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Welcome

Dear Students,

Welcome to the Microbiology and Immunology Graduate Program. Our faculty, post-docs, and students comprise a community that thrives on encouraging the academic and individual development of each graduate student. Together, we promote rigorous training in scientific thinking and research at the basic science level and its potential bench-to-bedside translation.

This handbook contains valuable information as a reference point for the policies and procedures of our program. Please note that some guidelines in this handbook continuously evolve. It is your responsibility; therefore, to stay up-to-date by checking your email and attending scheduled meetings with the program leadership. Also, while every attempt has been made to incorporate the most current policies, complete coverage cannot be guaranteed; therefore, you are advised to confirm your policy interpretation with the Graduate Program Director.

Please email, call, or stop by my office, PAP bldg Ste 217 (R138) with any questions or contact Santos I. Cayetano, Senior Program Coordinator via email (s.cayetano@med.miami.edu) or at his office at the RMSB 1128A. I especially invite you to pursue the most informal way of integrating into the MIC program by talking to our senior students whom we proudly mentor.

Work hard and diligently, but make sure to enjoy your time “becoming a scientist” as well.

Best of luck in your endeavors,

Enrique A. Mesri, Ph.D.
Graduate Program Director
Associate Professor of Microbiology and Immunology
Director, Miami CFAR AIDS Malignancies Program
Goals of the Microbiology and Immunology Graduate Program

The Microbiology and Immunology Graduate Program (M&I) accepts only students who wish to pursue the Doctor of Philosophy (Ph.D.) degree. Our programs are housed in multidisciplinary department encompassing the areas of cellular and molecular immunology, virology, microbial genetics, and pathogenic bacteriology. Our ultimate goal is to develop and nourish a creative, critical and thorough scientist capable of addressing open questions rooted in scientifically important research areas.

The program provides multi-faceted training opportunities for students to become highly competitive for various postgraduate careers upon completion of their Ph.D. from the program. Such careers are not restricted to research training in academia and industry, but, can be extended to patent law or research administration. We train students to rigorously investigate central topics and applications based on a broad comprehension of interdisciplinary science that was provided to you by the Program in Interdisciplinary Biomedical Sciences (PIBS). Upon your entry into the M&I Graduate Program, you will experience a focused curriculum that is interactive and discussion based. Most importantly, you, the student, are in charge of developing a research project in viral or bacterial pathogenesis or in molecular and cellular immunology, autoimmunity, transplantation or any related topic.

The M&I Graduate Program requires a serious level of commitment on the part of the faculty and students; therefore, only those individuals who are dedicated to the challenge of a rigorous course of scientific investigation should enroll in our program. Upon admission into the M&I Graduate Program, you must demonstrate proficiency in the course work and successfully complete our qualifying examination before being admitted to Ph.D. candidacy. Our candidates are expected to show increasing comprehension in their chosen research and to intellectually contribute to its growth.

The following six points highlights the aims of the M&I Graduate Program:
1. Train critical and creative scientific reasoning built on solid interdisciplinary knowledge of Microbiology or Immunology
2. Develop the laboratory skills necessary to perform experiments in the area of your choice, increase research/oral and writing skills;
3. Promote the acquisition of the skills necessary to present scientific findings, independent research plans and grant proposals, as well as manuscripts
4. Prepare our students to become the teachers of tomorrow by involving them in the active teaching process of a laboratory class for undergraduate students
5. Nourish the next generation of a networked community of scientists that is well prepared for challenging postgraduate careers
6. Guaranteed five years funding
Program Administration

Enrique A. Mesri, Ph.D.
Graduate Program Director
Associate Professor of Microbiology and Immunology
Director, Miami CFAR AIDS Malignancies Program
University of Miami Miller School of Medicine
Sylvester Comprehensive Cancer Center
1550 NW 10th Ave, PAP bldg Ste 217 (R138)
Miami, FL 33136
Office: 305-243-5659  Fax: 305-243-8309
Mobile: 917-282-2363
E-mail: emesri@med.miami.edu
http://sylvester.org/research/knowledgebase/scientist/e_mesri

Mr. Santos I. Cayetano
Senior Program Coordinator
Office of Graduate & Postdoctoral Studies
University of Miami, Miller School of Medicine
1600 NW 10th Street, RMSB 1128A
Miami, FL 33136
Office: 305-243-2478
Fax: 305-243-3593
E-mail: s.cayetano@med.miami.edu

Microbiology & Immunology Graduate Program Faculty

Primary Appointments in the Department of Microbiology & Immunology:

- **Rebecca (Becky) Adkins, Ph.D.**
  Professor, Microbiology & Immunology 305-243-5560

- **Bonnie Blomberg, Ph.D.**
  Professor, Microbiology & Immunology 305-243-6040

- **Zhibin Chen, M.D., Ph.D.**
  Associate Professor, Microbiology & Immunology 305-243-8348

- **Eli Gilboa, Ph.D.**
  Professor, Microbiology & Immunology and Medicine 305-243-1767

- **Roland Jurecic, Ph.D.**
  Associate Professor, Microbiology & Immunology and Cell Biology 305-243-6002

- **Wasif Khan, Ph.D.**
  Professor, Microbiology & Immunology 305-243-5694
  Director, Postdoctoral Programs Office
Robert Levy, Ph.D.
Professor, Microbiology & Immunology
305-243-4542

Mathias Lichtenheld, M.D.
Associate Professor, Microbiology & Immunology
305-243-3301

Diana M. Lopez, Ph.D.
Professor, Microbiology & Immunology
Director, Undergraduate Program
305-243-6632

Thomas Malek, Ph.D.
Interim-Chair, Microbiology & Immunology
Professor, Microbiology & Immunology
305-243-5627

Enrique A. Mesri, Ph.D.
Associate Professor, Microbiology & Immunology
Director, Graduate Program
305-243-5659

George Munson, Ph.D.
Associate Professor, Microbiology & Immunology
305-243-5317

Savita Pahwa, M.D.
Professor, Microbiology & Immunology,
Pediatrics, and Medicine
305-243-7732

Gregory Plano, Ph.D.
Professor, Microbiology & Immunology
305-243-6310

Richard Riley, Ph.D.
Professor, Microbiology & Immunology
Associate Dean for Preclinical Curriculum
305-243-2644

Kurt Schesser, Ph.D.
Associate Professor, Microbiology & Immunology
305-243-4760

Paolo Serafini, Ph.D.
Assistant Professor, Microbiology & Immunology
305-243-7917

Noula Shembade, Ph.D.
Assistant Professor, Microbiology & Immunology
305-243-7893

Geoffrey Stone, Ph.D.
Assistant Professor, Microbiology & Immunology
305-243-2189

Marta Torroella-Kouri, Ph.D.
Research Associate Professor, Microbiology & Immunology
305-243-6260
Secondary Appointments Department of Microbiology & Immunology:

- **Maria T. Abreu, M.D.**
  Professor of Gastroenterology, GI Chief
  Professor, Microbiology & Immunology
  Contact: 305-243-5120

- **Samita Andreansky, Ph.D.**
  Research Assistant Professor, Pediatrics
  Contact: 305-243-4896

- **Glen Barber, Ph.D.**
  Chairman, Cell Biology & Anatomy
  Professor, Cell Biology & Anatomy and Microbiology & Immunology
  Contact: 305-243-5914

- **Norma Sue Kenyon, Ph.D.**
  Professor, Surgery, Microbiology & Immunology, and Biomedical Engineering
  Contact: 305-243-5346

- **Michael Kolber, M.D., Ph.D.**
  Professor and Director, Clinical Immunology, Infectious Diseases, Division of Medicine
  Contact: 305-243-4791

- **Krishna Komanduri, Ph.D.**
  Professor, Medicine
  Contact: 305-243-6356

- **Ricardo Pastori, Ph.D.**
  Research Associate Professor, Medicine and Microbiology & Immunology
  Contact: 305-243-5349

- **Lisa W. Plano, M.D., Ph.D.**
  Associate Professor, Clinical Pediatrics and Microbiology & Immunology
  Contact: 305-243-2598

- **Alberto Pugliese, M.D.**
  Research Professor, Medicine and Microbiology & Immunology
  Contact: 305-243-5348

