Appendix H need to be followed.

4. Complete Graduate Record Examination (GRE) general test. The subject/advanced test in a science related area is not required.
5. Three (3) letters of recommendation, using the official forms provided in our website. At least two (2) of these must be from professors in the field of study.
6. An interview with faculty members of the Department to which the student is applying.
7. A working knowledge of English and Spanish.
8. Submission of the application form and other required documents on time.
9. If a student lists previous research experience, they should provide evidence, such as abstracts, manuscripts, etc.
10. Submission of an essay in English (250 maximum word count) describing the student's interest in the field.

Note: The basic science courses required by all the departments are: Two semester courses in General Biology, General Chemistry, General Physics and Organic Chemistry. In addition, applicants should have **Calculus and Statistics** as approved courses. Candidates are encouraged to visit the departments of their interest to learn of additional course requirements.

Presently, admission requirements will be evaluated using the following Admission Formula:

$$[(\text{GPA}/4.0)*25] + [(\text{GPS}/4.0)*25] + (\% \text{GREq} * 15) + (\% \text{GREa} * 15) + [(\text{LR}/66)*5] + [(\text{I}/20)*15] = \text{SCORE} \\ + (\text{RE Bonus}/40)*10 = \text{Final Score}$$

GPA: grade point average

GPS: Grade point in Science and Mathematics Courses

GREq: graduate record examination score (percent) in quantitative area (GRE general test)

GREa: graduate record examination score (percent) in analytical area (GRE general test)

LR: Letters of Recommendation

I: Interview

RE: Research Experience

Each Department generates a list of candidates. This list is sorted by the score obtained, with the student that obtained the highest score as first on the list. The department sets the maximum number of students that can be admitted according to ranking scores, merit and availability of positions in the department. Traditionally, students with scores of 60 or higher are

¹ As defined in the "Manual del Registrador" of the UPR-MSU.

recommended for admission to the PhD program. Students with scores between 50 and 59 are recommended for admission to the MS program. The Admission Formula may be modified by the Graduate Committee of the Division of Biomedical Sciences following careful consideration, as established in the certification 76-9 (Academic Senate of the Medical Sciences Campus, July 21, 1976). The Division of Biomedical Sciences evaluates all students on equal terms and does not discriminate on account of sex, gender, race, place of birth, age, physical or mental handicap, origin or social condition, political or religious beliefs. Information regarding the application process, as well as the application and recommendation forms, are available at: www.md.rcm.upr.edu/biomed/qualifications.

B. Admission of Students in Exceptional Cases:

In every process of admission evaluation, some special cases are considered. The following are criteria for the Graduate Committee and Department to consider when evaluating the admission of students in exceptional cases, when the GPS or GPA is less than 3.0 but no less than 2.5. Applicants must meet three (3) of the following four (4) criteria:

1. Author or Co-Author of a publication in a peer-reviewed journal
2. Evidence of scientific trajectory of excellence and/or experience in Academia or research institute, the Pharmaceutical industry, Biotechnology, or a Medical Technology Certificate; with at least one (1) year of experience with good references, clearly defined and documented. The Department must have direct knowledge of those experiences, or the applicant must submit evidence to document them.
3. Availability and commitment of a faculty member in the department interested in mentoring the student. The Mentor must have space, resources, and evidence of sufficient funds to support the student's training and project.
4. Academic development over time (course grades over the years) evidencing grade improvement.

C. Program Reclassifications or-Transfers:

Students who have been admitted in a Master in Science (MS) Program in the UPR School of Medicine, Division of Biomedical Sciences, must finish the MS degree. For more details, refers to Policy on Graduate Program Transfers (Appendix L).

D. Study Program:

A student who fully satisfies the admission requirements, and is admitted into the program, becomes a regular student (where a full-time load is 9 or more credits per semester, unless registered in specific courses that fulfil the full-time academic load requirements, such as thesis/dissertation proposal or Research for Master Thesis or Doctoral Dissertation¹). The admitted student should become familiar with the departmental guidelines and must comply with all of the requirements, regulations, and responsibilities according to departmental bylaws. Each department has a Graduate Studies Coordinator who oversees the academic progress of graduate students registered in the department's program.

All students pursuing an MS or PhD degree are required to be committed full-time to his/her program of study. The following is an outline of the sequence of steps expected from each graduate student regarding their academic program. Details are found in the main body of these

Regulations as indicated by the cross-reference in parentheses following each guideline.

1. Admission as a regular student.
2. Coursework under the guidance of the departmental Graduate Studies Coordinator, in accordance with the listings, and established regulations at the time of admission. This should be done as described in the Catalog of the Medical Sciences Campus, and the guidelines of each individual program.
3. Yearly evaluation of satisfactory progress by faculty of the Department (see Appendix A).
4. Selection of the Research Advisor and Thesis/Dissertation Committee no later than the first semester of the second year for master students and no later than the end of the third year for doctoral students (see sections 3 A and B).
5. Complete and approve all required courses that are necessary for the Qualifying Examination (see section 2 B), in accordance with the listings and the established regulations at the time of admission, as described in the applicable "Catalog of Courses" of the Medical Sciences Campus, and the guidelines of each individual program.
6. Approval of degree candidacy after following all Departmental and Graduate Program requirements, including the Qualifying Examination for PhD students (see sections 2 A and B).
7. Submission of a research proposal for approval by the Thesis/Dissertation Committee (see section 4 C).
8. Evaluation of satisfactory research progress by the Thesis/Dissertation Committee, done once every year (see Appendices A and E). The student must demonstrate his/her full-time commitment to his/her graduate studies and research project, and this should be stated in the Appendix E.
9. For the Ph.D. students, completion of at least one research publication of his/her work in a peer review journal, as a first author and writer of the dissertation. Under exceptional conditions, the Dissertation Committee may decide if a student can graduate when the dissertation work is not published but is submitted to a peer-reviewed journal prior to the thesis defense. For MS students, it is highly recommended that their thesis work contributes to a peer-reviewed publication (co-authorship). The student should consult frequently with the Dissertation Committee members, so that major revisions of the final copy are incorporated, and other unusual delays are avoided (see sections 5, 6 and 7 C and D).
10. Approve the final oral examination. The student must defend the quality of his/her research work, the quality of the written thesis/dissertation, and his/her competence in other matters that the thesis/dissertation Committee considers important (see section 6).
11. Granting of the degree when all requirements have been met and duly certified by the Office of the Associate Dean for Biomedical Sciences.

2. THE QUALIFYING EXAMINATION

The Qualifying Examination is required for all doctoral students.

A. Definition

The Qualifying Examination tests the student's overall knowledge of his/her chosen field of

study. The Departmental Faculty, or the members of the student's thesis Committee, will determine the areas to be covered in qualifying examinations.

B. Requirements

Doctoral students must complete and approve a minimum number of credits established by the Department (in accordance with the listings and requirements established in the applicable "Catalog of Courses" of the Medical Sciences Campus, and the guidelines of each individual program) prior to taking the qualifying exams. All students must take the qualifying exams early on the first (1st) semester of their third (3rd) year of study, if all the required courses have been offered and completed. Only in particularly special situations could it be offered before the end of the 3rd year of studies; If that were the case, the exam **must** be approved by the Graduate Program Committee of the Division of Biomedical Sciences. If required courses were not offered in a timely manner by the Department, the student must take the qualifying exam no later than the semester following completion of course requirements in order to be promoted to the 4th year of studies.

C. Successful Completion

The Chair of the Department, the Graduate Studies Coordinator, or the student's dissertation Advisor, depending on the Departmental requirements, determines the examination procedure. The evaluation process should be uniform within each Department, consistent in providing the material to be evaluated, and with the appropriate depth to assess the student's knowledge of the field. The Department Chairperson, or Graduate Studies Coordinator, will notify the Associate Dean of Biomedical Sciences if the student has passed or failed the examination. This notification must be in writing and sent within three (3) calendar weeks after completion of the Examination.

Qualifying Examinations must be offered by each Department at least once per semester (or twice a year). The examination may be repeated only once, but no more than one calendar year from the first unsuccessful attempt. Failure to pass the second time, unfortunately, will lead to academic dismissal of the student from the doctoral program. The student may have the option to complete a Master's Degree if recommended by the Departmental Faculty. The student may complete a Master's Degree without Thesis Program, but only within the departments that have this option duly certified. In both types of cases where the student may transfer to an MS program, the Graduate Program Committee must approve the decision. Students academically dismissed from a particular program will not be considered for readmission to the same Program.

3. THE CANDIDACY

Candidacy in the graduate programs is a requirement for all master's and doctoral degree students.

A. Definition

A candidate for a degree is a student who has demonstrated to the Faculty of his/her department that they meet the academic requirements to start an independent research project. Candidacy is certified by the Chairperson of the Department and/or the Graduate Studies

Coordinator, and it is informed to the Graduate Committee of the Division of Biomedical Sciences.

B. Requirements

1. Candidacy for the Master's Degree:

- a) Satisfactory approval of at least twenty-four (24) credits of coursework, including all required courses in his/her Department (in accordance with the listings and requirements established in the applicable "Catalog of Courses" of the Medical Sciences Campus, and the guidelines of each individual program). This will be evidenced by submission of the Appendix G to the Graduate Program by the Department.
- b) Approval of thesis Committee by the Graduate Committee and the thesis proposal by the Thesis Committee. The approved proposal must be submitted to the Graduate Program prior to registering in the Research for Master Thesis courses.
- c) Overall grade point average (GPA) of 3.00, and at least a 3.00 average in the required courses of his/her major Department.
- d) Satisfactory completion of all the requirements set by his/her Department.

2. Candidacy for the PhD Degree:

- a) Satisfactory completion of approximately 40-45 credits, depending on the department, and approval of all required/core courses in his/her Department (in accordance with the listings and requirements established in the applicable UPR Medical Sciences Campus Catalog, and the guidelines of each individual program). The applicable Catalog will correspond to the academic year of admission of each student. This will be evidenced by submission of the Appendix G to the Graduate Program by the Department.
- b) An overall GPA of 3.00, and at least a 3.00 average in the required courses of his/her major Department must be maintained.
- c) Satisfactory completion of the Qualifying Examination.
- d) Approval of Dissertation Committee by the Graduate Committee and the Dissertation proposal by the Dissertation Committee. The approved proposal must be submitted to the Graduate Program prior to registering in the Research for Doctoral Dissertation courses.
- e) Satisfactory completion of all the requirements set by his/her Department.

