Immunology & Molecular Pathogenesis

FACULTY HANDBOOK

2017 - 2018

Laney Graduate School

Graduate Division of Biological & Biomedical Sciences

PREFACE TO THE IMP FACULTY HANDBOOK

This Handbook for the faculty of IMP contains the entire student handbook.

Additions unique to the Faculty Handbook are marked in magenta.

I. PROGRAM ADMINISTRATION

Director

John Altman, PhD	Dept. of Microbiology/Immunology 2024 Yerkes jaltman@emory.edu	727-3393

Director of Graduate Studies- Pre-Qualifying Students

Jacob Kohlmeier, PhD	Dept. of Pediatric Infectious Diseases 3133 Rollins Research Center jkohlmeier@emory.edu	712-7883

Director of Graduate Studies- Post-Qualifying Students

Larry Boise, PhD	Dept. of Hematology and Medical Oncology C4012 Winship Cancer Institute lboise@emory.edu	778-4724

Seminar Director

Mehul Suthar, PhD	Dept. of Pediatric Infectious Diseases 2022 Yerkes mehul.s.suthar@emory.edu	727-3052

Head Recruiter

Haydn Kissick, PhD	Department of Urology 412-1462 Clifton Rd Building haydn.kissick@emory.edu	727-9029

Executive Committee Members

John Altman, PhD	Dept. of Microbiology & Immunology 2024 Yerkes	727-5981
Larry Boise, PhD	Dept. of Hematology and Medical Oncology C4012 Winship Cancer Institute	778-4724
Cheryl Day, PhD	Dept. of Microbiology/Immunology Vaccine Center	727-4374
Mandy Ford, PhD	Dept. of Medicine, Surgery 5203 Woodruff Memorial Building	727-2900
Arash Grakoui, PhD	Dept. Medicine, Infectious Diseases 3020 Yerkes	727-5850
Joshy Jacob, PhD	Dept. of Microbiology/Immunology 2042 Yerkes	727-7919
Haydn Kissick, PhD	Department of Urology 412-1462 Clifton Rd Building	727-9029

Jacob Kohlmeier, PhD	Dept. of Microbiology/Immunology 3133 Rollins Research Center	727-7023
Sean Stowell, MD, PhD	Dept. of Pathology and Lab Medicine 105P Whitehead Building	727-3456
Mehul Suthar, PhD	Dept. of Pediatric Infectious Diseases 2022 Yerkes	727-3052
Malu Tansey, PhD	Dept. of Physiology 605L Whitehead Building	727-6126
Ifor Williams, MD, PhD	Dept. of Pathology 105D Whitehead Building	727-8547
Jens Wrammert, PhD	Dept. of Infectious Disease E480 Health Sciences Research Building	778-3265

Student Representatives

Sonia Laurie, Senior Representative
slauri@emory.edu

Camilla Margoroli, Junior Representative
camilla.margaroli@emory.edu

Program Administrator

Emily Morran	GDBBS 1462 Clifton Rd. Suite 300A	727-2546

Program Website: http://biomed.emory.edu/PROGRAM_SITES/IMP/index.html

II. ADMISSION TO GRADUATE STUDIES

A. ADMISSION REQUIREMENTS

The graduate Program in Immunology and Molecular Pathogenesis is designed for those pursuing a Ph.D. degree or the combined M.D.-Ph.D. degrees. The Program's Recruitment Committee considers prior research experience to be the most important factor in the application review process, followed in order by letters of recommendation from research mentors, transcripts and GPA, other relevant letters of recommendation, if any, honors and/or leadership positions, and GRE scores. A successful applicant typically has a strong science background including coursework in biology, inorganic and organic chemistry, biochemistry, and molecular biology. Deficiencies in course background may be made up during the first year of graduate study upon recommendation of the Executive Committee. We do not admit students for a Masters Degree.

B. ADMISSION OF TRANSFER STUDENTS FROM OUTSIDE EMORY

We require that students complete their current graduate program, or resign from the graduate program before such applicants will be considered by our normal procedures. Upon request, we will confidentially consider applications according to the following policy.

1. The student must submit a complete application, with the exception of letters of reference.
2. This material will be reviewed by the admissions committee and the applicant will be advised as to the competitiveness of the application.
3. If the student wants to continue the application process, the references will be contacted, as well as the chairman or director of the current graduate program.
4. If the student's current program has no objections, we will then consider the application in our regular manner.

C. TRANSFER TO ANOTHER GRADUATE PROGRAM AT EMORY

Students admitted to the IMP Program are supported by the Graduate Division of Biological and Biomedical Sciences (GDBBS). As such, they may choose to do rotations or dissertation research with any faculty who are members of the GDBBS. If the student chooses to carry out dissertation work with a faculty member who is not a member of the IMP Program, three possibilities exist:

1. The student can find a co-mentor in the IMP program. This should not be undertaken lightly by the co-mentor, since this amounts to an agreement to support this student intellectually should problems arise.
2. The faculty member can join the IMP Program. This is subject to the normal procedures for inducting new faculty into the program, and is limited to faculty with training, credentials, and research support in some area of Immunology and Molecular Pathogenesis.
3. The student can arrange to transfer to the graduate program where the proposed mentor holds a training appointment. A letter of intent requesting the transfer should be sent to your current program, to your intended program, and to the Director of the Graduate Division of Biological and Biomedical Sciences. The Executive Committee of the intended program will review the student's progress in the IMP program and the student's record and approve or deny the transfer. It is expected that in most circumstances the transfer will be approved. Any additional requirements (course work, etc.) should be specified in writing and agreed upon by both the student and the intended graduate program.

III. ADMINISTRATIVE STRUCTURE

All graduate degrees offered by the program in Immunology and Molecular Pathogenesis are granted by the Laney Graduate School and the Division of Biological and Biomedical Sciences. The Dean of the Graduate School and the Director of the Division are assisted in the formulation of policy and the resolution of problems by an Executive Committee, which consists of the Directors of Division programs offering graduate training. In addition, a Divisional Student Advisory Committee consisting of students from each of the programs affords a way for student concerns to be raised and discussed.

Within the IMP program, the Director and two DGSs oversee student progress and provide support and guidance to students as they work towards their Ph.D. In this capacity, the Director and DGSs are also responsible for ensuring all students are completing program requirements towards their degree. The Director and DGSs are assisted in carrying this out with the input, feedback, and support of the program Executive Committee. For more information about Executive Committee roles, including program leadership roles and election procedures please see the IMP Faculty Handbook.

IV. PROGRAM LEADERSHIP ROLES

A. PROGRAM DIRECTOR

Description: The Program Director works in conjunction with the two DGSs, Executive Committee and Program Administrator to oversee all aspects of the program. In this capacity, the Director shall chair the Executive Committee, which includes presenting and overseeing subsequent votes on any program decision/change under consideration by the committee. The Program Director may advise the DGS in student matters if asked. S/he shall oversee the appointments of any new faculty members as well as faculty compliance with program expectations and communicate those expectations if/when needed. S/he will chair 1/3 of the qualifying exams and serve on any qualifying exam re-take committee. S/he may provide feedback to the Head Recruiter if asked and will oversee the program budget. Finally, the Program Director is the program's liaison to the Division.

Years of Service: The Director will be elected for a three-year term with the opportunity to be re-elected if desired at the end of each 3-year term.