- **Camillo Ricordi, M.D.**
  Professor, Surgery, Medicine, Microbiology & Immunology, and Biomedical Engineering
  Contact: 305-243-6913

- **Joseph Rosenblatt, M.D.**
  Professor, Medicine and Microbiology & Immunology
  Contact: 305-243-4860

- **Mario Stevenson, Ph.D.**
  Professor, Medicine and Microbiology & Immunology
  Contact: 305-243-2689

- **Emmanuel Thomas, M.D., Ph.D.**
  Research Assistant Professor, Department of Cell Biology
  Contact: 305-243-2895
Microbiology & Immunology Graduate Students

“5th Years & beyond”

- Dillon Betancourt
  Research Mentor: Dr. Barber
  Phone: 305-243-1282

- Justin Boucher
  Research Mentor: Dr. Khan
  Phone: 305-243-5697

- Darlah Lopez-Rodriguez
  Research Mentor: Drs. Andreansky & Mesri
  Phone: 305-243-4896

- Jenbon Lui
  Research Mentor: Dr. Chen
  Phone: 305-243-4651

- Anugraha Rajagopalan
  Research Mentor: Dr. Gilboa
  Phone: 305-243-1767

“4th Years”

- Natasha Ward
  Research Mentor: Dr. Malek
  Phone: 305-243-5627

- Connor Dwyer
  Research Mentor: Dr. Malek
  Phone: 305-243-5627

- Richard Hunte
  Research Mentor: Dr. Shembade
  Phone: 305-243-7894

- Timothy Plitnik
  Research Mentor: Dr. Stevenson
  Phone: 305-243-2689

- Yvonne Puplampu-Dove
  Research Mentor: Dr. Gilboa
  Phone: 305-243-1767

“3rd Years”

- Matthew Phillips
  Research Mentor: Dr. Abreu
  Phone: 305-243-5120

Key:
"Seniors" ≥ 4 years in MIC program
"Juniors" 3 years in MIC program
"Sophomores" 2 years in MIC program
"Freshmen" 1 year in MIC program
“2nd Years”

- Kyle Russell
  Research Mentor: Dr. Jurecic
  305-243-6002

- Kevin Toomer
  Research Mentor: Dr. Malek
  305-243-5627

“1st Years”

- Cameron Bader
  Research Mentor: Dr. Levy
  305-243-6215

- Cassandra Bazile
  Research Mentor: Dr. Khan
  305-243-5694

- Petoria Gayle
  Research Mentor: Dr. Schesser
  305-243-7687

- Leidy Gonzalez
  Research Mentors: Drs. Munson & Plano
  305-243-6592

- Rosmely Hernandez
  Research Mentor: Dr. Malek
  305-243-5627

- Sunnie Hsiung
  Research Mentor: Dr. Malek
  305-243-5627

- Omayra Mendez
  Research Mentor: Dr. Shembade
  305-243-7894

Stipend

Graduate students in good academic standing will receive an annual stipend of $28,000 (effective June 1st, 2015) and may not be otherwise employed. Students are paid on the last day of each month and are required to have a bank account for funds to be directly deposited. Please assure that you have completed all of the necessary international and domestic paperwork in order to receive your monthly disbursement.
Financial Aid and Health Insurance

**Tuition Scholarships:**
Graduate students in good academic standing will continue receiving a tuition scholarship for the duration of their studies. The M&I Graduate Program Office will submit the appropriate registration and tuition waiver information on behalf of the student to the Office of Graduate Studies. Additional information may be found online at: 
http://www.miami.edu/index.php/graduate_school/costs_and_financial_aid/information_about_fellowships/

*Note that the University of Miami has capped all doctoral studies to eight years. Moreover the M&I Graduate Program has a track record of approximately 5 years and as a result will only fund students for that period.

**Financial Assistance:**
Graduate tuition is calculated by the credit hour. A full-time course load per semester is 9 or more credits (3-4 credits in a summer semester). A part-time load is 1-8 credits. Tuition for the 2015-2016 academic year is $1,850.00 per graduate credit hour. Students enrolled in joint degree programs may incur higher tuition costs. Tuition rates are subject to change according to the University of Miami, Board of Trustees.

The Office of Financial Assistance is responsible for a variety of financial aid programs including grants, educational loans, student employment, and tuition payment plans. Contact the Office of Financial Assistance directly at (305) 284-5212 or at OFAS@miami.edu for application forms and deadlines.

Additional information may be found online at: http://www.miami.edu/financial-assistance/. You may also contact the Office of Financial Assistance Services at: Office of Financial Assistance Services
P.O. Box 248187
Coral Gables, FL 33124-5240
Tel: 305 284 5212

**Health Insurance:**
Graduate students, who are in good academic standing and elect to enroll in the University of Miami health insurance program, will have 100% of the individual student premium supported. All students are required to show proof of adequate health insurance or the student will be required to enroll in the health insurance plan sponsored by the University. Please note that international students are required to obtain the University of Miami health insurance.

If you select the University health insurance benefit plan, your research faculty grant will pay 100% of the premium: Log into your MyUM account, select the Employee Tab, and follow the directions to enroll in payroll deduction. The payroll deduction will be in three, monthly installments with the deductions being withdrawn from your October, November, and December paychecks. Graduate students may purchase coverage for their dependents (charges are paid directly to the Student Health Service). For more information, contact the Student Health Service at (305)-284-1652 or online at: http://www.miami.edu/student-health/. 
Domestic students with adequate alternative coverage may request cancellation of the insurance fee via MyUM or by submitting a Domestic Insurance Cancellation Form. Their coverage must provide or exceed the same benefits required by the University. Deadlines and instructions to waive the insurance are available on the Student Health Center website at: [http://www.miami.edu/student-health/](http://www.miami.edu/student-health/). Insurance cancellation must be renewed each academic year via MyUM. If you have any further questions, you may contact the Student Health Center at:

Student Health Center  
P.O. Box 5513  
Coral Gables, FL 33124  
Telephone: 305 284 1652

### General Requirements

All graduate students at the University of Miami are subject to the general standards and requirements of the University and its various departments and individual programs in regards to attendance, examination, payment of fees and conduct, as well as the requirements of the Graduate School.

Course requirements for the Ph.D. are established by the Graduate Program and to fulfill the course credit hour requirements for the Ph.D. degree, students will need a minimum of sixty credit hours of which at least twenty-four credits must have been taken in residency at the University of Miami with a minimum of twelve dissertation credits. Students must obtain at least four advanced credits from course(s) offered by other programs to satisfy your general electives.

### Mentor

Selection of a mentor to supervise dissertation research is a major step during the first year of graduate study. Mentor selection is intended to be an experience in decision-making within a supportive environment. The selection process must be completed at the end of the PIBS year and prior to joining the M&I Program.

If there is a problem concerning student-mentor relationship, either the mentor or the student should contact the Graduate Program Director (GPD) to help resolve the problem. In case the mentor is the GPD, the Chairman of the M&I department is to be notified.
In the event the student or the mentor elects to terminate the relationship for non-academic reasons, they must notify the Dissertation Committee, the Progress Chair and the GPD (see pg.28). A new mentor selection process is initiated with the assistance of the GPD and the previous Dissertation Committee may be dissolved upon consultation with the GPD.

In the event that the relationship needs to be terminated for academic reasons the guidelines outlined in the Graduate Honor Code Handbook must be followed. All forms of academic dishonesty are prohibited, whether related to a written or oral examination, a thesis, term paper, mode of creative expression, computer-based work, or other academic undertaking. Academic dishonesty includes attempting or agreeing to commit to any of the violations listed in the Graduate Student Honor Code handbook and/or assisting another student to commit any such violation. In determining what constitutes academic dishonesty, a student should be guided by the purposes of this Code, common sense, and information provided by the faculty member.

http://www.miami.edu/dean-students/pdf/graduate_honorcode.pdf

The Graduate Academic Bulletin is updated and published annually and may be obtained online at: http://www.miami.edu/umbulletin. Students are expected to have read and adhere to these rules.

