POLICY HANDBOOK

Graduate Program in Biomedical Sciences (BMS)

Approved: 08/28/25

Published: 08/20/2015

Revised: 09/13/19; 08/11/23; 08/12/24; 08/12/25

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I. ADMINISTRATION

A. INTRODUCTION

1. The Goal of Graduate Training in Biomedical Sciences

The Graduate Program in Biomedical Sciences (BMS) is an interdisciplinary, interdepartmental, and intercampus program, comprised of faculty actively engaged in biomedical research and education. The participants are from the Tulane School of Medicine and the Tulane National Primate Research Center (TNPRC). The goal of the BMS Graduate Program is to prepare students for careers in research and education in both academic and non-academic settings, providing a new generation of scientific leaders. The BMS program is committed to providing a rigorous and stimulating research and training environment for MS, PhD, MD/PhD, DVM/PhD, and MS/PhD trainees, for diverse careers in the biomedical sciences.

2. Accreditation and Compliance

Tulane University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, master's, doctorate, and professional degrees. Questions about the accreditation of Tulane University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on the SACSCOC website (www.sacscoc.org). The BMS Graduate Program is governed by the Tulane University Provost, and undergoes Programmatic Review by the Office of Graduate and Postdoctoral Studies (https://ogps.tulane.edu/) every five years to ensure compliance with Tulane University and SACSCOC.

3. Student Responsibility

Upon admission to the Graduate Program, students are held responsible for compliance with the regulations of the Graduate Program and Tulane University as set forth in this Program Guide and other Tulane University policies and should familiarize themselves with these regulations.

B. ACADEMIC CALENDAR 2025-2026

1. Master of Science Programs

Students should request an academic calendar from their individual MS programs. Calendars will vary amongst programs and may model the Medical School calendar or the Graduate School calendar.

2. PhD Programs

Students enrolled in the PhD program should follow the Graduate School Academic Calendar while enrolled in classes, as it pertains to coursework only. Students performing research rotations may be required to work in the lab according to the University Recess Schedule.

Once a Dissertation Advisor is selected, students are expected to work in the laboratory according to the Dissertation Advisor's expectations, while using the University Recess Schedule as a guide. Vacation requests should be submitted to the Dissertation Advisor and the BMS office.

Graduate School Academic Calendar: https://registrar.tulane.edu/academic-calendars/graduate
University Recess Schedule: https://hr.tulane.edu/holidays-winter-recess-schedule-2024-25

C. DIRECTORY

1. BMS Graduate Program Administration

BMS Leadership			
Associate Dean	Robert F. Garry, Ph.D.	504-988-2027	rfgarry@tulane.edu
Assistant Dean	Heather L. Machado, Ph.D.	504-988-1753	hmachado@tulane.edu
Director, Graduate Education	Derek Pociask, Ph.D.	504-988-7758	dpociask@tulane.edu

BMS Office			
Assistant Director	Kourtnie Robin, Ed.D.	504-988-3441	krobin@tulane.edu
Admissions Manager	Lucy Archer, M.A.	504-988-5043	larcher1@tulane.edu
Senior Program Coordinator	Delilah Martin	504-988-5044	dmartin12@tulane.edu
Finance Operations Manager	Lisa Richardson	504-988-5042	lrichardson3@tulane.edu

Main Contact: bms@tulane.edu

Graduate Program Administrative Offices are located in the Hutchinson Building, Room 1524. Office hours are from 8:00 a.m. to 4:30 p.m. Monday through Friday. The program website is **https://medicine.tulane.edu/education/biomedical-sciences-graduate-program**.

2. Services

Downtown Campus	**Telephone**
Mail Services	504-988-5299
Financial Aid Office	504-988-6135
Matas Medical Library	504-988-5155
Parking Services	504-865-5441
Student Health Center	504-988-6929
Technology Services	504-988-8888
Tulane Fitness Center	504-988-8652
TUPD (downtown)	504-988-5555
TUPD (TNPRC)	985-871-6444
Uptown Campus	
Registrar's Office	504-865-5231
General Information	504-862-8000
Student Directory	504-865-4000
Accounts Receivable	504-865-5368
Bookstore University Center	504-865-5913
Bursar	504-865-5398
Tulane Counseling Center	504-314-2277
International Student Center	504-865-5208
Howard Tilton (Main) Library	504-865-5604
Reily Recreation Center:	
Membership	504-865-5431
General/Court Reservations	504-865-5242
Student Records & Registration	504-865-5231

Professionalism/Environment of Learning Program at SOM
Report a Concern or Kudos: https://medicine.tulane.edu/student-affairs/professionalismenvironment-learning-program
Tulane University centralized online report system for complaints and concerns
Report a Concern: https://conduct.tulane.edu/report-concern
TUPD Online Reporting: https://publicsafety.tulane.edu/

D. STANDING COMMITTEES

1. **BMS Steering Committee**
   The BMS Steering Committee is an advisory committee to BMS leadership. The Committee provides important guidance on program administration, approval of changes/additions to the program and decisions on individual student issues. This committee is composed of faculty members from each basic science department, the Department of Medicine, the MD/PhD program, and the Tulane National Primate Center. BMS leadership (Associate Dean, Assistant Dean, Director of Graduate Education) and the SOM Associate Dean of Student Affairs are non-voting members. Graduate students also have input on this committee via a representative from the Biomedical Sciences Student Association (BMSSA). Recommendations made by the committee carry significant weight and are essential for programmatic planning and accountability with the Office of Graduate and Postdoctoral Studies as well as decision making within the School of Medicine.

2. **BMS MS Subcommittee of the Steering Committee**
   The MS Subcommittee of the BMS Steering Committee is an advisory committee to BMS leadership and the Steering Committee. It is comprised of faculty members from several Master of Science Programs, and provides important guidance on issues and decisions related to MS programs and students. One member of BMS leadership serves as a non-voting member. Major changes to the MS programs and decisions on individual student issues may be subsequently reviewed by the BMS Steering Committee.

3. **BMS Curriculum Committee**
   The BMS Curriculum Committee is composed of faculty members from the basic science departments and MS programs, a PhD BMS student, and one non-voting member of BMS leadership. This committee reviews new programs, major program changes, and current and new courses. Approval from this committee is required for programmatic accountability with the Office of Graduate and Postdoctoral Studies.

4. **BMS Admissions Committee**
   The BMS Admissions Committee evaluates PhD applicants and makes recommendations for admission to the PhD Graduate Program in BMS. This committee is composed of faculty members from each basic science department, the Department of Medicine, and the Tulane National Primate Center.

E. BIOMEDICAL SCIENCES STUDENT ASSOCIATION (BMSSA)

The Biomedical Sciences Student Association (BMSSA) is a student organization that represents the interests of graduate students to the BMS administration and to the Tulane Student Government Association (GAPSA). The BMSSA also provides a forum for discussion of relevant issues and acts to organize, promote and conduct activities to benefit Tulane graduate students. In addition, the BMSSA informs graduate students of pertinent developments in the Tulane community and recommends graduate students for appointment to faculty and university committees. All currently enrolled graduate students (MS and PhD) in good standing can be members of the BMSSA.

BMSSA officer elections are held at the end of each academic year in the spring. A special election for 1st year PhD representative typically occurs one month after the Fall semester starts. There are also several MS representative positions.

Contact: bmssa@tulane.edu
Website: https://tulanebmssa.wordpress.com/

II. DEGREES AND REQUIREMENTS

A. DEGREES OFFERED

1. Doctor of Philosophy

- Ph.D. in Biomedical Sciences
- Ph.D. in Biomedical Sciences for DVM's

2. Doctor of Philosophy and Medical Degree – M.D./Ph.D. Dual Degree

- M.D./Ph.D. in Biomedical Sciences (Physician Scientist Program; PSP)

3. Master of Science and Doctor of Philosophy – M.S./Ph.D. Dual Degree

- M.S. in Biomedical Sciences/Ph.D. in Chemical Engineering

4. Medical Degree and Master of Science – M.D./M.S. Dual Degree

- M.D./M.S. in Bioethics and Medical Humanities

5. Master of Science

- Anatomic Pathology – Pathologists' Assistant Program (2-yr)
- Anatomy (1-yr)
- Anatomy Research (2-yr thesis)
- Biochemistry and Molecular Biology (1-yr and 2-yr degrees)
- Bioethics and Medical Humanities (1-yr or 2-yr)
- Biomedical Informatics (2-yr)
- Biomedical Sciences (awarded only to Ph.D. students under special circumstances)
- Clinical Anatomy (2-yr)
- Clinical Research (2-3-yr)
- Clinical Research Methods (1-yr)
- Medical Genetics & Genomics (1-yr)
- Medical Sciences (awarded only to M.D. students under special circumstances)
- Microbiology & Immunology (1-yr)
- Molecular Medicine & Health Sciences (1-yr or 2-yr)
- Pharmacology (1-yr)
- Physiology (1-yr)

6. Certificates

- Clinical Ethics
- Research Ethics
- Medical Humanities
- Clinical Research
- Sports Medicine
- Biomedical Data Science
- Bioinformatics
- Health Informatics

B. DOCTOR OF PHILOSOPHY IN BIOMEDICAL SCIENCES

The Doctor of Philosophy in Biomedical Sciences degree is awarded for an accumulation of course credits, and primarily for superior attainment and accomplishment in biomedical sciences research. The student must demonstrate the ability to carry out independent study and research in a chosen field, as evidenced by the dissertation.

***CANVAS course module: Biomedical Sciences Graduate Program**

Upon entering the doctoral program, students are required to join the Canvas course entitled ***Biomedical Sciences Graduate Program***. This module serves as a communication platform and documentation home for all program requirements.

1. Time Allowed for Degree Completion

Students are expected to finish all course requirements in two full years of graduate study and complete their dissertation by the end of the 5th year. A minimum of one year of full-time study in residence at Tulane is required. If the degree is not completed by the end of the 5th year, students are required to submit a written plan to complete the degree, signed by the student and Dissertation Advisor, to BMS leadership by December of the 6th year. Students should complete the requirements for the Ph.D. degree within seven years from the date of matriculation in the program. **Students who wish to continue study beyond the 7th year must request permission from BMS leadership in consultation with the BMS Steering Committee, and have the support of their Dissertation Advisor and Committee.** Degrees will not be awarded beyond the 9th year of study.

2. Maintaining Full Time Status

Students must maintain full-time status every semester for the duration of their PhD training. All students must register for at least 9 credit hours each spring and fall semester to maintain their full-time status, tuition scholarships, and fellowship awards until course requirements are completed. Registration for Dissertation Research (BMSP 9990), maintains a student's full-time status. **Therefore, all students should register for BMSP 9990 every summer and every semester after completing the coursework requirements in their second year for the remainder of their academic tenure until graduation. Failure to register for BMSP-9990 will likely result in increased taxation of the stipend income, which lowers bi-weekly take-home pay**.

3. Course Requirements

A minimum of 48 credit hours of course work and independent study is required for a Ph.D at Tulane University. Students take an identical Core Curriculum in the first year (except for BIMI Track detailed below), totaling 27 credit hours. In the second year, students must complete at least 21 credits hours. Coursework in the second year must include at least 6 credit hours of lecture-based course work (electives), with the remaining credit hours consisting of Independent Study and/or Special Topics (research). Students may take Independent Study and/or Special Topics (combined) for 1-6 credits each per semester for a maximum of 12 credits (combined) until course completion. Electives are selected from the elective curriculum by the student in consultation with the dissertation advisor.

a) Program and Departmental Tracks – Course Requirements

After completion of the Core Curriculum, students may choose to specialize in an area of research emphasis by choosing a Track/Concentration. Specialization may require additional or different didactic courses or other requirements in years 2 and beyond.

b) Biomedical Informatics Track – Course Requirements

Unlike Program and Departmental Tracks, students are admitted to the Biomedical Informatics (BIMI) Track upon admission to the BMS program. A minimum of 48 credit hours of course work and independent study is required for the Ph.D. In the first year, students in the BIMI Track take an identical

curriculum, totaling 28 credit hours. In the second year, students complete core coursework, electives, and Directed Independent Study, for a minimum of 20 credit hours.

Students wishing any deviation from the Core Curriculum must submit their request in writing to the BMS office for Steering Committee approval (***see Appendix for Ph.D. course curriculum, BIMI Track, Pharmacology Track, Microbiology and Immunology Track, and Electives***).

4. Laboratory Rotations

Research Topics and Rotations (BMSP 7120/7130) is part of the Core Curriculum (except for BIMI Track detailed below). Students are required to complete one 8-week lab rotation in the Fall Semester of the first year and two 8-week lab rotations in the Spring Semester of the first year. The expectation of this course is to choose a Dissertation Advisor from one of the three rotations. Students are strongly encouraged to complete all three rotations before choosing a Dissertation Advisor. This policy allows for students to gain knowledge of different scientific fields, experience different mentoring styles and expectations, and experience the breadth and depth of research being conducted in the School of Medicine. Additionally, it is important that students select a Dissertation Advisor who is compatible, as the Dissertation Advisor and student will work closely together for several years. If a student has not chosen a Dissertation Advisor after three rotations, they will be required to perform one additional rotation. In rare cases, students may request to waive one rotation, and must receive Steering Committee approval. Dissertation Advisors must be BMS faculty at the SOM.

a) Biomedical Informatics Track – Lab Rotations

Research Methods (BIMI 7220) is part of the Core Curriculum for students who have been admitted to the BIMI track. Students will perform rotations in labs of faculty within the Division of Biomedical Informatics and Genomics, and will match with a BMS faculty member within the Division.

It is recommended that students review the AAMC-recommended *Compacts Between Biomedical Graduate Students and Their Research Advisors,* available on the BMS website, with the proposed Dissertation Advisor upon selecting a mentor ***(see Appendix).***

5. Teaching Assistantships

BMS PhD students are required to perform Teaching Assistant (TA) duties for the Department of Cell and Molecular Biology in the School of Science and Engineering on the Uptown Campus. The TA-ship involves one course section per semester during the first year of the BMS program, unless this service requirement is in conflict with donor or sponsor funding conditions. If additional TAs are needed, or if a student wishes to seek additional TA opportunities, the BMS office may offer positions to BMS students, to be approved by the Dissertation Advisor.

TAs are required to be present at every assigned lab section meeting and at a weekly preparatory meeting unless they provide adequate excuse and/or a suitable replacement in a timely manner. Lab meetings outside the regularly scheduled class time, including the preparatory meeting, should be coordinated with the course director and should not interfere with BMS required courses or functions.

TA assignments should be coordinated with each individual student, BMS administration, and the department for which the course section is taught. Lab directors should make lab expectations and requirements clear in writing at the beginning of the semester. Students who are teaching for the first time are required to attend the Cell and Molecular Biology TA Orientation during the week before classes begin. This session will provide information about how each coordinator organizes their course and what is expected of the BMS TAs. Students who do not perform TA duties in a satisfactory manner after repeated warnings will incur action on the part of the BMS administration. Tulane's Guidelines and Policies for Graduate Assistants can be found at https://ogps.tulane.edu/graduate-policies.

6. Presentation Requirements and Attendance at Annual Events

Research Presentations

Students are required to present their research at least once by poster presentation and at least once by platform presentation, during their tenure as graduate students. These presentations may be local (including events at Tulane) or at a National Conference. Upon fulfilling the presentation requirements, students should submit the Presentation Requirement form through Canvas.

