Molecular Medicine and Translational Science (MMTS) PhD Program Policies & Procedures
# Table of Contents

Choosing a Thesis Laboratory................................................................................................................................................. 3

MMTS PhD Curriculum and Program Requirements (for students entering from Track 4, Molecular and Cellular Biosciences) ................................................................................................................................................................................................. 5

MMTS MS Curriculum and Program Requirements (for students entering program with MD, DVM or DO degree) ........................................................................................................................................................................................................................................... 7

MMTS PhD Curriculum and Program Requirements (for students entering program with MD, DVM or DO degree) ........................................................................................................................................................................................................................................... 9

MMTS PhD Curriculum (for students in the combined MD/PhD program) ........................................................................................................................................................................................................................................... 11

Student Committee Selection .................................................................................................................................................. 13

Responsibilities for PhD Dissertation Committee .................................................................................................................. 14

Molecular and Cellular Biosciences, (Track 4) Masters Students Transitioning to MMTS PhD Program ........................................................................................................................................................................................................................................... 15

MMTS Graduate Student Annual Research Progress Evaluation ........................................................................................................ 16

Summary of the MMTS Graduate Student Research Progress Evaluation Forms ........................................................................................................ 18
  Form A: Student Progress Report ................................................................................................................................................. 19
  Form B: Student’s Form for Evaluation of Mentor ........................................................................................................................................................................................................................................... 20
  MMTS Committee Evaluation .................................................................................................................................................. 21
  MMTS Preliminary Examination and Post-Exam Development ........................................................................................................ 22

Preliminary Examination for Admission to PhD Candidacy........................................................................................................ 24

Dissertation Examination for PhD Degree .................................................................................................................................................. 29

Publication Requirement for the PhD degree .................................................................................................................................................. 30

Thesis Preparation for Printing .................................................................................................................................................. 31

MMTS 711/712: Translational Science Seminar Series – Presentation Policy ........................................................................................................ 32

Requirements for Course Exemptions for MMTS PhD Students ........................................................................................................ 33
Student Travel Funds.........................................................................................................................34

MMTS Graduate Student Attendance Policy.......................................................................................35

MMTS ClassAdvisors..........................................................................................................................36
CHOOSING A THESIS LABORATORY

1. SCOPE

1.1. The purpose of this policy is to establish a process for prospective MMTS PhD program students in Track 4 to follow in making the decision on the best laboratory in which to conduct his/her dissertation research. This policy will follow the Track 4 policies and encourage dialog among the graduate student, a potential mentor, the Molecular and Cellular Biosciences Track Director, and the MMTS PhD Program Directors with regard to which lab is the best fit for the student.

1.2. MD/PhD students should follow the policies for laboratory rotations described by the MD/PhD program.

2. POLICY

2.1. The student should meet and talk in general terms with the mentor of the lab(s) she/he wishes to work in, but without commitment. The following criteria are suggested when considering a lab for thesis work and should be discussed with the Principal Investigator of the lab(s) being considered.

2.1.1. Is there space in the PIs lab to accommodate a graduate student?

2.1.2. Does this PI have funding to support a graduate student?

2.1.3. Is there a project in this lab on which a graduate student could conduct dissertation research?

The student should also ask for a description of possible projects.

2.2. Once the MCB Track Director has the student preferences for three 1st year rotations, the Track Director will contact potential mentors to determine if adequate resources are in place to support the student for the duration of graduate training and to determine the timeframe for the 1st year rotation in their laboratories. If the answer is yes on the part of the mentors, the Track Director will then notify the student to meet with the mentors and begin to plan the rotation research.

2.3. Once the student has selected a mentor for their PhD dissertation research and has decided to enter the MMTS program, he/she must inform the MMTS Program Directors of their decision to join the MMTS graduate program for their PhD dissertation research.

2.4. Once the MMTS student has chosen a lab for his/her PhD dissertation research, the student and advisor must meet and complete the MMTS Individualized Compact Plan outlining expectations during PhD training. The student will also complete the Expectations and Responsibilities for Graduate Students form. The completed Compact is signed by the student and advisor and the Expectations and Responsibilities for Graduate Students form is signed by the student. Within the first month in the lab, both original forms are to be sent to the MMTS administrator for review by the program directors and will be placed in the student’s file.

2.5 In the unlikely event that none of the three 1st year rotation mentors can accept the student for PhD dissertation research, then the student can perform a 4th summer rotation.
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MMTS PhD CURRICULUM AND PROGRAM REQUIREMENTS (FOR STUDENTS ENTERING FROM TRACK 4, MOLECULAR AND CELLULAR BIOSCIENECES)

1. SCOPE

1.1. This policy summarizes the current curricular and program requirements for students who enter the MMTS program from Track 4, Molecular and Cellular Biosciences, to obtain the PhD degree.

2. POLICY

2.1. YEAR ONE as a Molecular and Cellular Biosciences student:

- Take the MCB curriculum in fall and spring and include Foundations of Translational Science (MCB 752) as a spring elective.
- Perform research rotations with potential mentors.
- Choose the MMTS program and advisor by the end of the spring term.
- Take Research (MMTS 791) in the summer term and choose Clinical Mentor during summer semester.

2.2. YEAR TWO as a MMTS student:

2.2.1. Course work

- **Fall**: Take Translational Science Seminar (MMTS 711), Statistics (choice of CPTS 730, HES 721, IPP 741-cross listed NEUR 741), Research (MMTS 791), Clinical Experience (MMTS 715), and electives, if applicable.
- **Spring**: Take Translational Science Seminar (MMTS 712), Scientific Development and the Business of Science (MMTS 724), Research (MMTS 792), Clinical Experience (MMTS 716), and Foundations of Translational Science (MCB 752), if not taken in year one.
- **Summer**: Take Research (MMTS 791) and prepare for Preliminary Exam in summer term.
- **Fall/Spring semesters**: Students are encouraged to participate in a Journal Club that matches their research interests.
- **Preliminary Exam**: Take the preliminary examination by September 1st at the end of the second year. Follow MMTS policies in this manual and the policies of the graduate school (see Wake Forest University Graduate School of Arts and Sciences Bulletin) for taking the exam.

2.2.2. Student Committee selection – choose an advisory committee

In consultation with the mentor and the Co-Directors of the MMTS graduate program, a faculty advisory committee should be appointed during the first year in the program, by the end of the fall semester of Year Two, following the guidelines for committee composition stated in the Bulletin of the Graduate School of Arts and Sciences. **All members of the advisory committee should be members of the graduate faculty.** Refer to Committee selection section on page 13.