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**Student Advising**

After selection of a mentor, but prior to admission to candidacy, the mentor and the M&I Graduate Program Director will advise the student on their area of research. After the student has been admitted to Ph.D. candidacy, the mentor continues to advise the student on both course work and dissertation research. On a yearly base, students are required to call upon their Dissertation Committee for additional advice and provide an update on their progress.
## Yearly Course Schedule:

<table>
<thead>
<tr>
<th>Course</th>
<th>Year</th>
<th>Term (Fall, Spring, Summer)</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIC 601</td>
<td>Yr. 1</td>
<td>Fall</td>
<td>5</td>
</tr>
<tr>
<td>MIC 623</td>
<td>Yr. 1</td>
<td>Spring B</td>
<td>2</td>
</tr>
<tr>
<td>MIC 728</td>
<td>Yr. 1</td>
<td>Spring A</td>
<td>3</td>
</tr>
<tr>
<td>MIC 751</td>
<td>Yr. 2 &amp; beyond</td>
<td>Spring or Fall</td>
<td>3</td>
</tr>
<tr>
<td>MIC 755</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall or Spring</td>
<td>3</td>
</tr>
<tr>
<td>MIC 775</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>MIC 711</td>
<td>Yr. 2 &amp; beyond</td>
<td>By announcement only</td>
<td>-</td>
</tr>
<tr>
<td>MIC 705</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall</td>
<td>1</td>
</tr>
<tr>
<td>MIC 716</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>MIC 726</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>MIC 727</td>
<td>Yr. 2 &amp; beyond</td>
<td>Spring</td>
<td>6</td>
</tr>
<tr>
<td>MIC 728</td>
<td>Yr. 2 &amp; beyond</td>
<td>Spring</td>
<td>3</td>
</tr>
<tr>
<td>MIC 731</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall</td>
<td>1-5</td>
</tr>
<tr>
<td>MIC 761</td>
<td>Yr. 2 &amp; beyond</td>
<td>By announcement only</td>
<td>2</td>
</tr>
<tr>
<td>MIC 780</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall</td>
<td>0</td>
</tr>
<tr>
<td>MIC 799</td>
<td>Yr. 2 &amp; beyond</td>
<td>By announcement only</td>
<td>1-3</td>
</tr>
<tr>
<td>MIC 810</td>
<td>Yr. 2 &amp; beyond</td>
<td>By announcement only</td>
<td>1-6</td>
</tr>
<tr>
<td>MIC 820</td>
<td>Yr. 2 &amp; beyond</td>
<td>By announcement only</td>
<td>0</td>
</tr>
<tr>
<td>MIC 830</td>
<td>Yr. 2 &amp; beyond</td>
<td>Fall, Spring, Summer</td>
<td>1-12</td>
</tr>
<tr>
<td>MIC 840</td>
<td>Yr. 3</td>
<td>Fall, Spring, Summer</td>
<td>1-12</td>
</tr>
<tr>
<td>MIC 850</td>
<td>Yr. 3 &amp; beyond</td>
<td>Fall, Spring, Summer</td>
<td>1-6</td>
</tr>
</tbody>
</table>
M & I Classes Credits: *INDICATES A REQUIRED COURSE*

MIC 623: Mechanisms of Microbial Virulence*  
**Spring**

**Directors:** Drs. Plano/Shembade

**Credits:** Two

Description: This course will focus on the mechanisms employed by bacterial and viral pathogens to produce disease in animals and humans. The course is divided into two, three-week modules. The first module will cover bacterial pathogens with an emphasis on the bacteria-host cell interaction. Specific topics will include: bacterial attachment and invasion of eukaryotic cells, virulence gene regulation, secretion of virulence factors, bacterial toxins and obligate intracellular bacterial pathogens. The second module will cover viruses and human viral diseases with an emphasis on viral replication, gene expression, virus-host cell interactions and viral oncology. Classes will consist of a mixture of lectures and discussions of recent or classic papers. There will be two exams.

Requisite for MIC 775 and MIC 755
MIC 728: Principles of Immunology*  
**Spring**  
**Director:** Dr. Chen  
**Credits:** Three  
Description: This team-taught course will present immunological concepts and reasoning in immunological research. The course is divided into 7 weekly modules. Each module has a common theme and consists of 3 lectures on immunological concepts and one session where students present and discuss a research paper related to the theme of each module. The paper discussion session will include use of disease models as a portal to understand the function of immune system in health and disease. The module topics are: (1) lymphoid cell development, (2) antigen recognition, (3) initiation of immune responses, (4) T lymphocyte effector development and function, (5) T cell immunity versus tolerance, (6) B cell immunity, and (7) innate immunity. There will be one exam following the first four modules and the second exam after the remaining three modules.

Requisite for MIC 775 and MIC 751

MIC 751: Advanced Topics in Immunology*  
**Spring**  
**Director:** Dr. Jurecic  
**Credits:** Three  
Description: Each year, selected topics in immunobiology will be discussed addressing the contemporary issues and questions regarding the development, regulation, and function of the immune system. Please contact the Graduate Program Office for information concerning the annual topic. Prerequisites are MIC 728 and MIC 775

MIC 755: Infectious Agents and the Immune System*  
**Fall**  
**Director:** Dr. Munson  
**Credits:** Three  
Description: This course is intended to explore, at an advanced level, central themes relevant to the biology of microbial pathogens. Topics will focus on the microbiology of viral and bacterial systems and emphasize interactions with eukaryotic hosts. Microbial physiology will also be covered as it relates to pathogenesis and discussions will consider virulence mechanisms taking into account interactions at the cell systems, cellular, and sub-cellular levels.

Prerequisites are MIC 623 and MIC 775

MIC 775: Advanced Microbiology and Immunology*  
**Fall**  
**Director:** Dr. Khan  
**Credits:** Three  
Description: This course will explore in depth the current and advanced concepts and topics in selected areas of Microbiology and Immunology. The classes will consist of a mixture of lectures and discussions of recent research articles. Besides covering recent advances and cutting edge experimental approaches in cellular and molecular immunology and microbiology, this course will also expose students to the emerging concepts and themes that integrate the disciplines of immunology, microbiology and virology. Prerequisite is MIC 728
MIC 711: Accelerated Basic Science Medical Curriculum

Director: Dr. Mesri

Description: Transfer for graduate credit of basic science medical course work for individuals enrolled in combined degree (i.e. M.D. /Ph.D.) programs.

*Note that future of these credits is under discussion in light of the PIBS 701 waiver for combined degree students.

Dissertation Research Credits**

MIC 780 Research Ethics:

0 credit Fall Semester

The NIH Guide for Grants and Contracts stipulates that Institutions receiving support for National Research Service Award Training Grants are required to develop a program in the principles of Scientific Integrity. This program should be an integral part of the proposed training effort. The University of Miami, School of Medicine has chosen to respond to this requirement with this course. This course must be taken during the first semester in the Department or Program. This is a six-hour course and is given in two sessions of three hours each. PREREQUISITE: PERMISSION OF THE GRADUATE ADVISOR.

MIC 799 Advanced Topics:

1 - 3 credits Offered: By Announcement Only

Subject matter offerings based upon student demand and availability of faculty. Subtitles describing the topics to be offered will be shown in parentheses in the printed class schedule, following the title “Advanced Topics”. PREREQUISITE: PERMISSION FROM INSTRUCTOR.

MIC 810, Master’s Thesis:

1 - 6 credits Offered: By Announcement Only

The student working on his/her master’s thesis enrolls for credit, in most departments not to exceed six, as determined by his/her advisor. Credit is not awarded until the thesis has been accepted.

MIC 820, Research in Residence:

0 credit Offered: By Announcement Only

Used to establish research in residence for the thesis for the master’s degree after the student has enrolled for the permissible cumulative total in MIC 710 (usually six credits). Credit not granted. Maybe regarded as full time residence.
MIC 830: Doctoral Dissertation
Director: Dr. Mesri
Description: Required of all candidates for the Ph.D. The student will enroll for credits as determined by the Graduate Office, but not for less than a total of twenty-four. No more than twelve hours of MIC 830 may be taken in a regular semester and no more than six in the summer.

MIC 840: Post-Candidacy
Director: Dr. Mesri
Description: Required of all candidates for the Ph.D. The student will enroll for credits as determined by the Graduate Office, but not for less than a total of twenty-four. No more than twelve hours of MIC 840 may be taken in a regular semester and no more than six in the summer.