BMS Annual Retreat

Students are required to attend the annual BMS Retreat. Students in their third and fourth years are required to submit an abstract at this event for selection for an oral or poster presentation each year. Students of any year may submit an abstract if desired. Students do not have to attend the retreat in the year in which they are graduating, as evidenced by a completed Prospectus and a Dissertation Defense date.

BMS Annual Cohort Meeting

Students are required to attend the BMS Annual Cohort Meeting for their respective classes. These meetings occur in May of each year.

7. Individual Development Plan

The Individual Development Plan (IDP) provides students with opportunities to think about training objectives, review progress, and set academic and career goals. In years 2 and beyond, students should complete an IDP annually, and review with the Dissertation Advisor. Faculty mentors are required to complete an Annual Review of PhD Student Progress each year to review progress and set academic and career goals. Students should provide their faculty mentors with this form, and review at the same time as the IDP.

Deadline: Students should submit a completed **IDP** and faculty **Annual Review of PhD Student Progress** forms by June 30 each year through Canvas. Failure to submit these forms by the deadline will result in disciplinary action, such as academic probation.

8. Ph.D. Milestones and Timelines

Failure to meet any hard deadline outlined below may lead to disciplinary action, including academic probation and/or dismissal from the program.

a) Timetable for Milestones, Deliverables, and Completion: A timeline that shows the milestones and required deliverables for the Ph.D. degree is provided below. Students will be assigned a temporary advisor in their first semester, who will perform the functions of the Dissertation Advisor until one is selected.

*Although there may be variations in each student's timeline, a student should meet with the Dissertation Committee annually and provide documentation to the BMS office. Failure to meet deadlines listed in the above table can result in disciplinary action, including academic probation or dismissal from the program. If a student is unable to meet the above deadlines, a written request for an extension from both the student and the Dissertation Advisor must be submitted to BMS Leadership to avoid disciplinary action. These requests may also be reviewed by the BMS Steering Committee.

All deliverables should be uploaded in **Canvas using the course module *Biomedical Sciences Graduate Program*.

Year	Student Requirement	Milestone (M) and/or Deliverable	Milestone Due Date
1	Contact Temporary Advisor		
1	Select Dissertation Advisor (Research Mentor) Meet with Research Mentor to select second year courses	M1: Dissertation Advisor Form	May 31 (2nd semester)
2	Select Dissertation Committee	M2: Dissertation Committee Form	May 31 (4th semester)
3	Preliminary Exam	M3: Preliminary Exam Form	Dec 15 (5th semester)
3	Annual Dissertation Committee Meeting to present dissertation aims, discuss research progress, and discuss candidacy Admit to Candidacy – coursework completed, preliminary exam completed, 1 year of research completed	Annual Committee Meeting Form (Y3) M4: PhD Candidacy Form	July 31 (end of Y3) July 31 (end of Y3)
4	Dissertation Prospectus (Serves as Annual Committee Meeting for year 4) *If the dissertation is not 50-75% complete, students should submit a request for an extension by July 31 of Year 4.	M5: Prospectus Form Annual Committee Meeting Form (Y4)	July 31 (end of Y4) July 31 (end of Y4)
5	Dissertation Defense or Annual Committee Meeting	M6: Dissertation Annual Committee Form (Y5)	 July 31 (end of Y5)
6	Submit a written plan to BMS leadership, signed by the student and Dissertation Advisor, detailing timeline to dissertation defense		Dec 15 (Y6)
7	Contact BMS leadership to request permission from the Steering Committee to remain in the program		July 31 (end of Y6)

b) Choosing a Dissertation Advisor: Students should choose a Dissertation Advisor by the end of the second semester and must begin their dissertation research during the summer of their first year. **Students must submit a Dissertation Advisor Form through Canvas (Milestone 1) for approval by BMS leadership.** If the student fails to choose a Dissertation Advisor by the end of the second semester of their first year, they must explain the delay to their temporary advisor and BMS Leadership and perform additional research rotations during the summer semester. In this case, a student must choose a Dissertation Advisor by the end of the summer semester. Failure to match with a Dissertation Advisor can lead to dismissal.

- Upon choosing a Dissertation Advisor, students should discuss with their mentors of whether it is appropriate to request a NIH Era COMMONS ID. If the student will be financially supported by an NIH grant (beginning in year 3), students should work with the mentor to request a COMMONS ID from Sponsored Projects Administration.

- It is recommended that students review the AAMC-recommended *Compacts Between Biomedical Graduate Students and Their Research Advisors,* available on the BMS website, with the proposed Dissertation Advisor upon selecting a mentor ***(see Appendix).***

c) Choosing a Dissertation Committee: A Dissertation Committee should be chosen by the student in consultation with the Dissertation Advisor by the end of the 4th semester. This Committee will participate in annual meetings with the student, approve the Prospectus, and approve the final written dissertation and oral thesis defense. This Committee may also, but is not required, to serve as the Preliminary Examination Committee. The Committee will consist of at least four BMS faculty members, one of which is the Dissertation Advisor. Students have the option of choosing one additional member that may be BMS faculty or may be external (eg: another University or Tulane school), but the Committee is limited to five total members. The Committee may not consist of members with a potential conflict of interest, which may include those that are related (eg: spouse/partner) or in the same laboratory or research group, among others. Final approval of all required deliverables requires at least four signatures from Committee members (including the Dissertation Advisor), with an exception for the Preliminary Examination of which requires at least three signatures (excluding the Dissertation Advisor). **Students must upload a Dissertation Committee Form (Milestone 2) to Canvas, as well as Annual Dissertation Meeting Forms, for approval by BMS leadership.**

d) Preliminary Examination

The BMS Graduate Program requires that all students pass a Preliminary Examination. The Preliminary Examination is an important milestone in a student's progress toward the doctoral degree. The purposes of the Preliminary Examination are:

- To assess the student's general knowledge in biomedical sciences related to the topic in the field of their dissertation study.
- To assess the student's ability to formulate hypotheses based on preliminary data and understanding of the published literature, and to test those hypotheses with a clear and feasible research plan.
- To test the student's ability to identify, articulate, orally present, and defend an original research project
- To test the student's ability to write a fellowship-style proposal on a topic in the field of their dissertation study.

The Preliminary Examination will be completed in five steps:

Step 1: Committee selection
Step 2: Topic approval
Step 3: Written component
Step 4: Oral presentation
Step 5: Oral examination

Because the Preliminary Examination is intended, among other goals, to prepare students to write competitive fellowship applications, students are strongly encouraged to submit an F31, or equivalent, fellowship application based on the studies proposed in the written component of the Preliminary Examination within the next two full cycles from the date of the Preliminary Examination.

Time Frame. After all the required coursework is completed, students are required to pass the Preliminary Examination by December 15 of their third year (5th semester). It is recommended that students begin the Preliminary Examination process immediately following the end of the 4th semester, where completion of the exam is desirable in the summer before the 5th semester. Under extenuating circumstances (eg: death in family), students may petition the program for an extension, but this must be submitted by November 1st of the 5th semester. **A student who fails to meet the deadline will be placed on Academic Probation**, and must appear before the BMS Steering Committee with the

Dissertation Advisor by January 30 of the 6th semester, at which time the student's future status in the Program will be decided.

***Step 1*: Committee selection.** A Committee should be chosen by the student in consultation with the Dissertation Advisor by the end of the 4th semester that will serve as the Preliminary Examination Committee. This Committee may be the Dissertation Committee, but is not required to be. The Committee will consist of at least four BMS faculty members, one of which is the Dissertation Advisor. Students have the option of choosing one additional member that may be BMS faculty or may be external (eg: another University or Tulane school), but the Committee is limited to five total members. The Committee may not consist of members with a potential conflict of interest, which may include those that are related (eg: spouse/partner) or in the same laboratory or research group, among others. One BMS Committee member will be chosen by the Dissertation Advisor to serve as the Preliminary Examination Chair, who will be responsible for adherence to BMS guidelines. The student's Dissertation Advisor will participate as a non-voting silent observer and may provide clarification during the exam only if invited to do so by the Chair of the Committee. All members of the Preliminary Examination Committee, except the student's Dissertation Advisor, are voting members.

***Step 2*: Topic Approval.** After completion of the 4th semester, the student will devise an overall hypothesis and specific aims for the Preliminary Examination. The proposal should be related to their Dissertation project, but include a significant portion (1/3 to ½) that reflects original ideas of the student, and is not derived from previous discussion with or grant applications by the Dissertation Advisor. The student will prepare and email the following to the Committee:

1) Proposal Project Summary (one paragraph). Project summary of the proposal should clearly state problem, hypothesis, specific aims, and a short description of the research design.
2) Synopsis of the Dissertation Project (one paragraph)
3) Description of overlapping vs novelty between Project Summary and Dissertation Project described in (1) and (2) (one paragraph)
4) Proposed due date within 4-6 weeks, and proposed oral examination date within 6-8 weeks.

The Preliminary Exam Committee will provide feedback and either approve the topic as is or request a meeting. After the topic is approved, the student is **encouraged** to discuss the scientific content of the proposal with peers and colleagues (students, postdocs, faculty), but **prohibited** from discussing with their Dissertation Advisor or Committee. The student will have six weeks from the date of the meeting to submit the written version of the proposal to the Preliminary Examination Committee. Two weeks after submitting the written document to the Committee, an oral examination will be administered by the Preliminary Examination Committee.

***Step 3*: Written Component.** The written proposal should be in the format of an NIH Ruth L. Kirschstein Predoctoral Individual National Research Service Award application aimed at 3 years in duration (https://grants.nih.gov/grants/how-to-apply-application-guide/forms-g/fellowship-forms-g.pdf). Margins must be 0.5 inches on all sides; font must be Arial 11 points; pages are to be numbered. The Preliminary Examination proposal should be written as a clear and concise narrative and submitted as one PDF document:

1) **Title page** (one page maximum). The Title page should include the title of the proposal, the student's name, and the date submitted to the Committee.
2) **Specific Aims** (one page maximum). The Specific Aims page should state the problem being addressed, the rationale and premise for the hypothesis (ie: supporting data from the lab or literature), the hypothesis, specific aims, and impact or significance on the field.
3) **Research Strategy** (6 pages maximum)
   - Significance (recommended 0.5-1 page). The Significance section should describe why the stated problem is significant, and how completion of the proposed studies will significantly advance the field. Knowledge gaps in the field that the proposed studies address should be

defined. This section should include minimal background information to allow the reader to understand the project.

- Approach. The Approach should include *Rationale*, *Experimental Design*, *Expected Outcomes*, *Alternative Approaches*, and *Relevant Biological Variables*. A sound rationale should be provided to support the experimental hypothesis, including key previous findings. Preliminary data from published papers or from the Dissertation Advisor's lab should be included where appropriate. Proposed experiments should be designed to effectively test the proposed hypotheses. *Expected Outcomes* should reflect thoughtful interpretation, and *Alternative Approaches* should focus on secondary hypotheses should the data not support the original hypothesis. *Relevant Biological Variables* should include a description of how variables, such as sex, are factored into the research design.

4) **References** (no page limit). A relevant and comprehensive reference section must be included. Primary literature should be cited, and review articles should be avoided.
5) **Contributions Statement**. Using the template provided by the BMS program (Canvas), describe the contributions of individuals assisting the student with any aspects of the proposal (ie: advisor, postdoc, etc…), to the design and preliminary data of the proposal. Scientific ideas by the Dissertation Advisor versus the student should be clearly detailed.

***Step 4*: Oral Presentation.** Students will give a 25-30 minute presentation, with minimal interruptions from the Preliminary Examination Committee for clarification purposes only (no examination questions). The student should know the topic well, both at the focused level of a specialist and at the broader level of a generalist. During the oral presentation the student should demonstrate command of the subject matter and the scientific method. The student should be able to summarize the existing state of knowledge in the area, identify conflicts or knowledge gaps, and propose experiments to address those issues. As students proceed through the defense of their proposal, all figures, graphs, and data that are presented should be fully explained.

***Step 5*: Oral Examination.** The second part of the oral component of the Preliminary Examination will consist of a 90-120 minute period of questions by the Committee, not to exceed 3 hours. Questions may initially focus on the proposal itself but can lead to questions on any area in biomedical sciences. Students may be tested on rationale, background literature, proposed experiments, expected outcomes and alternatives, detailed knowledge of experimental protocol and analysis, as well as general scientific knowledge including material covered in the BMS curriculum. As indicated above, the Dissertation Advisor will be a silent observer during the exam and may provide clarification only if invited to do so by the Chair.

***Requirements for Passing the Preliminary Examination*.** After the oral examination has concluded, the student and the Dissertation Advisor will leave the room and the Committee will deliberate on the student's performance according to the rubric available in Canvas (PE Oral Rubric, PE Written Rubric). The possible outcomes of the examination are Fail, Conditional Pass, and Pass. In the case of a Conditional Pass, the Committee will define the terms required in order to receive a Pass, and the due date for these terms to be met. These corrections may include re-writing parts of the proposal and/or re-examination. The student and Advisor will be invited to return to the room and the student will be informed of the result of the examination. Regardless of the outcome of the examination, the student will receive written critiques from the Committee members based on the rubric, by way of the Chair, **within three business days** of the conclusion of the examination. Requirements for satisfying the Conditional Pass must be specified in writing and attached to the Preliminary Examination Result Form (found in Canvas), including a date by which the additional requirements must be completed. The student will have a chance to satisfy the requirements stipulated by the Committee, after which the student will receive a Pass. If the requirements to remediate a Conditional Pass are not completed satisfactorily, the student will receive a Fail grade and be dismissed from the program. The final Result Form should be signed by the Committee and submitted through Canvas.

Submission of F31, or equivalent, proposal. As indicated above, students are strongly encouraged to submit a fellowship application based on the written component of the Preliminary Examination within the next two full cycles from the date of the examination. Once submitted, the student should notify the BMS program by uploading a Fellowship Submission Form in Canvas, and may be eligible for a fellowship incentive.

e) Annual Dissertation Committee Meetings

Students should meet at least annually with their Dissertation Committees. Following the completion of the Preliminary Exam, students should schedule a meeting with the Committee where they propose the dissertation project, review research progress, and receive feedback from the committee. At the beginning of each Dissertation Committee meeting, the student should be briefly dismissed and the Dissertation Advisor should candidly discuss the student's progress with the dissertation committee before the student is readmitted. **Annual Dissertation Committee Meeting forms** must be submitted through Canvas by the **end of each year (years 3 and beyond**) to avoid disciplinary action.

Year 3 (due July 31st) – Presentation of dissertation aims, review of research progress, review of candidacy

Year 4 (due July 31st) – Prospectus, OR, presentation and review of research progress

Year 5 and beyond (due July 31st each year) – Dissertation Defense, OR, presentation and review of research progress; establish timeline to graduation

f) Admission to Candidacy

Admission into BMS in a Ph.D. program does not constitute official admission to candidacy for the Ph.D. To be admitted officially to candidacy for the PhD, a student must have completed course requirements, passed the preliminary exam, and performed independent research for at least one year. The recommendation for admission to candidacy is made by the Dissertation Advisor. The recommendation for **Admission to Candidacy** must be submitted through Canvas by the **end of year 3 (Milestone 4)** and before the Prospectus may be completed.

g) Dissertation Prospectus

The Dissertation Prospectus serves as a major progress checkpoint of the dissertation project. The purposes of the Dissertation Prospectus are to:

- To discuss research progress with the Dissertation Committee, and present plans to complete the dissertation.
- Serves as a contract between the student and the Dissertation Committee to ensure appropriate research plans are completed prior to graduation, and to ensure timely completion of the dissertation project.

