

Graduate Student Checklist

Medical Microbiology and Immunology (MMI) Track

Year 1:

- Questions about the Biomedical Science Program, including orientation and the 1st year curriculum, should be addressed to:
Kandace Williams, Ph.D., Associate Dean of Biomedical Science Graduate Program
Phone: 419-383-4135 Email: kandace.williams@utoledo.edu
- Questions about the MMI track, including rotations, MMI curriculum, preliminary exam, journal club, etc. should be addressed to either:
Kevin Pan, M.D., Ph.D., MMI Chair and Co-Track Director
Phone: 419-383-5466 Email: Kevin.Pan@utoledo.edu
or
Jason Huntley, Ph.D., Associate Professor and Co-Track Director
Phone: 419-383-5456 Email: Jason.Huntley@UToledo.edu
- **MMI Curriculum:**
<https://www.utoledo.edu/med/grad/biomedical/mmi/curriculum.html>
- **Laboratory Rotations:**
Beginning in late September/early October, all biomedical science graduate students must complete research rotations in faculty (PI) labs. MMI students are strongly encouraged to complete all rotations in MMI labs. Ph.D. students must complete a minimum of three research rotations (each rotation is 5 weeks long). M.S.B.S. students must complete a minimum of two research rotations (each rotation is 5 weeks long). After completion of rotations, students select the lab they wish to join (M.S.B.S. students match in December; Ph.D. students match in early March). A fourth research rotation for Ph.D. students (March to April) is allowed if students do not match with a lab or wish to explore another faculty lab. Students must identify a mentor by the May of the first year.
MMI track faculty: <https://www.utoledo.edu/med/depts/micro/faculty.html>
- **MMI Seminars:** 1st year students are strongly encouraged to attend Department of Microbiology and Immunology seminars, held on Wednesdays at 11am. Attendance at seminar during the fall semester of the 1st year may be difficult but 1st year students should regularly attend all spring semester seminars.
<https://www.utoledo.edu/med/depts/micro/calendar.html>
- **MMI Preliminary Examination (100 Question Exam)**
https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/100_Questions_for_IIT_Students_7.16.19.pdf
The MMI faculty have assembled a list of 110 questions that all MMI students should be able to answer to be successful scientists in MMI. These questions include information from the first year curriculum and/or material that all students should know from their undergraduate studies. The preliminary exam will consist of 20 randomly selected questions, four questions from each of the five research areas (Research methods; Basic cell biology; Infectious agents; Innate

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immunity; and Adaptive immunity and transplantation). The goal is to ensure that our students have a solid foundation before beginning serious thesis research. The exam will be given by the end of May of the first year to all MMI students (Ph.D. and M.S.B.S.).

- **Graduate Student and Mentor Compact:** Schedule time with your mentor to discuss the ‘Compact Between Graduate Students and Their Research Advisors’ document. <https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/UT%20COMLS%20Grad%20compact%202019.pdf> After agreeing to all commitments, sign, and send copies to MMI Track Directors and Dr. Williams.
- **Plan of Study:** All MMI students should complete a Plan of Study (POS) form before the end of the 1st year (August). This form should be reviewed by the graduate advisory committee during the first meeting (see below), in case additional or supplemental coursework is recommended by the committee.
M.S.B.S. Plan of Study form: <https://www.utoledo.edu/graduate/forms/MasterPOS.pdf>
Ph.D. Plan of Study form: <https://www.utoledo.edu/graduate/forms/DocPOS.pdf>
- **Graduate Advisory Committee Meeting:** In consultation with their mentor, all MMI students should select members for a graduate advisory committee. Ph.D. advisory committees must be comprised of at least 5 faculty members, including the lab PI (mentor). M.S.B.S. advisory committees must be comprised of at least 3 faculty members, including the lab PI (mentor). Although not required, students are encouraged to select 1 committee member from outside the MMI track/department. Ideally, the graduate advisory committee should hold their first meeting by June or July of the 1st year, to discuss the proposed project, preliminary data/progress on that project, Plan of Study (POS), and qualifying exam topic. All MMI students must hold their first graduate advisory committee meeting before the end of the 1st year (August). Two forms must be completed at this meeting: (1) The Graduate Research Advisory (GRAD) Committee Approval & Assurances Form should be signed at the conclusion of this meeting: <https://www.utoledo.edu/graduate/forms/GRADform.pdf>; (2) The MMI graduate advisory committee meeting report should be completed and submitted to the MMI track: <https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/MMI%20Graduate%20Student%20Advisory%20Committee%20Meeting%20Report%207.23.19.pdf>
- **M.S.B.S. Qualifying Exam (QE):** As noted above, the graduate advisory committee ideally should hold their first meeting in June or July of the 1st year, to discuss the proposed project, preliminary data/progress on that project, Plan of Study (POS), and QE topic. However, M.S.B.S. students can hold their first meeting and QE in the same meeting. M.S.B.S. students must schedule and pass their QE before the end of the 1st year (August).
M.S.B.S. QE Guidelines: <https://www.utoledo.edu/med/grad/biomedical/pdfs/UTCOMLS-QualifyingExam-Masters-2019.pdf>.
The ‘Report of the Qualifying Examination’ must be completed and submitted the MMI Track and Dr. Williams: <https://www.utoledo.edu/med/grad/biomedical/pdfs/UTCOMLS-QualifyingExam-Form-2017.pdf>

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Year 2:

- **Register for and complete 2nd year MMI curriculum courses:**
<https://www.utoledo.edu/med/grad/biomedical/mmi/curriculum.html>
 - Current Topics in MMI (MMIM6030/8030; fall and spring)
 - Advanced Immunology (MMIM6020/8020; fall)
 - Advanced Microbiology (MMIM 6040/8040; spring)
 - Research in MMI (MMIM6890; Ph.D. student pre-qualifying exam; fall)
 - Dissertation Research (MMIM9990; Ph.D. student after qualifying exam; spring)
 - Thesis Research (MMIM6990; M.S.B.S. student after qualifying exam; fall and spring)

- **Ph.D. Qualifying Exam (QE):** Ph.D. students must schedule and pass their qualifying exam before the end of the fall semester of their 2nd year (December).
Ph.D. QE Guidelines: <https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/UTCOMLS-QualifyingExam-PhD-2018.pdf>
The 'Report of the Qualifying Examination' must be completed and submitted to the MMI Track and Dr. Williams: <https://www.utoledo.edu/med/grad/biomedical/pdfs/UTCOMLS-QualifyingExam-Form-2017.pdf>

- **Graduate Advisory Committee meeting.** Both M.S.B.S. and Ph.D. students should hold at least two graduate advisory committee meetings per year to assess research progress. For Ph.D. students, the QE counts as one of two required meetings. The 'MMI Graduate Student Advisory Committee Meeting Report' must be completed and submitted to the MMI track:
<https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/MMI%20Graduate%20Student%20Advisory%20Committee%20Meeting%20Report%207.23.19.pdf>
Students must email a written summary of each meeting to all committee members within 48 hours of the meeting, highlighting major discussion points and plans for the next six months.

- **Work in the lab full time**

- **Research forums:** All 2nd Year MMI students are strongly encouraged to participate in the yearly Council of Biomedical Graduate Students (CBGS) Research Forum:
<https://www.utoledo.edu/med/grad/biomedical/cbgs/graduate-research-forum.html>

- **MMI Retreat or Research in Progress:** All 2nd Year MMI students are strongly encouraged to present their research at yearly MMI retreats or summer Research in Progress presentations.

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Year 3 until Graduation:

- **Register for and complete MMI curriculum:**
<https://www.utoledo.edu/med/grad/biomedical/mmi/curriculum.html>
 - Current Topics in MMI (MMIM6030/8030; fall and spring)
 - Dissertation Research (MMIM9990; Ph.D. students after qualifying exam; fall and spring)
 - Thesis Research (MMIM6990; M.S.B.S. student after qualifying exam; fall and spring)
- **Work in the lab full time**
- **Graduate Advisory Committee meeting.** Both M.S.B.S. and Ph.D. students should hold at least two graduate advisory committee meetings per year to assess research progress. The 'MMI Graduate Student Advisory Committee Meeting Report' must be completed and submitted to the MMI track:
<https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/MMI%20Graduate%20Student%20Advisory%20Committee%20Meeting%20Report%207.23.19.pdf>
Students must email a written summary of each meeting to all committee members within 48 hours of the meeting, highlighting major discussion points and project goals for the next six months.
- **Research forums:** All 3rd year and above MMI students are required to present either a poster or oral presentation at the yearly Council of Biomedical Graduate Students (CBGS) Research Forum:
<https://www.utoledo.edu/med/grad/biomedical/cbgs/graduate-research-forum.html>
- **MMI Retreat or Research in Progress:** All 3rd year and above MMI students are required to present their research at yearly MMI retreats or summer Research in Progress presentations.

Additional Notes about the MMI Track:

- **Vacation/Time Away Policy:** Students are allowed 15 days of paid vacation per year. However, these vacation days should be scheduled around required attendance at all MMI seminars and journal clubs (fall and spring semesters). MMI students are strongly encouraged to take vacation days during the summer. See 'MMI Graduate Student Attendance Policy' for more details:
<https://www.utoledo.edu/med/grad/biomedical/mmi/pdf/Student%20Time%20Away%20Policy%2002132017.pdf>
- **Graduate Advisory Committee Chair:** During the first committee meeting, a chairperson (someone other than the major advisor) will be selected by members of the graduate advisory committee. The chairperson will be responsible for: (1) Keeping the meeting organized and on-time; (2) Ensuring that the student is making adequate progress towards degree completion; (3) Ensuring that meeting summaries (provided by the student) are accurate and that timelines/goals are achieved.
- **Graduate Advisory Committee Meeting Length:** With the exception of the QE, all graduate advisory committee meetings should be completed within one hour (including 30 minute student presentation and 30 minutes of discussion). The maximum time for a QE is 3 hours (including 30 minute student presentation).

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- **Scheduling Additional Graduate Advisory Committee Meetings:** For M.S.B.S. students beyond the 2nd year and Ph.D. students beyond the 5th year, additional committee meetings may be scheduled (*e.g.*, 3 meetings per year) to ensure that students have a well-outlined plan to degree completion. If needed, the MMI track directors may meet with the committee chairperson, major advisor, and student to discuss timelines and project goals.
- **Permission to Write:** During a Graduate Advisory Committee Meeting, members of the committee may give permission for the student to begin writing their thesis or dissertation. When permission has been granted (and indicated on the 'MMI Graduate Student Advisory Committee Meeting Report'), that student is then exempted from attendance at Friday Journal Clubs. Students writing their thesis/dissertation still are required to attend Wednesday MMI seminars.
- **Thesis/Dissertation Preparation and Graduation Forms.** Please see the COGS website for detailed information about deadlines and required forms for graduation. <https://www.utoledo.edu/graduate/deadlines.html>. In general, the completed thesis/dissertation must be pre-reviewed by your major advisory and submitted to the committee at least two weeks before the defense date.
- **MMI Forms and Information:**
https://www.utoledo.edu/med/grad/biomedical/mmi/various_forms.html

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