MIC 850 Research in Residence*
Director: Dr. Mesri
Description: Used to establish research for the Ph.D. candidate after the student has been enrolled for the permissible cumulative total in appropriate doctoral research. May be regarded as full-time residence as determined by the Dean of the Graduate School.

**Upon completion of other required Course Work.

Graduate Student Teaching Policy
M&I graduate students must participate as teaching assistants (TA) for Undergraduate Microbiology laboratories MIC301 during the Spring Semester. This is an essential component in the training process in your second year as graduate student.

Graduate Students beyond the second year, who are in good academic standing, may be given the opportunity for additional teaching but they must seek and obtain prior mentor approval. An approval form, signed by the graduate student and mentor, must be submitted to the M&I Graduate Program Office.

Seminar and Events Policy
All M&I graduate students must attend departmental seminars, program seminars, and guest speaker seminars. Additionally, all graduate students must participate in the following events:

- PIBS Showcase – organized by the M&I Freshman (August)
- Student Retreat – organized by the M&I Sophomores (October)
- The Cepero Memorial Lecture – organized by the M&I Juniors (May)

All graduate students must present individual seminars during the spring semester. Priority scheduling can be provided to students who are finalizing their defense date; nevertheless, the defense, in lieu of a regular seminar, must be confirmed no later than December 1st to accommodate revisions to the spring seminar schedule. The seminar requirement for the M&I freshman is reduced to thirty minutes including Q&A. It is recommended that two students present during each scheduled dates to accommodate all presenters.
Responsible Conduct in Research

Graduate Program in Microbiology and Immunology Monthly Lectures in Responsible Conduct in Research and on Emerging Ethical Issues in Contemporary Biomedical Research

Day and Time: 3rd Monday of Each Month, 5 PM. Starting September 2016

Main textbook: On being a scientist, 3rd Ed.

Format: 30 min Faculty presentation, 30 minutes small group discussion and 30 minutes global debate based on group discussions and moderated by different members of the Graduate Faculty with the help of a senior graduate student

Participants: Mandatory for all graduate students and M&I Labs Postdocs. Participants should attempt to attend most of the lectures.

Main Topics to be covered
1. Introduction to Responsible conduct of Research
2. Introduction to Ethical analysis: a roadmap for ethical decisions in the workplace
3. Conflict of interest – personal, professional, and financial
4. Policies regarding human subjects live vertebrate animal subjects in research, and safe laboratory practices.
5. Mentor/mentee responsibilities and relationships
6. Collaborative research among colleagues and institutions
7. Patents, intellectual property and collaborations with industry
8. Peer review of publications and proposals
9. Data acquisition and laboratory tools; management, sharing and ownership
10. Research misconduct, policies and institutional procedures for handling misconduct
11. Responsible authorship and publication
12. Scientists as responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research

Ethics Code

Graduate students agree to abide by the Graduate Student Honor Code. The University of Miami expects all graduate students to adhere to the highest standards of ethics and academic integrity. All forms of academic fraud are strictly prohibited. These include, but are not limited to: plagiarism, cheating, collusion, falsification, and a violation of professional ethics or misrepresentation of research data.

Plagiarism is defined by University of Miami Honor Council in the Honor Code as “…representing the words or ideas of someone else as your own. Examples include, but are not limited to: failing to properly cite direct quotes and failing to give credit for someone else’s ideas”. Plagiarism is explicitly outlawed at University of Miami. Plagiarism is not always easy to define and students who are unsure whether a particular practice is acceptable are urged to discuss the issue with the faculty instructor, mentor, or Graduate Program Director.
Students must certify that all work submitted for evaluation, presentation, or publication meets these standards. Students found to be in violation of these standards are subject to disciplinary actions by the M&I Graduate Program, the Associate Dean for Graduate Studies, and the Graduate School through the process described in the Graduate Student Honor Code which may be found online at: http://www.miami.edu/dean-students/pdf/graduate_honorcode.pdf.

**Publication Policy**

Students enrolled in the M&I Graduate Program shall have at least one peer-reviewed, first-author manuscript with primary experimental data (not a review) accepted or in press before the time of defense. Manuscript should have been submitted and review received before requesting sufficiency. This is a minimal necessary requirement, which does not imply that having a single first-author paper publication is sufficient for graduation.

Upon consultation with the Dissertation Committee, the mentor and student together can request, in writing, that the MIC Program Steering Committee waives the publication prerequisite based on “extraordinary circumstances”. Examples could include research for which a patent application has been filed or research in a manuscript prepared by a M.D./Ph.D. student whose delayed return to medical school would cause a severe hardship. Decisions are made on an ongoing, case-by-case basis in which a previous exception shall not automatically become a precedent for future requests.

**Vacation and Leave of Absence Policy**

This policy applies to full-time Ph.D. students of all of the graduate programs at the University of Miami, Miller School of Medicine (UMMSM). Students in good academic standing may receive stipends during the normal holiday periods observed by UMMSM (New Year’s Day, Martin Luther King, Jr. Day, Memorial Day, Independence Day, Christmas and the following day, Labor Day, and Thanksgiving Day). Ph.D. students may also receive stipend support for up to fifteen calendar days of sick leave per year. Ph.D. students may also receive stipend support for up to thirty calendar days of parental leave per year for the adoption or birth of a child. All parental leave requested must be requested in writing from Program Director.

Ph.D. students in good academic standing are also permitted to receive stipend support during a reasonable number of vacation days which are normally expected to not exceed two weeks, or ten business days during the calendar year. The exact number and timing of vacation days is negotiated between the student and their mentor, but the M&I Graduate Program Office must be notified in writing in advance for any absence exceeding two weeks.

Individuals requiring periods of time away from their research training experience longer than specified here must first seek preliminary approval for an unpaid leave of absence by their mentor. The students must submit a written request including the reason(s) for the request as well as the date the leave will begin and end. This request must be supported and signed by the mentor. Next, it must be approved by the M&I Program Director before it can be submitted to the Office of Graduate Studies for the final approval from the Associate Dean of Graduate Studies.
Standards of Progress

Successful completion of each component in the Graduate Program is required for the award of the Ph.D. degree. This section describes the standards of progress in the formal course work component of the graduate program.

Satisfactory progress is based upon both individual course grades and the cumulative grade point average (GPA). An average of a “B” (3.0) is required for a graduate degree. The GPA at the University of Miami is based on the four-point system:

- A+ = 4.0, A = 4.0, A- = 3.7
- B+ = 3.3, B = 3.0, B- = 2.7
- C+ = 2.3, C = 2.0, C- = 1.7
- D+ = 0.0, D = 0.0, F = 0.

All graduate work in which letter grades are given will be counted in computing the GPA. The GPA is calculated by dividing the total quality points earned by the credits attempted. All graduate students are expected to maintain a “B” average or better.

A student will be notified that he/she is not making sufficient progress if his/her cumulative GPA falls below 3.00, or if a single grade below a “C” is obtained in any course.

A student will automatically be placed on probationary status if his/her GPA falls below 3.00. The GPA must be raised to at least 3.00 by the end of the next semester or the student will be required to withdraw from the Graduate Program. An “I” (incomplete) grade for a course must be converted to a credit grade within two semesters following the receipt of the “I”. The instructor must fill out a form specifying the parameters for making up the incomplete. A “W” indicates a course dropped with permission of the Graduate Program Director after the end of the initial add-drop period as published in the official calendar of the University of Miami located online at: http://www.miami.edu/index.php/registrar/calendar/

Dissertation Committee

The composition of the Dissertation Committee is determined jointly by the student and the research mentor. The proposed committee membership must be preapproved by the M&I Graduate Program Director to assure policy adherence prior to any committee meeting. The Dissertation Committee is formally approved and appointed by the Dean of the Graduate School. The selection of the committee must be complete by December (at least eight weeks prior to administration of the Qualifying Exams which begin on February 1st of the second year in the program – see page 23). The Committee will be comprised of no less than five members that are registered with the Office of Graduate Studies as graduate faculty and must include:

1. Three members from the Graduate Faculty within the Microbiology & Immunology Graduate Program faculty. Of the three, one must be the student’s research mentor. One member from the faculty (who is not the student’s research mentor) must be assigned as the recorder. The recorder, not the mentor, will serve as Chair of the Dissertation Committee (see pg. 23).
2. The fourth member must be from the outside of the mentor’s primary department and program. Note that this member can be neither a primary nor a secondary member of M&I program.
3. The fifth member may be any graduate faculty member from the University of Miami: Miller School of Medicine
4. Any additional members that can contribute are permitted, but must in addition to the three categories above. Members of this category are not required to be a registered member of the graduate faculty with the Office of Graduate Studies.
5. One External Examiner who will be selected after completion of the sufficiency meeting (see pg. 29)

**The duties of the Dissertation Committee are:**

1. To consult with and advise the student on his/her research;
2. To meet at intervals of no more than twelve months to review the student’s progress. The Committee may request shorter intervals in-between meetings depending individual circumstances;
3. To provide accurate feedback on the student assessment forms which must be filled out after every Dissertation Committee meeting;
4. To provide additional feedback and suggestions in the form of the recorder’s letter that is communicated to the student after each meeting. It is required of the “recorder” to verbally communicate the consensus of the Committee (in the presence of *at least* one other Committee member) immediately following the Dissertation Committee meeting (see pgs. 27);
5. To read and comment on the student’s dissertation draft;
6. To meet when the student’s dissertation is complete in order to conduct the final oral examination and confirm that the student’s dissertation is original research and a contribution to science;
7. To make sure that the final dissertation is lucid and written with proper English spelling, grammar, and syntax; and
8. To make sure that the student’s final dissertation is submitted in the appropriate and approved form. The M&I graduate program encourages students to pick their dissertation committee members based on their broad expertise and experience rather than personality, to help in achieving the goal of the publication policy.

**Admission to Ph.D. Candidacy**

Admission to Ph.D. Candidacy requires that all of these conditions be met:

- Acceptance by a Graduate Faculty member as a dissertation student
- Completion of the required course work (see pgs. 10 – 14)
- A GPA of no less than 3.00
- Passing of the Qualifying Examination

**Specifics of the Qualifying Examination:** To pass the qualifying exam, the following must be completed successfully: (a) written research proposal, (b) the oral defense of the proposed research, which entails, answering of questions that evaluate your understanding of related topics and the respective fundamentals.
The Qualifying Examination Overview:

The Qualifying Examination for prospective Ph.D. candidates is administered February 1st – May 1st of year two of the Microbiology & Immunology program.

The Qualifying Exam in Microbiology and Immunology Graduate Program is an integral part of the overall evaluation of a student’s academic performance after his/her successful completion of Year 1 in the PIBS Program, and requires a current combined GPA of > 3.0. The evaluation will entail examination of your ability to conceive, efficiently organize and evaluate ideas as well as to verbally communicate them to the faculty. Importantly, you are expected to exhibit the capacity to think about the significance of the research described by relating the specific aims of your project to broad long-term objectives. The Qualifying Examination also evaluates your problem solving capability and utilization of basic knowledge, as well as your ability to critically evaluate scientific literature. Thus, a successful defense must indicate to the M & I Graduate Program that you have a high ability to grow into a successful scientist.

The Qualifying Examination must be the first formal encounter between the student and the Dissertation Committee as a whole (see page 20-21). The Dissertation Committee members evaluate the student’s written proposal and the oral examination. A member of the Dissertation Committee is selected by the Committee to be the ‘recorder’. This individual must be a member of the M & I Graduate Faculty and takes the responsibility of reporting to the Progress Chair of the M & I program throughout the tenure of the Dissertation Committee. The recorder summarizes and prepares a consensus statement concerning the opinions and recommendations of the Committee as a whole. The consensus report following the Qualifying Examination should:

1. Identify the underlying hypothesis, strengths and/or weaknesses of the student’s proposal, as well as its creativity and experimental feasibility.
2. Evaluate the student’s fundamental knowledge of the scientific disciplines most relevant to the proposed research.
3. Evaluate the student’s ability to define his/her research, formulate hypotheses, know and understand relevant literature, design experiments and their controls and critically interpret data.
4. Evaluate student’s ability to clearly present information.
5. Estimate his/her technical proficiency and include an overall evaluation based on the specific categories on the Student Assessment Form. Forms are to be collected by the recorder and returned to the M & I Graduate Program coordinator who will summarize the data in a single assessment that students have access to.
6. Indicate whether the student has passed the qualifying exam and should be admitted to Ph.D. candidacy.

It is important that the student reminds the recorder of his specific obligations before-hand as the growing numbers of programs at UMMSM use different formats for the student assessments. The Qualifying Examination guidelines are available on the Department’s web page located in the Graduate Program section under Student Resources. Students are responsible to arrange with the M&I administrator in order to provide each committee member with the Student Assessment Form on the scheduled day of the Qualifying Exam as well as other organizational aspects of the meeting (AV equipment etc.).
2. Committee Selection and composition

The proposed committee membership must be preapproved by the M & I Graduate Program Director (Dr. Enrique A. Mesri) to assure policy adherence prior to any committee meeting. This Committee will be comprised of no less than five members:

1. Three members from the Graduate Faculty within the Microbiology and Immunology Graduate Program Faculty, (includes mentor; one member other than mentor must be assigned as the recorder).
2. Two additional faculty members, one of which must be from the outside of the mentor’s primary department. Note that the latter cannot be a primary or secondary member of the M &I graduate program. Note that both of these members must be faculty that is registered with OGS as Graduate Faculty of a Graduate Program.
3. Additional members that can contribute but do not fall under 1) or 2) are permitted.
4. One External Examiner (selected after the sufficiency meeting).

3. Specifics of the Qualifying Examination

To pass the qualifying exam, its three sections comprised of the written research proposal, the oral defense of the proposed research and the answering of questions evaluating understanding of related topics and the respective fundamentals must be passed. The evaluation will occur during the “Qualifying Exam Season” which “opens” February 1st and “closes” at 5:00 p.m. on May 1st. You are responsible for contacting each committee to establish the exam date and time, and notify members and the M & I Graduate Program Office.

You must provide a hard copy and PDF version of your dissertation proposal to all Dissertation Committee Members. In addition you must e-mail a PDF version to the Progress Chair, and M & I Graduate Program Coordinator (Santos Cayetano). Historically, it has been advantageous to schedule the Qualifying Exam within a few days of your departmental seminar. Therefore, you are strongly encouraged to seek appropriate dates.

3.1. Written Research Proposal

The written research proposal must be formatted within the most recently updated guidelines provided by the M & I Graduate Program Office. The principle objective of the written proposal is to require students to critically think about their proposed project and to learn to convert their ideas into readable and concise text. What will detract is an unstructured, incoherent and sloppy compilation of superficial ideas thrown together in the last minute. The dissertation committee will be looking for an easily readable, well thought out and logically organized plan building on a reasonable premise that is followed up with realistic experimental plans that include control experiments.

Instructions for Proposal Content and its Organization:

The Thesis Proposal consists of three parts and is not allowed to exceed 10 pages including all tables and figures. It is important to follow these instructions as they overlap with those for fellowship affiliations, i.e., thesis proposal c:

1. Face Page – Use Form Page 1
   • Name
   • Title of Proposal
   • Mentor
   • Dissertation Committee Members
   • Date of Oral Qualifying Exam
2. Abstract – Use Form Page 1
   • Description: State the broad, long-term objectives and specific aims of the research proposal, making reference to the health relatedness of the project and/or its scientific impact. Describe concisely the research design and methods for achieving these goals. Avoid the use of the first person. Description must be limited to the box provided on Form Page 1.

3. Research Proposal – Pages 2 – 10. Follow the format below:

   • Specific Aims. State the specific purposes of the research proposal and the hypotheses to be tested or its resolution to a major scientific problem. (Generally 1 Page)

   • Background and Significance. Provide the background to the proposal. State concisely the importance of the research by relating the specific aims to broad, long-term objectives. (Generally 2 – 3 pages)

   • Research Design and Methods. Provide a description of the research design of the experiments proposed and the procedures to be used to accomplish the Specific Aims. Include any statistical methods by which the data will be analyzed. You may want to include a tentative ‘sequence’ and/or timetable for the proposed experiments. (Generally 5 – 7 pages)

   • Provide Literature Citations. Place these at the end of the research proposal. Each citation must include names of all authors, the complete title, book or journal, volume number, page numbers (beginning and end), and year of publication. Include a maximum of 3 pages of citations. (The citations ARE NOT part of the 10 pages)

- Section a – c should be well formulated and presented in sufficient detail that they can be thoroughly and easily evaluated for their scientific merit. It is important that they are developed in collaboration with the mentor, but they must be written solely by the graduate student. The collaboration with the mentor is a process that cannot be accomplished by a single review of the proposal by the mentor but should entail several informal and formal discussions.