Time Frame. Students should prepare the Dissertation Prospectus (1) after Candidacy is achieved, (2) when at least 50-75% of the dissertation project has been completed, (3) anticipated dissertation defense is within 6-12 months, and (4) no less than 6 months prior to the dissertation defense. The **Prospectus Approval Form** should be submitted through Canvas no later than **the end of the year 4** to avoid disciplinary action (**Milestone 5**). If significantly less than 50% of the dissertation project is completed by the end of year 4, a student with the support of the Dissertation Advisor may petition for an extension by contacting BMS leadership. If granted, the student must have an Annual Committee meeting where the dissertation project is outlined and documented (1-3 pages). In this case, the proposed dissertation project and the Annual Committee Meeting Form should be submitted through Canvas as one PDF no later than the end of year 4 (July 31st) to avoid disciplinary action.

Written component: The written component should be a brief account of the research that has been completed, plans for additional experiments, manuscripts published or in preparation, and any other materials relevant for completion of the dissertation. Students are encouraged to write the research

summary and plans in outline form, and preliminary data should not be included. Although the prospectus need not be in the format of chapters, it should generally reflect a broad outline of the dissertation. The written prospectus should be submitted to the Dissertation Committee 2 weeks prior to the meeting. The Prospectus document should include:

1) **Title page** (one page maximum). The Title page should include the title of the dissertation project, the student's name, and the date submitted to the Committee.
2) **Specific Aims** (one page maximum). The Specific Aims page should state the problem being addressed, the rationale and premise for the hypothesis (ie: supporting data from the lab or literature), the hypothesis, specific aims, and impact or significance on the field.
3) **Research Progress** (2-3 pages). Research Progress should be detailed for each Specific Aim, and include the following sections:
   - Rationale. Rationale for the specific aim should be stated briefly (3-5 sentences).
   - Research Summary. The research summary includes a brief summary of completed research and results, with minimal experimental details. It is recommended to describe the results in bulleted form under each specific aim.
   - Proposed Plans. Proposed experiments to complete each specific aim should be described in bulleted form.
   - Timeline to Completion. A feasible timeline to complete the proposed experiments should be described.
   - Manuscripts. List manuscripts published, in preparation, or planned for each specific aim.
4) **Literature Cited**. If relevant, a bibliography should be included. The Specific Aims page should not include references.
5) **Other Materials** (optional). Students may include information regarding training fellowships, conference talks, future career plans, or other scientific achievements.

Oral presentation: Students should present the Prospectus in the form of a 30 minute powerpoint presentation to the Dissertation Committee. Students should be prepared to discuss anticipated results and alternative approaches for the planned experiments.

h) Dissertation (Final Examination)

The dissertation is an essential part of the candidate's degree work, and is the necessary demonstration that the candidate is worthy of taking a place among research scholars in the discipline. It must demonstrate not only mastery of the literature of the subject, but also the ability to carry on independent research that results in a genuine contribution to knowledge or an original interpretation of existing knowledge, and it must do so in a literate and lucid fashion. The Dissertation Committee shall agree on the acceptability of the dissertation before it is submitted to the Graduate Program in Biomedical Sciences in final form (***see Academic Calendar for required deadlines***).

Written component: The Title Page of both the abstract and the dissertation must contain: The subject of the dissertation, the date on which it was submitted, the department and the signature of the candidate, with the candidate's full legal name typed underneath. Signatures of the examining committee members should be listed in the lower right-hand corner; the full name of the committee chair and committee members must be typed under the signatures. Examples of dissertations by former BMS PhD students can be examined in the BMS office. Specific formatting and content instructions can be found on the BMS website. Detailed instructions for the preparation of the dissertation may be obtained from A Manual of Style, University of Chicago Press; the M.L.A. Style Sheet; or A Manual for Writers of Term Papers, Theses and Dissertations, by Kate L. Turabian. The dissertation advisor will advise which guide is preferred. The written dissertation should be submitted to the Dissertation Committee ***no less than two weeks prior*** to the dissertation defense.

Oral defense: The dissertation defense is comprised of both a public and private oral defense of the dissertation work. All candidates must present the dissertation research in the form of a seminar, which

will be followed by a private defense to the Dissertation Committee. After successful defense of the dissertation, the Committee may require revisions to the written dissertation. The final dissertation (with revisions incorporated) should be reviewed and approved by the Dissertation Committee **no later than one week prior to the last day of class** in the semester the candidate wishes to graduate (***see Academic Calendar***). The requirement for the final dissertation will not be waived. Students should upload the **Final Examination** form with the appropriate signatures in Canvas.
Students must notify the BMS office of the scheduled Dissertation Defense date no less than two weeks prior to the oral defense. Hosting departments should also be notified.

Submission: Students must submit an electronic copy of the dissertation with the original Dissertation Committee signatures to Canvas one week before the semester ends. Those who wish to bind their dissertation must also submit an unbound copy with the original committee signatures on acid-free, 100% cotton paper (minimum 20 lb weight) to the BMS Office. Binding costs vary annually, but students should anticipate approximately $80 per copy.

9. Graduation

Degrees earned in the School of Medicine are awarded three times a year; December, May, and August. Applications for Degree must be filed for the current term on or before the deadline date for graduation. This is usually due early in the semester. Applications filed in previous terms are not valid.

a) Checklist/Requirements

Students must submit the following forms or proof of submission to the BMS office **at least one week prior to the end of classes** except where otherwise noted:

1. Application for degree (due approximately 6 weeks after start of semester)
2. Final Exam/Oral Defense Form (**one week** prior to end of classes)
3. Submit final dissertation with signatures through Canvas
4. Complete online survey of Earned Doctorates https://sedsurvey.org/
5. Upload and submit final dissertation with signatures to ProQuest MNI website https://www.etdadmin.com/main/home?siteId=61 (uploading is free unless copyrighted)
6. Upload and submit final dissertation with signatures to the Tulane Howard Tilton Thesis Archive https://digitallibrary.tulane.edu/user/login?destination=islandora/object/tulane%3Astudent_submission_collection/manage/overview/ingest

The decision to copyright the dissertation must be made before it is uploaded to ProQuest. Information regarding Proquest and general copyright policies of the dissertation can be found in Canvas, and at: https://pq-static-content.proquest.com/collateral/media2/documents/copyright_dissthesis_ownership.pdf

b) Application for Degree

Students seeking to receive their diploma are required to submit the online **Application for Degree**, accessible under the Student Tab in the Gibson portal. Submission is applicable only for students who have completed, or who anticipate completing, all degree requirements by the deadline established by the BMS office for the corresponding semester's degree conferral.

c) Commencement Exercises

The Unified Spring Commencement Ceremony and the Graduate Hooding Ceremony are held only in the Spring semester. Ceremonies are not conducted at the end of Summer or Fall semesters. As part of the Application for Degree process, students will have the opportunity to indicate their intent to participate in the Unified Spring Commencement Ceremony. Participation in the Graduate Hooding Ceremony requires completion of the **Graduate Hooding and Recognition Ceremony Registration and the First Destination Survey**, which the BMS office will distribute in early May. This survey confirms students' participation in walking across the stage and being hooded by the mentor (Dissertation Advisor).

Walking Prior: Students who plan to apply for their degree during the summer term (mid-August deadline) may request to "walk" on stage at the Graduate School Hooding Ceremony in May prior to the dissertation defense. To be eligible, students must have completed their Prospectus and have a scheduled dissertation date prior to the August summer graduation deadline. The **Walking Prior** form is available in Canvas and must be uploaded to Canvas upon completion. The submission deadline for the Walking Prior form aligns with the Spring application for degree deadline established by the BMS office. Participation in the Graduate Hooding Ceremony also requires completion of the Graduate Hooding and Recognition Ceremony Registration and the First Destination Survey. Students planning to defend their dissertations in the Fall semester are not eligible.

d) Stipend Termination Policy

Stipend termination occurs on the last day of service, typically the official date of degree conferral or an alternative date set by the Dissertation Advisor, such as early completion or an extended period beyond graduation to finalize research projects.

- ***Domestic students*** may continue working as student employees for **up to two pay periods** after graduation (May, August, or December).
- ***International students*** are not permitted to work as students after graduation unless they have applied for and received valid work authorization.

To ensure your stipend is terminated on schedule, please upload the **PhD Stipend Termination Notification Form** to the BMS course in Canvas at least **two weeks** before your last day. It is **strongly recommended** that you complete this form while gathering final signatures and submitting all graduation materials – especially if you intend to work beyond the conferral date. If no form is submitted, your student status will be terminated on the official date of degree conferral. **This action cannot be reversed.**

C. DOCTOR OF PHILOSOPHY FOR DVM'S

The Tulane National Primate Research Center offers DVMs to apply for an opportunity to complete a Ph.D. while conducting research on their campus. Please contact Dr. Robert Blair, Associate Professor, Division of Comparative Pathology, Tulane National Primate Research Center for more information. Students enrolled in this program must follow the curriculum in the **Appendix**. Up to 24 credit hours of coursework can be transferred from the student's DVM degree. The transfer process requires approval from the BMS Steering Committee and the candidate must match their DVM courses with Core or Elective courses within the BMS curriculum (***see Appendix***). Credit hour transfers can only occur after one semester of coursework has been completed. All other requirements of the Ph.D. component of this program are the same as those of the doctoral degree (***see pages 5-12),*** except that DVM's must complete their Preliminary Exam by the end of the Third (Spring) Semester.

D. M.D./PH.D. (PHYSICIAN SCIENTIST PROGRAM, PSP)

The primary aim of the Physician Scientist Program is to provide an integrated learning environment that supports the development of physicians committed to the advancements of the medical sciences. Students will acquire the necessary skills to become both sound clinicians and accomplished scientists. More importantly, it is intended to promote a view of medicine and science as unified endeavors rather than distinct disciplines. There are two tracks ("A" and "B") that lead to a dual M.D./Ph.D. degree:

Students complete their first two years of medical school (MD-1, MD-2), and are required to earn passing grades in medical school coursework, pass USMLE Step 1, and be in good standing before entering the Ph.D. portion of the program.

***CANVAS course module: Biomedical Sciences Graduate Program-MD/PhD**

Upon entering the doctoral program, students are required to join the Canvas course entitled ***Biomedical Sciences Graduate Program-MD/PhD***. This module serves as a communication platform and documentation home for all program requirements.

1. Tracks

Track A: Students are considered for the combined degree program at the time of application to medical school. Students must indicate that they are applying for a combined M.D./Ph.D. by marking the appropriate box on their AMCAS application and by providing the additional information required by AMCAS. The Physician Scientist Program (PSP) provides Track A students with tuition waivers and stipends during both medical and graduate school. Track A is a selective program and students must apply before entering medical or graduate school. If selected, Track A students will begin their first laboratory rotation the summer before entering medical school (BMSP 7160).

Track B: Alternatively, first and second year medical students who wish to pursue a Ph.D. may apply for admission to the BMS graduate program. If accepted, these "Track B" students follow the same training plan and curriculum as the Track A students. A graduate student stipend and graduate school tuition waiver is offered, but track B students are not typically granted medical school tuition waivers. Track B students begin rotations as soon as possible after joining the program.

2. Time Allowed for Degree Completion

The Physician Scientist Program is designed to complete the M.D./Ph.D. degree in 7-8 years. Upon entering the Ph.D. portion of the degree, students are expected to finish all course requirements by the end of the 1st year, and complete their dissertation by the end of the 4th year. A minimum of one year of full-time study in residence at Tulane is required. Students should complete the requirements for the Ph.D. degree within 6 years from the date of matriculation in the program. If the Ph.D. portion is not completed by the end of the 4th year, students are required to submit a written plan to complete the degree, signed by the student and Dissertation Advisor, to BMS leadership by December of the 5th year. **Students who wish to continue study beyond the 6th year must request permission from BMS leadership in consultation with the BMS Steering Committee, and have the support of their Dissertation Advisor and Committee.** Degrees will not be awarded beyond the 9th year of study.

3. Laboratory Rotations

Research Topics and Rotations (BMSP 7160) is part of the Core Curriculum. Students are required to complete one 8-week lab rotation in the Summer semester prior to entering the first year of medical school (MD-1), one 8-week lab rotation in the Summer semester prior to entering MD-2, and an optional third rotation the summer prior to entering the Ph.D. portion of the degree (PhD-1). The expectation of this course is to choose a Dissertation Advisor from one of the three rotations. Students are strongly encouraged to complete all three rotations before choosing a Dissertation Advisor. This policy allows for students to gain knowledge of different scientific fields, experience different mentoring styles and expectations, and experience the breadth and depth of research being conducted in the School of Medicine. Additionally, it is important that students select a Dissertation Advisor who is compatible, as the Dissertation Advisor and student will work closely together for several years. If a student has not chosen a Dissertation Advisor after three rotations, they will be required to perform one additional rotation. Dissertation Advisors must be BMS faculty at the SOM.

It is recommended that students review the AAMC-recommended *Compacts Between Biomedical Graduate Students and Their Research Advisors,* available on the BMS website, with the proposed Dissertation Advisor upon selecting a mentor ***(see Appendix).***

4. Maintaining Full Time Status

All students must register for at least 9 credit hours each semester to maintain their full-time status, tuition scholarships, and fellowship awards. Registering for Dissertation Research (BMSP 9990), even though it is zero credit hours, maintains your full-time status. Therefore, all students should register for BMSP 9990 every summer and every semester after completing the coursework requirements for the remaining of their academic tenure. ***Failure to register will affect your stipend, primarily by having more taxes withdrawn which will lower the bi-weekly take-home pay.***

5. Course Requirements

A minimum of 48 credit hours of course work and independent study is required for a Ph.D at Tulane University. PSP students should transfer up to 24 credit hours from the MD curriculum to apply towards the PhD portion of the degree. The remaining 24 credit hours is achieved over the first and second year of the PhD portion of the program (PhD-1, PhD-2), and consist of didactic courses, independent study, and optional electives and special topics. Electives are selected from the elective curriculum by the student in consultation with the Dissertation Advisor. Students may choose to specialize in an area of research emphasis by selecting a Track/Concentration. Specialization may require additional coursework or other requirements in years 2 and beyond, and requires approval of the Dissertation Advisor. (***see Appendix for PSP course curriculum and electives)***.

a) Transfer of Credits from Medical School: Students should request to transfer up to 24 credits of MD coursework before applying for candidacy.

Coursework from MD-1/MD-2 available for transfer towards the Ph.D. are listed below.