C. Certification Procedure

1. The Chairperson of the Department and/or the Department's Graduate Studies Coordinator will be responsible to certify that the student has met all requirements for Candidacy when they submit Appendix G to the Graduate Program.
2. The Graduate Studies Coordinator, through the office of the Chair, will send a letter to the Associate Dean and to the Graduate Program Committee of the Division of Biomedical Sciences confirming that the doctoral student has satisfied all the requirements for Candidacy.

4. THE THESIS/DISSERTATION PROPOSAL

A. Selection of Thesis/Dissertation Advisor

The student is responsible for nominating a properly qualified Thesis/Dissertation Advisor, as described in Appendix B. The prospective Advisor's name, with his/her written consent to accept the student, must be submitted to the Departmental Graduate Committee by the Graduate Studies Coordinator.

The Departmental Graduate Committee is empowered to approve or reject the nomination of the student's Advisor. The Departmental Chairperson and/or the Graduate Studies Coordinator will notify the Associate Dean of Biomedical Sciences, in writing, of the selection of the student's Thesis/Dissertation Advisor (even if the advisor is also the Departmental Chairperson) and the members of the Thesis/Dissertation Committee (see below).

B. Thesis/Dissertation Committee Selection

The student, in agreement with his/her Advisor, will select the Thesis/Dissertation Committee members. The Advisor, through his/her Departmental Chairperson or Graduate Studies Coordinator, will notify the Associate Dean of Biomedical Sciences of the composition of the thesis/Dissertation Committee. The qualifications for serving as a Thesis/Dissertation Committee member are listed in Appendix B.

1. *Requirements for master's degree candidates*

Master's Degree Candidates are required to have a minimum of three (3) Thesis Committee members. Two (2) members must be from the student's Department (the Advisor is one of the Departmental members) and one (1) member must be from outside of the student's Department. Adjunct or Joint faculty within the student's department are considered as departmental members.

2. *Requirements for doctoral degree candidates*

PhD Candidates are required to have a minimum of five (5) members on their Thesis/Dissertation Committee. Three (3) of the members must be from the student's Department (the Advisor is one of the Departmental Members), and at least one (1) member must be from outside of the Department of the Candidate and Advisor. Adjunct or Joint faculty within the student's department are considered as departmental members.

3. *Acceptance*

The Advisor, through his/her Department Chairperson or Graduate Studies Coordinator, must inform the Graduate Program, in writing, of the composition of the student's thesis/dissertation committee. This thesis/dissertation committee becomes official once it is approved by the Graduate Program Committee. The curriculum vitae (CV) of the external member(s) of the thesis/dissertation committee should be submitted to the Graduate Program Committee for approval.

4. *Substitutions of the Thesis/Dissertation Committee Members*

a) The Thesis/Dissertation Advisor:

- (1) To change the Thesis/Dissertation Advisor, the student must request and obtain written permission from the Departmental Chairperson after providing a written explanation of the reasons for the change. The Graduate Program must be notified, in writing, of any changes in the Thesis/Dissertation Advisor. If the Advisor is also the Departmental Chairperson, the Graduate Studies Coordinator should notify the Graduate Program (in writing) about the change and should also provide the name of the prospective Advisor.
- (2) Any proposed Thesis/Dissertation Advisor must meet the qualifications specified in Appendix B.
- (3) Any change of Thesis/Dissertation Advisor must obtain the approval of the Graduate Program Committee. The Graduate Program Committee acts as the final authority concerning Thesis/Dissertation Advisor changes.

b) Committee Member Changes:

- (1) The student and the Thesis/Dissertation Advisor may recommend changes in Committee members. Such changes must obtain written approval from the Departmental Chairperson or Thesis/Dissertation Advisor, after providing a written explanation of the reasons for the change.
- (2) Any proposed Thesis/Dissertation Committee member must meet the qualifications specified in Appendix B.
- (3) Proposed changes in Thesis/Dissertation Committee composition must meet with the approval of the Graduate Program Committee. The Graduate Program Committee acts as the final authority concerning changes in the Thesis/Dissertation Committee.

C. **Content of the Thesis/Dissertation Proposal**

1. *Definition*

The Thesis/Dissertation Proposal is a statement of the subject and intent of the research program that the student wishes to undertake. The proposal must be based on scientific principles and is intended as a preliminary outline of the research leading to an original contribution to the scientific field. The Graduate Program of Biomedical Sciences strongly suggests the use of NIH or NSF predoctoral fellowship application format for PhD proposals (as described in PHS 398) (as of May 2021, <https://grants.nih.gov/grants/how-to-apply-application-guide/forms-f/fellowship-forms-f.pdf>, or any other site established by the NIH for this purpose). This format should be used for both MS and PhD proposals. This application contains the following: Page #1- Cover page with title, name of student & his/her department, and Committee members; Page #2- Abstract of approximately 400 words that summarize the proposed project; Page #3- Specific

aims: long-term objectives, the goal of the proposed research, and the hypothesis to be tested (hypothesis, rationale and strategy for each aim); Page #4 (until page #15)- Research Plan: Significance, Approach, Innovation. The Research Plan section should be completed in 6 pages (single-spaced) using the appropriate forms from the NIH or NSF. The proposal should include the background leading to the proposed research, the significance of the research, the research approach (design and methods) for achieving the Specific Aims, the rationale, and expected outcome and alternative approaches of the proposed studies. It should also include the skills and techniques that will be used during the training period and any preliminary data the student has obtained in the current laboratory. A recent bibliography, consisting of articles relevant to the proposed studies, must be included. There are no page limitations for this latter section. The proposal should also include a biographical sketch, and a vertebrate animal section, or human subject section, if applicable, as additional pages (not within the 6 pages of the research plan). The proposal must be written in English and be revised by the student's advisor before presenting it to the dissertation or thesis committee for final approval.

If the NIH changes or revises the format of the F31 fellowship application format in the future, the Graduate Committee of the Associate Deanship of Biomedical Sciences will evaluate these changes and will accordingly update its recommendation on the format that should be used by the graduate students. Students and Advisors who decide to use a different format for the proposal must first obtain approval of the selected style by the Graduate Committee of the Associate Deanship of Biomedical Sciences.

Students with an approved thesis or dissertation proposal are strongly encouraged to submit it as an independent pre-doctoral fellowship to external funding agencies, such as NIH, NSF, Ford Foundation, among others.

2. *Registration for Thesis/Dissertation Proposal*

Students must have completed all required coursework and have prior approval of their Thesis/Dissertation Committees and proposals, before receiving approval from the Graduate Program to register for Research for Thesis/Dissertation courses, as described above (Section 3. The Candidacy, subsection B. Requirements). For PhD students, they must have approved their qualifying exam as well.

3. *Preparation of the Thesis/Dissertation Proposal*

In order to avoid extensive revisions and unnecessary delays, the student should consult his/her Advisor and the Thesis/Dissertation Committee on how to prepare the Thesis/Dissertation Proposal.

4. *Approval of the Thesis/Dissertation Proposal*

- a) The student's Advisor must approve the proposal draft before it is submitted to the other members of the committee.
- b) The proposal is then submitted and presented to the Thesis/Dissertation Committee for approval.
- c) The proposal is approved once it is signed by a majority vote of all committee

- members. *(Example of the approval form will be found in Appendix K)*
- d) Once approved, the Thesis/Dissertation Proposal is sent to the Associate Dean of Biomedical Sciences. The Thesis/Dissertation Advisor is the person responsible for sending the signed copy to the Graduate Program through the Departmental Chairperson or Graduate Studies Coordinator. The graduate student must verify that this step was performed and that the signed copy was received by the Graduate Program Office.
 - e) Then, the student must register in either the 6 credit or 15 credit course of the Thesis/Dissertation Research Project for MS or PhD, respectively. **All students must have taken and passed the qualifying exam and submit and receive approval** from their Thesis/Dissertation Committee prior to enrolling for a thesis/dissertation research project.

D. Request of Research Funds

If funds are available, the Associate Dean of Biomedical Sciences may assign a determined amount of money each academic year to help the student with his/her research. The student and student's Advisor, through the Departmental Chairperson, may request research funds from the Division of Biomedical Sciences once the student has been admitted to Candidacy and the Thesis/Dissertation Proposal has been approved and received in the office of the Associate Dean for Biomedical Sciences. Graduate students that qualify for research funds from the Graduate Program must be in compliance with all the requirements established in the program. Among these are: satisfactory evaluations in graduate courses with a minimum grade point average of 3.0 in the scale of 4, no courses with Incompletes, satisfactory completion of the qualifying examination, approval of the thesis proposal, periodic meetings with the thesis committee to report on the progress of the project, and submission of the Appendix E form to the Graduate Program no later than at the end of each academic year, as well as compliance with the expected timeline for completion of the writing and oral defense of the thesis/dissertation. Moreover, the students must also be in compliance with the educational requirements on the "Responsible Conduct in Research Compliance Program" as described in the following website: (as of September 1, 2013, http://www.md.rcm.upr.edu/biomed/pdf/nuevo%20ingreso/3_RC2P_2011-12_v1.pdf). The appropriate procedures to follow are outlined in the "Procedimientos para la Reglamentación de la Asignación y Utilización de Fondos de Investigación para los Estudiantes del Programa de Estudios Graduados", approved by the "Consejo de Educación Superior", which can be obtained at the Division of Biomedical Sciences Office.

The Graduate Committee, at its regular meeting on September 4, 2019, having considered the concerns and recommendations related to the authorization of students to travel outside Puerto Rico (with the purpose of learning techniques and/or doing experiments as part of their development in the research phase of their thesis project), agreed to establish the steps to authorize this type of academic activities by creating a process, primarily, to ensure safety of the student in the other Institution where they will be conducting research. In addition, the Biomedical Sciences Graduate Program wants to ensure the due process of notifications and authorizations in the Medical Sciences Campus (MSC) where the student is actively completing graduate studies, regardless of the need for funds to make the trip. Last, but not least, the Graduate Program needs to ensure that the experience had by students in the laboratory agrees with what is needed for their research project. For details of research travel requirements, please refer to Appendix J of this

Manual.