2.3. YEAR THREE AND BEYOND as a MMTS student:

- **Course work**: Take Translational Science Seminar (MMTS 711, 712) and Research (MMTS 791/792) in the fall, spring, and summer semesters.
- **Research Advisory Committee meetings**: Meet with Research Advisory Committee at least once a year to review progress towards the PhD degree. More frequent meetings (~6 months) may be necessary in years 4 and beyond as the student gets closer to anticipated final defense date.
• **Publication requirement**: Students are required to publish at least one first author manuscript based on their dissertation research prior to graduation (see Publication Requirement for PhD degree in this Manual).

• Follow graduate school guidelines for registration for final semester before graduation.

• If a student changes laboratories and mentors after a successful preliminary examination, a new Research Advisory Committee will be formed and the student will provide them with a written Specific Aims page for the new project prior to their first new committee meeting. A new preliminary examination is not required.

• Follow graduate school guidelines (see Wake Forest University Graduate School of Arts and Sciences Bulletin) for preparation of dissertation and final dissertation defense.

• Students are encouraged to participate in a Journal Club that matches their research interests and additional courses as needed (e.g., if student is supported by specific NIH T32 or other training programs).

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1. SCOPE

1.1. This policy summarizes the current curricular and program requirements that students who have the MD, DO, or DVM degree must complete to obtain the MS degree in MMTS. A Master's degree in Biomedical Sciences is also available to non-physicians through the Wake Forest Graduate School. [https://school.wakehealth.edu/](https://school.wakehealth.edu/)
• Take Translational Science Seminar (MMTS 711/712) in the fall and spring semesters.
• Take Research (MMTS 791/792) in the fall, spring and summer semesters.
• Take a course in statistics (choice of CPTS 730, HES 721, IPP 741) in the fall semester.
• Take any needed electives in the fall and spring semesters.

2.2.2. Thesis defense:
• Prepare thesis and take final examination, following the guidelines described in the Bulletin of the Graduate School of Arts and Sciences. The goal is for MS students to defend their thesis prior to the end date of the funding support.
• MS students are encouraged to publish at least one manuscript based on their thesis research.

Students are encouraged to participate in a Journal Club that matches their research interests.

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MMTS PhD CURRICULUM AND PROGRAM REQUIREMENTS
(FOR STUDENTS WHO ENTER THE PROGRAM WITH THE MD, DO, or DVM DEGREE)

1. SCOPE

1.1. This policy summarizes the current curricular and program requirements that students who have the MD, DO, or DVM degree must complete to obtain the PhD degree in MMTS. Based on the advanced degree, MD, DO, or DVM students will enter as a MMTS second (2nd) year PhD student (see figure).

2. POLICY

2.1. YEAR TWO (Fall, Spring, Summer):

2.1.1. Select a thesis research mentor. Students should choose a dissertation research mentor and a research project before entering the MMTS PhD program and must be able to devote at least 75% of their faculty, residency or fellowship effort to research. The choice of mentor must be approved by the Co-Directors of the MMTS graduate program.

2.1.2. Course work-

- Take MCB 700 (Analytical Skills) in the 2 weeks preceding the fall semester.
- Take a course in statistics (choice of CPTS 730, HES 721, IPP 741) in the fall semester.
- Ethics and professionalism coursework is required for all PhD students, though typically taken in the first year of study.
  - Take an Ethics course in the fall and spring semesters, choice of CPTS 703/704 or GRAD 713 (Foundations of Scientific Integrity and Professionalism)/GRAD 714 (Scientific Integrity and Professionalism).
  - Take a Professionalism course in the fall and spring semesters, GRAD 715 (Career Planning in the Biomedical Sciences)/GRAD 716 (Seminars in Professional Development). GRAD 715/716 may be exempted with evidence of prior satisfactory completion of a similar course with completed WFU Graduate school course transfer form and a copy of the syllabus from your prior institution. Always consult with your advisor.
- Take MMTS 711/712 (Translational Science Seminar) in the fall and spring semesters.
- Take MMTS 724 (Scientific Development and the Business of Science) in the spring semester.
- Choose electives in the fall and spring semesters. There are no minimum hours of didactic coursework required for completion of the PhD degree.
- Take Research (MMTS 791/792) in the fall, spring, and summer semesters.

2.1.3. Choose a PhD Dissertation Committee. In consultation with the mentor and the Co-Directors of the MMTS graduate program, a PhD Dissertation Committee should be appointed by the end of the
2.1.4 PhD students take the preliminary exam by September 1st at the end of Year 2 (refer to the section on Preliminary Examination in this Manual).

Students are encouraged to participate in a Journal Club that matches their research interests

2.2. YEAR THREE AND BEYOND:

- Take Translational Science Seminar (MMTS 711/712) in the fall and spring semesters.
- Take Research (MMTS 791/792) in the fall, spring and summer semesters.
- Take any needed electives in the fall and spring semesters.
- Follow graduate school guidelines for registration for final semester before graduation.
- Prepare thesis/dissertation and take final examination, following the guidelines described in the Bulletin of the Graduate School of Arts and Sciences. Completion of the PhD degree should be in 3-5 years.
- PhD students are required to publish at least one first author manuscript based on their dissertation research (see Publication Requirement for PhD degree in this Manual).

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MMTS PhD CURRICULUM (FOR STUDENTS IN THE COMBINED MD/PhD PROGRAM)

1. SCOPE
1.1. This policy summarizes the current curricular and program requirements that students who are in the combined MD/PhD program must complete in order to obtain the PhD degree in MMTS.

2. POLICY
2.1. YEARS ONE AND TWO:
2.1.1. Perform two lab/research rotations – one in the summer before the Year One of the medical curriculum and one in the Summer between Years One and Two.
2.1.2. Complete Years One and Two of medical school curriculum.
2.1.3. Select a dissertation research mentor before the end of Year Two, following the guidelines in the “Choosing a Thesis Laboratory” policy in this Manual (page 3).
2.1.4. Complete first clinical rotation of Year Three of medical school (3 months).

2.2. YEAR THREE (Fall, Spring, Summer):
2.2.1. Course work-
   - Take MCB 700 (Analytical Skills) in the 2 weeks preceding the fall semester.
   - Take a course in Statistics (choice of CPTS 730, HES 721, IPP 741) in the fall semester.
   - Ethics and professionalism coursework is required for all PhD students, though typically taken in the first year of study.
     - Take an Ethics course in the fall and spring semesters, choice of CPTS 703/704 or GRAD 713 (Foundations of Scientific Integrity and Professionalism)/GRAD 714 (Scientific Integrity and Professionalism).
     - Take a Professionalism course in the fall and spring semesters, GRAD 715 (Career Planning in the Biomedical Sciences)/GRAD 716 (Seminars in Professional Development)
   GRAD 715/716 may be exempted with evidence of prior satisfactory completion of a similar course with completed WFU Graduate school course transfer form and a copy of the syllabus from your prior institution. The students should always consult with their advisor for selection of courses that best fit the training program.
   - Take MMTS 711/712 (Translational Science Seminar) in the fall and spring semesters.
   - Take MMTS 724 (Scientific Development and the Business of Science) in the spring semester.
   - Choose electives in the fall and spring semesters. Electives supportive of the research proposal are highly recommended.
   - Take MMTS 791/792 (Research) in the fall, spring, and summer semesters.