Year	Banner	Course #	Course	Credit Hours
T1	GANT	1008	Gross Anatomy	8
T1	BIOC	1010	Biochemistry	7
T1	GENE	1007	Genetics	1
T1	HSTO	1001	Histology	5
T1	PSYI	1002	Physiology	5
T1	FIMI	1005	Foundations Med I	5
T1	IMMU	2001	Immunology	1
T2	FIM2	2005	Foundations Med II	2
T2	MICR	2000	Intro to Infectious Disease	4
T2	PATH	2002	Mechanisms of Disease	14
T2	PHAR	2003	Pharmacology	5
T2	CLDG	2004	Clinical Diagnosis	3
T2	BRBH	2006	Brain & Behavior	6

6. Presentation Requirements and Attendance at Annual Events

Research Presentations

Students are required to present their research at least once by poster presentation and at least once by platform presentation, during their tenure as graduate students. These presentations may be local (including events at Tulane) or at a National Conference. Upon fulfilling the presentation requirements, students should submit the Presentation Requirement form through Canvas.

BMS Annual Retreat

Students are required to attend the annual BMS Retreat. Students in their second and third years are required to submit an abstract at this event for selection for an oral or poster presentation each year. Students of any year may submit an abstract if desired. Students do not have to attend the retreat in the year in which they are graduating, as evidenced by a completed Prospectus and a Dissertation Defense date.

BMS Annual Cohort Meeting

Students are required to attend the BMS Annual Cohort Meeting for their respective classes. These meetings occur in May of each year.

7. Individual Development Plan

The Individual Development Plan (IDP) provides students with opportunities to think about training objectives, review progress, and set academic and career goals. In years 2 and beyond, students should complete an IDP annually, and review with the Dissertation Advisor. Faculty mentors are required to complete an Annual Review of PhD Student Progress each year to review progress and set academic and career goals. Students should provide their faculty mentors with this form, and review at the same time as the IDP.

Deadline: Students should submit a completed **IDP** and faculty **Annual Review of PhD Student Progress** forms by June 30 each year through Canvas. Failure to submit these forms by the deadline will result in disciplinary action, such as academic probation.

8. PhD Milestones and Timelines

Failure to meet any hard deadline outlined below may lead to disciplinary action, including academic probation and/or dismissal from the program.

a) Timetable for Milestones, Deliverables, and Completion: PSP students follow an accelerated timeline to ensure the M.D./Ph.D. is achieved within eight years. A timeline that shows the milestones and required deliverables for the Ph.D. degree is provided below.

Year	Student Functions	Milestone (M) and/or Deliverable	Milestone Due Date
Rising PhD-1	Select Dissertation Advisor (Research Mentor) prior to matriculating to the PhD portion of the PSP program Meet with Research Mentor to select coursework	M1: Dissertation Advisor Form	September 1 (start of 1st semester)
PhD-1	Select Dissertation Committee	M2: Dissertation Committee Form	May 31 (2nd semester)
PhD-2	Preliminary Exam	M3: Preliminary Exam Form	Dec 15 (3rd semester)
PhD-2	Annual Dissertation Committee Meeting to present dissertation aims, discuss research progress, and discuss candidacy Admit to Candidacy – coursework completed, transferred MD coursework, preliminary exam completed, 1 year of research completed	Annual Committee Meeting Form (Y2) M4: PhD Candidacy Form	July 31 (end of Y2) July 31 (end of Y2)
PhD-3	Dissertation Prospectus (Serves as Annual Committee Meeting for year 3) *If the student is not 50-75% complete, students should submit a request for an extension by July 31 of Year 3.	M5: Prospectus Form Annual Committee Meeting Form (Y3)	July 31 (end of Y3) July 31 (end of Y3)
PhD-4	Dissertation Defense or Annual Committee Meeting	M6: Dissertation Annual Committee Meeting Form (Y4)	 July 31 (end of Y4)

PhD-5	Submit a written plan to BMS leadership, signed by the student and Dissertation Advisor, detailing timeline to dissertation defense		Dec 15 (Y5)
PhD-6	Contact BMS leadership to request permission from the Steering Committee to remain in the program		July 31 (end of Y5)

*Although there may be variations in each student's timeline, a student should meet with the Dissertation Committee annually and provide documentation to the BMS office. Failure to meet deadlines listed in the above table can result in disciplinary action, including academic probation or dismissal from the program. If a student is unable to meet the above deadlines, a written request for an extension from both the student and the Dissertation Advisor must be submitted to BMS Leadership to avoid disciplinary action. These requests may also be reviewed by the BMS Steering Committee.

All deliverables should be uploaded in **Canvas using the course module *Biomedical Sciences Graduate Program—MD/PhD*

b) Milestone Requirements

Students should follow the guidelines described for Ph.D. students (pages 8-15) for the following milestones, observing the PSP-specific timeline above:

- Choosing a Dissertation Advisor
- Choosing a Dissertation Committee
- Preliminary Examination
- Annual Dissertation Committee Meetings
- Admission to Candidacy*
- Dissertation Prospectus
- Dissertation
- Graduation**

* Students should request to transfer 24 credit hours of coursework from medical school (MD-1, MD-2) **before they apply for Candidacy**. A written request detailing chosen courses and credit hours should be submitted to the BMS office for approval.

** Students should apply to graduation after completion of both MD and PhD degrees.

9. Interdivisional Transfer (IDT): Transfer to Medical School

Upon completion of the PhD portion of the degree, students will transfer back to medical school to complete MD-3 and MD-4 years. In order to transfer back to medical school, all PhD requirements should be completed. **Students should upload IDT forms to the BMS MD/PhD Canvas page no later than April 1** of the year they wish to matriculate to medical school for degree requirement verification. IDT forms are due to the medical school by April 7. Additionally, the transition from PhD service-based (taxable) stipends to MD non-service (non-taxable) stipends will begin in mid-June.

E. M.S. Biomedical Sciences/Ph.D. Chemical Engineering Dual Degree

Students enrolled in the PhD program in Chemical Engineering through the School of Science and Engineering may have the option to earn a thesis-based Master of Science in Biomedical Sciences. For information regarding this program, contact the BMS office.

F. M.D. /M.S. Bioethics & Medical Humanities Dual Degree

The Master of Science in Bioethics and Medical Humanities guides students to understand and navigate the ever-evolving technological and social complexities of healthcare by examining them from the perspective of ethics and the humanities. It is an ideal program for any student who envisions pursuing these issues in their future career. The Dual Degree (MD-MS) program can be completed within the 4-year Medical School curriculum. MD-MS dual degree students complete the MS portion of the curriculum in the first two years at Tulane School of Medicine. M.S. coursework the program is set up to allow integration with the MD curriculum and will ensure that MS classes do not conflict with the scheduled and required MD curriculum and through elective coursework offered in the summer before and after Year 1.
https://medicine.tulane.edu/ms-bioethics-and-medical-humanities/md-ms-dual-degree

G. Master of Science Degree

BMS offers a number of department-driven programs that lead to a Master of Science degree.

1. List of Master's Programs and Program Contacts

Program	Faculty Director		Program Contact	
Department of Biochemistry and Molecular Biology				
Biochemistry and Applied Bioinformatics	Wu-Min Deng, PhD	wdeng7@tulane.edu	Kelly Ragland	kraglan@tulane.edu
Biochemistry and Molecular Biology	David Franklin, PhD	franklin@tulane.edu	Kelly Ragland	kraglan@tulane.edu
Department of Medicine				
Bioethics and Medical Humanities	Stephen Hanson, PhD	shanson4@tulane.edu	Tzofit Ofengenden, PhD	tofengenden@tulane.edu
Biomedical Informatics	David Crosslin, PhD	crosslin@tulane.edu	Zylkia Lozano	zlozano@tulane.edu
Clinical Research Methods	Vivian Fonseca, MD	vfonseca@tulane.edu	Oriyan Ceaser	oceaser1@tulane.edu
Medical Genetics and Genomics	Karen Weissbecker, PhD	kremer@tulane.edu	Amaris Frias	afrias@tulane.edu
Department of Microbiology and Immunology				
Microbiology and Immunology	Kerstin Honer zu Bentrup, PhD	miim_ms@tulane.edu	Taylor Schoen	miim_ms@tulane.edu
Department of Pathology and Laboratory Medicine				
Anatomic Pathology (Pathologists' Assistant)	Darryl Duncan, MHS, PA	dduncan6@tulane.edu	Genevieve Burguieres	gburguie@tulane.edu
Molecular Medicine and Health Sciences	Haitao Zhang, PhD	hzhang@tulane.edu	Genevieve Burguieres	gburguie@tulane.edu
Department of Pharmacology				
Pharmacology	Craig Clarkson, PhD	cclarks@tulane.edu	Linda Martin	lmartin10@tulane.edu
Department of Physiology				
Physiology	Monica Maldonado, PhD	mmaldonado@tulane.edu	Debbie Olavarrieta-Mickal	dolavar@tulane.edu
Department of Structural and Cellular Biology				
Anatomy	Steven Hill, PhD	smhill@tulane.edu	Tripp Frasch	tfrasch@tulane.edu
Anatomy Research	Steven Hill, PhD	smhill@tulane.edu	Tripp Frasch	tfrasch@tulane.edu
Clinical Anatomy	Steven Hill, PhD	smhill@tulane.edu	Tripp Frasch	tfrasch@tulane.edu

2. One-Year Programs

One-year programs are designed to attract those students who are interested in improving their credentials to compete for admission to a professional school including medical school or dental school, as well as those individuals who are interested in achieving their professional goals within their chosen profession.

a) M.S. in Anatomy
Department of Structural & Cellular Biology
https://medicine.tulane.edu/departments/structural-cellular-biology/ms-anatomy

b) M.S. in Biochemistry and Molecular Biology
Department of Biochemistry and Molecular Biology
https://medicine.tulane.edu/biochemistry-molecular-biology/masters-1-year

c) M.S. in Clinical Research Methods
Department of Medicine
https://medicine.tulane.edu/clinical-research-training/masters/research-methods

d) M.S. in Medical Genetics and Genomics
Department of Medicine, Hayward Genetics Center
https://medicine.tulane.edu/centers-institutes/hayward-genetics-center/masters-medical-genetics-genomics

e) M.S. in Microbiology and Immunology
Department of Microbiology & Immunology
*Three optional tracks offered: 1. Thesis, 2. Medical Laboratory Microbiology (MLM), 3. Non-thesis.
https://medicine.tulane.edu/microbiology-immunology/masters

f) M.S. in Molecular Medicine and Health Sciences
Department of Pathology and Laboratory Medicine
*1-year (non-thesis) and 2-year (thesis) options offered.
https://medicine.tulane.edu/pathology-laboratory-medicine/masters

g) M.S. in Pharmacology
Department of Pharmacology
https://medicine.tulane.edu/pharmacology/Pharm%20Masters

h) M.S. in Physiology
Department of Physiology
https://medicine.tulane.edu/physiology/masters-program

3. Two-Year Programs

Two-year programs are designed to attract those students who are interested in improving their credentials to compete for admission to a professional school including medical school, dental school, graduate school in biomedical research; pursuing a career in biomedical education; as well as those individuals who are interested in achieving their professional goals and advancement within their chosen profession.

a) M.S. in Anatomic Pathology (Pathologists' Assistant program): This is a 2-year professional degree program designed to prepare graduates for careers as advanced practitioners in anatomic pathology. The 80 credit hour curriculum combines didactic coursework and clinical training. In the first year, students focus on foundational sciences and surgical pathology through classroom instruction. Clinical rotations begin during the summer of the first year and continue through the second year which is dedicated entirely to hands-on clinical training at partner sites across the country. The Pathologists' Assistant

Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). All M.S. in Anatomic Pathology graduates are eligible to sit for the American Society for Clinical Pathology Board of Certification Examination for Pathologists' Assistants.
https://medicine.tulane.edu/pathology-laboratory-medicine/pathologists-assistant

b) **M.S. in Anatomy Research**: This is a 2-year thesis program of study of gross anatomy, embryology, cell biology, and histology leading to a Master of Science degree in Anatomy by research. It is designed specifically for candidates who wish to develop research careers in biomedical science and medical education. In the first year, students in the program take anatomy and histology courses along with other graduate courses. All courses in the program are taught within the School of Medicine by full time faculty. In the second year, students carry out mentored research in the Department of Structural and Cellular Biology.
https://medicine.tulane.edu/structural-cellular-biology/masters/anatomy/research

c) **M.S. in Biochemistry & Applied Bioinformatics:** This is a 2-year thesis-required program for the study of biochemistry and bioinformatics leading to a Master of Science degree in Biochemistry and Applied Bioinformatics. The program is designed to improve academic credentials and scientific research experience of graduates. Our distinctive program emphasizes student development in five areas (coursework, laboratory skills, independent thought, presentation skills, and personal growth), allows students to broaden and strengthen their academic foundation, and equips students with basic and advanced lab and bioinformatics skills for a career in academic or industrial research.
https://medicine.tulane.edu/biochemistry-molecular-biology/masters-2-year

d) **M.S. in Bioethics and Medical Humanities:** This is a 1- or 2-yr, 30 credit hour non-thesis program leading to a Master of Science in Bioethics and Medical Humanities spanning clinical and research ethics, bioethical theory, history of medicine, narrative, and medicine in literature and film. This program is designed for: 1) Dual-degree students in Medicine or Public Health ; 2) those interested in applying for admission to medical, dental and other health-related professional schools; and 3) mid-career professionals in Medicine, Public Health, Law, Nursing, Chaplaincy, Social Work, etc., who wish to enhance their scholarly and clinical background for future service or scholarship in ethics or medical humanism.
https://medicine.tulane.edu/biomedical-sciences-graduate-program/ms-bioethics-medical-humanities

e) **M.S. in Biomedical Informatics:** This program provides students with an academic foundation to become informatics leaders in medicine, biology, and public health. This 2 year, 30-credit program combines coursework with seminars and journal clubs, and results in a research-focused thesis that will prepare students for both academia and industry. Students will have opportunities to translate classwork, critical research skills, and personal growth into real-world experience while collaborating with expert faculty across multiple domains and departments. Areas of interest include (1)Translational science, genomics, multi-omics, and single cell and spatial sequencing, (2) Biomedical data science - AI/machine learning/biostatistics, (3) Precision medicine and implementation science, (4) Bioinformatics, statistical genetics, and computational biology, (5) Learning healthcare systems - clinical informatics.
https://medicine.tulane.edu/deming-medicine/biomedical-informatics-genomics-division#:~:text=The%20Biomedical%20Informatics%20Master's%20Program,or%20other%20healthcare%2Drelated%20professions

f) **M.S. in Clinical Anatomy:** This is a two-year non-thesis program designed for bachelor's degree graduates and physicians who intend to follow a career in teaching the morphological sciences in colleges as well as research and scholarship in health sciences education. With a MS Clinical Anatomy degree, graduates can apply for teaching positions in anatomy, histology, embryology, neuroanatomy and biomedical sciences.
https://medicine.tulane.edu/structural-cellular-biology/masters/clinical-anatomy

g) **M.S. in Clinical Research**: This is a 38 credit, 2 to 3-year, curriculum designed for senior post-doctoral fellows and junior faculty to provide them with the tools and experience to conduct clinical and translational research. The program includes didactic training in clinical research as well as a mentored research component. The scholar must have institutional and departmental support as well as protected time to attend classes and pursue mentored research. In lieu of a thesis, the candidate is expected to prepare a grant ("K" or "R" format) and/or a paper based on the mentored research. https://medicine.tulane.edu/clinical-research-training/masters/mscr

h) **M.S. in Molecular Medicine and Health Science (thesis option):** Students select the thesis option are expected to complete the program in two years. The thesis option is designed to enrich the scientific research experience and improve the academic credentials of students interested in careers in the biotech and pharmaceutical industries, as well as in academia. The degree requirements in this program include 30 credit hours of coursework with a cumulative GPA $\geq$ 3.0, plus preparation and successful defense of a thesis. In the second year, students will conduct mentored research in a lab affiliated with the Department of Pathology and Laboratory Medicine. Graduates of this program will demonstrate advanced knowledge in the molecular and cellular basis of disease and develop quantitative and qualitative research skills in data collection and analyses. https://medicine.tulane.edu/pathology-laboratory-medicine/masters