5. THESIS/DISSERTATION RESEARCH

A. Candidate Responsibilities

1. **Candidates are responsible for** their thesis/dissertation research, maintenance of adequate research notes, and the security of such notes. The laboratory notebooks cannot be removed from the work area (laboratory) at any time, since they are owned by the institution and the funding agency that supported the work.
2. **Candidates must discuss** their ongoing research with the Thesis/Dissertation Committee members at least once a year. After the annual meeting, **Appendix E** must be signed by all members of the thesis/dissertation committee and the signed document sent to the Associate Dean of Biomedical Sciences by the Graduate Studies Coordinator, Thesis/Dissertation Advisor, or student.
3. **Candidates should avail** themselves of all opportunities provided to them, such as facilities, instruments and personnel.
4. **Candidates must conduct** themselves in an **ethical and professional manner**, as defined by the Office of Research Integrity (ORI) at NIH (PHS Policy on Instruction in Responsible Conduct of Research (RCR): http://ori.hhs.gov/policies/RCR_Policy_shtml, as of September 1, 2013). For this purpose, candidates will be required to provide evidence of completion of the Research Compliance Program, which can be found at the following website: (https://md.rcm.upr.edu/biomed/wp-content/uploads/sites/27/2014/08/3_RC2P_2011-12_v1.pdf, as of September 1, 2013). It may be accomplished by participating in the RCR instructional activities offered in the annual student orientation, by taking the Bioethics in research courses offered by the Graduate Program (CBIO 8991 and CBIO 8992), or by taking the Survival Skills course offered by the Department of Pharmacology (or similar courses). A copy of the Certificates of completion of RCR instruction must be sent by the student to the Graduate Program.

B. Advisor Responsibilities

1. **The Advisor's principal responsibility** is to create a respectful environment of academic excellence for his/her students, as well as to encourage independent thought.
2. **The Advisor should** be directly involved in the candidate's training and be available for consultation. The Advisor, together with the Thesis Committee, should ensure that the student's Master project is designed to be completed in one year and the PhD project in approximately three years.
3. **The Advisor is responsible for supporting and stimulating the graduate student and encouraging them to arrange a Thesis/Dissertation Committee meeting at**

least once a year to evaluate the student's progress. The student and the Advisor will prepare, in consultation with the Thesis/Dissertation Committee, a brief written progress report (Appendix E). ALL members must sign the document. The report is sent to the office of the Associate Dean for Biomedical Sciences, through the student, Chairperson, or Department Graduate Studies Coordinator, and will become part of the student's permanent record. This report is due July 1 of each academic year.

4. **The Advisors should conduct** themselves in an **ethical and professional manner**, as defined by the Office of Research Integrity (ORI) at NIH (PHS Policy on Instruction in Responsible Conduct of Research (RCR): http://ori.hhs.gov/policies/RCR_Policy_shtml, as of September 1, 2013), and be acquainted with the Graduate Program's Responsible Conduct in Research Compliance Program (http://www.md.rcm.upr.edu/biomed/pdf/nuevo%20ingreso/3_RC2P_2011-12_v1.pdf, as of September 1, 2013). Advisors will also complete this program and send a copy of the certifications of RCR instruction to the relevant institutional compliance committees.

C. **Thesis/Dissertation Committee Members Responsibilities**

1. **Members are responsible for identifying** difficulties in the student's thesis research project and in advising the students. The Thesis/Dissertation Committee, together with the Advisor, should ensure that the student's MS project is designed to be completed in one year, and the PhD project in approximately three years. It is recommended that if the project involves the use of clinical samples, samples should be already available for MS students, in order to avoid delays in timely graduation.
2. **Members must attend** Thesis/Dissertation Committee meetings and be active participants (evidenced by signing the Appendix E). In cases where one of the Thesis Committee members cannot attend the meeting physically, they may be present virtually using platforms such as Google Meet, Zoom, or other platforms. It is very important that the Thesis/Dissertation Committee members must meet and discuss the project with the student annually as a minimum. The Appendix E form must have all committee member and student signatures, including all suggestions and agreements made at the Committee meeting. If a committee member cannot be present, the student and the advisor can meet separately and receive their recommendations. This is especially important when the committees meet to approve the proposal or to determine if the experimental phase has been completed. The absent member must certify in writing his agreement with decisions made by the rest of the committee after evaluating written reports and or meeting recordings.
3. **Members must promptly respond** to their obligations in order to avoid unnecessary delays in the student's progress.

D. **Credit for Thesis/Dissertation Research**

1. **Six (6) credits in Master's Thesis Research** are required for the Master's Degree. Master's Thesis Research credits are not transferable to PhD, and only up to 24

course credits may be transferred to the PhD Program (without grade- see the “Manual de Normas y Procedimientos de la Oficina del Registrador” (approved through Medical Sciences Campus Academic Senate “Certificación #58, 2020-2021, 10 de marzo de 2021), Section L “Normas Aplicables a la Exención de Cursos”, point #2 [page 43]) after Departmental revision and approval.

2. **Fifteen (15) credits in PhD Dissertation Research** are required for the PhD Degree.
3. **A student who is enrolled full-time** in the Thesis/Dissertation courses must be actively engaged in research work a minimum of 37.5 clock hours per week (including the summer periods).
4. **Students are required to comply with the minimum full-time effort of 37.5 hours per week** when enrolled for thesis/dissertation credits, for a residence period of at least one year for master students and two years for doctoral students. A grade of pass or fail will be given by the Advisor upon completion of the Thesis/Dissertation Research, but the degree will not be granted until the revised, signed and bound thesis/dissertation document is delivered to the office of the Associate Dean of Biomedical Sciences and Graduate Program Director. Electronic Thesis/Dissertation documents are accepted by the UPR-Medical Sciences Campus Library; the student may submit the dissertation to the platform required by the UPR MSC library. However, the student should ask his/her Advisor, Committee Members, and Department Chair if they prefer the document in an electronic and/or paper format.

6. PREPARATION OF THE THESIS/DISSERTATION

Prior to writing the initial draft, the student must meet with the Thesis/Dissertation Committee to verify that the experimental work is adequately completed and to decide which style should be used.

A. Style

The student and the Advisor must agree on one of two possibilities:

1. *Traditional*

The style of the thesis/dissertation will follow the guidelines set-forth in the latest edition of the "Publication Manual of the American Psychological Association", available at the Office of the Associate Dean for Biomedical Sciences. The thesis/dissertation must be neat, written in English, free from typographical errors and compliant with accepted scientific standards. The major responsibility to see that the thesis/dissertation conforms to these criteria will be delegated to the Thesis/Dissertation Advisor.

2. *Subdivided in article format (each article a chapter)*

The thesis style can be a compilation of chapters containing the published, in press or submitted articles of the student (written in English). This format cannot be used if all the research work has not been submitted for publication. The final document must include a general introduction and a general discussion with conclusions, and individual chapters at the beginning and end of the document.

B. General Format

1. *Traditional Style*

The thesis/dissertation must be organized according to the following format as outlined in the latest edition of the "Publication Manual of the American Psychological Association".

- a) Title Page. The title of the thesis/dissertation will be in capital letters, centered one-third of the way down on the page. Following the title will be the author's full name. Following the author's name, the following STATEMENT must be included: "A thesis/dissertation submitted in partial fulfillment of the requirements for the degree of Master's (MS) or Doctor in Philosophy (PhD) (Department Name) at the University of Puerto Rico, Medical Sciences Campus (month & year)".
- b) The Approval of Thesis/Dissertation Page (see Appendix F).
- c) Dedication. (Optional)
- d) Abstract. The abstract may contain up to **750** words, printed double space. The abstract must conform to the requirements of "Thesis/Dissertation Abstracts", found in the latest edition of the "Publication Manual of the American Psychological Association" available in the Graduate Program Office.
- e) Table of contents. Should be organized as follows for traditional style:

*ACKNOWLEDGEMENTS	Page
LIST OF TABLES	"
LIST OF FIGURES	"
LIST OF SYMBOLS AND ABBREVIATIONS	"
**INTRODUCTION	"
A. STATEMENT OF PURPOSE	"
B. ----- etc.	"
MATERIALS AND METHODS	"
RESULTS	"
DISCUSSION	"
CONCLUSIONS	"
APPENDICES I, II, III	"
BIBLIOGRAPHY	"

*Note about the Acknowledgements section: The acknowledgements must be written on a single page immediately following the title page.

**In thesis/dissertations where the student and advisor(s) decide to divide each specific aim in individual chapters, the content of each chapter should include all the different sections (i.e., Introduction, materials and methods, results,

discussion, etc.)

2. *Article style*

Each published, in press (or in exceptional cases, submitted) article is enclosed as an individual chapter after a general introduction, and a general discussion placed at the beginning and end of the thesis/dissertation, respectively. The article style will use the following format:

- a) Title Page.
- b) Approval of Thesis/Dissertation Page (see Appendix F).
- c) Dedication. (Optional)
- d) Abstract (maximum of 750 words).
- e) Table of contents. Should be organized as follows:

ACKNOWLEDGEMENTS	Page
LIST OF TABLES	"
LIST OF FIGURES	"
LIST OF SYMBOLS AND ABBREVIATIONS	"
INTRODUCTION (with bibliography)	"
PAPER #1 (with bibliography)	"
PAPER #2 (with bibliography)	"
PAPER #3 (with bibliography)	"
CONCLUSIONS (with bibliography)	"
APPENDICES I, II, III	"

(must include letters or emails from the editors of the journals authorizing the use of figures and/or tables used in publications in the printed and electronic formats).

C. **Specific Thesis/Dissertation Requirements**

1. **Paper.** For the final copy, the original must be printed on 8½ x 11-inch opaque white bond paper of 100% rag content and a weight of at least 16 pounds. Erasable paper cannot be used.
2. **Margins.** The left-hand margin of each page must be at least 1.5 inches wide. All other margins must be at least 1 inch wide.
3. **Spacing.** The written text must be typed in double-space. Exceptions are the bibliography and quotations, which should be typed in single space.