   • Include sufficient information to permit an effective evaluation without faculty having to refer to the literature citations. Brevity, clarity and readability are considered indicative of a student’s ability to conduct a superior project.

**Instructions for Language, Font and Figures**
The guidelines and forms for the written research proposal are available on the web page located in the Graduate Program section under Student Resources and are based on NRSA guidelines.

1. In preparing the written proposal, use English and avoid jargon. For terms not universally known, spell out the term the first time it is used followed by the appropriate abbreviation in parentheses; the abbreviation may be used thereafter.

2. Prepare the Research Proposal single-sided and single-spaced, staying within the margin limitations indicated on the mandatory form and continuation pages. The print must be clear and legible. Do not use photo reduction. Label all graphs, diagrams, tables, and charts. Color images may be included as long as they can be readily detected in grey scale prints.
3. The proposal must conform to all of the following four measurements:

• The height of the letters must not be smaller than 12 point.

• Type density must be no more than 15 characters per inch (cpi). For proportional spacing, the average for any representative section of text must not exceed 15 cpi.

• No more than 6 lines of type must be within a vertical inch. Type requirements should be checked using a standard device for measuring type sizes, rather than relying on the font selected for a particular word processing/printer combination. Figures, charts, tables, figure legends, and footnotes may be smaller in size but must be readily legible.

3.2. Oral defense of the proposed research

The defense of the proposal provides the opportunity to evaluate if the student has put significant effort into both: 1) learning and mastering the fundamental knowledge of the disciplines relevant to the proposed research 2) thinking about the underlying science, rationale and implications of the work. Limitation of the results will not detract from a student’s performance at this examination. What will detract is a lackluster in the depth of responses and lacking knowledge of the critical primary literature.

The dissertation committee will determine your understanding of the hypotheses being tested. This includes understanding of the underlying scientific rationale, why the questions being posed are important, why the particular experiments will be performed, as well as how the student interprets the results obtained. Additionally, an understanding and appreciation of issues such as the importance of reproducibility of results, statistical analysis, etc. will be part of the committee members overall evaluation of the defense.

3.3. Answering questions

The defense of the proposal provides the opportunity to evaluate your understanding of thematically related topics and assess your fundamental knowledge of the disciplines relevant to your research. What will detract is a lack luster in command of the relevant facts, scientific concepts, and current theories relating to the proposed work. You could be thoroughly examined on areas related to your research project, i.e. within the theme of your major area of work. For example, if you were to study T-cell immune responses to a tumor antigen, questions probing areas pertaining to antigen presentation, T-cell activation, T-cell receptor signaling and effector mechanisms should be expected. The same with the biomedical/ disease related area of focus and the main technologies to be employed.

4. Grading Policy and Criteria for Advancement to Ph.D. Degree Candidacy

You will be graded on each of the three portions 1-3 as Satisfactory (S) or Unsatisfactory (U) and must receive an S on each of the three components to successfully pass the Qualifying Examination. The recorder of the dissertation committee is responsible for documenting the committee’s votes and will compose a consensus report to the student, all members of the Committee, the Graduate Program Director, the Progress Chair, and the M & I Graduate Program Office, within 2 weeks of the meeting.

Once the Progress Chair receives a consensus report from the Dissertation Committee denoting the successful completion of the qualifying examination, a request for admission to Ph.D. candidacy is submitted to the Graduate School by the M & I Graduate Program Office. Upon meeting all requirements and passing the qualifying examinations, admission to candidacy for the degree is approved. Note that you must be admitted to candidacy before the defense of dissertation is scheduled. Also, no student may receive the degree in the same semester or summer session in which he or she is admitted to candidacy.
If a student does not successfully pass (receive an S) any portion(s) of the qualifying examination, the section(s) not passed must be successfully re-taken within no more than 4 months from the original examination date at the discretion of the committee. Deficiencies may occur only one time. Failure of the Qualifying Exam on the second attempt is grounds for dismissal from the Program. In that event the Committee will refer the matter to the M & I Graduate Program Director.

**Progress after Admission to Ph.D. Candidacy**

Maintaining the status of Ph.D. Candidacy requires:

- Successfully passing the Qualifying Exam
- Maintaining a GPA > 3.0
- At least one yearly Progress Meeting and Progress Report
- Yearly seminar presentation scheduled in the Spring by the M & I Graduate Program
- Regular seminar attendance
- Participation in program events

Students in the M & I Graduate Program must have progress meetings with their Dissertation Committee at least once within 12 month intervals. It is solely the student’s responsibility to call these meetings, and arrange a feasible time for all members. It is highly recommended to schedule the meeting at the day of your mandated yearly seminar or shortly thereafter. Students are responsible to provide each committee member with the Student Assessment Form (back of handbook) on the scheduled day of the Progress Meeting. The student’s Dissertation Committee determines satisfactory progress after admission to Ph.D. candidacy.

Two weeks prior to the scheduled progress meeting, you must provide a written progress report. Written progress reports should emphasize quality over quantity. You should begin by briefly summarizing pertinent information obtained since the qualifying exam. This section should be followed by a detailed presentation of your accomplishments since the last meeting. At the end, students should briefly summarize the experimental plans for the upcoming period. Students are encouraged to seek from their Research Mentor a feedback on the report prior to its distribution.

Additional guidelines for the written progress report include:

- Describe any changes or modifications of the planned experiments and the reasons for the changes.
- The document need not contain all of the experimental work since the last progress meeting but should be a selection of the work you consider most relevant.
- The total length of the report is not to exceed 6 pages including figures (12 point font, single space). Append any papers submitted, in press or published.
- Hardcopy and a PDF file of the Progress Report must be handed out to your dissertation committee at least 2 weeks (14 days) prior to your scheduled meeting date. A PDF of your progress report must be e-mailed to the Progress Committee Chair and the M & I Graduate Program Office as well prior to the meeting.
At the end of each progress meeting, your committee members privately discuss their views as to your progress and the designated recorder will verbally relate the overall sense of the committee directly to you. She/he will also write a brief letter or memorandum to you, the Dissertation Committee, the Progress Chair, and M & I Graduate Program Office. The letter should comment on your experimental progress while much of your scientific growth will be assessed with the Student Assessment form. Where deemed necessary, this letter may also convey information concerning corrective measures for unsatisfactory progress. The recorder ascertains that a majority of committee members are in agreement with the letter contents. All letters will be sent to you, the Progress Chair, M & I Graduate Program Office, and your Dissertation Committee within two weeks of the meeting.

The Dissertation Committee’s assessment forms of your progress are placed in your student file and this summary is made accessible to you.

_Lack of Progress:_

If the Dissertation Committee determines that the student is not making satisfactory progress or that there is a consistent lack of progress, the Dissertation Committee will institute appropriate remedial action. If the student’s progress remains unsatisfactory for more than one semester, the Dissertation Committee must decide whether the student should:

1. Change his/her research project
2. Change mentors
3. Withdraw from the graduate program.

If a Dissertation Committee recommends (2), or (3), the recorder of the dissertation committee must inform the M & I Program Office and the Graduate Program Director (GPD) immediately. They will schedule a meeting to advise the student until either another mentor is selected or the student has left the program. Once confirmed that a student will not complete the Ph.D., _stipend support will be terminated 6 weeks from the original date of notification_. Records of all actions will be placed in the student’s file.