4. **Thesis Requirements (applicable to thesis-required programs)**

a) **Process:** The subject of the thesis for all master's degrees must be in the field of major study and must have the approval of the professor by whom the thesis is to be directed. The finished thesis must have the approval of a committee appointed by the chair of the department. The director of the department will serve as chair of the thesis committee. At the request of the director, a member of some other department may be added to the committee.

b) **Submission:** An electronic copy of the final, approved thesis must be submitted to the **home office of the student's Master's program**. The title page of both the abstract and the dissertation must contain the subject of the dissertation, the date on which it was submitted, the department and the signature of the candidate, with the candidate's full legal name typed underneath. Signatures of the examining committee members should be listed in the lower right-hand corner; the full name of the committee chair must be typed under the signature. A short abstract of 350 words should follow the abstract title page. The student must also upload the thesis to the ProQuest MNI website: https://www.etdadmin.com/main/home?siteId=61

c) **Formatting:** A general guide for use in the formatting of theses and dissertations in the BMS program is available online at http://www.etdadmin.com/docs/bmstulane/bmstulaneguidelines.pdf. A full list of authorities and books consulted and a short biographical sketch must be appended. A basic style sheet for use in preparing theses and dissertations is available in the BMS Program office, as well as sample copies of master's dissertations. More detailed instructions for the preparation of the dissertation may be obtained from A Manual of Style, University of Chicago Press; the M.L.A. Style Sheet; or A Manual for Writers of Term Papers, Theses and Dissertations, by Kate L. Turabian. The dissertation advisor will advise which guide is preferred.

d) **Deadlines:** The candidate should submit the thesis prior to the end of the exam period for the appropriate semester as listed in the Graduate School Academic Calendar. If the department in which a thesis has been written finds there is sufficient reason to protect the contents by copyright, there will be a fee charged from ProQuest.

5. Graduation

Degrees earned in the School of Medicine are awarded three times a year; December, May, and August. Applications for Degree must be filed for the current term on or before the deadline date for graduation. This is usually due early in the semester. Applications filed in previous terms are not valid.

a) Checklist/Requirements

Students may receive additional requirements/instructions from their Master's program directors.

1. Application for degree (due approximately 6 weeks after start of semester)
2. Upload and submit final thesis with signatures to ProQuest MNI website https://www.etdadmin.com/main/home?siteId=61 (uploading is free unless copyrighted)
3. Upload and submit final thesis with signatures to the Tulane Howard Tilton Thesis Archive https://digitallibrary.tulane.edu/user/login?destination=islandora/object/tulane%3Astudent_submission_collection/manage/overview/ingest

The decision to copyright the thesis must be made before it is uploaded to ProQuest. Information regarding Proquest and general copyright policies of the thesis can be found at:
https://pq-static-content.proquest.com/collateral/media2/documents/copyright_dissthesis_ownership.pdf

b) Application for Degree

Students seeking to receive their diploma are required to submit the online **Application for Degree**, accessible under the Student Tab in the Gibson portal. Submission is applicable only for students who have completed, or who anticipate completing, all degree requirements by the deadline established by the individual Master's program and the BMS office for the corresponding semester's degree conferral.

c) Commencement Exercises

The Unified Spring Commencement Ceremony and the Graduate Hooding Ceremony are held only in the Spring semester. Ceremonies are not conducted at the end of Summer or Fall semesters. As part of the Application for Degree process, students will have the opportunity to indicate their intent to participate in the Unified Spring Commencement Ceremony. Participation in the Graduate Hooding Ceremony requires completion of the **Graduate Hooding and Recognition Ceremony Registration and the First Destination Survey**, which the BMS office will distribute in early May. This survey confirms students' participation in walking across the stage.

H. CERTIFICATES

BMS offers department-driven certificate programs that are awarded after successful completion of a related cluster of credit bearing courses (12 credit hours). They may be earned on their own (stand alone) or earned along with a corresponding degree.

1. **Certificate in Bioinformatics** (Division of Biomedical Informatics and Genomics)
   The Certificate in Bioinformatics is a hybrid in person/online program that aims to provide students with the fundamental principles of biomedical informatics. The curriculum consists of four courses (2 required, 2 electives) and students must earn a total of 12 credit hours: (1) Introduction to Bioinformatics, (2) Statistical Machine and Deep Learning in Biomedical Practice, (3) Fundamentals of Data Analysis, and (4) Big Data Analysis in Biomedical Informatics. (offered by the Division of Biomedical Informatics and Genomics)

2. **Certificate in Biomedical Data Science** (Division of Biomedical Informatics and Genomics)
   The Certificate in Biomedical Data Science is a hybrid in person/online program that aims to provide students with the fundamental principles of biomedical informatics. The curriculum consists of four courses (2 required, 2 electives) and students must earn a total of 13 credit hours: (1) Introduction to Data Science for Biomedical Informatics, (2) Statistical Machine and Deep Learning in Biomedical Practice, (3) Big Data Analysis in Biomedical Informatics, and (4) Biomedical Data Science with Cloud Computing.

3. **Certificate in Clinical Ethics**
   The Certificate in Clinical Ethics is designed to provide clinical professionals, students of medicine, ethics committee members, and non-clinical health care professionals (e.g., patient advocates, hospital attorneys) with an understanding of medical ethics, current bioethical controversies, and practical and classroom experience in clinical ethics. It is designed for persons who wish to better understand ethics in clinical medicine or conduct clinical ethical consultations.
   https://medicine.tulane.edu/ms-bioethics-medical-humanities/bioethics-medical-humanities-graduate-certificates

4. **Certificate in Clinical Research**
   The Certificate in Clinical Research is designed to provide clinical professionals with some fundamentals of clinical research with less time commitment than is required for the MS degree program. The curriculum provides scholars with an introduction to research design, regulatory issues, statistical concepts and data management, and includes four courses covering basic biostatistics, epidemiological methods, ethics and responsible conduct of research, and protocol writing. The Certificate is open to medical professionals and trainees, and is especially suited for K award applicants and recipients who can acquire these skills as part of their educational component. This unique certificate program is modeled after the Clinical Research Training Courses offered by the NIH Clinical Center.
   https://medicine.tulane.edu/clinical-research-training/certificate

5. **Certificate in Health Informatics** (Division of Biomedical Informatics and Genomics)
   The Certificate in Biomedical Data Science is a hybrid in person/online program that aims to provide students with the fundamental principles of health informatics. The curriculum consists of four courses (2 required, 2 electives) and students must earn a total of 12 credit hours: (1) Introduction to Health Informatics, (2) Health Informatics with Cloud Computing, (3) Fundamentals of Data Analysis, and (4) Big Data Analysis in Biomedical Informatics.

6. **Certificate in Medical Humanities**
   The Certificate in Medical Humanities is designed to provide health care professionals, students of medicine, and interested lay members of the public with and understanding of the fundamental principles of medical humanities and study of medical history, narrative medicine, and/or the intersection of film and literature with medicine. It is designed for those who wish to develop a deeper understanding of the connection between medicine and art, history, and literature.
   https://medicine.tulane.edu/ms-bioethics-medical-humanities/bioethics-medical-humanities-graduate-certificates

7. **Certificate in Research Ethics**
   The Certificate in Research Ethics provides clinical and non-clinical professionals (including regulatory or administrative personnel), Institutional Review Board members, and students of medicine engaged in or planning to conduct medical research with an understanding of medical ethics, current bioethical controversies, and a focus on research ethics. It is designed for persons who want to conduct ethical research and/or better protect human subjects through informed ethical assessment.
   https://medicine.tulane.edu/ms-bioethics-medical-humanities/bioethics-medical-humanities-graduate-certificates

8. **Certificate in Sports Medicine**
   The Certificate in Sports Medicine involves a series of online courses guided by experienced instructors, allowing students to pursue their academic goals while tapping into what it takes to succeed in the fast-paced sports industry. The curriculum is designed for professionals who aspire to more fully understand the sports industry from a medical perspective. The program is designed to be a graduate-level certificate that provides learners with an introduction to the foundational knowledge and skills important to the recognition, care, prevention and rehabilitation of athletic injury; the assessment and response to emergency situations

involving athletes; and research within sports performance methods. Learners will develop a diverse base of knowledge and practices necessary to guide success in working with current and former athletes. https://sopa.tulane.edu/degrees-programs/certificates/graduate/sports-medicine

I. INDIVIDUAL FELLOWSHIP INCENTIVE PROGRAM

The Biomedical Sciences Graduate Program has established an incentive plan designed to encourage BMS PhD and PSP students to submit research proposals for external funding after choosing a Dissertation Advisor.

BMS graduate students who apply for an individual fellowship (e.g. NIH NRSA) **will be awarded $400 from BMS** as a reward for submitting the application. If the fellowship is funded, applicants **will receive an additional financial reward of $1500 from BMS.** The $400 award is given for first submissions only, and the $1500 award is given one-time only at the start date of the fellowship. If a student submits the same fellowship application to two different grant agencies, the maximum incentive received will be $400 for submission.

1. Eligibility

- Applicant must be a full-time PhD or PSP student in the BMS program
- Fellowship application must be written and submitted by the student
- Award must be from an external funding source
- Award and application process is equivalent to an NIH F30/F31 NRSA application, and must be peer-reviewed
- Award is for a minimum of 2 years of stipend funding
- Award must provide more than half of the current base stipend in the BMS program. Applications for and receipt of travel and other small grants will not be eligible for an incentive award under this program.

2. Requirements: Fellowship Submission Incentive

To qualify for the $400 award from the BMS program:

- Applicant's Dissertation Advisor must provide written verification to the BMS program that the application was written by the student and is considered to be competitive
- Student must provide a PDF of the completed fellowship application to the BMS program, with evidence that the application was received by the granting agency

3. Requirements: Funded Fellowship Incentive

To qualify for the $1500 one-time award from the BMS program:

- Applicant's Dissertation Advisor must provide written verification to the BMS program that the application was written by the student
- Applicant must provide a PDF of the completed fellowship application to the BMS program
- Applicant must provide the granting agency-distributed award notice to the BMS program

If a student receives a fellowship (e.g. NIH F31) that provides stipend funding below the amount of the current Tulane BMS stipends, the students Dissertation Advisor is obliged to provide stipend support to supplement to the amount of the current BMS stipend.

Applications for Fellowship Submission Incentive and the Funded Fellowship Incentive should be submitted through Canvas for approval by BMS leadership.

III. FINANCIAL REGULATIONS

A. FEDERAL INCOME TAX

Determination of the tax status of an individual receiving compensation from any grant is the responsibility of the Internal Revenue Service. According to the IRS, fellowships and scholarships made to US students are tax-free for degree-seeking students ONLY if used for tuition, fees and other required educational expenses. Scholarship and Fellowship awards made to foreign students are not subject to any service conditions; however, depending upon the treaties in effect between the student's country and the US government, taxes may be withheld from this portion of the award. Foreign students should contact https://www2.tulane.edu/wfmo/payroll/international_tax.cfm for more information.

Tulane University withholds Federal Income taxes for Service-required Stipends over a certain threshold for full-time students. Service-required stipends include Teaching Assistantships and Research Assistantships. All students must file income tax returns with the Federal and State Governments at the end of each calendar year. It is the responsibility of each student to file prior to the deadline date (April 15).

B. FINANCIAL AID

The Tulane Financial Aid Office maintains a website for School of Medicine graduate students: https://financialaid.tulane.edu/graduate/medicine. The website includes a Financial Aid Application Checklist and a list of financial advisors.

C. TUITION AND FEES

1. **Doctoral Students**
   For Ph.D. students enrolled as full-time students, the BMS program provides full tuition waivers, and the Tulane Student Health Insurance Plan (T-SHIP) is provided at no cost to the students. The BMS program also provides waivers for the Campus Health fee and the Dissertation fee. **Students are required to pay all other fees.** During the first two years, student fees (Student Activity, Recreation Center, Academic Service) are withheld from the student's stipend. In years 3 and beyond, **students are responsible for paying their own fees,** as they are not deducted from student stipends. Current fees for the academic year can be found at https://studentaccounts.tulane.edu/content/tuition-and-fees.

2. **Master of Science Students**
   Tuition and fee waivers are not available to MS students. Tuition and fees are due at the time of registration. Tuition is listed under the School of Medicine for all BMS MS programs in the following website which shows the current fee schedule for Tulane University: https://studentaccounts.tulane.edu/content/tuition-and-fees.

D. FINANCIAL RESPONSBILITY

** **Responsibility to Pay:** Students are responsible for paying their fee bill by the published payment deadline printed on your billing statement. See the Accounts Receivable website for more information about payment procedures.

Gibson Online can help you stay in control of your student account and financial aid. Use the Student Accounts menu to view your fee invoice and student account history.

- Remember to check your fee invoice in the Student Accounts section, immediately after enrolling each semester, each time you add or drop courses, just before classes begin, and just before you pay your tuition and fees bill.

- Read your fee invoice carefully.
- Review the courses listed to be sure they are correct. If not, go to ***GIBSON*** and add/drop.
- Check the "Bills" to be sure your tuition and fees are calculated correctly for your residency and courses. Graduate and undergraduate courses are charged different rates.
- Review the "Payment History" section to see payments you have made yourself. If you are expecting a graduate tuition waiver, payment from a Tulane account, or payment from an external agency or employer, check this section to see if the payments are showing on your account as credits. Often payments from other sources do not show until after the add/drop period ends.
- Check the "Recent Activity." This amount due is calculated based on your current enrollment and all credits.
- Subtract your Estimated Aid from the Amount Due if you meet all eligibility requirements to receive the aid.
- Estimated aid and graduate tuition waivers are not immediately updated when your enrollment status changes. For graduate tuition waivers, awards will start showing during the first month of class each semester. Remember to wait at least 24 hours after enrolling or making enrollment changes, and then check your fee invoice again for graduate tuition waivers.

E. STIPENDS

All PhD students receive an annual stipend while enrolled as full-time students in the BMS Program. The stipend is continued as long as the student is making progress toward the degree. Stipends are coordinated by the BMS office and require direct deposit. All fellowships, scholarships, and any type of assistantships require full-time residence status and maintaining an academic level of performance satisfactory to both the department and BMS leadership.

Student stipends are funded by the BMS program until July of their second year in the program. This funding normally includes both a Fellowship and a Teaching Assistantship stipend. Dissertation Advisors are responsible for stipend funding and T-SHIP beginning July of the 2nd year until graduation. Stipends provided by the Dissertation Advisor are Research Assistantships.

Stipends, fellowships and assistantships are not available for Master of Science students.

F. OUTSIDE EMPLOYMENT

Doctoral students are full-time student employees and are strongly discouraged from off-campus employment during their entire program.