Election Procedures: The Program Director is selected by a vote of the Program Faculty every 3 years. To facilitate this process, the Program Administrator will announce the opening via email to the IMP faculty listserv and solicit nominations from among the IMP faculty for 1 full week. If someone is nominated by another, the Program Administrator will ask if the person would like to stand for election. After 1 week, the Program Administrator will share the nominees and faculty will have the opportunity to vote via electronic, private ballot for another full week. At the close of the voting period, the Program Administrator or current Director will announce the outcome on the IMP program listserv.

Current: John Altman

Year Elected: 2017

End of Term: Summer 2020

B. DIRECTOR OF GRADUATE STUDIES- PRE-QUALIFYING STUDENTS

Description: The DGS for pre-qualifying students is the primary program resource for students. S/he will act as the students' advisor until they have officially joined a lab by completing and turning in the GDBBS Advisor Assignment form. S/he will organize new student orientation and advise 1st year students on lab rotation selections and advisor selections. S/he will organize 2nd year qualifying exams and will chair 1/3 of the qualifying exams and serve on any qualifying exam re-take committee. The DGS will serve as the instructor for rotations, research, and seminar for students in years 1 & 2. In

this capacity, s/he will be responsible for assigning and posting grades for those courses. Finally, any student plans to deviate from the program timeline as outlined in the handbook should be brought to the DGS for consideration, advice and approval.

Years of Service: The DGS will be elected for a three-year term with the opportunity to be re-elected if desired at the end of each 3-year term.

Selection Procedures: Same as for the Program Director.

Current: Jacob Kohlmeier

Year Selected: 2014-15

End of Term: Summer 2018 *Serving one extra year to stagger with Director election.

C. DIRECTOR OF GRADUATE STUDIES- POST-QUALIFYING STUDENTS

Description: The DGS for post-qualifying students is the primary program resource to those students. S/he will monitor student progress through regular & consistent communications with the Program Administrator. S/he will ensure post-qualifying students are meeting program milestones at the appropriate time and will communicate with students and advisors as needed on any issues/delays that arise. S/he will chair 1/3 of the qualifying exams and serve on any qualifying exam re-take committee. DGS will serve as the instructor for research and seminar for students in years 3+. In this capacity, s/he will be responsible for assigning and posting grades for those courses. Finally, any student plans to deviate from the program timeline as outlined in the handbook should be brought to the DGS for consideration, advice and approval.

Years of Service: The DGS of Post-Qualifying students will be elected for a three-year term with the opportunity to be re-elected if desired at the end of each 3-year term.

Selection Procedures: Same as for the Program Director

Current: Larry Boise

Year Selected: 2014-15

End of Term: Summer 2018 *Serving one extra year to stagger with Director election.

D. HEAD RECRUITER

Description: The IMP Head Recruiter attends Division level meetings related to recruitment, learns how to use key recruitment tools, such as Filemaker- App Tracker, reviews all applications to the program, and is the primary point person for prospective students. The head recruiter chairs the recruitment committee. In this capacity, s/he selects the ~top 1/3 of applicants and assigns members of the committee a portion of these to review. S/he then runs the recruitment committee meeting to select interviewees as well as the follow up meeting(s) to select offers of admission. S/he works with the Program Administrator to plan recruitment activities, monitor the budget, and provide regular and consistent communication to interviewees about recruitment dates, activities, and follow up plans. In conjunction with the Program Administrator, s/he oversees & communicates interview offers, offers of admission, and fellowship nominations to both the applicants & GDBBS.

Years of Service: The Head Recruiter will be elected for a three-year term with the opportunity to be re-elected if desired at the end of each 3-year term.

Selection Procedures: Same as Program Director.

Current: Haydn Kissick

Year Selected: 2017-2018

End of Term: Summer 2020

E. SEMINAR DIRECTOR

Description. The IMP Seminar Director is responsible for planning the Immunology and Molecular Pathogenesis Distinguished Scientist Seminar Series. Criteria for choosing outside seminar speakers should balance the needs of the IMP faculty and students, with speakers and topics appealing to the broadest possible audience of the full program membership. The Seminar Director will solicit nominated speakers from the full IMP program via an email sent to the program listserv. They will also work with department chairs that elect to co-sponsor speakers. Finally, they will work with student representatives responsible for planning the annual student invited seminar speaker. They will be assisted in these tasks by the Program Administrator.

Faculty and student hosts will be assigned for each invited speaker. The faculty host is responsible for (a) planning the scientific itinerary for the speaker, including the dinner, and (b) posting a brief description of the speaker/topic to the IMP seminar listserv advertising the seminar. The student host will assist with activities throughout the day of the visit including but not limited to escorting the guest on campus, organizing the student lunch, and attending the dinner.

The guest list for dinner must comply with GDBBS guidelines. Per GDBBS, reimbursement for meals may not exceed $60/person and at least one IMP student must be included in any program expenditures, including meals.

The Program Administrator will plan travel and lodging as well as create flyers & oversee their distribution on the seminar listserv and program website. The Program Administrator will also work with the faculty host to finalize & distribute the guest's itinerary and will monitor the budget & advise the Seminar Director accordingly.

Years of Service: Three years.

Selection Procedures: Appointed by the Program Director.

Current: Mehul Suthar.

Year Selected: 2016-17

End of Term: Summer 2019

F. EXECUTIVE COMMITTEE

Description: The Executive Committee will consider and vote upon any program changes or additions. The committee will be chaired by the Program Director and

consist of the two DGSs, Head Recruiter, and four At-Large seat positions. The committee may also include the most previous director, most previous DGSs and most previous Head Recruiter, the director of the T32 training grant, and any faculty member currently teaching one of the two core courses: Current Topics in Immunology or Concepts of Immunology.

Years of Service: Those elected to leadership roles (Director, DGSs, and Head Recruiter) will serve on the committee during their time in that role. They will be asked to continue to serve for one additional 3 year term after their leadership role ends in order to advise those who follow them into their position. The continuation will be optional. Those elected to at-large seats will serve one 3-year term.

Election Procedures: With the exception of the course directors for the Current Topics in Immunology and Concepts in Immunology and the Seminar Director, all members are elected to a specific leadership position or an at-large seat and serve on the EC for one 3-year term. Those in leadership positions may choose to continue for an additional 3 year term of service on the EC following their time as a program leader in order to advise the new leaders. They do not need to be re-elected to serve in this advisory role.

The At-Large seats up for election will be announced by the Program Administrator on the faculty-wide listserv. Faculty members will have 3 business days to be nominated for a seat. At the close of 3 days, if only one person has been nominated, the faculty will cast a "Yes/No" vote through an electronic, private ballot administered by the Program Administrator. If more than one person has been nominated, the Program Administrator will oversee an electronic, private vote. Voting will remain open for 3 business days. The Program Administrator will share the outcome with the Program Director who will make the announcement on the IMP Program listserv.

Current EC Members:

John Altman (current director- end of term-summer 2020)

Larry Boise (current Post-Qual DGS- end of term-summer 2018)

Jacob Kohlmeier (current Pre-Qual DGS- end of term-summer 2018)

Haydn Kissick (current Head Recruiter- end of term-summer 2020)

Mehul Suthar (current Seminar Director- end of term- summer 2019)

Cheryl Day (current instructor of Current Topics in Immunology)

Mandy Ford (former Head Recruiter)

Arash Grakoui (former DGS)

Joshy Jacob (current instructor of Concepts in Immunology)

Sean Stowell (At-Large seat- end of term- summer 2018)

Malu Tansey (At-Large seat- end of term- summer 2018)

Ifor Williams (At-Large seat- end of term- summer 2019)

Jens Wrammert (At-Large seat- end of term- summer 2020)

G. STUDENT REPRESENTATIVES

Description: The IMP program will have two elected student representatives who will attend all Executive Committee meetings (but be excluded from any conversations involving sensitive, personal, student issues). They will represent the student needs to the committee as well as share program decisions with students in an informal but professional manner. They may also be asked to survey current students and report results to the EC and/or prepare information for the EC to consider as applicable. Student representatives are also responsible for bringing student concerns and ideas to program leaders on an as needed basis throughout the year depending on what the student body has requested. Finally, student representatives will be voting members of the EC except for in matters related to individual student issues.

