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Notes on terminology: despite the common usage within the BCDB program to refer to all research as “thesis research” and all committees as “thesis committees”, the Laney Graduate School (LGS) uses these terms more specifically. Dissertation is the more appropriate term for the research and document resulting in a doctorate (Ph.D.), while thesis is reserved for those resulting in a Master’s degree. Similarly, the LGS refers to the committee of faculty members that advise the student during the dissertation or thesis research as the advisory committee. We have tried in this document to be consistent with both common usage and LGS usage to minimize confusion by using both terms to introduce key sections of the Guidelines (e.g., see III. F., above). In addition, the LGS uses the term DGS for what we in BCDB call the Program Director while we in GDBBS typically use the same term/acronym (DGS) for the person, typically working closely with the Program Director, who deals more immediately with student issues. Thus, on all LGS forms where it asks for the signature of the DGS, you should actually get the signature of the BCDB Program Director.

Abbreviations used in the text include: BCDB, Biochemistry, Cell & Developmental Biology Graduate Program; DGS, Director of Graduate Studies; GDBBS, Graduate Division of Biological and Biomedical Sciences; LGS, Laney Graduate School (also referred to at times as the Graduate School of Arts and Sciences or GSAS); MSTP, Medical Scientist Training Program; PLE, Post-rotation Laboratory Experience.
These guidelines of the policies and expectations of the Program in Biochemistry, Cell, and Developmental Biology (BCDB) are continually reviewed and updated in an effort to keep them current. Official decisions on any aspect are rendered by the BCDB Executive Committee in consultation with the Director, Director of Graduate Studies (DGS), and the faculty of the Program. The BCDB Program provides students with the opportunity to develop theoretical and practical research competence in Biochemistry, Cell and Developmental Biology and related disciplines. Research interests of the faculty are described on-line at the Graduate Division of Biological and Biomedical Sciences (GDBBS) and BCDB Program websites.

**PART I. ADMISSION TO GRADUATE STUDIES**

**A. Admission Requirements and Procedures**

The BCDB Program is designed for students pursuing a Ph.D. degree or the combined M.D./Ph.D. degrees. Application material, admission requirements, financial information and degree requirements are all available on the GDBBS website. All applications are made to the GDBBS with an indication of interest in the BCDB Program. The BCDB Program Recruiting and Executive Committees evaluate applicants principally on research experience, educational background, Graduate Record Examination (GRE) scores and letters of recommendation. A successful applicant typically has a strong science background in chemistry, mathematics, physics and biology. Students wishing to study for a Master’s degree are not admitted.

Accepted applicants with a Master’s degree in Biochemistry or Cell Biology (or a closely related discipline) or the equivalent may request admission directly into Advanced Standing. Applicants interested in the combined M.D./Ph.D. Program should contact the Medical Scientist Training Program, Office of the Dean, Emory University School of Medicine, Woodruff Health Sciences Center Administration Building, Atlanta, GA 30322.

**B. Admission of Transfer Students**

We do not normally admit students who are currently training in other graduate programs. We require that such students complete their current graduate program or resign from their graduate program before such applications will be considered by our normal procedures. However, we will confidentially consider a student’s application with an appropriate explanation of why they have not resigned from their current program, according to the following policy:

1. The student must first submit a complete application, with the exception of letters of reference.

2. This material will be reviewed by the admission 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 director of the current graduate program.

4. If the student’s current program has no objections, we will then consider the application using our normal procedures, after completion of the application process through the GDBBS (see above).

**C. Transfers to Other Programs at Emory**

Students admitted to the BCDB Program are supported by the GDBBS. As such, they may choose to do rotations or dissertation research with any of the Graduate Training Faculty of the Division regardless of his/her program affiliation, with the exception of the first rotation which must be with a BCDB faculty member. Thus, a student may be in the BCDB Program and his/her advisor could be a member of a different graduate program. In this case it is recommended that the dissertation research committee be selected to ensure that the student’s curriculum provides for training commensurate with other students in the BCDB Program.
In some cases, the student may wish to transfer to the graduate program where the proposed mentor holds a training appointment. This can result in changes in required coursework or exam scheduling to meet the requirements of the new program. A letter of intent requesting the transfer should be sent to the student’s current program, to the intended program, and to the GDBBS Director. All parties must agree to the request for it to be approved.

PART II. TRAINING FACULTY MEMBERSHIP CRITERIA

A. Admission Requirements

Training members must be full-time tenured or tenure-track Emory Faculty in good standing, and should have demonstrated expertise in the fields of Biochemistry, Cell or Developmental biology or comparable molecular biological sciences and must have, or have the prospect of acquiring, sufficient extramural funding to ensure support of the students’ research projects. Examples of documented expertise include doctoral and/or postdoctoral training in the field, and publications in major peer reviewed journals of the areas represented by the program. BCDB Faculty members have full membership, which equates to full rights and privileges, including the right to serve on any GDBBS committee or in an administrative position, and to act as dissertation advisors.