G. TRAVEL POLICY – UNIVERSITY-RELATED TRAVEL

Ph.D. students engaging in Tulane-related travel must comply with the Tulane University Travel Policy. https://procure.tulane.edu/sites/default/files/New_Travel_Policy_2022.pdf
Travel must be approved by the student's Dissertation Advisor, and/or BMS leadership (first and second year Ph.D. students).

Travel expenses **must** be booked by the student's Dissertation Advisor or Department Administrator using a Tulane administered T&E card through Concur. These expenses include lodging and airfare/transportation. Conference registration must be booked by the student's Dissertation Advisor or Department Administrator using a Tulane administered P card or T&E card when appropriate.

IV. POLICIES AND PROCEDURES

A. Code of Graduate Student Academic Conduct

The Graduate Program in Biomedical Sciences expects students to conduct their academic endeavors with honesty and integrity. Activities covered by the Code of Academic Conduct include course work, examinations, and research. This Code outlines individual responsibilities as well as procedures to be followed if there is a question concerning a student's academic honesty or integrity. These values are held in common by all departments and enforced by the sanctions of the BMS program. All students enrolled in BMS are subject to these regulations and should be familiar with this Code of Academic Conduct. Lack of familiarity with the Code or with the precise application of its principles to any specific instance is not an excuse for noncompliance. The Code of Academic Conduct is available at: https://ogps.tulane.edu/graduate-policies. Principles and activities not covered by this Code may fall under the purview of university or departmental research and/or ethics committees. Questions concerning jurisdiction should be addressed to the BMS leadership.

B. The Tulane University Code

The University requires of all of its student's behavior compatible with its high standards of scholarship and conduct. The Vice President for Student Affairs is responsible for formulating appropriate procedures and regulations concerning student behavior and for the judicial consideration of violations. https://conduct.tulane.edu/sites/conduct.tulane.edu/files/2018-19%20Code%20Pre%20edits_0.pdf.

C. Requirement to Stay Informed

Students are responsible for checking their Tulane issued email accounts daily since announcements from the BMS office, School of Medicine departments or other entities at Tulane are frequently sent via email.

D. Requirement to Inform Tulane

All students are required to have a personal evacuation plan that they can implement without reliance on Tulane University. This should be filed through Gibson and can be accessed by this link https://gibson.tulane.edu/tulane/legacy/storm_plan. Students are also responsible for informing the university of their change of name and address. This should be done by informing the BMS office and by logging into *Gibson Online* (https://gibson.tulane.edu/tulane/jsp/login.html)

E. Continuous Registration Requirement

A student admitted to any degree program in BMS must be continuously registered in a degree-granting division of the University during the 12-month calendar year and maintain full-time status until the awarding of the degree. Any student who is not registered for coursework in a degree-granting division of the University must be registered in Master's Research or Dissertation Research every semester, including the summer, in order to remain in continuous registration. Although these courses are zero-credit-hour courses, registration will maintain full-time status.

Failure to be continuously registered is *de facto* withdrawal and the school reserves the right not to readmit. A student who is readmitted is obligated to pay any applicable fee required to maintain continuous registration.

F. Class Attendance Requirements

Students are expected to attend all classes unless they are ill or prevented from attending by exceptional circumstances. Instructors may establish policies for attendance of their classes, which are announced at the

beginning of the semester. Students are responsible for making up the work covered during that session, including quizzes, examinations, and other exercises; they also are responsible for obtaining notes on material covered in lectures or other class sessions. Students are responsible for notifying professors about absences that result from serious illnesses, injuries, or critical personal problems.

G. ACADEMIC REGULATIONS

The following definitions pertain to BMS academic regulations:

For Doctoral programs:

Department – BMS
Department Chair – BMS leadership
Advisory Committee – BMS Steering Committee
Grievance Committee – Ad-hoc committee comprised of three members + non-voting chair (exclusive of BMS leadership)

For Master's of Science programs:

Department – department of the individual program, usually comprised of program directors
Department Chair – chair of the department of the individual program
Advisory Committee – MS Subcommittee to Steering
Grievance Committee – Ad-hoc committee comprised of three members + non-voting chair (exclusive of department)

1. Graduate Student Grading Policy

The BMS program follows the Tulane University Graduate Student Grading Policy found on page 1 of the following document: https://ogps.tulane.edu/sites/default/files/Grad%20student%20grade%20policy%20final_0.pdf). Descriptions of grades (I, R, IP, W) on this document are consistent with BMS policies.

2. Academic Performance Standards

All students (MS and PhD) in the BMS program must maintain a grade point average of at least a 3.0. Courses in which a student earns a grade of C+ or lower cannot be counted towards a master's degree or a PhD. Students are required to earn a passing grade (B- or above) in any core curriculum course in order to earn the degree. If a student earns a grade of C+ or lower in a core course (or any course), they may be given one chance to remediate the grade if they wish to continue pursuit of the degree.

If a student receives two B- grades, or one grade of C+ or lower, the student is placed on Academic Probation and considered for dismissal by the department in consultation with the appropriate advisory committee (Steering/MS Subcommittee to Steering) at the conclusion of the semester in which the non-passing grade or the second B- occurred. The student will be recommended to be removed from probation if they receive no further grades of B- or lower in the following semester, and if the student maintains a grade point average of 3.0 or better.

For doctoral students, probation or dismissal will be considered if a student fails to match with a lab within 4 rotations, pass the preliminary examination, complete the dissertation prospectus, or complete and defend the dissertation according to the established time frames (or completion of any milestone within the given timeframe). Under these conditions, terms of probation and dismissal will be set by BMS leadership in consultation with the Steering Committee.

Minimum academic performance and/or unsatisfactory performance may also lead to the withdrawal of financial support.

3. Technical Performance Standards

Technical Standards are non-academic requirements essential for meeting the requirements of a Ph.D. and some MS programs in BMS. Granting of these degrees implies the recipient has demonstrated a base of knowledge in their chosen field of study and possesses the ability to independently apply that knowledge to form hypotheses, design and conduct experiments, interpret experimental results, and communicate these findings to the scientific community. The following technical skills are required for completion of degree:

a) **Observation:** The candidate must be able to acquire knowledge by direct observation of demonstrations, experiments, and experiences within the research and instructional setting.
b) **Intellectual/Conceptual Abilities:** The candidate must be able to measure, calculate, analyze, reason, integrate and synthesize information to solve problems.
c) **Motor Skills:** The candidate must possess motor skills necessary to perform procedures required for experimentation within the chosen discipline. Those individuals with physical challenges are encouraged to contact the appropriate administration to determine their educational options within the chosen discipline.
d) **Communication:** The candidate must be able to communicate and discuss his or her experimental hypotheses and results to the scientific community.
e) **Behavioral and Social Attributes:** The candidate must possess the emotional and mental health required for appropriate utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities inherent in managing a scientific setting, the ability to function under the stress inherent in research, and the ability to understand and comply with ethical standards for the conduct of research.

Process for Review of Status

Any degree candidate enrolled and placed in jeopardy by these policies may request a review of status by the appropriate advisory committee. The procedure for a request of a review is to submit to the BMS office, a written explanation of extenuating circumstances or other matters pertinent to the request for hearing. The decision of the advisory committee shall be considered final.

4. Grade Change Policy

A student who believes that a final grade was assigned incorrectly may request a final grade change. Final grades can be changed only in exceptional circumstances and only with the approval of the instructor, the chair of the department, and the dean of school/BMS leadership. Grade changes are not allowed once a degree to which that grade applies has been awarded.

5. Course Registration

All students are responsible for their own class schedules. Consultation with academic advisors or thesis mentors is strongly encouraged before enrolling in any BMS class. Students register using Gibson Online (https://gibson.tulane.edu/tulane/jsp/login.html). Class schedules are found on the University Registrar's website (www.registrar.tulane.edu). Upon registering, students assume full financial responsibility for keeping the University informed of any address changes so that bills and priority registration materials may be delivered promptly.

a) Independent Study and Special Topics

The BMS office must register students for Independent Study (BMSP-7990) and Special Topics (BMSP-7500) **prior** to the start of the semester, to ensure credit is received. Forms can be found in Canvas, and should be uploaded to Canvas to request registration.

b) Registration Holds

Students who have an outstanding financial balance with Accounts Receivable and/or are blocked by Campus Health concerning their immunization records will need to resolve these issues before registering. The BMS office can help with identifying the nature of registration holds.

6. Registration Deadlines/Course Changes

Registration deadlines are found at the Registrar's website. If registration deadlines are missed, students will need to complete a drop/add form, available in Canvas. Students wishing to add or drop courses should consult the Registrar's website for deadlines and instructions, and should be completed in Gibson online. Failure to make schedule adjustments promptly and accurately may result in financial or academic penalties. Registration will not be permitted beyond the first week of a course.

7. Course Audits

Students may audit any course in the BMS Program that he/she is otherwise qualified to attend except under the following circumstances:

- The course has reached capacity with "for grade" students and/or;
- The course is listed as "permission of the instructor required: and permission has not been granted, and/or;
- Official course registration is required. Usual advisor signatures, tuition and fees and add/drop dates apply. No transfers from audit to credit will be permitted after add/drop date;
- There are no class work or attendance requirements

A student may take a previously audited course for credit. This process requires a second official registration and payment for the course. Students paying audit tuition and fees are entitled to copies of handouts, assignments and/or other class materials. The conditions for student participation and evaluation of student work will be agreed upon in advance by the student and the instructor. Courses taken for audit will not appear on final transcript.

8. Transferring Credits

Graduate students may request to transfer credit from graduate courses taken at other accredited institutions. Students must submit a written request to the BMS office to transfer credits from other graduate programs. These requests will be reviewed by the BMS Steering Committee and BMS leadership, in consultation with the appropriate course directors. Only courses in which the student achieved a grade of B or higher (as evidenced by an official transcript from the other institution), and which are no more than six years old, will be considered for transfer. To transfer credits, a course must be deemed equivalent to a course in the BMS curriculum and appropriate for the degree desired (doctoral or master's). The number of credits transferred will be the lesser of the credits awarded from the transferring course and the BMS equivalent course.

A maximum of 24 credit hours may be transferred from one PhD program to the BMS PhD program, and a maximum of 12 credit hours may be transferred from one MS program to BMS PhD program. If a student earns more than one graduate degree at Tulane, and the same course(s) is required by both degrees, the student cannot count more than 25% of the total credit hours required for the smaller degree, not to exceed 12 credit hours. At least 50% of the credits counted towards a Tulane degree must be taken at Tulane.

9. Incomplete Grade (I) Policy

An incomplete grade (I) is given at the discretion of instructors when special circumstances prevent a student from completing work assigned during the semester and with the understanding that the remaining work can be completed within an agreed upon time of up to 12 months following the course. Incomplete grades also are given when a student's absence from a final examination has been excused by their school's dean or dean's designee prior to or within one day following the final examination.

Incomplete grades must be resolved within 12 months or they are automatically changed to a grade of F/I. The I will remain on the student's transcript, accompanied by the final course grade only when the final grade in the course is an F. Full Incomplete Grade Policy can be found at:
https://ogps.tulane.edu/sites/default/files/Incomplete%20Policy%202022%20Update.pdf

10. Program Withdrawal

a) Voluntary Withdrawal

A student who has registered for a semester and plans to withdraw from the program must inform the BMS office in writing. The official date of the withdrawal must be approved by BMS leadership and is usually the date of formal notification. Students who officially withdraw from the program must surrender their student identification cards and keys to their mentor's laboratory, if relevant, at the time of withdrawal. A "W" will be recorded on the student's transcript. In the case of a medical withdrawal, students must request a medical withdrawal in accordance with the checklist on the Case Management and Victim Support Services Website: https://cmvss.tulane.edu/content/medical-withdrawal-leave-return. Students must notify the BMS office of their intent to request a medical withdrawal prior to beginning the process.

b) Administrative Withdrawal

Students who fail to register during a term without specifically requesting leave or permission to withdraw, will be withdrawn administratively. Transcripts will reflect "W". All payments and benefits, including tuition waivers or stipends, will cease upon administrative withdrawal.

11. Academic Probation

A student may be placed on academic probation for the following reasons:

- Failure to meet Academic Performance Standards ***(see page 30)***.
- Failure to meet Technical Performance Standards ***(see page 31)***.
- Failure to complete Milestones in accordance with the timeline given.
- Failure to submit required annual paperwork, or other degree requirements.
- Violation of the expectations of professional behavior.
- Other reasons at the discretion of BMS leadership.

The terms of the probation will be established by the department (BMS for doctoral students; program departments for master's students) in consultation with the appropriate advisory committee (ie: Steering for doctoral students). Students on academic probation are ineligible to obtain a letter of good standing, which may affect student fellowship applications and foreign student visa renewals.

The student should be notified of the probation within one week of when the milestone is not met or when final grades are due for the semester in which the non-passing grade or second B- occurred. Notice of Academic Probation will be sent in a manner that verifies that the student received it (ie: read receipt), with the head of the department, BMS office, and BMS leadership copied on the communication.

12. Dismissal

A student may be dismissed for any of the following academic or non-academic reasons:

- Failure to meet Academic Performance Standards ***(see page 30)***.
- Failure to meet Technical Performance Standards ***(see pages 31)***.
- Violation of the honor code or other misconduct.
- Possibility of danger to the health of the student or to other students if enrollment is continued.
- Violation of the expectations of professional behavior.
- Other reasons at the discretion of BMS leadership.

If a student being considered for probation or dismissal receives a stipend, the stipend will be automatically discontinued if they are dismissed. This change will be in effect within one pay cycle of the final decision being issued.

Students who have been dismissed from the BMS program are not allowed to re-enroll, but may apply for another graduate program in a different school at the university. Academic dismissal is noted permanently on the student's transcript.

Timeline: Refer to the OGPS published policy, "Timeline for Dismissal Process." https://ogps.tulane.edu/sites/default/files/Graduate%20Student%20Dismissal%20Policy.pdf

13. Student Appeals and Grievances

These procedures do not apply to cases under the Code of Academic Conduct or the Code of Student Conduct. The timelines described are not absolute and exceptions may be made under certain circumstances. Deviations from the appeal process timelines must be approved by BMS Leadership.

a) Grade Appeals

Grade appeals are intended for students who believe their grade was not determined in a fair and appropriate manner.

1. Within one month of receiving the grade, the student should make an informal attempt to resolve the grievance by approaching the teacher or other academic supervisor.

2. If a student and teacher cannot arrive at a mutually satisfactory solution within seven days, the grievance should immediately be referred to by the student to the department chair for resolution.

3. If the grievance cannot be resolved by informal mediation within seven days of referral to the department chair, the chair should invite both student and teacher to submit written statements of their opinions concerning the grievance, to be reviewed by the appropriate advisory committee, which excludes a representative from the individual department in which the grievance concerns. The Advisory Committee should render a decision within ten days of receiving written statements. The decision of the Advisory Committee is final.

   The Advisory Committee should prepare a written report that contains the decision and an explanation of the grounds upon which the decision was reached. One copy of the report should be sent to BMS Leadership, the Executive Dean for Research (SOM), and the Dean of the School of Medicine.

b) Dismissals and other Appeals

If a student has been dismissed for academic reasons, they have the right to appeal that decision. The timelines described are not absolute and exceptions may be made under certain circumstances. Deviations from the appeal process timelines must be approved by BMS Leadership.