The two positions will be held by a junior representative and a senior representative. Following the first year of service, the junior representative will become the senior representative and work in conjunction with the newly elected junior representative. This will offer continuity as well as training and leadership opportunities to maximize the effectiveness of this position.

Years of Service: 2 years/position

Selection Procedures: Each elected representative will serve 2 years. To be eligible for the position, a student must have at least 2 years remaining in the program so s/he can fulfill both the junior year and senior year. Approximately 1 month before the end of the senior representative's term, s/he will announce the open position on the student listserv. Students may nominate themselves or others for the position. Nominations will be submitted to the Program Administrator for 1 week. After that time, the Program Administrator will announce the nominees on the student listserv, and current students will have 3 business days to vote via hidden online poll. The Program Administrator will share the results with the rising senior representative who will announce the outcome and appointment of the new junior on the student listserv shortly after voting has ended.

Current Senior Representative: Sonia Laurie (Spring 2016-Spring 2018)

Current Junior Representative: Camilla Margaroli (Spring 2017-Spring 2019)

V. GDBBS FACULTY RESPONSIBILITIES

The following information has been taken from the GDBBS Policy & Procedures Manual, pages 23-24. As training faculty within the Division, all IMP faculty are responsible for meeting Division level expectations.

Program members are expected to participate actively in Program functions. This includes the honor and responsibility of serving as dissertation mentors to graduate students in the Program. The dissertation mentor is financially and intellectually responsible for the development of that student and is the major overseer of the

student's successful completion of the Ph.D. Program. Such agreements should not be entered into without considerable thought and consideration.

Additional contributions should be made in the following areas including, but not limited to, program relevant graduate level teaching, student recruitment, directing laboratory rotations, Program administration, participation in the preparation and grading of qualifying exams, attendance at research seminars given by outside faculty, Program faculty, and Program students, attendance at Program faculty meetings, voting on admissibility of new faculty members, and service on dissertation committees.

Satisfactory participation includes displaying adequacy in at least two of the following categories.

A. TEACHING

Directing, co-directing or teaching at least 10 contact hours in course(s) within the last three years in a GDBBS graduate course relevant to the Program and taken by a significant number of program students. Undergraduate, medical, and allied health courses are not considered program-relevant unless they also carry a GDBBS listing and were taken by a significant number of GDBBS students during the three year period in question.

B. RESEARCH TRAINING

Active participation in research training involves:

1. Membership on dissertation committees of students in the Program.
2. Attendance at student seminars and dissertation defenses.
3. Attendance at relevant faculty research seminars.
4. Writing and grading Part I examination questions (if applicable).

C. ADMINISTRATIVE

Holding any executive office of the Program including Director, Director of Graduate Studies, Executive Committee, Recruiter, active participation in other Program committees, OR

Holding an executive office in the Graduate Division of Biological & Biomedical Sciences, OR Graduate School of Arts & Sciences (but not within the administrative structure of another Program), OR as an administrator elsewhere at Emory University (e.g. Dept. Chair).

D. RECRUITING

Participation is required in recruitment efforts including meals and interviews during the annual recruitment period, or individual field visits to recruit at academic institutions.

Each faculty member also bears a responsibility to advertise our Programs and to make contact with potential students whenever possible. The GDBBS Recruiting Committee has formulated a list of activities that will assist in recruitment. The GDBBS encourages all faculty members and students to visit predominantly undergraduate institutions and talk with prospective students. Funds are available to defray some of the costs of travel

for this purpose. Contact the Director of GDBBS to discuss such reimbursement before traveling.

VI. GDBBS DATABASE

The Division maintains a database that houses key information for GDBBS students and faculty. Appropriate, applicable information from the database then feeds into the Division and Program websites and training grant tables, as needed. Because of the interdisciplinary nature of the Division, it is of utmost importance that all faculty update their database information at least once/year. All faculty will receive an email from GDBBS typically in the spring or early summer requesting that they update their database information using the web interface. All faculty are welcome and encouraged to update their information as often as they see fit, but at least once per year. The address for the web interface is https://secure.gdbbs.emory.edu/updates/#/login In order to assist the IMP program in disseminating accurate information both for communication and for training grant applications, please ensure your information is up to date at the start of each academic year.

VII. GDBBS FINANCIAL SUPPORT

The Division provides all financial support for GDBBS students with the exception of student fees each semester for the first 21 months in the program. In month 22, the faculty mentor then assumes full financial responsibility for the graduate student with the exception of student fees each semester. GDBBS maintains a Stipend Reserve Fund through which faculty may set up savings or loans. For more information, please read pages 24-26 of the GDBBS Policy and Procedures Manual and contact Margie Varnado in the GDBBS office.

VIII. PROGRAM REQUIREMENTS

A summary of requirements for obtaining a Ph.D. degree from the IMP program are:

1. Obtain a grade of "B" or better in all courses including laboratory rotations
2. Choose a dissertation advisor
3. Pass the oral qualifying exam
4. Form a dissertation committee & hold committee meetings (required frequency described below)
5. Develop a committee-approved thesis proposal
6. Submit a review of the literature
7. Participate in the academic events of the program, which includes seminars, Research in Progress presentations, journal clubs, etc.
8. Write and successfully defend a dissertation
9. Fulfill LGS requirements, specifically the Jones Program in Ethics, TATTO, and final dissertation and graduation requirements.

Each requirement is explained in more detail below. Please refer to the current IMP Student Timeline available on the IMP website for current due dates pertaining to each requirement.

A. REQUIRED COURSEWORK

The curriculum detailed below satisfies all coursework credit hours and IMP program course requirements in the first two graduate years. However, students may enroll in additional GDBBS courses after the 2nd year in consultation with their advisor.

1. Note to faculty on required coursework.

Hypothesis Design & Scientific Writing, a required course for both PhD and MD/PhD students, requires input and time on each faculty mentor's part. Please plan to meet with your trainee regularly throughout his/her time in this course. Each mentor will be provided with more information from the course instructors at the start of the semester. The program's hope is that through time investment in this course by both the mentor and the student, each student will have a sufficient foundation at the end of the course to move forward with submitting a grant if so desired. For more information, please contact the current course instructors.