2.2.2. Choose a PhD Dissertation Committee: Refer to Committee selection section on page 13.
2.2.3. Students are encouraged to participate in a Journal Club that matches their research interests.

2.3. YEARS FOUR AND FIVE:
- Course work- Take Translational Science Seminar (MMTS 711, 712) and Research (MMTS 791/792) in the fall, spring, and summer semesters.
- Preliminary Exam- Take the preliminary examination as soon as possible during Year Four. Follow MMTS policies in this manual and the policies of the graduate school (see Wake Forest University Graduate School of Arts and Sciences Bulletin) for taking the exam.
• **Research Advisory Committee meetings**: Meet with Research Advisory Committee at least once a year to review progress towards PhD degree. More frequent meeting (~6 months) may be necessary as the student gets closer to anticipated final defense date.

• **Publication requirement**: Students are required to publish at least one first author manuscript based on their dissertation research prior to graduation (see Publication Requirement for PhD degree in this Manual).

• Follow graduate school guidelines for registration for final semester before graduation. If needed, students may continue their research during Years Three and Four of the medical school curriculum, but are highly encouraged to complete their project and defend their dissertation before returning to medical school.

2.4. YEARS SIX AND SEVEN:

• Complete Years Three and Four of the medical school curriculum, typically entering Year Three in the spring.

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STUDENT COMMITTEE SELECTION

Student Committee selection

- Choose a PhD Dissertation Committee that will serve as the student’s a) Preliminary Examination Committee, b) Research Advisory Committee, and c) Final Defense Committee with the following distinctions.
  - **Preliminary Examination Committee**: The Student’s Preliminary Examination Committee must consist of at least four (4) members, including the PhD advisor, the clinical mentor, and at least two other committee members chosen by the student and his/her advisors, one of whom will serve as committee chair. The chair of this committee cannot have a primary appointment in the same Institute (e.g., Wake Forest Institute of Regenerative Medicine), Center, Department, or Section as the primary mentor. Faculty composition of the committee must be approved by the MMTS Program Directors; the advisor and at least one committee member must be a faculty member in the MMTS program, and all must be members of the Wake Forest University Graduate Faculty. The clinical mentor must hold an MD, DO, or DVM degree.
  - **Research Advisory Committee**: The Preliminary Examination Committee will become the student’s Research Advisory Committee following advancement of the student to PhD candidacy. The purpose of the Research Advisory Committee is to periodically monitor the student’s progress toward completion of the PhD degree and to assist in professional development. The Research Advisory Committee must meet at least once a year after the student advances to PhD candidacy, but may need more often depending on the guidance needs of the student. The chair of this committee cannot have a primary appointment in the same Institute (e.g., Wake Forest Institute of Regenerative Medicine), Center, Department, or Section as the primary mentor.
  - **Final Defense Committee**: The Final Defense Committee is appointed by the Dean of Wake Forest University Graduate School of Arts and Sciences based on the recommendations of the student and primary mentor. The Final Defense Committee must consist of at least five (5) members of the Graduate Faculty. The chair of this committee cannot have a primary appointment in the same Institute (e.g., Wake Forest Institute of Regenerative Medicine), Center, Department, or Section as the primary mentor. Faculty from outside institutions may be appointed to the Final Defense Committee with approval by the student’s PhD advisor and the Dean of the Graduate School.
  - **NOTE**: If the student wants to have the Preliminary Examination Committee continue as the Research Advisory Committee and, ultimately, Final Defense Committee, then he/she should consider the requirements of the Final Defense Committee stated above. In some instances, faculty members may be added to the Research Advisory Committee to provide expert advice on experimental design and approaches, but not all members of the Research Advisory Committee are required to participate in the Preliminary Examination (for MMTS this will be 4 members minimum) or the Final Defense (5 members minimum), as long as the minimal standards of the graduate school requirements are met.
Responsibilities for PhD Dissertation Committee

PhD Dissertation Committee:

- Will function as Preliminary Examination Committee; chair and members may be replaced or added as needed.
- Will have annual meetings to assess student’s progress.
  - The MMTS graduate student will complete [FORM A, MMTS PhD Program Student Progress Report](#) and forward it to their PhD Dissertation Committee chair for review.
  - The student will complete top portion and the committee Chair will complete the [MMTS GRADUATE STUDENT COMMITTEE EVALUATION FORM](#) after the committee meeting. The completed forms will be signed by the student, the advisor and the committee chair and forwarded to MMTS Graduate Program Administration.
  - The student will complete top portion and the Chair reviews and completes, with committee input, the student’s [MMTS PhD CANDIDATE PRELIMINARY EXAM AND POST-EXAM DEVELOPMENT PLAN](#) to determine whether satisfactory progress has been made to rectify deficiencies identified during the Preliminary Examination. If all deficiencies have been addressed, no further action on the Plan is necessary. The completed and signed form is to be forwarded to the MMTS Graduate Program Administration. If deficiencies still exist, the committee will discuss additional courses of remediation, detail the remediation plan in the [MMTS GRADUATE STUDENT COMMITTEE EVALUATION FORM](#), and return the signed forms to the MMTS Graduate Program Administration. Student progress on the remediation plan will be reviewed and discussed at the next annual committee meeting.
- Will function as Final Defense Committee; chair and members may be replaced or added as needed.

Chair of the Preliminary Examination Committee:

- Should review the Bulletin of Wake Forest University for The Graduate School of Arts and Sciences Preliminary Examination requirements and MMTS Policies and Procedures on MMTS website.
- At the time of the Preliminary Examination meeting, the Chair reviews [FORM A -Summary of Student’s Progress](#) to date that has been filled out by the graduate student.
- At the end of the Preliminary Examination meeting, the Chair fills out the [MMTS PhD CANDIDATE PRELIMINARY EXAM AND POST-EXAM DEVELOPMENT PLAN](#), reflecting the input from the committee, and sends a signed copy to the student and MMTS Graduate Program Administration.
- At the end of the Preliminary Examination meeting, the Chair fills out the application for [CANDIDACY FOR DOCTOR OF PHILOSOPHY DEGREE](#) and sends to Graduate School and MMTS Graduate Program Administration. (contact the Graduate School for the form)

Chair of the Final Defense Committee:

- Should review the Bulletin of Wake Forest University for The Graduate School of Arts and Sciences final examination requirements.
- At the time of the final examination meeting, the Chair fills out the ballot for awarding the degree and submits it to the Graduate School.
MOLECULAR AND CELLULAR BIOSCIENCES, (TRACK 4) MASTERS STUDENTS TRANSITIONING TO MMTS PhD PROGRAM

1. SCOPE

1.1. This policy summarizes the program requirements for MS students who enter the Molecular Medicine and Translational Science program from Track 4, Molecular and Cellular Biosciences to obtain the PhD degree.