1. Within five business days of receiving the decision, the student should file a written appeal to BMS leadership to be reviewed by the BMS Grievance Committee. The written appeal must detail reasons that the student believes they have made adequate progress towards the completion of their degree. It is distinct from any appeal the student might file regarding an individual course grade that has contributed to their dismissal. The department in which the appeal pertains should submit relevant documentation describing the grounds for dismissal to the Grievance Committee.

2. After receiving the written appeal, the Grievance Committee will review the student's transcripts, annual reviews, research materials, academic standing, and any other relevant information. Said faculty members should review the appeal and return a decision within ten days of receiving the written appeal. The decision should be documented with an explanation of the grounds upon which the decision was reached. Once copy of the report should be sent to BMS Leadership, the Executive Dean for Research (SOM), and the Dean of the School of Medicine.

3. If the student is not satisfied with the decision reached by the Grievance Committee, they may appeal to the Executive Dean for Research (SOM), the Dean of the School of Medicine, or the dean's designee within five business days of receiving the decision. The Dean or their designee will review the appeal and the department's decision and return a decision within ten days. The decision should be documented with an explanation of the grounds upon which the decision was reached. One copy of the report should be sent to BMS Leadership.

4. If the student is not satisfied with the decision reached by the School of Medicine, they may appeal to the Provost or Provost's designee. The Provost or designee will review the appeal and the decisions made by the Department, Program, and School of Medicine, and return a decision within five business days. The decision of the Provost is final.

V. STUDENT AFFAIRS

A. Division of Student Affairs

BMS students are encouraged to take advantage of the wide-range of services offered by the Tulane University Division of Student Affairs related to student health and welfare. Graduate and Professional student resources can be found at https://studentaffairs.tulane.edu/graduate-professional-student-resources.

B. Professionalism and Environment of Learning Program

The Tulane University School of Medicine is committed to creating and maintaining a positive environment for its faculty and learners. This environment is based on mutual respect and accountability. The BMS Program is designed to provide an environment that is professional, respectful, inclusive, and intellectually-stimulating. Students should be aware of the **Guiding Principles for Professionalism** at Tulane School of Medicine, and submit a signed form at the start of each year. In addition, our program allows for individuals to confidentially report concerning behavior, or exceptional behavior. To report a concern or a kudos, or to learn more information, visit: https://medicine.tulane.edu/student-affairs/professionalismenvironment-learning-program.

C. Extended Absences

1. Vacation Leave

Ph.D. students are entitled to 2 weeks of paid vacation (10 days) per year in addition to holidays approved by the BMS calendar. Vacation does not excuse students from class attendance requirements or other class responsibilities. All students taking vacation must inform their mentor and the BMS office two weeks prior to the scheduled vacation, by submitting the Vacation Leave form found on the BMS website. The summer session during graduate school is time spent in residence, **not a vacation period**. Students may request more than 10 days of vacation, however, stipends will be suspended for leave time beyond 10 days.

Foreign students holding a student visa who wish to temporarily leave the United States must obtain permission of their department chairman (if applicable) and submit a written request to the BMS Office at least ***30 days prior to their travel*** and/or before making any travel arrangements. Students granted permission then apply for a new I20 or IAP-66 in order to return to the United States. Any foreign student

who leaves the United States without the consent of the BMS Office will be subject to disciplinary action. Students not returning from leave of absence within the approved date will have their stipends suspended and may be required to re-apply to the BMS Program.

2. Medical Leave

Students may experience medical and/or psychological conditions that significantly impact their ability to complete their academic pursuits. During such circumstances, a medical leave of absence from the University provides the student an opportunity to remain a matriculated student while also allowing time away for appropriate treatment and recovery. To apply for medical leave, students should contact Student Resources and Support Services by emailing tyner@tulane.edu, calling (504) 314-2129, or by scheduling an appointment here. Students should notify BMS leadership of plans to apply for medical leave. Policies and procedures for applying for leave and returning to the BMS program are found here: https://cmvss.tulane.edu/content/medical-withdrawal-leave-return.

3. Childbirth and Family Leave

All students who anticipate giving birth during the academic semester or during the period covered by financial support (e.g., stipends, grants, etc.) are eligible for a Childbirth Leave.
Students who seek benefits, services, or leave related to pregnancy and childbirth should contact Case Management and Victim Support Services. Detailed information on Childbirth Leave can be found at https://ogps.tulane.edu/graduate-policies. Students should complete the Student Childbirth and Pregnancy Request Form, found at https://pregnancy.tulane.edu/.

4. Other Leave

MS students should coordinate absences with their individual Program Director. Any Ph.D. student desiring to take a leave of absence from the Program for any reason except medical/psychological for an extended period of time (more than one week) must submit the request in writing to their Dissertation Advisor and to the BMS Office, stating the reason(s) for the requested absence. Approval for such leave must be granted by the Steering Committee. In emergencies, BMS leadership may grant this leave and present the request to the Steering Committee as soon as possible. This policy applies to all full-time Ph.D. students in the BMS Program.

VI. UNIVERSITY SERVICES

A. Accounts Receivable

Each month during your academic career at Tulane, you will receive a statement of unpaid charges owed to the university from the Accounts Receivable Office. These charges may include mandatory fees, health insurance, health service charges, bookstore charges, food service charges, returned check/fine charges, rent or tuition.

Since registration automatically establishes an open-end credit account for you with Accounts Receivable, it is very important that you read the Agreement and Disclosure Statement regarding your rights and responsibilities on this account. This disclosure statement is distributed by the university in the schedule of classes; however, you may obtain a copy from the Accounts Receivable Office.

B. Career Services

The Office of Graduate and Postdoctoral Studies provides career resources specific to graduate students (https://ogps.tulane.edu/career-resources). Additional resources are available via Tulane Career Services (https://hiretulane.tulane.edu). By offering a comprehensive career decision making and career-planning

instructional program, students are presented with opportunities and support systems that engage them actively in their own career management

C. Counseling Center

The Counseling Center is a safe and inclusive place for Tulane students to receive confidential assistance with concerns such as relationships, emotional health, happiness, motivation, troubling behaviors, stress, trauma, or life decisions. The center is staffed by licensed and experienced mental health counselors, social workers, psychologists and psychiatrists. They offer consultation, brief individual therapy, group therapy, psychiatric evaluation and medication management, urgent walk-in services, referrals to private care and community resources, stress management and other support groups, and mindfulness workshops.
https://campushealth.tulane.edu/departments/counseling-center

D. Goldman Center for Student Accessibility

The Goldman Center for Student Accessibility is committed to providing equal access and a friendly environment for all who study and work at Tulane University. They offer accommodation and modifications of the academic or work environment to students and employees with psychological, medical/physical, and learning or developmental disabilities. The Goldman Center for Student Accessibility has a process in place for undergraduate, graduate, and professional students who wish to be considered for reasonable accommodations.

Students may request and receive appropriate services and accommodations through the Goldman Center. Before accommodation decisions are made, students must register by filling out an Accommodation Packet and submitting all necessary documentation for review. Since this process can take time, students are strongly encouraged to register as soon as possible, rather than wait until a need arises. https://accessibility.tulane.edu/

E. Housing

On-Campus Housing options include the Deming Pavilion (https://www2.tulane.edu/deming/) and Thirteen 15 (https://www.thirteen15nola.com/). Accommodations are assigned on a lease basis. There is usually a waiting list for Deming so applications should be submitted early.

Resources for **Off-Campus Housing** provided by Tulane University can be found at https://offcampushousing.tulane.edu/.

F. Legal Assistance

The Tulane Legal Assistance Program (TULAP) is a legal services program funded by the Tulane University Associated Student Body. It provides free legal advice and low-cost representation to current Tulane University students, staff, and faculty. TULAP also provides free notarial services and informs Tulane community members of their legal rights. With funding from the university, TULAP is only able to provide representation to current students, staff, and faculty, and cannot represent one member of the Tulane community against another, as that would present a conflict of interest.
https://law.tulane.edu/tulap

G. Office of International Students and Scholars

The Office of International Students and Scholars (OISS), located in Tate House, provides auxiliary services and support for international students. The aim of the OISS is to help Foreign Nationals have meaningful educational, cultural and social experiences at Tulane. The staff serves 2,000 students, staff and faculty from over 100 countries. A variety of programs and services are offered in the following areas:

ESL classes, immigration information, housing assistance, cross cultural programs, community opportunities, counseling, and travel and scholarship information for American students. For students who are interested in living, working or traveling abroad, contact the International Center for information and a chance to meet someone from that country. https://oiss.tulane.edu/

H. Student Health Services

All BMS students and medical students are eligible to use the Downtown Health Center. There is no office visit fee for full-time students that have paid the Student Health fee. Part time students may incur some costs. The Student Health Service is located in the Elk Place Building at 127 Elk Place, Room 261.

Downtown Student Health Center
127 Elk Place, Room 261, New Orleans, LA 70112
Tel. 504-988-6929

Uptown Student Health Center
Willow Street & Newcomb
Tel. 504-865-5255

I. Office of Academic Excellence & Community Engagement

Tulane University School of Medicine's Office of Academic Excellence & Community Engagement focuses on the recruitment, retention and holistic support of the student body. For information on events, resources and services, visit
https://medicine.tulane.edu/office-academic-excellence-community-engagement

APPENDIX

A. BMS Ph.D. Curriculum

Must complete 48 credit hours to earn a PhD at Tulane University		
Course		**Credit**
First Year: Must complete 27 credit hours		
Fall (1st semester)		
Advanced Cell Biology	BMSP 6070	3
Graduate Biochemistry	GBCH 6010	4
Research Topics and Rotations (2 credits faculty topics, 2 credits 1st rotation)	BMSP 7120	4
BMS Workshop	BMSP 7100	1
BMS Seminar	BMSP 7140	1
Responsible Conduct of Research	INTD 6010	0
		13 Total
Spring (2nd semester)		
Biomedical Statistics & Data Analysis	GBCH 7250	2
Human Molecular Genetics	EPID 7810	3
Physiological Basis of Disease **OR** Bioinformatics (contact BMS office for course number)	BMSP 7770 **OR** BIMI TBN	3
Research Topics and Rotations (2 credits 2nd rotation, 2 credits 3rd rotation)	BMSP 7130	4
BMS Workshop	BMSP 7110	1
BMS Seminar	BMSP 7150	1
		14 Total
Summer		
Dissertation Research	BMSP 9990	0
Second Year: Must complete 21 credit hours		
Fall (3rd semester)		
BMS Workshop	BMSP 7100	1
BMS Seminar	BMSP 7140	1
[1]Independent Study **AND/OR** [1]Special Topics	BMSP 7990 **and/or** BMSP 7500	1-6
[2]Electives		0/3/6
must register for a minimum of 9 credit hours		**9-14 Total**
Spring (4th semester)		
BMS Workshop	BMSP 7110	1
BMS Seminar	BMSP 7150	1
[1]Independent Study **AND/OR** [1]Special Topics	BMSP 7990 **and/or** BMSP 7500	1-6
[2]Electives		0/3/6
must register for a minimum of 9 credit hours		**9-14 Total**
Summer 2025 and Beyond		
Dissertation Research (BMSP 9990)	BMSP 9990	0

[1]Maximum of 6 credits per semester (12 credit max) of Independent Study+Special Topics combined. Students should submit form through Canvas to register.
[2]Electives are didactic courses, with a minimum of 6 credit hours in Fall+Spring combined

B. BMS Ph.D. Curriculum - Concentration in Biomedical Informatics

Must complete 48 credit hours to earn a PhD at Tulane University		
Course		**Credit**
First Year: Must complete 28 credit hours		
Fall (1st semester)		
Elements in Biomedical Informatics	BIMI 6100	4
Introduction to Data Science for Biomedical Informatics	BIMI 6200	3
Research Methodology of Biomedical Informatics	BIMI 8500	2
BIMI Workshop (Journal Club)	BIMI 7210	1
BIMI Research Methods (2 credits 1st rotation, 2 credits 2nd rotation)	BIMI 7220	4
Responsible Conduct of Research	INTD 6010	0
		14 Total
Spring (2nd semester)		
Health Informatics in Biomedical Informatics	BIMI 6400	3
Human Molecular Genetics	EPID 7810	3
Fundamentals of Data Analytics	BIMI 6300	3
Research Methodology of Biomedical Informatics	BIMI 8500	2
BIMI Research Methods (3rd rotation)	BIMI 7220	2
BIMI Workshop (Journal Club)	BIMII 7210	1
		14 Total
Summer		
Dissertation Research	BMSP 9990	0
Second Year: Must complete 20 credit hours		
Fall (3rd semester)		
Statistical Machine and Deep learning in Biomedical Practice	BIMI 7100	3
Research Methodology of Biomedical Informatics	BIMI 8500	2
BIMI Workshop (Journal Club)	BIMI 7210	1
Independent Study Independent Study and/or Special Topics	BIMI 7990 and/or BIMI 7980	1-6
Electives (minimum 5 credit hours in fall and spring combined)		0-5
		9-11 Total
Spring (4th semester)		
Research Methodology of Biomedical Informatics	BIMI 8500	2
BIMI Workshop (Journal Club)	BIMI 7210	1
Genomics and Omics Data Analysis	BIMI 7500	3
Independent Study Independent Study and/or Special Topics	BIMI 7990 and/or BIMI 7980	1-6
Electives (minimum 5 credit hours in fall and spring combined)		0-5
		9-11 Total
Summer and Beyond		
Dissertation Research (BMSP 9990)	BMSP 9990	0

C. BMS Ph.D. Curriculum – Concentration in Pharmacology

All BMS PhD students must take the identical first year curriculum of core courses (27 credit hours). After the first year of BMS core coursework, students may choose to join the Pharmacology Track, to earn a Concentration in Pharmacology. The Pharmacology track requires 25 credit hours of pharmacology-focused coursework, for a total of 52 credit hours for degree.

Course		**Credit**
Second Year: Must complete 25 credit hours		
Fall – Year 2		
Advances in Pharmacology	GPHR 7210	1
Medical Pharmacology *requires concurrent registration of GPHR 7190	GPHR 7250	6
Principles of Pharmacology	GPHR 7190	3
Practicing Professionalism	GPHR 7055	1
Pharmacology Seminar	GPHR 7230	1
		12 Total
Spring – Year 2		
Advances in Pharmacology	GPHR 7220	1
Medical Pharmacology *requires concurrent registration of GPHR 7240	GPHR 7260	4
Principles of Pharmacology	GPHR 7240	2
Practicing Professionalism	GPHR 7055	1
Pharmacology Seminar	GPHR 7200	1
Lab Research	GPHR 7510	2
Thematic course (see below for thematic courses)		2
		13 Total
Summer and Beyond		
Dissertation Research	GPHR 9990	0

Thematic Courses (choose one)

GPHR 7040	Neuropharmacology	(2 credits)
GPHR 7050	Cellular Control Mechanisms	(2 credits)
GPHR 7060	Endocrine Pharmacology	(2 credits)

D. BMS Ph.D. Curriculum – Concentration in Microbiology and Immunology

All BMS PhD students must take the identical first year curriculum of core courses (27 credit hours). After the first year of BMS core coursework, students may choose to join the Microbiology and Immunology (MIIM) Track, to earn a Concentration in Microbiology and Immunology. The MIIM track requires 21 credit hours of microbiology-focused coursework, for a total of 48 credit hours for degree. Additional electives may be taken in addition to the 21 credit hours detailed below.