4. **Paging**
 - a) The title, abstract, thesis/dissertation approval and dedication pages will not be numbered.
 - b) All other pages preceding the Introduction will be sequentially numbered with roman numerals.
 - c) Pages should be numbered with Arabic numerals beginning with the Introduction.
 - d) The location of the page number will be centered at the bottom of every page.
5. **Footnotes** should be avoided in the thesis/dissertation.
6. **Quotations** must be properly cited, as indicated in the Publication Manual of the American Psychological Association.
7. **Plagiarism or close paraphrasing** of another author's material without proper attribution is not permitted.
8. **Reference citation:** All citations must be listed in the bibliography and all references must be cited in the text. The references must be placed in alphabetical order or numbered sequentially.
9. **All illustrations** (figures and photographs) must be numbered in the sequence in which they first appear in the text. Arabic numbers must be used, beginning with numeral 1.
10. **Tables must be** numbered in the sequence in which they first appear in the text, beginning with Arabic numeral 1.
11. **Manuscripts where the student is the first author** may be used as chapters in the thesis. However, if more than one student (also including, technician or postdoctoral fellow) contributed to the article (submitted, in press or published) ONLY the articles where the student contributed with at least 50% of the documented work may be added as a chapter. The Advisor and/or the thesis/dissertation committee will determine which manuscripts may be included in the thesis/dissertation document, according to the contribution or effort of the student. All manuscripts submitted for publication by graduate students working in their thesis/dissertation project, should include the following sentence in the acknowledgements section of the paper: "*This research work is in partial fulfillment of (name of the student)'s (doctoral or master, (select one) (thesis or dissertation, (select one))*".

D. **Responsibilities**

1. **The Candidate.** The Candidate is responsible for writing the thesis/dissertation according to the above criteria. The Thesis/Dissertation Advisor and the Committee Members should be frequently consulted concerning details of the thesis/dissertation. The

Candidate has the ultimate responsibility in guaranteeing that the thesis/dissertation is a properly written scientific document. The Candidate assumes the responsibility of circulating and collecting copies of the thesis/dissertation among the other Committee Members at least 4 weeks prior to the dissertation presentation (three weeks for the MS thesis presentation). Once approved in final form (including all minor corrections following the oral defense), the bound originals and copies of the thesis/dissertation must be submitted by the Candidate to the Office of the Graduate Program within 3 weeks of the oral presentation (see section 7-D), as well as evidence of successful submission to the ProQuest system. If a student fails to submit the bound originals and copies of his/her thesis/dissertation within 6 months of his/her (approved) oral presentation and/or to the ProQuest system, the Department may dismiss the student from the Program, unless a valid excuse justifies the delay, which must be presented in writing to the Department Chair for consideration and approval. After the 6-month period, re-admission to the Graduate Program would be required to submit an approved thesis or dissertation to the Graduate Program in order to process the degree completion documentation.

2. ***The Thesis/Dissertation Advisor.*** The Advisor, as well as the Candidate, are responsible for the written quality of the thesis/dissertation. The Thesis/Dissertation Advisor must proof-read and approve the document before it is circulated among the other Committee members. The Thesis/Dissertation Advisor will act also as a mediator between the Candidate and Committee Members in thesis/dissertation-related issues. The Advisor will verify that the final version of the thesis/dissertation incorporates all the changes required by the Committee.

3. ***The Thesis/Dissertation Committee Members.*** The Committee members are responsible for reading and critiquing the thesis/dissertation and assuring that the thesis/dissertation is of adequate scientific and literary quality.

7. THE THESIS/ DISSERTATION DEFENSE

A. Preliminary Requirements

1. ***Prior to the Dissertation presentation,*** the office of the Associate Dean of Biomedical Sciences will submit to the Departmental Graduate Studies Coordinator the list of courses (with grades) taken by the Candidate as they appear in the Appendix G form submitted prior to registering in thesis/dissertation courses. This document must be reviewed by the Advisor, the Department Graduate Studies Coordinator, and the graduate student, to verify that all graduation requirements (courses and grades) are met before the thesis/dissertation oral presentation. The document (Appendix G) must be returned to the Associate Dean of Biomedical Sciences signed by the Department Chair or Graduate Coordinator, confirming that the student completed all the required courses for their degree.

2. ***Documentation required by the Office*** of the Associate Dean for Biomedical Sciences and submitted by the thesis/dissertation Advisor, ***at least two weeks before the thesis/dissertation defense:***

- a) Title of thesis/dissertation (in English and Spanish)
- b) Candidate's thesis/dissertation committee composition (to prepare the formal approval of thesis document-Appendix F by the Office of the Associate Dean and announcement).
- c) Date, time and place of oral defense.
- d) Status of the residence requirements as certified by the student's Advisor or Graduate Studies Coordinator. Residency is defined as full-time (40 hours/week) dedication to the research component of their graduate studies (Master student: 1 year residency and Doctoral student: 2 years residency).
- e) TIME SCHEDULE FOR PROCESSING THESIS/ DISSERTATION FORM (see Appendix D).

3. **The departmental Graduate Studies Coordinator**, through the office of the Departmental Chairperson, will be responsible for:

- a) Certifying that all requirements for the degree have been completed, except for the thesis/dissertation and its defense.
- b) Indicating the admission date of the Candidate into the Graduate Program.

Students that started their graduate training as "special students" are not considered graduate students until they are accepted into the graduate program. Courses approved as a "special student" may be transferred to the graduate student academic record, as established in the "Manual de Normas y Procedimientos de la Oficina del Registrador" section IV, subsection A-3, Estudiante Visitante (page 11).

4. **Prior to writing the initial dissertation draft**, the student must meet with the Thesis/Dissertation Committee to verify that the experimental work is adequately completed (see Appendix D, line #1 and Appendix E, written under recommendations or observations by the committee). The Thesis/Dissertation Committees must certify in writing that they agree that the experimental phase of the student's research project is completed in an Appendix E, or in a separate document where all of them sign this agreement. This certification is required prior to scheduling a thesis/dissertation presentation and defense.

5. **The student and advisor** have no more than six months to prepare the thesis/dissertation draft following the committee's recommendation (last appendix E submitted to the Associate Dean for Biomedical Sciences). The Advisor is responsible for the quality of the thesis/dissertation, ensuring that it meets all academic and scientific standards.

6. **For the Master's Candidate**. Three (3) printed copies of the thesis are required at least three (3) weeks prior to the scheduled defense. The Candidate should distribute these to the Thesis Committee. An electronic version should also be available for those who request it. Committee Members must certify receipt of the thesis draft by signing and dating the "Confirmation of Receipt of Thesis Draft Copy" document.

7. ***For the PhD Candidate.*** Five (5) printed copies of the dissertation are required at least four (4) weeks prior to the scheduled defense of dissertation. The Candidate should distribute these to the Thesis Committee. An electronic version should also be available for those who request it. Committee Members must certify receipt of the thesis draft by signing and dating the “Confirmation of Receipt of Thesis Draft Copy” document.

8. As approved by the Graduate Program Committee, students must deliver the thesis/dissertation drafts at the required times before the presentation and defense. If Committee members agree to be provided less than the required time to review said draft, students must submit written evidence (emails, etc.) where each of their thesis committee members accepts the shortened time offered to review the final thesis/dissertation draft before the defense date. Additionally, the student must submit evidence of the date that the draft was sent or delivered as required by each committee member, with a signed and dated Appendix L form. Appendix L is required prior to scheduling a thesis/dissertation presentation and defense.

9. ***The members of the Thesis/Dissertation Committee*** may refuse to read a thesis that does not conform to the highest ethical and scientific standards and quality of presentation. The members must inform the Candidate and the Advisor, in writing, of the specific objections prior to the scheduled defense.

10. ***The Candidate has a maximum of three (3) calendar weeks*** after the thesis defense to incorporate the corrections/recommendations from the committee members.

B. **Preparation for the Thesis/ Dissertation Defense**

1. Candidate

The Candidate’s oral defense of the thesis/dissertation may cover knowledge of both the thesis/dissertation itself and knowledge related to the field of study. Accordingly, the Candidate should prepare for such questions.

2. Advisor of the Candidate’s Thesis/Dissertation Defense.

The Thesis/Dissertation Advisor automatically becomes the Chairperson of the Thesis/Dissertation Committee for the oral defense of thesis/dissertation. They will preside over the thesis presentation and discussion, and may ask questions.

3. Thesis/Dissertation Committee:

The ***Thesis/Dissertation*** Committee will ascertain whether or not the Candidate is qualified to receive a graduate degree from the University of Puerto Rico Medical Sciences Campus. The ***Thesis/Dissertation*** Committee must attend the oral defense of the thesis/dissertation and examine the Candidate. Attendance of all ***Thesis/Dissertation*** Committee Members is required. Under extreme circumstances, such as a national emergency, as approved by the Graduate Program Committee, one or all members may be physically absent from the defense and attend remotely by means of platforms such as Google Meet, Zoom, etc. On occasion, one member of the committee may not be physically present during the examination, however, they may participate virtually by video conference. A written justification of the absence must be submitted to the Associate Dean

for Biomedical Sciences for prior approval. Nevertheless, a majority of the committee must be present for the thesis/dissertation presentation and defense.

4. *The Office of the Associate Dean for Biomedical Sciences*

In order to consider a request for scheduling a thesis/dissertation seminar, the following documents need to be received at the *Office of the Associate Dean for Biomedical Sciences*:

- a) Letter from the student's Advisor including proposed date and time for the seminar, as well as the title of the thesis/dissertation and names of the Committee members
- b) "Course Evaluation Prior To Graduation" Form (Appendix G) completed by the Department, signed and dated by the Department Chair or Graduate Coordinator.
- c) Latest Appendix E or other document signed by the committee members, indicating that the experimental phase of the thesis/dissertation has been completed
- d) Signed and dated Appendix L as evidence of thesis/dissertation delivery as required by the committee members
- e) Evidence of committee members agreement with the time provided for revision of the thesis dissertation draft (Appendix D and written communications agreeing to a shortened correction time, if applicable).

The Office of the Associate Dean for Biomedical Sciences will send notices of the thesis/dissertation presentation and defense to:

- a) each Department in the School of Medicine.
- b) the faculty of the Division of Biomedical Sciences and the Medical Sciences Campus community (by email).
- c) to the Candidate's Departmental Chairperson.