2. POLICY

2.1. Biomedical Science Students who would like to remain in the lab in which they are doing their MS work:

2.1.1. If the PI is agreeable to the student doing their PhD thesis work in the lab and can supply stipend support, the student will complete their master’s degree, MCB core course requirements and apply to the Graduate School for acceptance. MD or DVM students are not required to complete the MS degree, but must obtain approval from the graduate school. MCB will make a decision for acceptance in consultation with the MMTS Executive Committee and both MCB and MMTS must grant approval.

2.1.2 Students who complete their Master’s work in either December or May can enter the PhD program “off-cycle” in the spring semester or summer session.

2.1.3 In addition to the online application to the Wake Forest University Graduate School, students must submit to the Graduate Committee a transcript of course work taken at WFSM. The student will request a letter of support from the faculty mentor that includes a statement of commitment for financial support during the doctoral training period. A letter from the MS thesis committee chair must also be included that describes the student’s performance during their MS work and supports entry into the PhD program. The student will submit a new personal statement of research interest that will feature a description of their MS work and how this will be continued during the PhD studies.

2.1.4. If a student is accepted into the PhD program, and has already completed the MCB core course requirements, the student will be required to complete the MMTS curriculum and complete their Preliminary Examination within 12 months of entering the program (refer to Preliminary Examination for Admission to PhD Candidacy; page 24). The student will be exempt from laboratory rotations. Students will also fulfill requirements of PhD candidates such as MMTS Seminar presentations and committee meetings as recommended by their newly selected PhD Dissertation Committee.

2.2. Students who would like to do their PhD work in a laboratory other than their MS work lab:

2.2.1. These students would apply to the MCB track through the same process as all other applicants and be considered with the overall pool of applicants for the next entering class (fall admission only). They would do three rotations during their first year and work toward completion of all other requirements. The coursework will be decided on a case-by-case basis depending on the prior classes and reviewed by the Curriculum Committee with final approval by the MMTS Executive Committee.

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MMTS GRADUATE STUDENT ANNUAL RESEARCH PROGRESS EVALUATIONS

1. SCOPE

The purpose of this policy is to establish a mechanism for obtaining a periodic evaluation of the MMTS graduate student research progress by the graduate program director(s), the graduate student PhD Dissertation Committee and the graduate student research/thesis mentor. The policy applies to all students in the MMTS program.

2. POLICY

2.1. Student progress will be reviewed periodically by one or more of the following: the graduate program director(s), the student's thesis mentor and the student's PhD Dissertation Committee. A critical part of the program director evaluation will be the student's CV. The student evaluation includes:

2.1.1. Student CV

2.1.2. MMTS Form A (Student’s Progress Report) and MMTS Form B (Evaluation of Mentor)

2.1.3. Wake Forest University Graduate School of Arts and Science Student Laboratory Research Assessment Form

2.2. The Curriculum Vitae (CV) is the responsibility of the student and helps develop the skill of maintaining written evidence of progress. The CV should be maintained in hard copy as well as electronic copy by both the student and the MMTS program administrative office along with hardcopy and electronic copies of Form A and Form B. The submission of the CV, Form A and Form B will be required only once a year and at the beginning of the summer semester. A recommended CV template can be found on http://intranet.wakehealth.edu/Departments/Faculty-Affairs/Promotion-and-Tenure/ and will follow the format of the faculty of Wake Forest School of Medicine.

2.3. The CV, combined with the student’s grades and MMTS and Graduate School evaluation forms, provides a basis for letters of support from the student mentor and the program director(s) when seeking grant funding, post-graduate positions, and other requests.

3. The student evaluations will occur as follows:

3.1. MMTS students before appointment of a faculty PhD Dissertation Committee will be evaluated by the graduate program director(s). The student will provide a copy of their semester evaluation (Graduate School Student Laboratory Research Assessment Form) from the laboratory that they have selected to conduct their thesis research. At the beginning of the summer semester, the student will provide a self-evaluation by completing FORM A: MMTS Program Student’s Progress Report, which is for the productivity of the past academic year only, and then forward the form to their thesis/dissertation mentor. Each student will complete a confidential evaluation of their mentor by completing FORM B: MMTS Program Student’s Form for Evaluation of the Mentor at the beginning of the summer semester. A student’s CV will be submitted only once a year at the beginning of the summer semester. The student must forward all completed forms to MMTS administration. The student has the option of a face-to-face meeting with the graduate program director(s), or the graduate program director(s) has the option of requesting a meeting with the student. This meeting will be used to discuss the student CV, any questions about forming the student PhD Dissertation Committee, a tentative Preliminary Examination date, and plans for the coming year.

3.2. MMTS students after appointment of a PhD Dissertation committee will be evaluated on an annual basis by the graduate program director(s). The PhD Dissertation Committee Chair, in conjunction with the other committee members, will provide an evaluation at the initial and annual committee meetings, or more frequently if necessary, by completing the areas indicated on the MMTS Graduate Student Committee Evaluation Form.
The student’s thesis/dissertation mentor will provide an evaluation of the student’s progress at the end of the spring semester, summer session, and fall semester by completing the Graduate School Student Laboratory Research Assessment Form and then forward the completed form to MMTS administration for review by the MMTS Program Director(s). A student’s CV will be submitted only once a year at the beginning of the summer semester. At the beginning of the summer semester each year, the student will provide a self-evaluation by completing FORM A: MMTS Program Student’s Progress Report, which covers productivity of the past academic year only, and then forward the form to the MMTS administration and their thesis/dissertation mentor. Each student will complete a confidential evaluation of their mentor by completing FORM B: MMTS Program Student’s Form for Evaluation of the Mentor and forward the form to the MMTS administration. During the summer semester, the student has the option of a face-to-face meeting with the graduate program director(s) or the graduate program director(s) has the option of requesting a meeting with the student. This meeting will be used to discuss the student CV and their plans for the coming year. A copy of all forms submitted to Graduate School need to be submitted to MMTS administrative office.

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<th>APPROVAL REQUIRED:</th>
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SUMMARY OF THE MMTS GRADUATE STUDENT RESEARCH PROGRESS EVALUATION FORMS

Upon completion, all forms should be electronically forwarded to Molecular Medicine & Translational Science (MMTS) Graduate Program Administration. If electronic transmission of the forms is not possible, hard copies should be forwarded to MMTS Graduate Program Administration, 3rd floor, Wake Forest Biotech Place.