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**From Sufficiency to the Defense**

_Sufficiency:_

Sufficiency is required prior to your thesis defense and graduation. The Research Mentor and Dissertation Committee determine whether a student is sufficient. Sufficiency only will be granted at the time of a scheduled progress meeting and only if the Research Mentor and the Dissertation Committee Members reach the consensus that:

1. The student has fulfilled his/her publication requirement (see page 14);
2. All experiments necessary for the written dissertation document have been completed.
3. All other program requirements, such as the mandated class work and a GPA > 3, has been fulfilled.
4. Completion of 24 University of Miami credit hours of required courses.
5. Completion of 4 advanced credits course(s) to satisfy general electives.
Being sufficient allows the student to:

6. Successful completion of research work with at least one first author published and/or
   accepted manuscript (not review article). However, the student’s dissertation committee can
   request a waiver of this rule if the committee feels that the student has done scholarly work
   and made significant progress. In cases of request for waiver, the dissertation committee will
   explain reason for waiver, and the final decision will be made by the MIC Program Director.

7. Students have 4 months to write and defend the thesis work from sufficiency date.

8. Student should consult with their Research Mentor to propose to the Dissertation Committee
   and the Graduate Program, three scientists that could potentially serve as External Examiner.

9. Schedule a date for the thesis defense.

10. Submit a written dissertation.

External Examiner:
An individual from the outside of University of Miami must be selected to participate in the student’s
dissertation defense. Such an “external examiner” will be chosen based on demonstrated expertise in
the research area of the dissertation.
(The external examiner may not be a collaborator, a previous collaborator or the ex-mentor of the
graduate student’s thesis advisor).

The mentor, together with the other members of the dissertation committee, should generate a list of
potential candidates prior to the potential ‘final’ progress meeting. Within two weeks following the
student’s sufficiency the mentor will forward the names (in order of priority) of three potential
individuals to the Graduate Program Director for approval. After the approval, it is the responsibility
of student and mentor to make the initial contact with the proposed examiner. If he/she agrees to
participate, the Graduate Program Office will subsequently send out an official invitation and help in
the organization of the visit.

Scheduling of Thesis Defense:
A thesis defenses should be scheduled for Thursdays in order to readily incorporate it into the M & I
seminar series. A typical schedule for a dissertation defense in the M & I Graduate Program begins
with the student’s seminar at noon on a Thursday and is followed by his/her oral defense at 2 p.m.

Students must contact the M & I Graduate Program Office prior to the scheduling process to assure
availability of dates because the scheduling of thesis defenses and/or Outside Speaker Seminars are
ongoing throughout the year. The Program Administrator will advise the student at this time on
numerous other issues related to a thesis defense.

It is the responsibility of the student to identify potential dates and times that are mutually agreeable to
the M & I Graduate Program, the Research Mentor and all Dissertation Committee Members. Thereafter,
it is also the responsibility of the student to compare these potential dates with the availability of the
External Examiner. Once a final date has been confirmed, the student must immediately notify the M &
I Graduate Program Office.

It is essential to closely communicate with the M & I Graduate Program Administrator during the
preparation for a defense because scheduling conflicts can be avoided and the defense and its
accompanying seminar must be advertised throughout the Medical School. This includes the posting of
appropriate notices that are required by the Graduate School.
**Thesis Writing and Submission:**
The thesis constitutes both a body of research and a document deemed worthy of publication by the entire Dissertation Committee and the External Examiner. During the early stages of the writing process, students are strongly encouraged to regularly discuss and consult with their mentors and to obtain their feedback on all scientific issues and their presentation within the document. Furthermore, the dissertation document must adhere to all formatting rules of the Graduate School. Note that the Office of the Graduate School sets extremely detailed guidelines (http://www.miami.edu/index.php/graduate_school/current_students/electronic_theses_dissertations/).

You must obtain up-to-date guidelines from the Graduate School web site because they continuously evolve. Understand the rules prior to beginning to write your dissertation and strictly adhere to them because it will be the Graduate School’s ultimate authority to accept your dissertation. Acceptance of your dissertation by the Graduate School is required for you to graduate.

Students are responsible for mailing a hardcopy of their dissertation document to their External Examiner where it should arrive at least three weeks prior to the defense. Furthermore, students are responsible for giving their thesis to their Research Mentor and the Dissertation Committee members at least two weeks prior to the defense.

**Thesis Defense:**
Students must present a public seminar before they can formally defend their experimental work and the written document in front of the Research Mentor, the Dissertation Committee and the External Examiner. All of these individuals must be present at the defense and it is generally not possible to waive this requirement. However, in unique, last-minute emergencies the Graduate Program Director can consult with the Research Mentor to permit that a single individual may be permitted to be physically absent if this individual is able to follow the public seminar and participate in the defense via teleconferencing.

The defense involves the review of all experimental data and the entire written document. Of note, the oral defense is not restricted to matters immediately pertaining to the experiments and document but includes a broad scientific dialogue. During the defense the Committee Recorder is responsible for allotting appropriate time for questions by all participants. The External Examiner fulfills a very important role because he can validate the internal program standards. Therefore, he is given the privilege to begin the questioning and discussion process as well as to have all of his major questions and concerns addressed at the time of the defense.

The thesis work and the performance in the oral defense must be approved by all, the Research Mentor, the Committee Members and the External Reviewer. This group is empowered to pass or fail a student’s dissertation document and/or the oral defense. If the student passes, then all participants sign the appropriate forms.

If corrections and/or additions are considered to be minor the participants may sign the forms but it must be retained by the M & I Graduate Program Office until the Research Mentor, or the assigned Recorder of the Dissertation Committee, has verified that the recommendations of the committee have been followed. Upon written notification of the M & I Graduate Program Office by the Research Mentor, or the assigned Recorder of the Dissertation Committee, the signed forms will be submitted to the Graduate Office. If major revisions are required, then they will withhold their signatures until designated measures have been taken and fulfilled to their satisfaction. All revisions and edits should be completed no more than two weeks after the defense and forwarded to the Graduate Office.
Graduation:
The academic calendar has specific deadlines for graduation. It is the student’s responsibility to be aware of the exact dates and to coordinate accordingly the defense and the submission of a corrected thesis in the format required by the Graduate school. Questions regarding deadlines, graduation fees and other requirements or regulations concerning the details of preparation and submissions of the dissertation should be directed to:

Doreen Yamamoto
Dissertation Editor
305 284 4154 – call for information
dyamamoto@miami.edu

Graduate Program Governance & Committees

Steering Committee of M & I Graduate Program (SCMG):
The SCMG implements all policies concerning the Microbiology and Immunology Graduate Program. The Steering Committee approves and executes routine decisions of the subcommittees of the Graduate Program without recourse to the graduate faculty. It also initiates and prepares proposals affecting fundamental policies relating to the Graduate Program. These important issues are later presented to the graduate faculty for approval.

The SCMG meets on a monthly basis and annually meets with all M & I Graduate Faculty. The SCMG members are: the Graduate Program Director, the Chair of the M & I Curriculum Committee, the Chair of the M & I Progress Committee, one of the two M & I representatives of the AOC, one Member-at-Large (currently Dr. Adkins), a M & I representative for MD/PhD program (currently Dr. Thomas Malek) and one student representative. Detailed below are the responsibilities of these committees.

- PIBS Admissions and Operating Committee (AOC):
The committee is responsible for review of student applications to PIBS, making decisions about interviews and acceptances of applicants, and the planning and execution of recruitment visits. In addition this committee acts as a steering committee, advising the PIBS Program Director concerning program structure, policies, and procedures as well as student progress. Two members from our program represent the M & I interests. At present they are Drs. Chen and Schesser.

- PIBS Curriculum Committee:
The committee is responsible for PIBS coursework of the first year. One member from our program represents the M & I interests and reports to the M & I Curriculum Subcommittee. At present they are represented by Dr. Munson and Dr. Jurecic as an alternate representative.

- M & I Curriculum Committee:
The Curriculum committee determines and revises the curriculum for the M & I Graduate Program. Suggestions for alterations or changes in particular courses or the formation of new or special courses are welcome and can be directed to the Chair. At present this committee is directed by Dr. Jurecic and supported by Drs. Plano, Chen, Khan, Munson, and Riley.

- M & I Progress Committee:
The Progress Chairman ensures the orderly progress of evaluation of students’ performance, maintains students’ progress records, and monitors their strengths and deficiencies based on the information provided by him by the recorder of the students’ dissertation committees. At present the Chair of the Progress Committee is Dr. Geoffrey Stone.
MyUM

MyUM is UM’s interactive one-stop information hub for personalized, university-related information for students, faculty, and staff. To log in go to https://myUM.miami.edu/ and follow the instructions.