2. PhD Course Requirements

Semester 1 (Fall – registered by the Program Administrator)

Basic Biomed & Biol Sciences I	IBS 555	6 credits
Concepts of Immunology	IBS 542	4 credits
Intro to Research	IBS 545	1 credits
Laboratory Rotations	IMP 597r	1 credit
Colloquium in Immunology	IMP 792r	2 credits
Advanced Graduate Seminar	IMP 790r	1 credits
Jones Program in Ethics	JPE 600	1 credit

Semester 2 (Spring. Students register themselves beginning in Spring of Year 1)

Virology	IBS 513	5 credits
Current Topics in Immunology	IBS 747r	5 credits
Advanced Graduate Seminar	IMP 790r	1 credits
Laboratory Rotations	IMP 597r	1 credit

Semester 3 (Fall)

Advanced Graduate Seminar	IMP 790r	1 credits
Annual Reviews Immunology	IBS 777r	2 credits
Colloquium in Immunology	IMP 792r	2 credits
Advanced Graduate Research	IBS 699r	4 credits
TATTO (more info below)	TATT 600	2 credits

Semester 4 (Spring)

Advanced Graduate Seminar	IMP 790r	1 credits
Hypothesis Design & Scientific Writing	IBS 522R-02P	4 credits
Stat Design and Analysis of Experiments	IBS 538	4 credits
Advanced Graduate Research	IBS 699r	1 credits

Years 3+ (Fall & Spring)

Prior to submitting Application for Candidacy:

Advanced Graduate Seminar	IMP 790r	1 credits

*Adv. Graduate Research	IBS 699r	8 credits

After submitting Application for Candidacy:

Advanced Graduate Seminar	IMP 790r	1 credits
*Dissertation Research	IMP 799r	8 credits

*Research credits are variable and should be adjusted based on any additional electives the student may take. **Total credits should be at least 9, or, if exceeding 9, be as close to 9 as possible for each semester in years 3+.**

Over the summer, students will register for 9 credits of research. Pre-candidacy students should register for Advanced Graduate Research, IBS 699r. Post-candidacy students should register for Dissertation Research, IBS 799r.

Students can be exempted from specific required courses if it is established that equivalent previous course work has been satisfactorily completed. Other electives would then be available for the student to substitute for the exempted required course. **This must be approved in writing by the Director of Graduate Studies and the faculty advisor.**

Electives
Electives are to be decided jointly between student and advisor.

Recommended Electives:

IBS 504	Intro Prokaryotic Genetics (Fall)
IBS 561	Eukaryotic Chr. Org. & Function (Spring)
IBS 745	Infection & Immunity (Spring)
IBS 524	Cancer Biology II (Spring)

*Other electives can be found on the GDBBS Internal website under "Students" → "Course Information".

Most full time students will be eligible for candidacy at the end of their 2nd year. Eligibility and admission to candidacy is overseen by the Laney Graduate School. Students can find more information about candidacy requirements on the LGS website.

3. MD/PhD Course Requirements

Because M.D.-Ph.D. students have completed two years of course work, they enter the program in Advanced Standing. Their rotations and first IMP courses take place in the M2 year (spring). Therefore, they are able to take the qualifying exam in January of the G1 year. The following curriculum fulfills course requirements for the IMP Program.

M2 Semester (Spring)

3 rotations		
Virology	IBS 513	5 credits
Statistical Design and Analysis of Experiments	IBS 538	4 credits

G1 Semester 1 (Fall)

Advanced Graduate Seminar	IMP 790r	1 credits
Concepts of Immunology	IBS 542	4 credits
Colloquium in Immunology	IMP 792r	2 credits
Annual Reviews in Immunology	IBS 777R	2 credits
Adv. Graduate Research	IBS 699r	1 credits
Jones Program in Ethics (more info below)	JPE 600	1 credit
TATTO (more info below)	TATT 600	2 credits

G1 Semester 2 (Spring)

Advanced Graduate Seminar	IMP 790r	1 credits
Current Topics in Immunology	IBS 747r	5 credits
Adv. Graduate Research	IBS 699r	2 credits
Hypothesis Design & Scientific Writing	IBS 522R-02P	4 credits

Years G2+ (Fall & Spring)

Prior to submitting Application for Candidacy:

Advanced Graduate Seminar	IMP 790r	1 credits
*Adv. Graduate Research	IBS 699r	8 credits

After submitting Application for Candidacy:

Advanced Graduate Seminar	IMP 790r	1 credits
*Dissertation Research	IMP 799r	8 credits

Over the summer, MD-PhD students will register for 9 credits of research. Pre-candidacy students should register for Advanced Graduate Research, IBS 699r. Post-candidacy students should register for Dissertation Research, IBS 799r.

4. On Non-GDBBS Electives

Students wishing to take for credit electives beyond those specifically listed in this handbook must obtain prior approval from all of the following: (1) their research mentor, (2) an IMP DGS, and (3) the instructor in charge of the course. In general, the program does not encourage students to make substantial commitments to elective courses because these can detract from the need to focus on research projects.

5. Grade Criteria

Students must attain an average grade of B or better in course work each semester. No grade less than B is acceptable in required IMP courses. Any grade below a B will be brought to the attention of and discussed by the IMP Executive Committee for possible academic probation (see next section).

Students with an average grade of less than B will be placed on academic probation, subject to review by the IMP Executive Committee. Students on Academic Probation due to their grade point average have one semester to bring their grade point average above the minimum. The IMP Executive Committee may require the student to retake any course in which a grade of less than B was given. Those who have received an unacceptable grade may not receive any grade less than a B in any subsequent course work. Failure to satisfy these criteria may be grounds for dismissal from the IMP graduate program.

6. Jones Program in Ethics

The Laney Graduate School's Jones Program in Ethics (JPE) has been approved by the Laney Graduate School Executive Committee. JPE will be required for doctoral students in the biological/biomedical and natural sciences entering the Laney Graduate School in Fall 2012 and later. The Jones Program in Ethics is a comprehensive program to educate doctoral students in all disciplines in the ethical pursuit of scholarly research. Training will take place both within interdisciplinary forums and also within the student's graduate program.

There are three elements to the program:

1. JPE 600, a core course in scholarly integrity, supported by the Laney Graduate School is required of all incoming Laney Graduate students. Incoming students are automatically registered for this course and attend it prior to the start of the fall semester.
2. Program-based training in ethics and the responsible conduct of research, may take place within existing courses. In addition, first year and 5th year students are required to participate in faculty-led seminars and discussions organized by the Directors of IMP and MMG. Attending these seminars is part of the students' requirements for candidacy. Post-candidacy, fifth year students attend again as a refresher. These seminars currently occur during the month of September on Mondays and Wednesdays at 4pm.
3. A minimum of four topical public workshops, training sessions, or lectures must be completed before graduation. Announcements of these come from the Laney Graduate School throughout the academic year. They are listed as JPE 610 workshops and will appear on the student's transcript. Each student must attend at least 4 before graduating from LGS.
4. For more information, please visit the JPE website.

7. TATTO – Teaching Experience

The Teaching Assistant Training and Teaching Opportunity Program (TATTO) provides teacher training and experience for students in the GDBBS. Completion of the TATTO program is required for all Ph.D. students. This two-day required summer course takes place one week immediately prior to the beginning of the Fall semester. Monica Taylor coordinates this Laney requirement for all GDBBS students. She will register all second year Ph.D students and first year MD/Ph.D students for the late summer coursework.

Teaching Assistantship (TA). The second part of TATTO is a teaching assistantship. All students in the GDBBS are required to serve as a Teaching Assistant for one semester, usually during the second graduate year. Teaching Assistants typically serve as laboratory instructors or discussion leaders for small groups. Teaching Assistants also assist students with problems during scheduled office hours, help prepare handouts and/or laboratory material, and help administer and grade exams. Students assigned to laboratory courses assist in setting up laboratory exercises, and help students understand the theoretical and practical aspects of the exercise. If you have specific questions or requests related to your teaching assistantship, please see Monica Taylor in the GDBBS main office.

B. LABORATORY ROTATIONS

As part of students' coursework, each student must complete research in at least 3 different laboratories of GDBBS faculty during the first year. Some students may decide to do a fourth rotation during the summer after their second semester.