<table>
<thead>
<tr>
<th>Who is being evaluated?</th>
<th>When does the evaluation occur?</th>
<th>Which form to complete for the evaluation?</th>
<th>Who completes the evaluation form?</th>
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<tbody>
<tr>
<td>MMTS grad student</td>
<td>At the beginning of the Summer semester each year.</td>
<td>FORM A MMTS Program Student Progress Report (Electronic fillable form – no handwriting)</td>
<td>The MMTS graduate student will complete FORM A and then forward it to their mentor and MMTS Graduate Program Administration.</td>
</tr>
<tr>
<td>MMTS grad student mentor</td>
<td>At the beginning of the summer semester of each year.</td>
<td>FORM B-MMTS PhD Program Student’s Form for Evaluation of the Mentor (Confidential) (Electronic fillable form – no handwriting)</td>
<td>The MMTS graduate student will complete FORM B and then forward to MMTS Graduate Program Administration.</td>
</tr>
<tr>
<td>MMTS grad student at the time of the initial and/or annual advisory committee meeting</td>
<td>At the initial or annual advisory committee meetings.</td>
<td>MMTS Graduate Student Committee Evaluation Form (Electronic fillable form – no handwriting)</td>
<td>The MMTS graduate student will complete the upper portion and then forward the entire form to their committee chair to complete in conjunction with the committee. The completed forms will be signed by the student, the advisor and the committee chair and then forward to MMTS Graduate Program Administration.</td>
</tr>
<tr>
<td>MMTS grad student at the time of the preliminary examination meeting</td>
<td>At the time of the preliminary examination. The Committee Chair completes immediately following the preliminary examination</td>
<td>MMTS PhD Candidate Preliminary Exam and Post-Exam Development Plan form (Electronic fillable form – no handwriting)</td>
<td>The MMTS graduate student will complete the upper portion and forward the entire form to their committee chair to complete in conjunction with the committee. The completed forms will be signed by the student and the committee chair and then forward to MMTS Graduate Program Administration.</td>
</tr>
<tr>
<td>MMTS grad student</td>
<td>Graduate School Student Research Evaluation Form to be provided to students at the beginning of the semester and reviewed with research mentor to determine expectations for the semester. Students are required to make certain that their advisor completes form by the last day of final exams at the end of each semester.</td>
<td>Wake Forest University Graduate School of Arts &amp; Sciences Student Laboratory Research Assessment Evaluation Form. The form can be found on the WFU Graduate School of Arts and Sciences website under Bowman Gray/Student Forms <a href="http://graduate.wfu.edu/students/">http://graduate.wfu.edu/students/</a>. A Curriculum Vitae (CV) will be submitted at the beginning of the summer semester only.</td>
<td>The MMTS student will initiate by completing the top portion of the form and the MMTS mentor will complete form prior to the last day of final exams at the end of each semester. Submit as typed electronic copy only. The Completed Form is to be forwarded to MMTS Graduate Program Administration and the MMTS program directors will review. The evaluation forms will be kept in the student’s file. The CV is only requested once a year which will be at the beginning of the summer semester.</td>
</tr>
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</table>
FORM A: MMTS Program Student’s Progress Report Form

This annual progress report is for productivity for the past academic year only

Reporting Date:

Student Name:

Mentor Name: Last Committee Meeting:

Chair of Dissertation Committee (leave blank if no committee has been appointed):

Dissertation Committee Members (leave blank if no committee has been appointed):

Month and Year entered the MMTS program: Current year in MMTS program:
(i.e. 2nd yr. PhD student, 4th yr. PhD Candidate)

ACADEMIC PRODUCTIVITY (to be completed by the student)

Course Work (students should attach a copy of their most current transcript):

GPA_____

Has all required coursework been completed? Yes ____ No____

If no, what is still required?

RESEARCH PRODUCTIVITY (to be completed by the student)

What presentations (local, national, international; poster or talk) has the student made? Please detail.

Has the student published (abstracts, full-length research articles, review articles)? Please list.

Has the student submitted or had any grants funded or received funding? Please list.

Has the student participated in the submission of a patent?

When is the student projected to complete the PhD degree?

(Annual Progress Report: Forward completed form to Mentor and MMTS Graduate Program Administration)
FORM B

MMTS Program Student’s Form for Evaluation of the Mentor

Mentor: ________________________________  Date: ______________________

Student: ______________________________

All students: Please evaluate your thesis mentor annually at the end of the spring semester and return the completed form to MMTS program administration.

Responsibilities for Mentors

- Assist the student in developing a research project
- Guide the student in evaluation of the literature concerning the project
- Teach specific research techniques
- Help prepare student for oral presentation at the Translational Science Seminar Series and attend the presentation

1. How well has the thesis mentor explained the goals of the project?
   
   Goals discussed with the student should include:
   
   - The medical/biological problem
   - The hypotheses to be tested
   - The experimental approach / possible outcomes

2. Did the thesis mentor discuss your data with you? Were the following questions asked during discussion of experiments?

   - Why did you follow this particular path?
   - What protocol changes did you make as your work went on?
   - What type of data did you obtain?
   - How did you analyze your data?

3. Did the thesis mentor help prepare the presentation of your data and the significance of your findings?
   
   Did you discuss the following in relation to your findings?
   
   - How to present your data with tables, figures or illustrations
   - Explanation of the medical/biological impact of your results
   - What questions remain/what experiments could answer those questions?

4. Did the thesis mentor attend your presentation or arrange for someone in the laboratory to be present at your seminar?

______________________________
Student signature
Molecular Medicine and Translational Science Graduate Student Committee Evaluation form
(Initial and Annual Committee meetings)

Student name:__________________________ Date:__________________________

Advisor:__________________________________________

Committee members: Chair:__________________________
__________________________
__________________________

Students are to complete this section. Send Word version to Committee Chair to complete. Type in this form only, no handwriting.