In addition, the Office of the Associate Dean for Biomedical Sciences will be present or send a representative to attend the oral defense as a member of the audience.

B. Conduct of the Final Oral Defense of Thesis/ Dissertation

1. The Chairperson (Advisor) will introduce the Candidate and the committee members to the guests and will describe the procedures (as stated below [#2 to #4]).
2. The oral presentation of the student Thesis/Dissertation project should be approximately 50 minutes.
3. Following the presentation, the Chairperson will ask if any member of the audience has questions.
4. Following the general question and answer period, the Chairperson will request that the general audience leave the room. At this time, the Candidate will be examined by the

Thesis/Dissertation Committee.

5. Following the oral examination, the Chairperson will ask the Candidate to leave the room.
6. The Thesis/Dissertation Committee Members will discuss the outcome of the oral defense. Each member has one vote, including the Chairperson. A majority of votes will decide if the candidate approves the oral defense or not.
7. If the defense and the thesis/dissertation are approved, the Thesis/Dissertation Committee will sign and submit the Approval of Thesis/dissertation form (Appendix F) to the office of the Associate Dean of Biomedical Sciences. If minor corrections are required, then the signature of the Chairperson will be withheld from the Approval form until such minor corrections have been completed by the Candidate within 3 weeks following the oral presentation (the Candidate must be informed of such corrections immediately following the oral presentation). By signing the approval form, the Chairperson certifies that all corrections to the thesis/dissertation have been completed satisfactorily.
8. If the Candidate fails the final oral defense of the thesis/dissertation, the Chairperson will prepare a written report to the office of the Associate Dean for Biomedical Sciences explaining the reasons for this failure. Each member of the Committee must sign this report.
9. A Candidate who fails the final oral defense of thesis/dissertation may be re-examined within six (6) months.
10. Under special circumstances, the Thesis/Dissertation Committee may recommend a third examination. However, no student may take the oral thesis/dissertation examination more than three times.

C. Final Thesis/Dissertation Requirements.

One (1) original bound thesis/dissertation must be submitted to the Office of the Associate Dean of Biomedical Sciences, one (1) digital copy properly submitted to the Pro-Quest system, and three (3) bound copies must be submitted to the Department once the oral defense of the thesis/dissertation has been successfully passed and all minor corrections made (within 3 weeks of the oral presentation).

The thesis/dissertation documents will be distributed as follows:

Original:	Retained by the office of Associate Deanship for Biomedical Sciences
Digital Copy:	Upload to the Pro-Quest Platform for the UPR-MSU Library
Copy:	Given to the Student
Copy:	Given to the Thesis/Dissertation Advisor
Copy:	Given to the student's Department

If the student was a participant of the RISE Program, another bound copy is submitted to that

office. Additional bound or digital copies may be distributed among the thesis/dissertation Committee Members according to their requirements. However, the student should ask his/her Advisor, Departmental Chair and Associate Dean if they would like the document in an electronic or paper format.

If the bound copy and evidence of ProQuest submission are not submitted to the office of the Associate Dean of Biomedical Sciences, the student will not be certified by the School of Medicine as an MS or PhD graduate. Moreover, the certification will have, as the completed day of graduation, the academic session where the bound thesis was submitted to the office of the Associate Dean of Biomedical Sciences (May, as date of graduation, if submitted between January to May; Summer, as date of graduation, if submitted by June-July; December, as date of graduation, if submitted between August to December). If a student fails to submit the bound originals and copies of his/her thesis/dissertation within 6 months of his/her (approved) oral presentation, the Department may dismiss the student from the Program (unless a valid excuse justifies the delay, and this must be presented in writing to the student Department Chair for consideration and final approval by the Graduate Program Committee). If the Graduate Program Committee approves the excused delay in turning in the thesis/dissertation, the required administrative academic procedures will be carried out in order to award the degree. If the delay is longer than 6 months, the student will need to request re-admission to the Graduate Program in order to submit the final signed thesis/dissertation to the office of the Associate Dean of Biomedical Sciences for approval of degree completion.

8. GRADUATION REQUIREMENTS

A. Master in Science Degree

1. **Complete Candidacy Requirements** (see section 3A. B.1).
2. **The student must be in residency** for at least one calendar year at the University of Puerto Rico, Medical Sciences Campus. Residency is defined as full-time commitment (at least 37.5 hours per week) to the research component of the graduate studies.
3. **A satisfactory completion** of the master thesis requirements (6 credits) (see section 2 to 7). Including the completion of the Responsible Conduct in Research Compliance Program of the Biomedical Sciences Division or take the ethics in research courses of the Biomedical Sciences.

B. **Doctor in Philosophy Degree**

1. **Complete Candidacy Requirements** (see section 3A. B.2).
2. **The student must be in residency** for at least two calendar years at the University of Puerto Rico, Medical Sciences Campus. Residency is defined as full-time commitment (at least 37.5 hours per week) to the research component of the graduate studies.
3. **A satisfactory completion** of the doctoral dissertation requirements (15 credits) (see section 2 to 7), including the completion of the Responsible Conduct in Research Compliance Program of the Biomedical Sciences Division or take the ethics in research courses of the Biomedical Sciences.

In addition, it is expected that the student publishes (or has a manuscript accepted for publication) at least one (1) **research** article in a peer-reviewed journal prior to the Final Oral Defense.

Changes can be made to this document following a careful evaluation and by recommendation of the Basic Sciences Departments and the Graduate Program Committee of the Division of Biomedical Sciences.

REVISED: MAY 2020, JUNE 2021 AND JUNE 2022

APPENDICES

APPENDIX A

EVALUATION OF SATISFACTORY PROGRESS

Uniform Criteria for Evaluation of Academic Progress

- A. Compliance with course sequences of their respective Department every academic session.
- B. Didactic courses should be completed by the end of their 2nd year for all MS and PhD students unless their specific departmental program course sequence requires coursework in their 3rd year of studies. Graduate students should comply with Departmental or Graduate Committee recommendations regarding course work and expected times for other academic milestones.
 - 1. Proposal approval before starting their 3rd year of studies for MS students.
 - 2. Comprehensive exam and proposal approval by the end of their 3rd year for PhD students, which may include the summer session.
- C. Evaluation of academic progress by Thesis/Dissertation Committees or Department (Chair and Coordinator of Graduate Studies or Graduate Committee) each year.
 - 1. The Director, or the Graduate Program Coordinator of each Department, has access to the academic information through the SIS program so that students can be evaluated each year for promotion.

When should student evaluations be presented to the Graduate Committee?

- A. By the second Friday in June of each Academic Year, the Departmental Coordinators must document student promotions that take into account, not only GPA, but also academic milestones. Additionally, timely evaluation of their progress in thesis/dissertations should be documented and submitted to the Graduate Program. The promotions will then be submitted to the UPR-MSU Registrar by the Graduate Program.
- B. Annual Submission of Appendix E is absolutely required for compliance with academic requirements for students no later than the end of their third year of studies.
- C. The Graduate Coordinator must inform the Departments and the Graduate Program Director when students do not comply with academic/research project milestones (including timely submission of Appendix E).

Candidacy

- A. Approval of the thesis/dissertation proposal is a requirement for candidacy, apart from course and GPA requirements, and qualifying/comprehensive exam approvals.
- B. Doctoral Students (PhD) who are not candidates when they enter their 4th year, will be placed in probation unless there are extenuating circumstances (i.e., illness), or a justified change in Advisor, as determined by the Department and the Graduate Program Committee. In some particular cases, an additional time of up to one academic year (before the 5th year of studies) could be approved.

I. **Grade Point Average**

A. If the cumulative grade point average drops below 3.00, the student is automatically placed on probation by the Graduate Program (and will not be able to participate in the UPR Graduate Assistantship Program²). If the grades of the probationary semester do not bring the cumulative grade point average to 3.00 or higher, the student is automatically dismissed from the corresponding Graduate Program.

1. The probationary period may be extended one semester by petition of the Department Chairperson or Graduate Studies Coordinator to the Office of the Associate Dean for Biomedical Sciences and approval by the Graduate Committee.

2. The student may petition the Graduate Program Committee of the Division of Biomedical Sciences for a hearing, to provide an explanation (see Appendix C), if necessary.

B. The faculty of the graduate programs must cooperate with the Registrar in the collection of course grades, so that all grades will be available to the Student, Advisor, and the Graduate Programs before the beginning of each semester. The Associate Dean of Biomedical Sciences will consult with the Registrar to ensure that the grades are collected and posted on time.

1. The Associate Dean of Biomedical Sciences will request a complete report of the grades (and of the cumulative average) of all Graduate Students active in the Program at the end of each academic session and year (approximately January and June).

2. The office of the Associate Dean of Biomedical Sciences will notify all students who have been placed on probation for the next academic session. A copy of this notice will go to the Advisor (if one has been selected), to the Department Chairperson, and the Graduate Studies Coordinator and the Dean of Academic Affairs.

II. **Evaluation by the Departmental Faculty**

A. The Departmental Graduate Studies Coordinator is responsible for evaluating the satisfactory progress of each student at least once each year (using Appendix G), up until the time that a Thesis/Dissertation Committee is certified for the student. Then, the Thesis/Dissertation Advisor is responsible for the evaluation (using Appendix E). Annual Submission of Appendix E is absolutely required for compliance with academic requirements and evidencing academic progress.

B. The Departmental Graduate Studies Coordinator must verify that the grades of courses each semester are posted correctly on their records at the end of each academic year (using Appendix G). If any discrepancy is noted, a brief report should be submitted to the Associate Dean of Biomedical Sciences Office for the inclusion in the student's permanent record.

C. The Departmental Faculty may also take action, concerning a student's professionalism, according to their Departmental regulations. A report of these actions must be forwarded to the Advisor, Thesis/Dissertation Committee, and the Office of the Associate Dean of Biomedical Sciences for inclusion in the student's permanent record. Also, the student must be informed directly about these actions.

²According to “Certificación 135 (1988-1989) Consejo de Educación Superior”.