Prior to each rotation, students must consult with and obtain written approval from the Director of Graduate Studies for Pre-Qualifying Students, using the *Laboratory Rotation Notification* form available on the IMP website. Once approval is obtained from the DGS, students must obtain written approval from the faculty member on the *Laboratory Rotation Notification* form. Students must turn this form into the Program Administrator prior to beginning each rotation. See the *IMP Student Timeline* on the IMP website for due dates.

Laboratory rotations expose students to different research approaches and techniques of modern science. They help define a student's research interests and make it easier to select an advisor. However, the choice of advisor is not limited to the faculty with whom the student has done a rotation. Rotations also allow faculty to observe and evaluate the first-year students in their laboratory setting. Expectations for time spent in the laboratory should be ***clearly*** established between the faculty member and the student ***before*** beginning each rotation. Students are expected to be working on their projects when not attending class.

At the close of the rotation, students must fill out the *Laboratory Rotation Summary Report* which is also on the IMP website. On this form, students are required to write a short report of the rotation to receive a grade. The summary report needs to be signed by the rotation mentor as well as the DGS. Once the *Laboratory Rotation Summary Report* is completed, students should turn it into the Program Administrator prior to the start of the next rotation. See the *IMP Student Timeline* on the IMP website for due dates. Additionally, faculty are required to submit written comments on rotation performance to the DGS of Pre-Qualifying Students. The DGS will consider faculty feedback, the student's summary report, and fulfillment of the rotation weeks in assigning a rotation grade.

C. DISSERTATION ADVISORS

The Director of Graduate Studies for Pre-qualifying students, will serve as advisor until the student has selected a dissertation advisor. Selection of a dissertation advisor takes place after the final laboratory rotation. No final commitments should be made to a faculty member by the student (or vice-versa) until this time. The dissertation advisor must be a member of the GDBBS. Although not mandatory, we strongly encourage students to select an advisor who is a faculty member of the IMP Program. Once students have arranged their advisor, they must formalize this relationship by completing the *GDBBS Mentor Agreement Form* and IMP Addendum available on the IMP website under "Resources" and "Forms and Documents". **The GDBBS form requires the signatures of the student, advisor, DGS, and department chair of the advisor. It also requires documentation of the proposed advisors current funding.** Students should turn all 3 documents into the Program Administrator as soon as plans are made.

Note: Students who choose a dissertation advisor at the CDC must have a co-advisor who has an Emory University faculty appointment and is a member of the IMP program.

Factors you should consider when choosing a Dissertation Advisor are discussed at length in Appendix 1.

1. Note for Faculty on Dissertation Advisors

Making a commitment as an advisor to a student means you are agreeing to accept the primary responsibility for that student's academic, intellectual, and scientific development. Additionally, you are agreeing to be financially responsible for that student from their 22nd month in the program through the time of their defense. That student is not simply your employee, but rather your apprentice and the relationship should be treated as such. IMP training faculty may take on no more than 2 students within each academic year.

D. PHD QUALIFYING EXAMINATION

An oral qualifying examination is administered to evaluate each student's mastery of scientific concepts before permitting him/her to proceed to full-time doctoral dissertation research. If a student is deemed deficient in the qualifying examination, he/she will have one more opportunity to retake and pass the oral test.

The oral examination will assess each student's comprehensive knowledge of immunology and other pertinent scientific areas. Each student is expected to be fully-versed in immunology and virology (required IMP courses). Topics can also include biochemistry as well as experimental techniques and design. In addition to possessing a broad range of facts and knowledge, the student must demonstrate an ability to synthesize information and display systematic reasoning skills. The oral examination will be administered during the first weeks of January (Year 2 for PhD/G1 for MD-PhD).

A committee of four IMP faculty members will be assigned to administer the oral examination to each student, with one faculty member or DGS who will serve as chairperson. Students will find out who is on their committee 1 week in advance of the exam. The committees, dates, and locations will be arranged by the DGS for Pre-Qualifying Students with administrative support from the Program Administrator. Advisors **will not** be permitted to attend the examination. The examination will begin with the student providing a five-minute overview of his/her current research. No slides or overhead transparencies may be used. However, it is permissible to write/draw material on the board during the examination. Each member will then be given ten minutes to individually ask questions, followed by a five-minute period when the other members can pose follow-up questions. There will be two rounds of questioning.

Students must obtain the *IMP Oral Qualifying Examination* form from the IMP website to present to their committee at the qualifying examination. This form, which includes the signatures of each committee member, should be turned into the Program Administrator **immediately** following the exam. In the case a student fails the exam, he/she will have 4 weeks to do a successful reexamination. All attempts will be made to maintain the same committee for the retake. A second failure results in dismissal from the program.

1. Note for faculty on qualifying exam committees

Qualifying exam committees are formed from among the faculty mentors of the group of students taking the exam. Mentors of all current 2nd year students or 1st year MD-PhD students will serve on 3 exam committees in January. The exams cannot be carried out without the time and commitment of these advisors, so please plan accordingly when your trainees are in an exam year. The Pre-qualifying DGS will contact the mentors involved in the fall prior to the January exams to begin organizing exam committees and confirming exam dates.

E. DISSERTATION COMMITTEES

A student must select his/her dissertation committee before the first Research In Progress (RIP) presentation. (Spring of 2nd year for PhDs/G1 year for MD/PhDs).

The duties of the committee include assisting the student in creating and executing an original, publishable research project, assisting in the preparation of an acceptable dissertation and administering the final oral examination (the dissertation defense). As such, this committee is vital to the progress of the student.

The overall dissertation committee must meet the following criteria:

1. Include 5 members total, including your advisor.
2. At least 3 members from the IMP program and at least 4 members of the GDBBS. Your mentor, if in IMP, counts as 1. If your mentor is not in IMP at the time you form your committee, then at least 3 of the other faculty must be IMP members.
3. At least 1 member who has been in the IMP program for at least 5 years and graduated at least 1 IMP student. You may contact the Program Administrator for a list of current faculty who fulfill this.
4. At least 4 members must be present together to hold a meeting.
5. If the student would like to include one member outside of Emory, s/he will need to follow the steps described on the LGS Dissertation Committee form for including an "outside reader". The IMP program will allow one outside reader on a committee.

Although not a strict criterion, IMP encourages students to choose at least a couple of committee members that are outside the advisor's normal "circle" of close colleagues and collaborators, in order to get feedback from different perspectives.

Students must submit the LGS Dissertation Committee form to the LGS to formalize their committee selection before their first RIP. **Students can access the form and instructions through the IMP website.**

Guidelines for choosing members of Dissertation Committees are included in Appendix 2.

After you and your advisor have agreed upon a candidate list of members for your dissertation committee, we recommend you discuss the list with the DGS for post-qualifying students before you extend invitations to join your committee.

F. COMMITTEE MEETINGS

In year 2 and 3, students are to hold committee meetings at least once per calendar year. Beginning in year 4, students are to hold committee meetings every 6 months. However, the committee may recommend more frequent meetings as needed to more closely monitor a student's progress. At least 4 of the 5 committee members must be in attendance at each meeting. A student must have at least 3 committee meetings prior to the dissertation defense.

At least 1 week before each meeting, students will provide a 3-page maximum summary report detailing their progress. This report should briefly remind the committee of the aims of the project, summarize the progress made since the last meeting, and summarize the next steps the student intends to take. This report needs to be submitted to each committee member **no less than 1-week before the student's meeting.**

Students must incorporate the IMP Committee Meeting IDP Slides as part of their presentation to their committee at every committee meeting. Templates for these slides can be found on the IMP website.