1. Overall evaluation of student at this time:
   • Exceeds expectations
   • Meets expectations
   • Does not meet expectations (explain)

2. Research plans:

3. Career development plans or events (professional meetings, scheduled talks, job search, etc.)

4. Suggested grade based on progress since last committee meeting ( Satisfactory or Unsatisfactory):

5. Date for next committee meeting:

6. Other comments:

Signatures:
__________________________ ___________________________ __________________________
(student) (advisor) (committee chair)

Return completed form to MMTS Administration
Student name: ___________________________ Date: ____________

Date of Preliminary Exam: ________________ Advancement: YES ☐ NO ☐ pending revisions ☐

Advisor: ___________________________

Committee members: Chair:
Other Members: ___________________________

Hypothesis or Experimental Question
The student must have a hypothesis or experimental question that is clearly stated, testable, and well-justified. The rationale (scientific foundation) for this hypothesis or question must be clear, and the student must be able to defend his/her proposed hypothesis or question.
Comments: ___________________________

Add rating at end of comments: Scale – 1-5 (low rate 1 – high rate 5)

Experimental Approach
The experimental approach must be clearly described and logical. The approach must directly test the hypothesis or experimental question. Discussion of expected and alternative outcomes, potential pitfalls, and alternative approaches must be included.
Comments: ___________________________

Add rating at end of comments: Scale – 1-5 (low rate 1 – high rate 5)

Background Knowledge
The student must display a deep understanding of the Preliminary Exam topic and supporting literature. The student must also have broad knowledge of the general biomedical sciences and experimental approaches, especially in their specific field of study.
Comments: ___________________________

Add rating at end of comments: Scale – 1-5 (low rate 1 – high rate 5)

Oral Presentation
The student must be able to clearly articulate and describe the research proposal. The student must be able to defend his/her rational for specific approaches and respond to critiques in a professional manner. Overall oral communication skills are evaluated in this section.

Add rating at end of comments: Scale – 1-5 (low rate 1 – high rate 5)

Post-Exam Development
If deficiencies in the student’s development were identified during the preliminary exam, they should be listed with a recommended course of action. The thesis committee will then monitor progress in the student’s development at future committee meetings.
Forward completed and signed MMTS preliminary exam evaluation form to MMTS Administration
1. SCOPE
1.1. The preliminary examination is a process used to determine the acceptability of the student for advancement to degree candidacy based on the scientific quality of the student’s project, the clarity of the student’s written proposal, the completeness of the literature survey, and the student’s originality and understanding of relevant biomedical concepts. The MMTS PhD program uses an oral examination format of the written proposal. The student is responsible for the content of all coursework (required courses and electives) taken up to the time of the examination. PhD candidates must have a grade point average of at least 3.0 in their graduate courses at the time of the preliminary examination.

2. POLICY
2.1. Each student will submit a proposal of research, termed the Preliminary Examination Research Proposal. The proposal will be based on the R01-style research grant written during the required course MMTS 724, Scientific Development and the Business of Science, as outlined in detail below and will be based on the research to be performed for the PhD dissertation. The student will submit the proposal to a Preliminary Examination Committee, consisting of four or more graduate faculty members and, if approved by the Committee, the student will defend the proposal in an oral examination. The Committee judges whether the student passes or fails the examination and informs the MMTS Program Directors. The examination must be completed no later than September 1st at the beginning of the third year (end of the second year)*. Extension beyond this time without the agreement of the preliminary examination committee and the MMTS PhD Program Directors will put the student at risk of expulsion from the graduate school by the Dean for failure of academic progress.

* Based on the advanced degree, a MD, DVM, or DO student enters as a MMTS second (2nd) year PhD student and is expected to complete their preliminary examination by the end of their first year of graduate school.

3. PROCEDURE
3.1. Preliminary Examination Committee Selection (see page 13 for more details on Student Committee selection):
3.1.1. The student’s Preliminary Examination Committee must consist of at least four (4) members. These include the MD and PhD advisors and at least two other committee members chosen by the student and his/her advisors, one of whom who will serve as committee chair. Advisors and committee members must be approved by the MMTS Program Directors; advisors and at least one committee member must be a faculty member in the MMTS program, and all must be members of the Graduate Faculty. The chair of the Preliminary Examination Committee cannot have a primary appointment in the same Institute (e.g., Wake Forest Institute of Regenerative Medicine), Center, Department, or Section as the primary mentor.

3.1.2. The function of the committee is to determine acceptability of the student for advancement to PhD degree candidacy by critically evaluating the specific quality of the project, the clarity of the written proposal, the completeness of the literature survey, and the student’s originality and understanding of relevant biomedical concepts. The examining committee passes or fails the student. In case of failure, the committee can recommend that the candidate be dropped or that reexamination be allowed no earlier than six months from the date of the first examination. A student may be reexamined only once.

3.2. The Preliminary Examination Proposal:
3.2.1. The Preliminary Examination Research Proposal should build on the R01 style grant proposal prepared during MMTS 724 and should represent the ideas of the student, with an emphasis on significance and innovation of the project. Recognizing that the student’s thesis research will be guided by the overall direction of their mentor’s laboratory, the student is encouraged to work closely with
their advisor, as well as members of the advisory committee, and other faculty during the preparation of the Preliminary Examination Research Proposal. The student’s advisor may review a draft of the Preliminary Examination Research Proposal and offer editorial comments but should not edit the document, as incorporating the advisor’s recommendations into the proposal remains the responsibility of the student.

All students are strongly encouraged to use their Preliminary Examination Research Proposal as a basis for submission of a grant proposal to an extramural funding agency. If a grant proposal has been submitted before preparing the Preliminary Examination Research Proposal, that proposal may be used as a basis for developing their Preliminary Examination Research Proposal. In that case, the student should include novel features in the Preliminary Examination Research Proposal that build on, but go beyond, the ideas and experiments described in the extramural proposal. For example, this could include an expanded preliminary data section and/or a new or expanded aim that builds on results obtained in the period between the extramural proposal and the Preliminary Examination Research Proposal. The student should also include a copy of their extramural Specific Aims page along with their outline, for the committee to verify that the Preliminary Examination Research Proposal extends the concepts of the extramural proposal.

3.3. **Forms Required:**

Before the examination, the graduate student is responsible for filling out **FORM A, MMTS PhD Program Student Progress Report** and providing the form to the preliminary examination committee chair. Immediately following a successful preliminary examination, the committee chair, with appropriate input from the committee, will complete the [PhD Candidate Preliminary Exam and Post-Exam Development Plan](#) and forward the form to MMTS administration. An example of the evaluation form is provided on page 22. This form will summarize deficiencies in the student’s development that were identified during the preliminary exam (e.g., understanding of statistics, knowledge of literature, oral presentation style) and recommend a course of action to help correct student deficiencies. The student will forward the [PhD Candidate Preliminary Exam and Post-Exam Development Plan](#) to the committee chair for each subsequent annual evaluation of the student’s progress until identified deficiencies have been corrected.

An application for Candidacy for Doctor of Philosophy Degree from Wake Forest University Graduate School of Arts and Sciences is to be completed by the committee chair and forwarded to the Graduate School and MMTS Administration. (contact the Graduate School for the form)

3.4. **Dates and Deadlines:**

The date set for the oral exam will establish all preceding deadlines. The examining committee may revise the schedule suggested below at their discretion. The deadlines should be explicitly communicated to the student.