III. Evaluation by the Thesis/Dissertation Committee

A. When the Thesis/Dissertation Committee is approved by the Graduate Committee of the Division of Biomedical Sciences, this committee becomes responsible for evaluating the student's progress at least once each year (using Appendix E).

B. The Advisor and the Thesis/Dissertation Committee must submit a brief written Annual report (Appendix E) to the Division of Biomedical Sciences, for inclusion in the student's permanent record, at the end of each academic year.

IV. Conduct Compromising the Integrity of the Graduate Student - All conduct regarded as unethical or inappropriate according to “Reglamento General de Estudiantes de la Universidad de Puerto Rico” will be subject to the rules and procedures as established in chapter VI of the “Reglamento General de Estudiantes de la Universidad de Puerto Rico” (Certificación Núm. 13 (2009-2010), Ed. Rev. 28 De Julio De 2011 a tenor con Certificaciones Núm. 60 (2010-2011) y Certificación Núm. 154 (2010-2011)), and “Rules and Procedures for The Evaluation of Non-Cognitive Academic Factors of Medical Students at The University of Puerto Rico School of Medicine”, included in the “Policies and Guidelines for The Academic Evaluation and Advancement of Medical Students” (<https://md.rcm.upr.edu/download/2019-2020-policies-and-guidelines-for-academic-evaluation-and-advancement/?wpdmdl=3751&refresh=60b00d0c28bbf1622150412>, as of March 11, 2016).

V. Time Limits - The Graduate Committee of the Division of Biomedical Sciences may call for an investigation when inadequate progress or unsatisfactory performance of the student is acknowledged. As a general rule, students in the Master's program should present their thesis proposal no later than their 2nd year in the program. Doctoral students should take the qualifying examination for candidacy before entering their 4th year in the graduate program, as regular students (in the 1st semester of their 3rd year of studies), as well as the approval of the thesis committee by the Graduate Studies Committee. The doctoral thesis proposal also should be presented before entering the 4th year of studies. The Graduate Studies Coordinator will be responsible for keeping a list of the deadlines for all students and checking to see if any time limits have been exceeded without appropriate action. If any time limit has passed without the appropriate action, the Graduate Committee of the Division of Biomedical Sciences will schedule a hearing to discuss the reasons and take the appropriate actions. The regular and maximum time to obtain a degree for Master's Students are 3 and 6 years, respectively. For PhD Students, the regular and maximum time to obtain a degree are 5 to 8 years, respectively.

VI. Leave of absence from graduate students - A student may request a leave of absence (personal or sickness leave) from the Graduate Program during an academic year or before the beginning of the next academic year. The student must do so by submitting a written request to the Graduate Studies Coordinator, and the Department Chair, meeting and discussing with them the petition. The petition must include the reason(s) for requesting the leave of absence, the period of time involved, how the student expects to solve the problem, and the student's intention to continue or

withdraw from the Graduate Program. If the student asks for sick leave, the letter must be accompanied with the appropriate document from the medical doctor or health professional explaining the situation of the student. The Chair or Graduate Studies Coordinator will present the request, with all pertinent documents and information, to the Graduate Committee for their perusal. The Graduate Committee, through the office of the Deanship, will inform the student of the decision. A lack of academic progress cannot be used as a justification to request a leave of absence. The maximum number of years in a leave of absence is two, these may be consecutive or non-consecutive intervals. The period of time during a “leave of absence” is considered as part of the total number of years in the graduate program. Re-entry to the graduate program requires that the student provides a written request to the Departmental Chair (with copy to the Associate Dean of Biomedical Sciences and Graduate Studies Coordinator), with evidence that the initial problem was adequately managed and solved. When a leave of absence has been granted for health reasons, a letter of the medical doctor and/or health professional should be included, certifying that the student may continue with the graduate training. The graduate program will follow these steps, as adapted from the document “PROCEDIMIENTOS, NORMAS Y REGULACIONES PARA LA CONSIDERACION Y OTORGACION DE LICENCIAS DE ESTUDIOS” (last current valid document)” (<https://md.rcm.upr.edu/download/procedimientos-normas-y-regulaciones-para-la-consideracion-y-otorgacion-de-licencias-de-estudios/?wpdmdl=1076&refresh=60b00ec01a2401622150848>), UPR School of Medicine.

APPENDIX B

OBLIGATIONS AND REQUIRED QUALIFICATIONS OF MEMBERS OF THESIS/DISSERTATION COMMITTEES

I. Qualifications

A. *Purpose of Qualifications.*

1. These qualifications set the minimum acceptable standards necessary to serve on thesis/dissertation committees.
2. The primary function of a thesis/dissertation committee member is to judge the quality of the thesis/dissertation and the ability of the student to defend it.
3. An auxiliary function is to provide guidance to the student during the thesis/dissertation research.

B. *Certification of thesis/dissertation committee members:*

1. The Department Chair or Graduate Studies Coordinator will be required to furnish documentation of the qualifications of any proposed thesis/dissertation committee member if the appointment is questioned by the Graduate Committee of the Division of Biomedical Sciences.
2. The Graduate Committee of the Division of Biomedical Sciences acts as final authority in certifying that the qualifications of Thesis/Dissertation members have been met.

C. *Initial general qualifications of Thesis/Dissertation Committee members.*

All Thesis/Dissertation Committee members must meet **ALL** of the following criteria at the time of initial appointment to the student's Thesis/Dissertation Committee:

1. Active involvement in scientific research for at least one (1) year prior to nomination.
2. Research experience for the equivalent of three (3) years. Two (2) of these three (3) years may have been devoted to research toward the PhD degree, or their equivalent (D.Sc.).
3. Publication of at least three (3) papers in recognized scientific journals, with at least one (1) paper during the last three (3) years, at the time of acceptance to be a member of the thesis/dissertation Committee.

Exceptions to the general qualifications of Thesis/Dissertation Committee members can be approved or disapproved by the Graduate Committee of the Division of Biomedical Sciences, following careful considerations.

Committee Members with professional degrees: Thesis/Dissertation Committee members with professional degrees (Medical Doctor (MD), Doctor of Podiatric Medicine (DPM), Doctor of Osteopathic Medicine (DOM), Doctor in Dental School or Dental Medical Doctor (DDS/DMD), Doctor of Veterinary (DVM), Doctor in Pharmacy (PharmD) or equivalent) must meet all the following criteria:

1. Hold appropriate credentials and meet applicable licensing requirements.
2. Active full-time clinical practice or active full-time research or combined active part-time practice and active part-time research for at least one (1) year prior to nomination, and at the time of nomination.
3. Experience in full-time clinical practice or full-time research or combined part-time practice and part-time research for the equivalent of five (5) years. Two (2) of these five (5) years may have been devoted to clinical practice or research during an internship or residency.
4. For full-time clinical practitioners, clinical experience with patient populations can be substituted for publications.
5. For individuals who combine part-time clinical practice with part-time research, at least three (3) papers in recognized basic or clinical scientific journals, with at least (1) paper in the last three (3) years.

Committee Members with academic degrees (PhD): Thesis committee members that hold academic degrees and are full-time researchers must have at least five (5) publications in recognized basic or clinical peer reviewed journals, with at least one (1) of these during the last three (3) years.

D. *Qualifications necessary to serve on Master's Committee*

1. In addition to satisfying the criteria listed in (C) above, the prospective member of a Master's Committee must:
 - a) Have a valid PhD, D.Sc., MD, DOM, DPM, DVM, DDS/DMD, Psych.D., or Pharm.D degree. Prospective committee members with a degree other than the above must be approved by the Graduate Committee of the Division of Biomedical Sciences.
 - b) Be a member of the faculty of an accredited institution of higher education, or an acknowledged expert in the Candidate's thesis area.
2. Thesis Advisor Requirements for Master's Committees.
 - a) In addition to the general committee requirements listed above, the thesis Advisor must also meet the additional criterion of having a doctoral degree as described in

D1a and of holding a regular faculty position (from the rank of Instructor to Professor) in the student's department at the School of Medicine of the University of Puerto Rico, Medical Sciences Campus (this includes joint or adjunct appointments).

b) In certain cases, a Co-advisor may be appointed that meets the above requirements (a).

c) The Advisor(s)/Co-Advisor(s) should be actively engaged in research. Individuals with professional degrees who do not have an additional academic degree (PhD) or ten (10) years of experience as a Principal Investigator (PI), may not serve as the primary advisor for an MS thesis of biomedical research projects.

E. *Qualifications necessary to serve on PhD Committees.*

1. In addition to satisfying the criteria listed in (C) above, the prospective PhD Committee member must:

a) Have a valid PhD, D.Sc., MD, DOM, DDS/DMD, DPM, DVM PsychD, or PharmD degree. Prospective committee members with a degree other than the above, must be approved by the Graduate Committee of the Division of Biomedical Sciences.

b) Be a member of the faculty of an accredited institution of higher education, or an acknowledged expert in the Candidate's Dissertation area.

2. Dissertation Advisor requirements for PhD Committees.

a) In addition to the general Committee requirements listed above, the Dissertation Advisor must also meet the additional criterion of holding a regular faculty appointment (of the rank of Instructor or above) in the student's Department at the School of Medicine of the University of Puerto Rico, Medical Sciences Campus (this includes a joint or adjunct appointments).

b) In certain cases, a Co-advisor may be appointed that meets the above requirements (a).

c) The Advisor (s)/Co-advisor (s) should be actively engaged in research with at least three (3) articles published. Individuals with professional degrees who do not have an additional academic degree (PhD) or ten (10) years of experience as a PI on basic science research, may not serve as the primary advisor for a PhD dissertation.

Exceptions to the requirements and regulations, or individual cases not explicitly stated in or covered by the Manual, can be approved or disapproved by the Graduate Committee of the Division of Biomedical Sciences, following careful considerations.

II. *Obligations*

A. **Committee Members**

Every member must have personal knowledge of the thesis/dissertation research of the Candidate on whose Committee the member serves. Each member must be able to attend at least two (2) Thesis/Dissertation Committee meetings during the course of the student's research. In addition, each member must be able to attend the oral defense of thesis/dissertation unless extraordinary circumstances mediate, as determined by the Graduate Committee of the Division of Biomedical Sciences (VI.B.3). If a member of the committee cannot be physically present during the examination, they can participate via video conference, such as Google Meet or Zoom.