Additionally, **students must obtain signatures and complete the *IMP Committee Meeting Summary and Progress Report* form at each committee meeting.** Students should submit this form to the Program Administrator **within the week** following their committee meeting. **This form is required as documentation of each meeting and is available on the IMP website.**

Students must bring copies of the Meeting Summary form from the previous meeting to each committee meeting.

1. Notes for Faculty on Committee Meetings

1. The minimum frequency of committee meetings is the jurisdiction of the Program and Division, not the mentor. As such, mentors are expected to support their students in meeting these minimum meeting requirements and not impede them by suggesting or requiring that they wait for meetings until certain lab/data concerns are met. However, mentors may require that their trainees have more frequent meetings than those required of the Program and Division. Please work with your students in meeting the above minimum meeting requirements.

2. The section below outlines general guidelines for committee meetings. Please ensure that the committees you are on carry out the meeting with these guidelines in mind.

2. Guidelines for Dissertation Committee Meetings

1. Dissertation committee meetings are to be held once per academic year, and then once every 6 months during the 4th year and beyond. Beginning in the 7th year and beyond, students are required by the GDBBS to hold committee meetings every 4 months.
2. Dissertation committee meetings should last 1-2 hours and should review the student's recent progress toward publications and/or dissertation research.
3. All meetings are closed, meaning only the student, advisor(s), and committee members should be in attendance.

4. A quorum of all but one of the committee members is required for the meeting to be held. If necessary, committee members may participate in the meeting by phone or video conference.
5. The advisor is required to be present at the dissertation committee meeting.
6. The meeting should start with the student reviewing the IMP-mandated "Individual Development Plan" (IDP) slides.
7. The bulk of the meeting should be spent reviewing data relevant to progress toward publications and/or the dissertation.
8. The committee should try to focus their suggestions on lines of investigation most critical to finishing up manuscripts.
9. At the end of the presentation, the student should be asked to step out of the room for 5-10 minutes while the advisor and committee members discuss the student's progress, based on both the student's presentation and confidential input from the advisor.
10. During this time, the student is tasked with filling out the "Committee Feedback" section of the IMP Committee Meeting Summary and Progress Report form, listing suggestions that were given to the student during the presentation.
11. When the student returns to the room, committee members should review the student's summary of their feedback, add any final "big picture" evaluative comments on the student's progress, and sign and complete the IMP Committee Meeting Summary and Progress Report form.
12. All members and the advisor must sign any additional GDBBS and LGS forms, as applicable (provided by the student at the meeting).

G. DISSERTATION PROPOSAL

In spring of Year 2 (G1 for MD/PhD students), a student's committee is formed and should attend the first RIP. The first committee meeting should then happen no later than July 1 following the first RIP. **Failure to meet this deadline could jeopardize the student's stipend support**.

The first meeting will involve the presentation of a thesis proposal. The proposal should be a written grant in NIH format describing the student's proposed research. The grant should adhere to the format and instructions for NIH F award applications following the guidelines students are taught in the Hypothesis Design & Scientific Writing course. Students are encouraged to submit the proposal (or something similar) to the appropriate NIH funding agency for F award support. The student's dissertation advisor is expected to aid in the design and editing of the thesis proposal. Thus, the thesis proposal should be written by the student with scientific input and editorial advice from his or her dissertation advisor. The presentation of the thesis proposal signals the start of a collaborative interaction between the student, advisor, and committee to foster the student's independent research program and track its progress.

At least 2 weeks prior to the meeting, students should send their committee their written proposal. For the first meeting, this is in lieu of the summary report (See above in Committee Meetings.)

Each student should prepare an oral slide presentation of his/her thesis proposal. This presentation should provide a brief overview of the field of interest, followed by a presentation of each specific aim, hypotheses, preliminary results, and approach(s) to be used. Additionally, the slide presentation must also include the IDP slides mentioned above and available on the **IMP website**.

At the meeting, students must provide and have signed by the committee the *IMP Evaluation of Thesis Proposal Form* and the *IMP Committee Meeting Summary and Progress Report*. Student can print these from the **IMP website**.

Once approved by the committee, the *IMP Evaluation of Thesis Proposal Form* should be and the *IMP Committee Meeting Summary and Progress Report* need to be turned into the Program Administrator. Additionally, students should submit an electronic version of their proposal to the Program Administrator to be kept on file for reference, if needed, by the program.

H. REVIEW OF THE LITERATURE

Third year students (G2 MD/PhD students) are required to write a 30 page (double spaced) review/overview of the literature critical to the chosen area of research. This review will constitute the first, introductory chapter of the student's dissertation. The student and his or her PI are strongly encouraged to submit this review for publication. Reviews are due by December 1 of the third year for Ph.D students and December 1 of the second year for MD/PhD students. Students should submit an electronic copy to the Program Administrator no later than December 1 to ensure completion of this program requirement.

IX. AWARDING OF THE PHD DEGREE

The format of the dissertation must be approved by the dissertation committee before you begin writing. A copy of the dissertation in final form must be submitted to all members of the committee before the defense date can be set. The defense must be **at least two weeks after the committee receives the final written copy**. The written dissertation must conform to Laney Graduate School Guidelines found on the LGS website, but in general will consist of an original account of the background, approach, experiments, and conclusions of the dissertation research. Published papers written by the student may be reformatted as chapters in the dissertation, but an original introductory chapter (review of the literature) and concluding chapter must be added. The final chapter (~10 pages) should not simply summarize the conclusions made in the dissertation, but provide a scholarly discussion how these conclusions advance the field of study. **The dissertation must indicate which figures and tables are based on data generated by the Ph.D. candidate.**

Publications are important part of the training and success of IMP students. It is expected that a student will have multiple publications (two first-author publications, review article from introduction chapter, and additional collaborative works) accepted in peer-reviewed journals at the time of their dissertation defense. However, the number of accepted papers only serves as a guideline for signaling the student's progress for defense and should not be considered as the sole requirement to secure permission to defend. Students at this point must convince their committee and the IMP program that they are operating at the independent level of a postdoc. In extenuating circumstances, a student and his or her PI may petition the IMP executive committee for permission to defend with less than 2 papers, however it is unlikely that this will be permitted for students who have not successfully published a single first author peer-reviewed scientific report.

The final oral examination (dissertation defense) is scheduled by the student with the approval of the dissertation committee. The examination is administered by the committee, with the advisor serving as chairperson. The examination is public and anyone attending may ask questions. After the public presentation, the audience is dismissed and the dissertation committee will further question the candidate. The success of the defense is determined by majority vote of the dissertation committee.

Student should ensure they have met all requirements of the Laney Graduate School, the GDBBS, and the IMP program. They should refer to the "Planning for Graduation" checklist available on the IMP Student Timeline on the IMP website.

Please note, it is the student's responsibility to provide programs for the audience on the day of the defense. It is the mentor's responsibility to plan/provide a celebration following the defense if the student and mentor determine they would like to do this.

See Appendix 3 for guidelines on presentations for the oral thesis defense.

X. TERMINAL MASTERS DEGREE

In the event that a student chooses not to complete the requirements for a Ph.D. he/she may apply for a Masters Degree. The student should discuss this decision with his/her DGS before making any concrete plans. Award of the Masters Degree will require that: (1) the student successfully completes 2 years of course work; (2) passes the qualifying examination; and (3) that the student completes a written thesis that is approved by the thesis committee. The student is required to defend the thesis in a final oral examination that will be comprehensive in scope. The examination is public and anyone attending may ask questions. The student is expected to achieve a high degree of expertise in the area of Immunology and Molecular Pathogenesis. However, the scope and depth of the Master's thesis is expected to be is significantly less than that of the Ph.D. dissertation.