3.4.1 Eight weeks before the date of the oral exam, the student will submit a 1 – 2 page outline of the proposal. One week later, the examining committee will meet briefly (1 hour) with the student to discuss the acceptability of the outline and to make suggestions regarding the project. The purpose of this meeting is to guide the student in preparing for the oral examination. It is appropriate to give examples of the issues that will be raised. However, detailed questioning and defense of the proposal should be reserved for the oral examination and is not appropriate for this preparation meeting. If there are no major problems, the student may proceed to complete the written proposal.

3.4.2 Two weeks before the oral exam, the student will submit the completed written proposal to the examining committee. Within 1 week, the committee chair will inform the student if the written proposal is acceptable for oral defense. If not, the committee will provide a detailed written critique and set a date for receipt of a revised proposal, usually within 2 - 3 weeks. If the revised proposal is unacceptable, the examining committee will recommend to the MMTS PhD program Executive Committee whether the student should be terminated from the PhD program.
3.4.3 If the proposal is judged acceptable, the oral exam will proceed as scheduled. The student will present a concise (approximately 20 minutes) overview of the preliminary proposal and this will be followed by questions from the examination committee. Following the exam, a decision on acceptability of the student for admission to degree candidacy will be made by the committee. In the event that a student does not pass the oral exam, the examining committee can recommend that the student be refused admission to candidacy for the PhD program, or that reexamination be allowed no earlier than six months from the date of the first exam. A student may be reexamined only once. The chair of the committee will inform the MMTS PhD program Director of the outcome of the preliminary exam. The MMTS PhD program Director then informs the Dean of the graduate office.

3.5. Proposal Format:
The outline and the final proposal will be patterned after NIH guidelines. The student should consult with the examining committee on questions of format during the preparation of the proposal. The proposal should be clearly written in the student's own words and should be carefully proofed for spelling and grammatical errors.

3.5.1 Outline Format
The outline should be **no longer than two pages** (single spaced) and should consist of the following sections:

**Specific Aims:** A concise statement of the specific research objectives, including the hypotheses to be tested.

**Scientific Foundation:** Explain the significance of the project and its originality, placed in the context of a brief summary of previous work done in the area.

**Research Plan:** Summarize experimental design to be used to address the specific aims, including methods to be used. References are not included in the Outline.

3.5.2 Final Research Proposal Format
The final research proposal should be patterned after NIH guidelines for R01 type proposals. The document should be in Arial 11 font with 0.5 inches margins. The student should consult with his/her examining committee on questions of format during the preparation of the proposal. However, it must be emphasized that the proposal is to have a strong emphasis on significance, innovation and approach and less emphasis on preliminary data. The final proposal should consist of the following sections and may not include an appendix:

**Title Page**- student’s name, title of project, advisor’s name, date of examination

**Abstract** (30 lines maximum per NIH instructions) - short summary of the problem to be addressed and the goals of the project

**Specific Aims** (1 page limit) - State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.

**Research Strategy**- Organize the Research Strategy in the specified order and using the instructions provided below. Start each section with the appropriate section heading - Significance, Innovation, Approach. This section (a-c) is limited to 12 pages total.
(a) **Significance** (suggest 1-3 pages)

- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
- Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

(b) **Innovation** (suggest 0.5-1 page)

- Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
- Describe any novel theoretical concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.

(c) **Approach**

- This section includes the Preliminary Studies. Discuss the preliminary studies, data, and/or experience pertinent to this application.
- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high risk aspects of the proposed work.

**References:** Techniques to be used and all work and ideas of others should be properly referenced. References should include titles and follow a format approved by the committee. These are not included in the page limitations.

3.6 **MMTS Preliminary Exam Standard Operating Procedures**

3.6.1. Prior to the examination, the student is asked to leave the room so that the committee members can address any concerns or questions regarding the thesis proposal – this often does not last more than a few minutes. The student is then invited back in. During the exam, the student is expected to provide a short (~20 min) overview of their project including background/rationale, specific aims, and the experiments for the aims. The exam committee can ask questions at any time. The questions can be specific to the project but can also be general information important for the student to know to conduct and/or fully understand their project. The questioning can also evaluate the student’s comprehension of statistical analysis of results and power of the experimental design. The format of this questioning can be up to the committee. Committee members can ask questions freely, or take turns asking questions (e.g., 10 minutes per committee member). The thesis advisor may decide if they want to participate in asking questions of the student or not, but the Chair of the examining committee must make sure the advisor does not unnecessarily influence the outcome (positively or negatively) of the exam. After committee members have asked their questions, the student is asked to leave the room again. The committee discusses the proposal, the ability of the student to defend their work, their
knowledge, etc., and then decides whether the student should pass. The exam usually lasts 90-120 minutes.

3.6.2. The purpose of the preliminary examination is to determine whether the student is acceptable to advance to degree candidacy. The preliminary exam proposal is not a contract for the student’s PhD dissertation work and should be viewed by the examining committee as a method to test the student’s ability to think under pressure, defend the scientific foundation of the proposal, and identify potential weaknesses in the student’s development that need attention after advancement to degree candidacy. To accomplish this goal, the preliminary proposal is written as an R01 grant application that is defended by the student for its significance, innovation, and approach to a scientific question. Additional clarification of the overarching principle of the preliminary exam is as follows:

1) The faculty committee should examine the student on the clarity of the written proposal, the scientific basis of the proposal, the understanding of relevant biological concepts, and any course work covered up to that time that may be pertinent to the proposal.

2) The preliminary exam proposal may or may not be on the topic of the thesis proposal. If it is on the topic of the thesis proposal, it does not need to cover the scope of the thesis proposal. The scope of the thesis proposal in consultation with the Research Advisory Committee will be determined after the student has advanced to candidacy.

3) Preliminary data can be included in the preliminary exam proposal but its presence or absence cannot be used to delay the examination or penalize the student.

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DISserTATION EXAMINATION FOR PhD Degree

1. SCOPE
1.1. Under the supervision of the PhD Dissertation Committee, which will now act as the Final Defense Committee, the candidate prepares a dissertation embodying the results of investigative efforts in the field of concentration.