B. ***The members (including the Advisor) assume the added responsibility*** of complying with Graduate Program and Departmental time limits when they accept an appointment to a Thesis/Dissertation Committee. They must also have a working knowledge of the UPR School of Medicine's "MANUAL FOR THE MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY DEGREES".

APPENDIX C

THE GRADUATE PROGRAM COMMITTEE HEARING

Any problem involving the student and their performance in the Graduate Program should be referred first to the student's Advisor, then to the Departmental Graduate Studies Coordinator, and then to the Chair, in order to seek their assistance and resolve the situation in an amicable fashion. If no satisfactory progress is made in the resolution of the problem, the student, faculty or departmental chairperson may request a hearing from the Departmental Graduate Committee. If no resolution is achieved at the departmental level, a hearing may be called by the Graduate Program Committee of the Biomedical Sciences.

I. Graduate Committee Hearing

A. Request for a Hearing

1. A student may request a departmental Graduate Committee hearing to appeal any decision involving the student's performance in the Graduate Program. This request should normally be transmitted through the Advisor and Department Chairperson or Coordinator. Failure of the Advisor, Departmental Chairperson or Coordinator to act upon a written request by the student within a time limit of five (5) working days, automatically enables the student to appeal directly to the Graduate Program Committee of the Division of Biomedical Sciences.

2. If a Departmental Graduate Committee deadline has been exceeded without appropriate action, the Associate Dean of Biomedical Sciences and/or the Graduate Program Coordinator will automatically schedule a hearing with the student.

B. Date

1. The Associate Dean of the Division of Biomedical Sciences will set a date for the hearing.

2. This date must be within one month after the receipt of a written request.

C. Invitations

1. The Graduate Committee Chairperson will summon persons that, in his/her opinion, may provide useful information in the hearing. The Graduate Committee Chairperson may receive and consider the suggestions by the Advisor, Departmental Chairperson, and student.

2. The student, the Department Chairperson, and the Advisor (if one has been approved) must be summoned.

3. The summons must be sent, by email and/or regular mail, at least two (2) weeks before the date of the hearing.

D. **Procedures**

1. The purpose of the hearing is for the Graduate Committee of the Division of Biomedical Sciences to gather sufficient information to enable them to reach a decision and take appropriate action.
2. The Graduate Committee Chairperson will request that each of the summoned persons provide all known information that would assist to clarify the situation. The exact procedure to be followed will be determined by the Graduate Committee. The student will be allowed an opportunity to express his/her opinions.
3. After all the information of the case has been presented, all persons (including any member of the Graduate Committee) directly involved in the case will be asked to leave the hearing. The Graduate Committee of the Division of Biomedical Sciences (minus members that may be directly involved) will meet in a closed session. Persons that are directly involved in the case cannot participate in the closed deliberations and decisions.
4. The Graduate Committee of the Division of Biomedical Sciences will deliberate and vote to take one of the following actions: *.
 - a) Ratify the administrative decision of the designated member of the Graduate Program.
 - b) Reverse any such decision.
 - c) Assume responsibility for any disciplinary / administrative actions.
 - d) Dismiss the student from the Graduate Program.
5. The Graduate Committee of the Division of Biomedical Sciences may proceed with one of the following actions by a majority vote of those members present*.
 - a) Make written suggestions and send them to the persons involved in the case.
 - b) Refer the problem to the appropriate person for a decision, in consultation with and with prior approval by the Dean of the School of Medicine.
6. The Associate Dean of the Division of Biomedical Sciences must send a written report of any decisions or suggestions to the student, the departmental chairperson, the Graduate Studies Coordinator, and to the Advisor (if one has been approved) within one (1) week after the hearing.

*In case of a tied vote, the situation will be presented to the Dean of the School of Medicine for the deciding vote.

II. If the result of the Graduate Committee Hearing is unsatisfactory to the student, then the student may appeal the decision through the appropriate channels (Ex: Student's Ombudsperson [Procurador (a) Estudiantil]).

APPENDIX D

TIME SCHEDULE FOR PROCESSING THESIS/DISSERTATION

Name of the Candidate: _____

Date of Entrance into the Program: _____

Name of the Department: _____

Title of the Thesis/Dissertation: _____

Name of Advisor: _____

Members of the Committee and Member's Department or Affiliation:

SCHEDULE

1. Date _____ The Thesis/Dissertation committee certifies that the student completed the experiments and is ready to write (use Appendix E to certify this permission).

2. Date _____ Thesis/Dissertation Committee members receive the preliminary thesis/dissertation (3 weeks for Master students and 4 weeks for Doctoral students before the oral presentation).

3. Date _____ Final oral examination. Committee members return the Thesis/Dissertation document with their critiques and/or recommendations to the student. The Advisor is the person who ensures that the student completes the final form of the Thesis/Dissertation document with all the changes suggested by the readers during the oral presentation as well as their written critiques.

4. Date _____ Students submit the Thesis/Dissertation in final form to the Associate Dean of Biomedical Sciences (one [1] bound copies).

APPENDIX E

ANNUAL THESIS/DISSERTATION COMMITTEE MEETING

Name of Student: _____ Name of Advisor: _____

Date of Meeting: _____

Title of Thesis/Dissertation: _____

Committee Members (Name and Signature):

Member: _____

Member: _____

Member: _____

Member: _____

Member: _____

Member: _____

Recommendations or observations by the committee:

Signed by: _____
Graduate Student

_____ Date

_____ Advisor

_____ Date

APPENDIX F

UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE
DIVISION OF BIOMEDICAL SCIENCES AND GRADUATE PROGRAM

APPROVAL OF THESIS

NAME OF STUDENT: _____

DEPARTMENT: _____

TITLE OF THESIS: _____

DIRECTOR OF THESIS: _____

ACCEPTED BY THE GRADUATE SCHOOL COMMITTEE, MEDICAL SCIENCES CAMPUS, GRADUATE SCHOOL, UNIVERSITY OF PUERTO RICO.

THESIS COMMITTEE

Mentor

Thesis Committee member

Thesis Committee member

Thesis Committee member

Thesis Committee member

DATE: _____

APPENDIX G

EXAMPLE OF COURSE EVALUATION PRIOR TO GRADUATION

EVALUACIÓN PARA CONFERIR GRADO _____ (MS o PhD) EN _____ (departamento)
 Nombre: _____ Núm. Estudiante: _____
 Facultad: Medicina- Ciencias Biomédicas
 Programa: (Maestría en Ciencias o Doctorado en Filosofía y el área de especialidad – Ej. Doctorado en Filosofía Microbiología) (Cert. CES #97-143)
 Fecha Ingreso al Programa: _____ Fecha Graduación: _____

A. CURSOS REQUERIDOS (_____ CRÉDITOS)				D. CURSOS ELECTIVOS DE OTROS DEPTOS. RCM				
CURSO	CRÉDITOS	NOTA	PH	CURSO	CRÉDITOS	NOTA	PH	
B. CURSOS ELECTIVOS DEPARTAMENTALES REQUERIDOS (MÍNIMO _____ CRÉDITOS.) ****				E. CURSOS ELECTIVOS DE PROGRAMA GRADUADO DE BIOLOGÍA DE LA UPR EN RIO PIEDRAS				
CURSO	CRÉDITOS	NOTA	PH	CURSO	CRÉDITOS	NOTA	PH	
C. CURSOS ELECTIVOS DE TOPICOS AVANZADOS EN OTRAS ÁREAS EN EL DEPARTAMENTO				F. TRANSFERENCIA (Cursos Graduados Sistema UPR tomados antes entrar Programa Doctoral RCM)				
CURSO	CRÉDITOS	NOTA	PH	CURSO TOMADO	CURSO CONVALIDADO	CRÉDITOS	NOTA	PH
G. CONVALIDACIONES (Cursos Graduados Universidades que no son del Sistema UPR tomados antes entrar Programa Doctoral RCM)				G. CONVALIDACIONES (Cursos Graduados Universidades que no son del Sistema UPR tomados antes entrar Programa Doctoral RCM)				
CURSO	CRÉDITOS	NOTA	PH	CURSO TOMADO	CURSO CONVALIDADO	CRÉDITOS	NOTA	PH

Exámenes de grado: Fecha: _____ Resultado: _____
 Créditos: _____ (____ crs. mín. requeridos) Puntos de Honor _____ Promedio de Grado _____
 Nombre de facultativo que prepara la forma _____
 Firma _____ Fecha _____
 Aprobación: Nombre del Director del Programa Graduado _____
 Firma _____ Fecha _____

APPENDIX H

PROCEDURES FOR TRANSFERRING COURSES FROM MS TO PHD PROGRAMS

I. Graduate Students that have completed a Master's Degree

A. Students that have completed a MS degree in the Graduate Program of the UPR School of Medicine Division of Biomedical Sciences and would like to pursue a PhD need to apply to the program following the regular procedure for admission, as described in this Manual. In the event the student is admitted to the PhD program of interest, the corresponding department may substitute up to 24 credits of the courses approved for the MS degree, during a period of no more than 4-6 natural years at the time of approval.

B. Students that have completed a MS degree from outside of the UPR School of Medicine Division of Biomedical Sciences (in an accredited public or private institution, in Puerto Rico or in the United States) and would like to pursue a PhD need to apply to the program following the regular procedure for admission, as described in this Manual. In the event the department of interest and the Graduate Program decide the student qualifies for admission to the PhD Program of interest, the department will review the academic record of the student and the course syllabi (descriptions) to determine which Masters' courses completed at the other institution may be validated. The maximum number of credits that will be validated from other institutions is 24, but each department will decide the specific courses/credits to be approved, based on the careful evaluation of the course syllabi and other relevant information regarding the content and level of specialization. Only graduate courses completed during a period of no more than 4-6 natural years at the time of approval, and for which grades of "B" or higher (or their equivalent, as determined by the Division of Biomedical Sciences) have been obtained will be considered for validation.