XI. OTHER ACTIVITIES AND INFORMATION

A. PROGRAM SEMINARS

Attendance at the weekly IMP Program seminar is a requirement for IMP students. IMP Program seminars given by faculty, invited speakers, and students are held each Tuesday at 4 pm in the Whitehead Auditorium (unless otherwise notified via IMP Listserv) throughout the academic year. Students may meet with guest speakers at lunches and dinners associated with the seminar, and students are encouraged to participate in the scientific discussions. Additionally, there will be one student-invited speaker each year. The current 4th year students will be responsible for coordinating this speaker's visit.

B. RESEARCH IN PROGRESS SEMINARS (RIP)

Every other Tuesday, seminars will be given by current IMP students. In these seminars, students present their ongoing research to other IMP predoctoral students, postdoctoral fellows, and faculty.

Guidelines for RIP are as follow:

13. The first RIP for each student will be in the Spring of the 2nd year (G1 for MD-PhD students).
14. RIP seminars will begin at the start of the fall semester each academic year.
15. Students will select a date for their RIP from blocks of dates allotted for their cohort.
    a. Students will pick dates most appropriate for attendance by their advisor and committee members.
    b. Students must send their RIP title to the Program Administrator no later than 1 month before their talk. This allows the Program Administrator to maintain the program website calendar and prepare announcements for each month's presenters.
    c. Any changes to the RIP schedule must be arranged by the student with another student within their class year. This change must be made no later than four weeks before their scheduled RIP, have the approval of the DGS, and include notification of any change provided to the IMP Program Administrator.
    d. Students within their last year of the Program are required to present an RIP.
    e. Grades for RIP/Seminar are based on attendance. Grading will use a straight grading scale based on the percent of attended seminars that semester (90-100 A, 80-89 B, 70-79 C, 60-69 D, below 50 F). There are no excused absences (medical/family emergencies will be considered). If a student has a conflict with a course or will be out of town for research purposes (not scientific meetings) they should discuss with the DGS what their options are to make up the missing seminars.

1. Note to Faculty on RIP attendance

It is in your student's best interest for you, committee members, and other lab-members to be in attendance at each RIP in order to provide constructive feedback on presentation skills. Your student should communicate his/her RIP date to you each year. Please attend if you are able and encourage others to do so, as well.

C. MEMBERSHIP OF PROFESSIONAL SOCIETIES

It is recommended that you join at least one professional society. Many have trainee membership categories that do not cost more than $50 per annum in dues. However several offer additional sources of travel funding or funding that can be applied for to travel to other labs to learn specific techniques. Additionally several of these societies hold annual meetings that you can attend to present your research to a wider audience within your chosen field of research.

Some of the more popular societies joined by IMP students are:

American Association of Immunologists:	http://www.aai.org/
American Society for Microbiology:	http://www.asm.org/
American Society for Virology:	http://www.asv.org/
American Society of Transplantation:	https://www.myast.org/

D. REGIONAL AND SCIENTIFIC MEETINGS

Students should visit the Professional Development Support Funds webpage for guidelines on how to apply for Professional Development Support funds from the Laney Graduate School. In addition to the Laney Graduate School requirements the Graduate

Division requires that students present their work at the conference in order to be eligible for funds. Students should read all of the information so they understand the policies and procedures. Students may still apply for additional funds through the Graduate Student Council website (https://blogs.emory.edu/graduatestudentcouncil/funding-charters). The IMP Program and GDBBS do not provide travel funds.

When the application for funds has been completed bring it and all required documents to the Division Business Manager (located in the Dental Building, suite 314) by the 15th of each month. Do not take this to the Laney Graduate School. Any application received after the 15th will not be reviewed until the following month. The student must attach a copy of their abstract to the application. Students will be notified about the approval of their application via email by the end of the month in which they submit their application (i.e., students who submit by October 15th will be notified by October 30th). Inform the Division Business Manager if you have not received notification by the first day of the following month (i.e., students who submitted by October 15th and who have not heard by November 1st). Once the application is approved the Division Business Manager will send the student an email with guidelines for submitting their reimbursement upon returning from travel.

Please note the following so that the application for funding is not held up: Students must book airfare through Emory's travel site, which is on the Laney Graduate School site above. The Graduate Division strongly encourages all students to book their travel arrangements early. Please contact the Division Business Manager if a Smartkey is required in order to process the arrangements through Emory's travel site. The student must obtain all required signatures on the application before turning it in to the Division Business Manager. There is a maximum dollar limit per year and per student career. The Laney Graduate School will keep up with the amount that has been awarded. The Division recommends that students keep up with their amount as well. The application will be updated occasionally so students should download a new application from the site each time they apply for funds.

E. F-GRANT APPLICATIONS

As part of IMP training, students will take the "Hypothesis Design and Scientific Writing" course in the Spring semester of the second year. As part of this course students will write an F proposal that should be submitted to NIH. More information on F grants can be found on the NIH website:

F30 for MD / PhD students

https://grants.nih.gov/grants/guide/pa-files/PA-16-305.html

F31 for PhD students

https://grants.nih.gov/grants/guide/pa-files/PA-16-309.html

You will require a substantial amount of input from your PI in preparing this application and students are encouraged to include this as a consideration when choosing which laboratory to join.

F. IMP LISTSERVS-

A program seminar listserv (ImmSem-L) has been established on the Emory University computer to facilitate distribution of notices of seminars and meetings in immunology. All IMP students and faculty are subscribed by the Program Administrator when they join the program. A second, separate student listserv is also maintained as well as student cohort listservs to distribute information pertaining to specific groups of students. Please attend to information from these listservs.

The IMP Program maintains 4 listservs for email communication to targeted audiences. These are described below.

- IMPFACULTY-L@listserv.cc.emory.edu is for the faculty only (and some admin assistants). All members of the listserv may post to it.
- IMPSTUDENT-L@listserv.cc.emory.edu is mainly for the students. A few faculty are also members, such as the DGS's, so students should not assume that posts there are invisible to the faculty. All members of the listserv may post to it.
- IMPPROGRAM-L@listserv.cc.emory.edu is a superset of the IMPFACULTY-L and the IMPSTUDENT-L listservs, and should be used for communications that are the same to both faculty and students. All members of the listserv may post to it.
- IMMSEM-L@listserv.cc.emory.edu is mainly for seminar & defense announcements, and includes all faculty, students, admin assistants and anyone who has asked to be on it because items posted there are of interest to them. Posting privileges are limited to the Program Administrator, Director, DGS, & Seminar Director at this time.

G. VACATIONS AND LEAVE

The course of study and graduate stipend you receive are based on a 12-month commitment. **GDBBS students are permitted a maximum of two weeks of vacation time each year, excluding holidays.** First year students are required to schedule these absences with the Director of Graduate Studies and the faculty member in whose lab they are working. Unscheduled absences or excessive vacation, holiday or leave time will result in a reduction of stipend and/or possible suspension from the Program. After their first year, students should coordinate any time off or absences with their advisor. Students may also request an official Leave of Absence as well as a Parental Accommodation. Please see the GDBBS Policy Manual and LGS Handbook for more information on these procedures, and notify the IMP program of any leaves by emailing the Program Administrator and DGS ***before*** submitting the required paperwork to LGS.