E-mail

Since all program communications occur by e-mail, please make sure to read your email daily. E-mail is an important avenue of communication between the M & I Graduate Program and the graduate students. E-mail accounts for students at UMMSM are hosted through the med.miami.edu server. A web mail interface is available on this server. Communications will include program events, administrative requests and announcements.

Security

The Department of Security office at the medical campus employs over 60 uniformed officers who monitor building entrances and patrol the campus on foot and by vehicle 24 hours a day. You can reach medical campus security by calling 305-243-6000 (6 6000 or *711 on in-house phones). Security officers provide escorts to any point on the medical campus (including Metrorail) 24 hrs. per day, upon request. The vehicle patrol will provide jump-starts and assist you if you are locked out of your vehicle. There are three other security and police entities at the medical center, in addition to our own. Jackson Memorial Hospital employs over 80 uniformed security officers; Bascom Palmer Eye Institute employs 15 uniformed officers; and the Metro-Dade Police Department provides a small contingent of officers on a full-time basis.

STAY Strategy for Campus Emergency Incidents

As part of efforts to help ensure the safety of the UM community, the University has adopted a new protection strategy for on-campus incidents with the potential for loss of life or bodily harm. After extensive research among peer institutions, the University of Miami Police Department has recommended a “STAY in Place” approach as the best safety practice.

The key components of the STAY strategy are:

- **S**: Secure your area, lock doors and windows, close blinds, prevent suspect from accessing victims.
- **T**: Take cover, hide, stay out of sight.
- **A**: Advise others so that they can take steps to protect themselves; await further information.
- **Y**: You must take measures to protect your safety. Police will be busy with the actual response to the incident and will not be able to direct your personal actions unless you are actively involved.
Under the STAY strategy, all buildings and organizational units will use existing emergency plans and, at their discretion, allow others to access their facilities to seek shelter. It is expected that a large number of people would seek shelter-in-place in classrooms and major buildings on the campuses. Any decision to lock down buildings will be made on an individual and localized basis within the framework of managing the overall incident. There are special situations, such as clinical care facilities on the medical campus, for which lockdown will remain a clearly defined strategy that can work in conjunction with STAY guidelines.

Individuals who are outdoors on campus in an emergency situation need to make the best personal safety decision they can based on common sense, situational awareness, immediacy of the threat, and availability of nearby facilities that may provide shelter-in-place options.

**Louis Calder Memorial Library**

The Louis Calder Memorial Library is a great source of information and courses in how to use scientific information tools. See its website for further information: [http://calder.med.miami.edu/](http://calder.med.miami.edu/).

**Graduate Student Association**

The Graduate Student Association (GSA) serves as a formal channel of communication between graduate students, the faculty, and the University administration. The goals of the GSA are to create activities commensurate with the interest of all members, to act as a vehicle of academic reform, and to represent the views of the graduate student community to University wide committees and all external groups. Membership in the GSA is granted to any student at UM who is registered for graduate credit. Contact 305 284 6750, or [http://www6.miami.edu/gsa/](http://www6.miami.edu/gsa/) for more details.

**International Student and Scholar Services**

The Department of International Student and Scholar Services (ISSS) provides support services for international students and scholars and facilitates the internationalization of the student and scholar experience. ISSS offers the following support services: Immigration advising, orientation, employment information and authorization, federal income tax filing, personal and adjustment problems, advocacy, and liaison (sponsors, governments). A special orientation program is held for all new international students in the fall. International Orientation facilitates the educational and cultural adjustment of new and transfer international students. (Scholar orientations are scheduled individually).

Web: [http://www.miami.edu/internationalservices/](http://www.miami.edu/internationalservices/)  
Email: isss@miami.edu  
Phone: 305-284-2928  
Fax: 305-284-3409  
In Person: 5600 Merrick Drive, Building 21-F, Coral Gables, FL 33124-5550
Multicultural Student Affairs

The mission of the Department of Multicultural Student Affairs (MSA) is to provide guidance and advocacy for the retention of ethnically diverse students at the University of Miami. Assessing the needs of Hispanic-American, African-American, Asian-American and Native American students and communicating these needs to faculty and administrators is a primary focus of the department. In addition, MSA provides guidance to the University of Miami in its ongoing efforts to build and maintain a multicultural campus community that supports and values its ethnic diversity. For more information call the MSA office at 305-284-2855.

Office of Disability Services

The Office of Disability Services (ODS) is the primary University office responsible for the coordination of auxiliary aids and services for students and employees with disabilities. ODS functions as a clearinghouse for information, as a coordinator of services and as an advocate and ombuds person. Information and/or services are available to students, their parents and/or sponsors, faculty and staff. Those seeking services should contact the Office of Disability Services at 305-284-6434 (voice) or 305-284-3402 (TDD) to discuss individual needs.

Student Counseling Center

The Student Counseling Center has personal counselors who can help students effectively cope with the challenges of college life and facilitate learning, growing and socializing. The Counseling Center offers a wide range of services, including short-term individual counseling, career and educational counseling, outreach programs, and various groups aimed at enhancing personal growth and development. The Center is staffed by an experienced team of professionals from the fields of psychology, psychiatry, mental health counseling and social work.

Regular appointments are available Monday through Friday from 9 a.m. to 5 p.m. Students can call the Counseling Center directly at 305 284 5511 or come in person to request appointments. The University Counseling Center is located in Building 21-R of the Center for Student Services on the Coral Gables campus. If a crisis occurs when the Center is closed, counselors can be reached by calling the University of Miami Police department at 305-284-6666 or www.miami.edu/counseling-center.

Sexual Assault Response Team (SART)

The Counseling Center also coordinates the Sexual Assault Response Team (SART). Trained advocates can be reached for support related to a sexual assault at any time during the regular academic year by phoning 305-798-6666.
Metrorail Passes

The Metrorail, an elevated rapid transit system that runs through Miami, provides convenient access to the medical school at the Civic Center Station exit. Discounted monthly Metrorail passes are available to UM students and must be ordered a month in advance of the month in which you would like to make use of the pass. To inquire about passes, contact the Security Office at 305-243-6280 or UMParking@med.miami.edu. For more information on the Public Transit Program: http://ummcsd.med.miami.edu/SECURITY/Transit_Pass.htm.

Parking

The Security Office is responsible for issuing parking lot access for faculty, staff and students who wish to park at the medical campus. Unfortunately, the demand for parking spaces is greater than the number of spaces. Therefore, the parking office maintains a waiting list for all the parking/garage lots. The waiting time may vary based on the demand for particular locations. To place your name on a list, please call Daysi Fleitas at 305-243-6280, ext. 2, or email your request to Umparking@med.miami.edu.

If you are placed on a waiting list and need parking in the meantime, parking spaces are readily available in the privately-owned Dominion Towers Parking Garage. Call 305-324-0900 for more information. The office is located on the first floor of Dominion Towers (1400 NW 10th Avenue, Suite 101).
Important Numbers

- M & I Graduate Program
  Mr. Enrique A. Mesri, Ph.D.
  Director, Microbiology & Immunology Graduate Program
  Director, Miami CFAR AIDS Malignancies Program
  Office: 305-243-5659
  Mobile: 917-282-2363

  Mr. Santos I. Cayetano
  Senior Program Coordinator
  Office: 305-243-2478

  Office of Graduate & Postdoctoral Studies

- Emergencies:
  Emergency Police, Fire & Rescue
  UM Police (quick dial)
  UM MSM
  UM Police
  Crime Prevention
  9 911
  * 711
  305-243-7233
  305-284-6666
  305-284-1105

- Student Health Services:
  Health Center
  Administration
  Pharmacy
  Health Insurance
  Immunization
  Wellness Center
  Medical Wellness Center
  305-284-9100
  305-284-5921
  305-284-5922
  305-284-1652
  305-284-5933
  305-284-8500
  305-243-7600

- Crisis Prevention Center:
  Counseling Center
  Switchboard of Miami
  Employee Assistance Program
  Hurricane Hotline
  305-284-5511
  305-358-4357 (HELP)
  305-284-6604
  305-284-5151

- Toppel Career Center
  305-284-5451

- Graduate School
  305-284-4154

- Office of the Registrar
  305-284-2294