APPENDIX I

STUDENT RESEARCH TRAVEL REQUIREMENTS



COMITÉ GRADUADO DE CIENCIAS BIOMÉDICAS
DECANATO ASOCIADO DE CIENCIAS BIOMÉDICAS



CERTIFICACIÓN NÚMERO 01
2019-2020

Yo, Carmen L. Cadilla Vázquez, Decana Asociada y Presidenta del Comité Graduado de Ciencias Biomédicas de la Escuela de Medicina de la Universidad de Puerto Rico, CERTIFICO QUE:

El Comité Graduado, en su reunión ordinaria del 4 de septiembre de 2019, habiendo considerado las inquietudes y recomendaciones relacionadas a la autorización de estudiantes para viajar fuera de Puerto Rico con el motivo de aprender técnicas y/o hacer experimentos como parte de su desarrollo en la fase investigativa de su proyecto de tesis, acordó establecer los pasos para autorizar este tipo de actividades académicas. Los motivos para la creación y ejecución de este proceso, el cual más adelante se describirá, están:

- *Asegurar la seguridad del estudiante en la otra institución donde se encuentre realizando investigación.*
- *Asegurar el debido proceso de notificaciones y autorizaciones en la institución académica donde el estudiante está activo realizando estudios graduados, independientemente de la necesidad de fondos para realizar el viaje.*
- *Asegurar que la experiencia que tendrá en el laboratorio donde realizará las tareas, sea una acorde a lo necesitado para su proyecto de investigación. Incluyendo además, una certificación que evidencie que lo que realizará fuera de Puerto Rico no puede hacerlo en el Recinto de Ciencias Médicas (RCM) o en ninguna otra Institución Académica en Puerto Rico.*

Y PARA QUE ASÍ CONSTE, expido la presente Certificación, en San Juan, Puerto Rico, hoy 10 de septiembre de 2019.



Carmen L. Cadilla Vázquez, Ph.D.
Presidenta



PASOS A SEGUIR PARA VIAJES DE INVESTIGACIÓN

Los estudiantes quienes les interesa hacer un viaje fuera de Puerto Rico (PR) a otro laboratorio para aprender técnicas y/o hacer experimentos deben seguir el protocolo institucional para cualquier viaje oficial. Si es **un viaje oficial**, el estudiante está cubierto por el seguro de la Universidad de Puerto Rico (UPR).

Aunque su viaje no conlleve aportación alguna del Departamento y/o de la Universidad, es preciso llenar los documentos oficiales para que sea registrado como un **viaje oficial** para estar cubierto en todo momento por el seguro.

Viajes largos:

1. **Ayudantía:** Si el/la estudiante cobra una ayudantía y va a estar fuera de PR más de un mes, entonces se le puede requerir una carta de invitación o la aceptación a cursos avanzados, la propuesta que contemple este tipo de viaje o un *Memorandum of Understanding* (MOU) entre la UPR y la institución a donde va. Existe un modelo de un MOU en el Departamento de Farmacología & Toxicología que ya ha sido aprobado y se modificará de acuerdo a la información que corresponda. Formato del mismo lo puede conseguir en el Decanato Asociado de Ciencias Biomédicas.
2. **Aval del Mentor(a) y Director(a) del Departamento:** Debe haber evidencia escrita de que el (la) Mentor(a) y Director(a) del Departamento apruebe el viaje.
3. **Seguro:** Se recomienda procurar un Seguro de Viajero ("*Travel insurance*") que incluya una cubierta médica.
4. **Costo de vida:** El mentor(a) y e/la estudiante debe investigar de antemano cuánto es el costo de vida en la zona donde se estará hospedando y cómo se va a pagar el mismo, además de los gastos de transportación.
5. **Informar y asesorarse con el departamento y con la Escuela Graduada:** Para recibir información correcta, es requerido divulgar los detalles del viaje (tiempo de duración, lugar de hospedaje, universidad donde estará, mentor, entre otros detalles).
6. **Realizar el trámite con tiempo suficiente:** El trámite toma tiempo, por lo que es importante que se inicie el proceso al menos 30 días antes de la fecha de partida.
7. **Evaluaciones periódicas con motivo de pago estipendio:** Se tiene que establecer formalmente como se evaluará el trabajo del estudiante, como mínimo 1 vez al mes, para propósito de pago de servicios prestados.

ORIGINADO POR: SCB-26/AGOSTO/2019
EDITADO POR: CG-4/SEPTIEMBRE/2019

PO Box 365067, San Juan, PR 00936-5067
Tel. (787) 758-4639, Fax (787) 767-8693

APPENDIX J

UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE
DIVISION OF BIOMEDICAL SCIENCES AND GRADUATE PROGRAM

APPROVAL OF THESIS PROPOSAL

NAME OF STUDENT: _____

DEPARTMENT: _____

TITLE OF THESIS PROPOSAL: _____

DIRECTOR OF THESIS: _____

ACCEPTED BY THE GRADUATE SCHOOL COMMITTEE, MEDICAL SCIENCES CAMPUS, GRADUATE SCHOOL, UNIVERSITY OF PUERTO RICO.

THESIS COMMITTEE

Mentor

Thesis Committee member

Thesis Committee member

Thesis Committee member

Thesis Committee member

DATE: _____

APPENDIX K

CONFIRMATION OF RECEIPT OF THESIS DRAFT COPY

University of Puerto Rico
Medical Sciences Campus
School of Medicine
Associate Deanship of Biomedical Sciences and Graduate Studies

CONFIRMATION OF RECEIPT OF THESIS DRAFT COPY

Name of student: _____

Department: _____

Title of Thesis/Dissertation: _____

Committee Members (Name and Signature):

Advisor: _____ Date: _____ pdf hard copy

Member: _____ Date: _____ pdf hard copy

Member: _____ Date: _____ pdf hard copy

Member: _____ Date: _____ pdf hard copy

Member: _____ Date: _____ pdf hard copy

Member: _____ Date: _____ pdf hard copy

Graduate Student Signature: _____ Date: _____

APPENDIX L

POLICY ON GRADUATE PROGRAM TRANSFERS



UNIVERSITY OF PUERTO RICO, MEDICAL SCIENCES CAMPUS,
SCHOOL OF MEDICINE
**Office of the Associate Dean for Biomedical
Sciences & Director of Graduate Studies**

POLICY ON GRADUATE PROGRAM TRANSFERS

A transfer student is defined as an applicant who has attended an accredited Graduate School or has attempted one or more courses, in a graduate level, regardless of credits earned.

The Division of Biomedical Sciences (DBS: certification #48; 1975-1976) of the Medical Sciences Campus, University of Puerto Rico (MSC-UPR), will not consider transfers from another University, or from international programs. If you are currently enrolled in another Graduate School or Program (MD among others), you must apply directly through our admission process. If admitted, the candidate may request course validation as established by the rules and regulations from the department to which the student is admitted and the Register's Manual.

The DBS highly encourages that students who have been admitted in a Master of Science (MS) Program in the UPR School of Medicine, DBS, should finish the MS degree in three years, as established by the Program. Therefore, the DBS of the MSC-UPR, will not consider transfers from the MS Program to the Doctor of Philosophy (PhD) Program. Thus, if a current MS student wants to pursue a PhD Program, a formal application to the PhD Program must be submitted. Individual department may have additional requirements. Only one type of internal transfer shall be considered. Specifically, consideration may be given for a student who has been admitted into a PhD Program in one of our basic science-graduate programs who desires to be transferred to the PhD Program in another department within the UPR School of Medicine, DBS.

Transfers from a PhD Program in one department to the PhD Program in another department within the DBS-UPR School of Medicine, shall follow the following criteria:

- a. A minimum average of 3.00 or more in the graduate GPS and other academic requirements stipulated by each program.
- b. The student may not have disciplinary findings and/or sanctions as stipulated in the Disciplinary Rules and Procedures of the General Student Regulations.
- c. Candidate must submit a 250-word essay explaining the reason and justification for the transfer.
- d. Department may require a student interview.
- e. DBS Graduate Committee must receive a recommendation letter from the Department Chair or Department Graduate Committee that accepted the student.

Transfer letter of intent must be submitted at the end of the student's first year, or no later than the first semester of their second year of graduate studies.

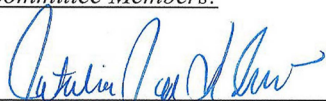
The deadline to submit the Department's recommendation for evaluation within the Graduate Committee will be the first Monday of February, and September, each year.

The student's initial year of admission to the PhD Graduate Program, would still be the official date of admissions, as stated in the Register's Manual for the UPR MSC.

Applicants must submit all documents before the deadline to ensure evaluation of the application. A student who meets admission criteria will be evaluated. Acceptance is subject to space availability.

Approved by the Curriculum Committee of Biomedical Sciences on December 02, 2021.


Committee Members:



Dr. Natalia Valentín, Assistant Professor
Department of Anatomy & Neurobiology



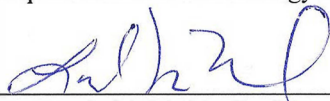
Dr. Pablo Vivas, Associate Professor
Department of Biochemistry



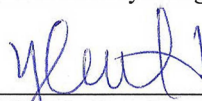
Dr. José G. Ortiz, Professor
Department of Pharmacology & Toxicology



Dr. María J. Crespo, Professor
Department of Physiology



Dr. Loyda Meléndez, Professor
Department of Microbiology & Medical Zoology



Dr. Yailis Medina, School of Medicine,
Curriculum Director & Associate Professor,
Department of Obstetrics & Gynecology



Dr. Irma Rivera, Director, Office of Evaluation
and Research on Medical Education



Mr. Jorge E. Martínez Jiménez
PhD Student Representative



Ms. Kaymara Hernández González
MS Student Representative



Dr. Jennifer Barreto, Graduate Program Coordinator
Biomedical Sciences & Professor Department
of Anatomy & Neurobiology



Dr. Nivia L. Pérez-Acevedo, Interim Associate Dean
of Biomedical Sciences and Director of Graduate
Program & Professor Department of Anatomy & Neurobiology

APPENDIX M

FACULTY INVOLVED IN THE REVISION OF THIS DOCUMENT

Revised, amended and approved by the Graduate Committee, June 2021:

Dr. Carmen L. Cadilla Vázquez, Associate Dean Biomedical Sciences
Dr. Nivia L. Pérez-Acevedo, Coordinator of the Graduate Program
Dr. María Sosa Lloréns, Chair of the Anatomy & Neurobiology Department
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