H. FINANCIAL SUPPORT

Stipends and tuition fellowships, awarded to students on the basis of academic merit, are intended to cover basic living expenses and tuition. With the exception of special awards, such as the Woodruff Fellowship, stipend levels are set by the GDBBS based upon the availability of funds from Laney Graduate School and university sources. The faculty also encourage and assist students in obtaining individual stipend support from extramural sources, such as federal agencies and private foundations. Students are supported by the GDBBS for the first 21 months of training. Additional support will be provided by research advisors, training grants, or other sources. Financial support is provided only to full-time students working toward the Ph.D. degree.

Stipend and tuition fellowships are awarded to allow students to devote full-time to the graduate program and complete the requirements for the Ph.D. degree in as short a time as is consistent with adequate training and research progress. Additional employment is not permitted. Graduate education and research are by necessity largely self-motivated processes, and the distractions of outside employment can interfere with the ability of students to prepare satisfactorily for their future professional careers. If additional income is absolutely necessary, students are encouraged to consider the possibility of low-interest student loans and should consult with the financial aid office.

I. UNIVERSITY REQUIREMENTS

Formal University requirements are detailed in the current Bulletin of the Laney Graduate School and the Graduate Student Handbook and are in addition to those detailed in the IMP student guidelines. While every effort has been made to make these guidelines as accurate and complete as possible, University policies may be subject to change without notice, and students must keep themselves up-to-date on these policies.

J. IMP WEBSITE

The IMP website contains information regarding seminars, program forms, students, faculty and their research can be found on this website.

K. HEALTH RESOURCES

Graduate school can be a stressful time on your body and mind. Be sure you are taking care of yourself. The Student Health Services is located at 1525 Clifton Rd. on the 2nd floor. They can be reached at (404) 727-7551 (press 1).

Additionally, the Student Counseling Center is located at 1462 Clifton Rd. on the 2nd floor. They can be reached at (404) 727-7450. Counseling is free for fully registered Emory students. You can also call the Emory HELPLINE at (404) 727-4357. It is open every night during the school year from 8:30pm-1:00am.

APPENDIX 1 – CHOOSING A DISSERTATION ADVISOR

One of the most important decisions you will make as a graduate student is your choice of an advisor. The dissertation advisor has the primary responsibility for direction of course and research activities necessary for a graduate degree in Immunology and Molecular Pathogenesis. The following criteria should be considered when evaluating potential advisors.

A. LIKELY PRODUCTIVITY LEADING TO PUBLICATIONS

What is the laboratory's track record for publication? Are these publications in quality journals?

No competitive degree in an experimental science should be awarded without one or more full-length publications resulting from research.

B. SUPPORT FOR THE RESEARCH

Is there a research grant, i.e., peer-reviewed funding, which can facilitate the purchase of necessary materials and services needed? How committed are funds toward other people and projects? An important measure of the quality and importance of the research effort is that external review by scientists knowledgeable in the field has led to the competitive award of money to support the project area. Such grants also reflect the judgment that training and past production of the principal investigator warrant the grant. Remember that after your second year, your stipend will derive from the grants of your advisor.

C. NATURE, SCOPE AND TRAINING TO BE PROVIDED BY THE DISSERTATION PROJECT

How certain are positive, publishable results? Is it likely that a breadth of techniques can be learned such that future development and versatility of the student is well served?

The best training for a modern scientist must provide a breadth of research experiences that significantly augment formal lecture and laboratory courses. It can be argued that a good research problem would be sufficiently open-ended as to allow several aspects of a major question to be approached by diverse methodology. A student should discuss research projects with each of several potential mentors to see what may be of mutual interest.

D. SENIORITY OF ADVISOR AND LABORATORY ENVIRONMENT

What is the depth and breadth of the advisor's training and research experience? How versatile and technique-wise are associate (technician, post-doc, student) personnel in a given research group?

In general, a more established faculty member may have a larger laboratory group and potential collaborators. These must often be relied upon to teach particular techniques. The senior faculty person may be committed to a range of duties that interfere with bench supervision. Such supervision is more likely with younger faculty. Hence, if frequent or constant need for direction is desirable, one should be clear that it can be provided. The long-range value of a faculty advisor is also based in part on outside contacts and knowledge of postdoctoral and job connections. A student should meet the lab personnel of the potential advisor for a sense of the type

of supervision provided and whether there appears to be a desirable ambiance in a group.

E. AREA OF RESEARCH

How interesting is the subject area to you? What are its ultimate directions and goals?

F. COMMUNICATION

Can you communicate well with the advisor? Are clear expectations made of lab members, time in lab, protocol for lab meetings and lab notebooks, etc?

G. STUDENT MENTORING RECORD

Does the P.I. have a positive track record of working with students either in the IMP program or other graduate programs? Does the P.I. have a reputation for supporting student's career goals?

APPENDIX 2 – CHOOSING A THESIS COMMITTEE

Overall, you want to choose people who are available, reasonable, and with whom you feel you could work well. Each advisor will have a different level of investment into how a student forms his/her committee. So consult with your advisor first for feedback and advice. Then, consider people from both the perspective of those who will enhance your science/project AND those who will invest in your personal and professional development. You do not have to "meet" all the criteria below, but these are some elements to consider as you form your committee.

A. FOR SCIENTIFIC INPUT, CONSIDER INCLUDING:

1. An expert in your field specifically
2. An expert in your field more broadly
3. Someone up to date and interested in cutting edge methods and technology
4. Someone whose lab has some kind of expertise that will benefit your project

B. FOR YOUR PERSONAL AND PROFESSIONAL DEVELOPMENT, CONSIDER INCLUDING:

1. Someone you rotated with or have interacted with in the past who seemed to have a personal interest in you and could be your advocate/ally if or when needed
2. Someone you feel comfortable talking to outside of committee meetings
3. Someone who is available for meetings (versus someone who is always traveling or spread thin with administrative responsibilities)
4. Someone who has a good track record of working with students.
5. At least some members familiar with program guidelines and requirements to help keep you on track

APPENDIX 3 – GUIDELINES FOR ORAL DISSERTATION DEFENSE PRESENTATIONS

The oral dissertation defense is many things. It's a cause for celebration. It's part of a long and venerable tradition. But most of all, it's the time for the candidate to justify why they are deserving of the designation of PhD.

There are many groups in the audience of the oral presentation — family, friends, peers with expertise overlapping your research topics (and some not), and the examination committee. Sections of your dissertation defense can address each of these groups — it's perfectly OK for you to take a few minutes to explain yourself to non-experts — but the only audience that matters in the end is your examination committee, and the only responsibility you have that really matters is to convince them you have developed sufficient depth of knowledge and skills in the practice of biomedical science to be worthy of the designation of PhD.

APPENDIX 4 — NEXT STEPS

The question of what direction a student's career will take following completion of the Ph.D. should arise early and become increasingly important as training progresses. It is never too early to consider career options. Students receiving a Ph.D. usually take a postdoctoral research position to acquire additional techniques and expertise to further prepare for an independent research career. Such postdoctoral training is usually essential for a career in academic research. Some students take permanent positions in industrial or government laboratories immediately after receiving the Ph.D. degree, while others enter additional advanced degree programs such as medical school, or seek careers in administration of science funding or policy, or editorial positions in scientific journals. Career objectives can best be realized through careful planning. All members of the faculty stand ready to advise students on career options, and students are encouraged to seek this advice at any time during their training.

Students can learn more about career planning and professional development opportunities by visiting this LGS website.

APPENDIX 5 – REVISION HISTORY

Date	Document Name	Description of Revisions	Authors
August 21, 2017	IMP Faculty Handbook 2017-2018 rev.d.JDA.docx	Added this"Revision History" Appendix Added "Guidelines for Thesis Committee Meetings	John Altman Mandy Ford