Course		**Credit**
Second Year: Must complete 24 credit hours		
Fall – Year 2		
Seminar	MIIM 7010	1
Graduate Microbiology	MIIM 7500	4
Medical Immunology	MIIM 7600	3
Research	MIIM 7310	1-3
MIIM Electives*		0-5
must register for a minimum of 9 credit hours		**9-16 Total**
Spring – Year 2		
Seminar	MIIM 7810	1
Research	MIIM 7320	1-3
Advanced elective course**		3-6
MIIM Electives*		0-5
must register for a minimum of 9 credit hours		**9-15 Total**
Summer and Beyond		
Dissertation Research	BMSP 9990	0
Attendance at MIIM Departmental Seminar		

****Advanced Elective Courses (literature- and discussion-based)**

MIIM 7620	Advanced Immunology	(3 credits)
MIIM 7120	Advanced Virology	(4 credits)
MIIM 7250	Vaccine Biology	(3 credits)

***MIIM Electives**

MIIM 7150	Dynamics Immunology & Microbiology	(3 credits)
MIIM 7220	Advanced Research Methods	(4 credits)
MIIM 7210	Research Methods	(2 credits)
MIIM 7400	Responsible Conduct Biomedical Research	(2 credits)
MIIM 7100	Clinical Cases	(2 credits)

Additional Requirements:

- Must present a 30 minute WIP (work in progress) departmental seminar within the first two years of joining the MIIM program
- Must present at least one 1 hour WIP departmental seminar prior to their dissertation defense
- Must attend all departmental seminars as well as lunches with outside speakers.

E. BMS M.D./Ph.D. Curriculum: PhD portion of the PSP Program

A total of 48 credit hours must be completed to earn a PhD at Tulane University. Students in the PSP program may transfer 24 credit hours of MD coursework toward the PhD, and complete an additional 24 credit hours within the first year of entering the PhD portion.

Course		**Credit**
Summer prior to entering MD-1		
Summer		
Research Topics and Rotations	BMSP 7160	3
Summer prior to entering MD-2		
Summer		
Research Topics and Rotations	BMSP 7160	3
Summer prior to entering PhD-1		
Summer		
Research Topics and Rotations* **OR** Dissertation Research *optional 3rd rotation if Mentor has not been selected	BMSP 7160 BMSP 9990	3 0
PhD-1 (First year): Must complete 18 credit hours		
Fall		
BMS Workshop	BMSP 7100	1
BMS Seminar	BMSP 7140	1
Independent Study	BMSP 7990	3-6
Special Topics	BMSP 7500	0-3
[1]Elective		0-3
Responsible Conduct of Research	INTD 6010	0
must register for a minimum of 9 credit hours		
Spring		
Biomedical Statistics & Data Analysis	GBCH 7250	2
BMS Workshop	BMSP 7110	1
BMS Seminar	BMSP 7150	1
Independent Study	BMSP 7990	3-6
Special Topics	BMSP 7500	0-3
[1]Elective		0-3
must register for a minimum of 9 credit hours		
Summer		
Dissertation Research	BMSP 9990	0
PhD-2 and beyond		
Dissertation Research	BMSP 9990	0

[1]Elective courses should be chosen in consultation with the Dissertation Advisor. Advisor may suggest that no elective is needed.
To register for Independent Study or Special Topics, students should submit form through Canvas.

F. BMS Ph.D. for DVMs Curriculum

A total of 48 credit hours must be completed to earn a PhD at Tulane University. Students in the DVM program may transfer up to 24 credit hours of DVM coursework toward the PhD, and complete an additional 24 credit hours within the first 2 years of entering the PhD portion.

Course		Credit
First Year		
Fall		
BMS Workshop	BMSP 7100	1
BMS Seminar	BMSP 7140	1
Independent Study	BMSP 7990	3
Faculty Topics and Rotations (2 credits 1st rotation, 2 credits 2nd rotation)	BMSP 7120	4
Responsible Conduct of Research	INTD 6010	0
		9 Total
Spring		
Biomedical Statistics & Data Analysis	GBCH 7250	2
BMS Workshop	BMSP 7110	1
BMS Seminar	BMSP 7150	1
Independent Study	BMSP 7990	1
Special Topics	BMSP 7500	4
		9 Total
Summer		
Dissertation Research	BMSP 9990	0
Second Year		
Fall		
BMS Workshop	BMSP 7100	1
BMS Seminar	BMSP 7140	1
Independent Study	BMSP 7990	3
Special Topics	BMSP 7500	4
Complete Preliminary Exam		**9 Total**
Spring		
BMS Workshop	BMSP 7110	1
BMS Seminar	BMSP 7150	1
Independent Study	BMSP 7990	3
Special Topics	BMSP 7500	4
		9 Total
Summer and Beyond		
Dissertation Research (BMSP 9990)	BMSP 9990	0

G. Elective Courses Available to BMS PhD Students

Course		Credit
FALL		
Biochemistry and Molecular Biology		
Academic Writing & Critique	GBCH 7560	2
*Advanced Bioinformatics	GBCH 7330	3
Human Medical Cellular Biochemistry	GBCH 7500	5
Biochemistry and Molecular Biology Seminar	GBCH 6020	1
**Course instructor approval required*		
Biomedical Informatics		
Biomedical Informatics	BIMI 6100	4
Introduction to Data Science for Biomedical Informatics	BIMI 6200	3
Biomedical Informatics Workshop	BIMI 7210	1
Research Methodology of Biomedical Informatics	BIMI 8500	2
Statistical Machine and Deep Learning in Biomedical Practice	BIMI 7100	3
Microbiology and Immunology		
Graduate Microbiology	MIIM 7500	4
Medical Immunology	MIIM 7600	3
Seminar in Microbiology	MIIM 7010	1
Pathology and Laboratory Medicine		
Mechanism of Disease I	PATH 6300	5
Cancer Biology and Pathology	PATH 7600	3
Pathology Research Elective	PATH 6100	2
Advances in Pathology Research	PATH 2003	1
Physiology		
Translational Physiology I	GPSO 7350	2
Medical Physiology	GPSO 6010	6
Medical Terminology	GPSO 7175	3
Seminars in Physiology	GPSO 7910	1
Medical Genetics and Genomics		
Grand Rounds in Human Genetics	HMGN 7010	1
Intro to Human Genetics	HMGN 7020	3
Human Molecular Genetics and Genomics	HMGN 7060	4
Human Cytogenetics	HMGN 7040	3

Course		Credit
SPRING		
Science & Engineering		
Science Policy and Communication	SCEN 6660	3

Course		Credit
SPRING		
Biochemistry and Molecular Biology		
Basic Medical Biochemistry	GBCH 6110	3
Principles of Genetics	GBCH 7170	4
Metabolic Biochemistry of Human Disease	GBCH 7520	5
Biochemistry and Molecular Biology Seminar	GBCH 7100	1
Cases in Research Ethics	GBCH 7590	2
*Introduction to Bioinformatics	GBCH 7230	3
Methods in Biochemistry	GBCH 7580	2
**Course instructor approval required*		
Biomedical Informatics		
Fundamentals of Data Analytics	BIMI 6300	3
Health Informatics in Biomedical Informatics	BIMI 6400	3
Genome Sequencing and Omics Data Analysis	BIMI 7500	3
Research Methodology of Biomedical Informatics	BIMI 8500	2
Microbiology and Immunology		
Advanced Immunology (offered every other year)	MIIM 7620	3
At the Interface-Dynamics of Immunologic and Microbial Interactions (offered every other year)	MIIM 7150	3
Seminar in Microbiology and Immunology	MIIM 7810	1
Responsible Conduct – Biomedical Research	MIIM 7400	2
*Advanced Research Methods	MIIM 7220	4
*Medical Parasitology	MIIM 7750	3
Vaccine Biology	MIIM 7250	3
Clinical Cases & Underlying Mechanisms	MIIM 7100	2
Advanced Virology	MIIM 7120	4
Scientific Writing	MIIM 7065	2
**Course instructor approval required for students outside the Microbiology department*		
Pathology and Laboratory Medicine		
Mechanism of Disease II	PATH 6310	5
Molecular & Cellular Pathobiology	PATH 6400	4
Pathology Research Elective	PATH 6100	2
Advances in Pathology Research	PATH 2003	1
Physiology		
Renal Physiology	GPSO 7320	3
Integrative Cardiovascular Physiology	GPSO 7600	3
Membrane Physiology	GPSO 6250	2
Translational Physiology II	GPSO 7350	2
Signal Transduction/Hormone Action	GPSO 7560	2
Seminar in Physiology	GPSO 7910	1
Structural & Cellular Biology		
Leadership in Healthcare	ANAT 7360	3
Medical Genetics and Genomics		
Grand Rounds in Human Genetics	HMGN 7010	1
Medical Biochemistry and Genetics	HMGN 7050	3
Population Genetics/Genetic Epidemiology	HMGN 7100	3

Commitments of Graduate Students

- **I acknowledge that I have the primary responsibility for the successful completion of my degree.** I will be committed to my graduate education and will demonstrate this by my efforts in the classroom, the research laboratory, and all other related academic and professional activities. I will maintain a high level of professionalism, self-motivation, initiative, engagement, scientific curiosity, and ethical standards, including complying with institutional and research group standards for contributing to an inclusive research environment.

- **I will meet regularly with my research advisor to provide updates on the progress and results of my course work, research, and professional and career development activities.**

- **I will work with my research advisor to develop a thesis/dissertation project.** This will include establishing a timeline for each phase of my work. I will strive to keep engaged with the work, discuss experimental findings and any pitfalls, and meet the established goals and deadlines.

- **I will work with my research advisor to select a thesis/dissertation committee.** I will commit to meeting with this committee at least annually (or more frequently, according to program guidelines). I will discuss my progress to date and be responsive to the advice and constructive criticism from my committee.

- **I will be a good lab citizen.** I agree to take part in shared laboratory responsibilities and will use laboratory resources carefully and frugally. I will maintain a safe and clean laboratory space. I will be respectful of, tolerant of, and work collegially with all laboratory personnel. I will be an active contributing member to all team efforts and collaborations and will respect individual contributions. I will also contribute to an environment that is safe, equitable, and free of harassment.

- **I will maintain detailed, organized, and accurate research records. With respect to data ownership, I acknowledge that original notebooks, digital files, and tangible research materials belong to the institution and will remain in the lab when I finish my thesis/dissertation so that other individuals can reproduce and carry on related research, in accordance with institutional policy.** Only with the explicit approval from my research mentor and in accordance with institutional policy may I make copies of my notebooks and digital files and have access to tangible research materials that I helped to generate during my graduate training.

- **I will discuss policies on work hours, medical leave, and vacation with my graduate program and research advisor.** I will consult with my advisor in advance of any planned absences and apprise my advisor of any unexpected absences due to illness or other issues.

- **I will discuss policies on authorship and attendance at professional meetings with my research advisor.** I will work with my advisor to disseminate all relevant research results in a timely manner before completion of all degree requirements.

- **I will be knowledgeable of the policies and requirements of my graduate program, graduate school, and institution.** I will commit to meeting these requirements in the appropriate time frame and will abide by all institutional policies and procedures.

- **I will attend and actively participate in laboratory meetings, seminars, and journal clubs that are part of my educational program.** To enhance research, leadership, and additional professional skills, I will seek out other enrichment opportunities, such as participation in professional organizations and meetings, student representation on institutional committees, and coordination of departmental events.

- **I will be knowledgeable of all institutional research policies.** I will comply with all institutional laboratory safety practices and animal-use and human-research policies. I will participate in my institution's Responsible Conduct of Research Training Program and practice the guidelines presented therein while conducting my research. I will also seek input on and comply with institutional policies regarding my research design and data analysis.

- **I acknowledge that I have the primary responsibility for the development of my own career.** I recognize that I need to explore career opportunities and paths that match and develop my individual skills, values, and interests to achieve my desired career goals. I understand that there are tools such as the individual development plan that I should use to help me define my career goals and develop my training plan. I will seek guidance throughout my graduate education from my research advisor, career counseling services, thesis/dissertation committee, other mentors, and any other resources that can offer advice on career planning and the wide range of opportunities available in the biomedical workforce.

Commitments of Research Advisors

- **Throughout the graduate student's time in my laboratory, I will be supportive, equitable, accessible, encouraging, and respectful.** I will foster the graduate student's professional confidence and encourage intellectual development, critical thinking, curiosity, and creativity. I will continue my interest and involvement as the student moves forward into a career.

- **I will be committed to meeting one-on-one with the student on a regular basis. I will regularly review the student's progress and provide timely feedback and goal-setting advice.**

- **I will be committed to the graduate student's research project.** I will work with the student to help plan and guide the research project, set reasonable and attainable goals, and establish a timeline for completion of the project.

- **I will help the graduate student select a thesis/dissertation committee.** I will assure that this committee meets at least annually (or more frequently, according to program guidelines) to review and discuss the graduate student's progress and future directions. I understand that the function of this committee is to help the student complete the doctoral research, and I will respect the ideas and suggestions of my colleagues on the committee.

- **I will provide an environment that is intellectually stimulating, emotionally supportive, safe, equitable, and free of harassment.**

- **I will demonstrate respect for all graduate students as individuals without regard to gender, race, national origin, religion, disability or sexual orientation, and I will cultivate a culture of tolerance among the entire laboratory.**

- **I will be committed to providing financial resources, as appropriate and according to my institution's guidelines, for the graduate student to conduct thesis/dissertation research.** I will not require the graduate student to perform tasks that are unrelated to the training program and professional development.

- **I will expect the graduate student to share common laboratory responsibilities and use resources carefully and frugally.** I will also regularly meet with the graduate student to review data management, storage, and record keeping. I will discuss with the student intellectual policy issues regarding disclosure, patent rights, and publishing research discoveries.

- **I will discuss with the graduate student authorship policies regarding papers.** I will acknowledge the graduate student's scientific contributions to the work in my laboratory, and I will provide assistance in getting the student's work published in a timely manner.

- **I will be knowledgeable of and guide the graduate student through the requirements and deadlines of the graduate program and the institution, as well as teaching requirements, if any, and human resources guidelines.**

- **I will encourage the graduate student to attend and present their research at scientific/professional meetings and make an effort to secure and facilitate funding for such activities. In addition, I will provide opportunities for the student to discuss science and their research findings with colleagues and fellow scientists within the institution and broader scientific community—for example, at lab meetings, research days, and seminars.**

- **I will promote the training of the graduate student in professional skills needed for a successful career. These skills include but are not limited to oral and written communication, grant writing, management and leadership, collaborative research, responsible conduct of research, teaching, and mentoring.** I will encourage the student to seek opportunities to develop skills in other areas, even if not specifically required by the student's program. I will also encourage the graduate student to seek input from multiple mentors.

- **I will create an environment in which the student can discuss and explore career opportunities and paths that match their skills, values, and interests and be supportive of their career path choices.** I will be accessible to give advice and feedback on career goals. I will work with the student on an individual development plan to help define career goals and identify training milestones. I will provide letters of recommendation for the student's next phase of professional development.