2. PROCEDURE
2.1. Requirements for dissertation submission and format are posted on the Graduate School website (https://graduate.wfu.edu/graduate-bulletin-archive/).
2.2. Final Defense Committee: The Final Defense Committee may be the same as the PhD Dissertation Committee. Members may be replaced or added as long as the overall requirements are followed. The Final Defense Committee must consist of at least five (5) members of the Graduate Faculty. These include the MD and PhD advisors and at least three other committee members chosen by the student and his/her advisors. The chair of the dissertation advisory committee cannot have a primary appointment in the same Institute (WFIRM)/Department/Center/Section as the mentor. Faculty from outside institutions may be appointed to the committee with approval by the dissertation advisor and the Dean of the Graduate School. Final Defense Committee must be approved by the MMTS Program Directors and the Dean of the Graduate School; the advisor and at least one committee member must be a faculty member in the MMTS program, and all must be members of the Graduate Faculty.
2.3. Students will submit a copy of the dissertation to the Dean of the Graduate School at least four weeks prior to the proposed date of the final examination and copies distributed to the Final Defense Committee at least three weeks before the final examination. The committee is polled by the chair of the Final Defense Committee at least ten days before the proposed date of the examination to determine the acceptability of the dissertation. After the defense, the chair will ask each of the members of the examining committee whether the candidate has passed unconditionally, passed upon rectifying deficiencies, or failed. If all committee members agree that the student has passed unconditionally, there is a consensus to pass the examination. The committee chair will sign the ballot, submit the ballot to the Graduate School, and the student shall be recommended for award of the degree. For the other options (pass upon rectifying minor and major deficiencies and fail), the student and mentor are directed to the graduate school bulletin.

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<td>REVISION APPROVAL DATE:</td>
<td>02/20/19</td>
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PUBLICATION REQUIREMENT FOR THE PhD DEGREE

1. SCOPE

1.1. To establish publication criteria required for the MMTS PhD program students to proceed toward completing the PhD degree.

2. POLICY

2.1. Publications are one of the products upon which a successful scientific career is built. Before a student can schedule the defense of their dissertation, it is required that at least one first author publication of original data from their work as a WFU graduate student be accepted in a peer-reviewed journal. As with other policies, the dissertation committee can consider extreme circumstances if variations from this policy are justified.

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THESIS/DISSERTATION PREPARATION

1. SCOPE
   1.1. To establish guidelines for student thesis/dissertation printing and binding.

2. POLICY

   2.1. The MMTS PhD program will defray the costs of printing and binding two (2) copies of the graduate student’s final, committee-approved thesis/dissertation: one (1) for the MMTS PhD student, and one (1) for the student’s advisor.

   2.2. The MMTS PhD program will keep an electronic copy of the graduate student thesis/dissertation in the MMTS PhD program administrative office.

   2.3. Strict guidelines for preparation of the thesis/dissertation are established by the Graduate School office and should be obtained from the registrar prior to writing the thesis. These include deadlines the student must meet for the thesis/dissertation to be accepted by the Graduate School and the student’s final defense committee.

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1. SCOPE
   1.1. To establish criteria for student presentations for the fall and spring semesters of the current academic year.

2. POLICY
   2.1. All MMTS students will present one research talk during each academic year they are enrolled as a PhD student. Scheduling will be arranged by the course director in consultation with the students and their advisors. More “senior” students will present first during the academic year, continuing through to newer students. The usual format will be a 20-25-minute talk with 5-10 minutes for questions. Variations in this schedule, if needed, are at the discretion of the course director.
   2.2. Students are exempt the semester they defend their dissertation, but will present a final seminar covering their PhD dissertation research in conjunction with their final defense. The final defense seminar will typically be 45-50 minutes with 5-10 minutes for general audience questions.
   2.3. MDs in clinical residency/fellowship/or T32 programs are expected to participate for the first 2 years of laboratory work, but are exempted during their clinical schedules.

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<th>APPROVAL REQUIRED:</th>
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<td>REVISION APPROVAL DATE:</td>
<td>10/19/16, 03/15/17</td>
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REQUIREMENTS FOR COURSE EXEMPTIONS FOR MMTS PhD STUDENTS

1. SCOPE
   1.1. To establish criteria which must be met for the MMTS PhD program Curriculum Committee and Executive Committee to consider granting a required course exemption for a current MMTS PhD student.

2. POLICY
   2.1. The course previously taken must:

   2.1.1. Be a graduate level course and meet the same academic standards as the equivalent WFU Graduate School course.

   2.1.2. Have credit hours equal to the equivalent WFU Graduate School course.

   2.2. The student must have attained a grade of B or better (≥ 3.0) in the course.

   2.3. The decision to grant any course exemption must be approved by the MMTS Graduate Program Directors and WFU Graduate School Administration.

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1. SCOPE

1.1. The MMTS PhD program strongly encourages and supports student participation and presentation at scientific meetings, allowing students to learn how to present their findings for public critical review, gain exposure in the scientific community, and enhance their professional development. Principal Investigators are responsible for supporting travel of the students they mentor. In addition, the MMTS PhD program will give limited funds for travel to encourage students to present their research results at regional or national meetings.

2. POLICY

2.1. The student MUST be giving an oral or poster presentation to qualify for MMTS travel support.

2.2. The student must fill out the MMTS Travel Award Application that must be approved by the MMTS Executive Committee.

2.3. Total MMTS travel support may not exceed $750 per student during their tenure as a PhD graduate student.

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**MMTS GRADUATE STUDENT ATTENDANCE POLICY**

1. **SCOPE**
   1.1 To establish an attendance policy for MMTS students.

2. **POLICY**

   2.1 Attendance for class, the MMTS seminars, and the laboratory is expected. Official excused absences include illness, illness or death of an immediate family member, religious holidays and jury or other civic duty. Excuse because of other reasons is at the discretion of the advisor.

   2.2 Students in the semester they plan to graduate will register for thesis preparation. The students are still expected to attend the Translational Science Seminar Series, but will be exempt from oral presentations.

   3.2 MMTS student Final Defense seminar attendance is highly encouraged for all MMTS students.

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1. SCOPE

1.1 Each class will be assigned a faculty class advisor who will meet with the students and advise them on a semi- or annual basis to provide logistical information regarding progress toward the PhD in the MMTS program. He/she will also serve as an advocate for the students. The faculty advisor will schedule the meeting and the students are required to attend. The faculty advisor will stay with the same class until they graduate. All degree-seeking students in the MMTS program are required to attend these meetings. There will be an annual meeting of the class advisors with the program directors to review the program.

2. POLICY

2.1 Second year PhD Student Class Advisor: The second year PhD students will be assigned a faculty class advisor and meetings will be arranged twice a year. The first meeting will occur in August at the end of their first year in Molecular and Cellular Biosciences. Topics to be discussed include, but are not limited to, introduction to MMTS, clinical experience, working with their mentor to select a PhD Dissertation Committee, selection of the statistics course, selection of electives, and preparing for Preliminary Examination.

2.2 Third year PhD Student Class Advisor: The third year PhD students will meet with their faculty class advisor twice a year. Topics to be discussed include, but are not limited to, verification of advancement to PhD candidacy, plans for completion of thesis, and necessity of preparing first author publications.

2.3 Subsequent Years: In subsequent years, students will meet annually with their faculty class advisor. Topics to be discussed include, but are not limited to, how to start positioning oneself to graduate, first author publications, dissertation preparation and final defense.

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