

**The University of Texas Health Science Center at Houston, MD Anderson Cancer Center,
and MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences (GSBS)**

**2017 Milestones Agreement Form
for Students in the MD/PhD Program**

This document reviews the academic milestones that MD/PhD students are expected to achieve, along with the timeline to complete these milestones to assure satisfactory progress through the Program. Completion of this form, along with the Individual Development Plan (IDP), is required on an annual basis. Students who are not making acceptable progress may be placed on academic probation and/or dismissed from the program. The University of Texas System requires that this form is reviewed and signed by the student and his/her assigned MD/PhD Program advisor each year of the student's enrollment in the combined degree program.

Academic Mentoring

Upon entering the MD/PhD Program, each student is assigned an MD/PhD Program advisor by the MD/PhD Executive Committee. The MD/PhD Program advisor and the GSBS Associate Dean of Graduate Education, Dr. Bill Mattox, will offer guidance to students on the selection of rotation and dissertation mentors. Students are also encouraged to seek input from GSBS Program Directors. Once a student identifies a dissertation advisor, that faculty member will serve as the major advisor of the PhD portion of the student's program.

Conscientious academic advising lays a solid foundation for students to remain in good academic standing, make satisfactory progress through the program, and meet all of the MD and PhD requirements of the MD/PhD Program as specified in this agreement. MS1 students are requested to check in monthly with their assigned MD/PhD Program advisor until the advisor is confident the student has adjusted and is successfully mastering all the medical school course work. This requirement is designed to help the student as he/she acclimates to medical school and to provide regular direction and counseling. Until students choose their dissertation advisor, they must also meet annually with Dr. Mattox prior to selecting rotation mentors.

Academic Requirements:

Students are expected to successfully fulfill the requirements of the medical school during the 4 designated years of medical school. Any additional time for completion of medical school requires a waiver from the MD/PhD Executive Committee.

Students are required to complete three research tutorials. These will be conducted during the summer prior to starting medical school and in the summer between the first and second years of medical school. Students entering with an MS degree or prior research experience in a GSBS laboratory may have one research tutorial waived at the discretion of the MD/PhD Executive Committee and GSBS Associate Dean of Graduate Education, Dr. Mattox. Students may also take additional research tutorials beyond the three required tutorials with permission from the MD/PhD Executive Committee and Dr. Mattox. Students are required to register and participate in *Topics in Molecular Medicine* throughout their MD/PhD training, except during the third year of medical school.

During their dissertation research, all students and their advisors are mutually responsible for working together in order that the student accomplishes the following:

- Assemble advisory and candidacy examination committees with guidance from the dissertation advisor (must include one MD/PhD Program Committee member and approved by the MD/PhD Executive Committee).

- Meet with the PhD advisory committee at least every 6 months during the PhD portion of the program.
- Select appropriate courses based on degree requirements and suggestions from the student's PhD advisory committee.
- After the student has successfully passed the candidacy examination, the student is to maintain/extend clinical skills by shadowing a clinical faculty member, active in an area relevant to the student's dissertation work or in a clinical area that the student plans to pursue for residency and/or fellowship; either a half-day each week or two full days a month for six months while enrolled as a full-time GSBS student as required by the MD/PhD Program. If the student wants to receive one month of Ambulatory Care elective credit for maintaining/extending clinical skills during his/her dissertation research, the medical school requires one full year of either a half-day each week or two full days each month. Two months of fourth year elective credit will be granted to the student by the Medical School for having completed the PhD degree within 4 years.
- Review and understand all degree requirements and make progress consistent with the expectations of the program, reaching milestones according to the timeline provided on this form. If modifications are necessary, obtain permission from the MD/PhD Executive Committee, the student's advisory committee and approval from Dr. Mattox.
- Meet regularly with the dissertation advisor and MD/PhD advisor to review the IDP, clarify the timetable for completing any remaining course requirements, examinations, and other requirements.
- Understand the requirements for writing and successful defense of the dissertation.
- Benefit from experiences and information provided by the dissertation advisor and the MD/PhD advisor to optimize the student's career opportunities and success. To that end, the student is required to complete an IDP annually and discuss the results of the IDP with a mentor.
- Defend the dissertation prior to returning to medical school. This requirement can be waived by the MD/PhD Executive Committee if the student's advisor and Advisory Committee provide documentation indicating that the student has completed all dissertation research and that the student only needs to complete the writing of the dissertation and hold the defense.
- Publish at least one first-authored paper in a peer-reviewed journal prior to Ph.D. graduation. This requirement can be waived by the MD/PhD Executive Committee if a manuscript has been submitted and the student has to graduate to fulfill commitments for internship and residency. For students who matriculated in the Fall of 2014 and after, this publication is required by the GSBS before the completion of MS4 (graduation). A waiver would require the additional approval of the student's GSBS Advisory Committee and the GSBS Academic Standards Committee.

Checklist for Dissertation Students

- Maintain active student status by registering as a full-time student for courses every Fall (9 credit hours minimum), Spring (9 credit hours minimum) and Summer (6 credit hours minimum for entire term/3 credit hours minimum when registered for 2nd half of summer) terms. Students who wish to register for more than the minimum number of hours required for full-time status must obtain permission from Dr. Mattox to do so.
- Successfully complete all milestones listed below.
- Meet with the MD/PhD Program advisor every year (Jan-Mar) and meet with Dr. Mattox annually prior to selection of the dissertation advisor. Each year complete an IDP plan as required by the GSBS. Upload the signed "MD/PhD Milestones Agreement" to Canvas each year as required by the GSBS.

PhD Requirements for All Students in the MD/PhD Program

Milestone

- Complete required tutorial rotations
- Identify a research advisor
- Join a GSBS Graduate Program²
- Complete *Ethical Dimensions of the Biomedical Sciences*
- Obtain approval from ASC for GSBS Advisory Committee
- Hold first GSBS Advisory Committee meeting
- Hold subsequent GSBS Advisory Committee meetings
- Complete a scientific writing course³
- Complete Ethics modules⁴
- Complete a quantitative course
- Complete pre-candidacy course requirements of:
 - MD/PhD Program, and
 - PhD Program (e.g., Immunology Program, etc.)²
- Petition for PhD candidacy
- Take candidacy exam
- Complete all PhD Program-specified requirements²
- Submit a signed petition to defend dissertation
- Defend dissertation
- Submit a minimum of one first-authored scientific paper in a peer-reviewed journal⁵
- Submit final signed dissertation and complete appropriate exit paperwork
- Publish a minimum of one first-authored scientific paper in a peer-reviewed journal⁶
- Complete all MD/PhD Program-specified requirements
- Complete all degree requirements and remaining exit paperwork

Expected Time of Achievement¹

Prior to MS3

July 1 prior to GS1

July 1 prior to GS1

End of fall semester of GS1

End of fall semester of GS1

Spring semester of GS1

Every 6 months

End of GS1

End of GS1

End of GS1

End of GS1

End of fall semester of GS2

End of spring semester of GS2

Before return to MS4

Before return to MS4

Before return to MS4

Before return to MS4

Before return to MS4

Before graduation

Before graduation

Within 8 years of admission

¹The expected timing listed is based on matriculation in the 2nd summer term of the academic year. Note that students may also enter GS1 after MS2 rather than MS3; if so, “expected time of achievement” of milestones would be adjusted accordingly, as appropriate

²Required of students who matriculated in Fall 2012 and thereafter

³Required of students who matriculated in Fall 2014 and thereafter

⁴Required of students who matriculated in Fall 2011 and thereafter

⁵Required of students who matriculated between Fall 2008 and Summer 2014

⁶Required of students who matriculated in Fall 2014 and thereafter

We have read this form and discussed the milestones. The student understands that completion of these academic milestones in the stated timeline is required in order to successfully complete the MD/PhD Program.

Student's Name: _____

Student's Signature

Date

Advisor's Name: _____

Advisor's Signature

Date

To complete this assignment, upload and submit the signed PDF form to Canvas. Name the PDF file with the student's name (last name/first name) to make it identifiable.

Manual signature procedure: Print this form. Student and advisor should sign and date it (both signatures should be on the same form). A scanned PDF file can then be uploaded to Canvas by the student.

The GSBS computer lab, BSRB S3.8112, is equipped with printers and scanners. Alternatively, mobile devices with cameras can be used. Visit [this page](#) (links to an external site) for suggested apps. Make sure the entire document is in the photo and focused with enough lighting for the text and signatures to be legible.

Digital signature procedure: This PDF file may be signed using digital IDs in Adobe Acrobat Reader. Clicking on the signature field(s) will trigger a prompt to attach a digital ID file, if one has been created. The PDF should then be saved and uploaded to Canvas by the student.

For technical advice, email gsbs.support@uth.tmc.edu.

ELECTRONIC OR PAPER VERSIONS OF THIS FORM WILL NOT BE ACCEPTED BY GSBS – THE STUDENT IS REQUIRED TO UPLOAD THE SIGNED FORM DIRECTLY TO CANVAS