An application for membership to the BCDB training faculty requires the following items: (1) a current curriculum vitae, (2) a NIH-style biosketch including “other support” information, (3) a letter from the candidate detailing the reasons for becoming a training faculty member in BCDB and the type of membership requested (see below), (4) a statement regarding the contributions the candidate will make in terms of teaching commitments (i.e., didactic courses) and administrative activities (i.e., BCDB committees) they will make during their first year in the Program, including the graduate level courses taught and/or the BCDB-specific courses they will participate in, (5) a letter of support from their Departmental Chair, (6) descriptions of past experience in training doctoral students or postdoctoral fellows, (7) a list of publications of past and present trainees, (8) a list of planned or anticipated collaborations with Program faculty, (9) a one page description of the candidate’s research, and (10) a one sentence summary of his/her major research efforts suitable for use in a recruiting brochure. A complete checklist is available on the BCDB Program website.

The complete application packet should be sent to the BCDB Program Director or Chairperson of the Faculty Membership Committee. The Membership Committee will review the application and recommend either that the BCDB Executive Committee decline admission or invite the applicant to present a research seminar open to the Emory community and specifically advertised to the Program faculty and students. The candidate’s application will be made available to all Program faculty members at that time. Following the seminar, the entire BCDB faculty will be polled by anonymous ballot on the acceptability of admission. The Faculty Membership Committee will forward the results of the faculty ballots, the candidate’s application, and an advisory recommendation to the Executive Committee who will render a final decision about whether to accept the candidate into the Program. Following a favorable decision by the Executive Committee, a letter from the Program Director indicating the Program’s acceptance of the candidate will be forwarded to the Division Director with the candidate’s dossier. According to Graduate School guidelines, the candidate’s dossier will be forwarded to the Dean of the Graduate School for final approval.

Current GDBBS guidelines restrict faculty membership to a maximum of two programs in the Division. In some rare cases the candidate can petition the Division Director for admission to more than two programs.

B. Faculty Responsibilities

Program members are expected to participate actively in Program functions. This includes the honor and responsibility of serving as advisors to graduate students in the Program. The dissertation research advisor 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 careful thought and consideration. Additional contributions should be made in more than one of the following
areas including, but not limited to, BCDB-relevant graduate level teaching, student recruitment, mentoring laboratory rotations by first-year students, 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 research committees.

C. Faculty Review

Each year Program faculty members will submit an annual report to the Chair of the Faculty Membership Committee. This committee will report to the Executive Committee on any faculty member found deficient in Program participation. If it is determined that a training member has not been sufficiently active in the Program, the member will be notified, and suggestions for helping him/her regain a full level of participation will be given. The member has one year to demonstrate renewed commitment to the Program, in the absence of which the member will be removed from the Program. The member can prepare a rebuttal statement and request immediate reinstatement through an appeal to the tenured members of the Executive Committee. If a faculty member being considered for removal from the Program as a result of lack of participation is the mentor of a BCDB student, accommodations may be made to minimize disruptions to the student’s progress, with consultation of the Director and DGS. Re-appointment to training faculty status following a lapse in membership of more than one year will be considered by the same mechanisms described above for de novo admission.

Satisfactory participation includes displaying adequacy in at least two of the following categories. Examples of each category are given.

1. 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 BCDB Program and taken by a significant number of BCDB students. Undergraduate, medical, and allied health courses are not considered BCDB-relevant unless they also carry a GDBBS listing and were taken by a significant number of BCDB students during the three-year period in question.
   - Writing and grading Part 1 examination questions.
   - Grading research grant proposals for IBS522r – Hypothesis Design and Scientific Writing

2. Research Training:
   - Membership on dissertation committees of BCDB students.
   - Attendance at a significant number (e.g., >10 / year) of student seminars and public dissertation seminars
   - Attendance at relevant faculty research seminars.

3. Administrative:
   - Holding any executive office of the BCDB Program, including Director, Director of Graduate Studies, Executive Committee member, Recruiter, active participation in other program committees, OR
   - Holding an executive office in the GDBBS, 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).
• Participation in recruitment efforts is required, including meals and interviews, during the annual recruitment period or individual field visits to recruit at academic institutions.

PART III. ADMINISTRATIVE STRUCTURE

All graduate degrees offered by the BCDB Program are granted by the Laney Graduate School of Arts and Sciences (LGS) and the GDBBS. The Dean of the LGS and the GDBBS Director are assisted in the formulation of policy and the resolution of problems by a GDBBS Advisory Committee, which consists of the Directors of programs offering graduate training. In addition, a Divisional Student Advisory Committee (DSAC), consisting of students from each of the Programs, affords a way for student concerns to be raised and discussed.

A. Program Director & Director of Graduate Studies (DGS)

The Program Director will chair meetings of the Program membership and act as the liaison between the Program and the GDBBS. The Director will also serve as the Chair of the Executive Committee of the Program. Candidates for the Director will be nominated and elected by a majority of the voting Program Faculty during a secret ballot vote. The Director may not be a departmental chairperson and will serve a term of three years.

The DGS shall be elected by a majority vote of the Program membership at large for a three-year term. The DGS will serve as Vice-Chair of the Executive Committee. The DGS is the primary Program resource for the students of the Program and serves as students’ advisor until they have permanent lab assignments.

B. BCDB Executive Committee

The BCDB Executive Committee functions in an advisory role in all matters concerning graduate students and the Program. It consists of nine faculty members: the Program Director and DGS and seven others elected at large by the Program faculty and serving three-year terms. In the event that an at-large position becomes vacated mid-term, the Program Director shall appoint a BCDB Program faculty member to serve out the remainder of the vacated term. The Executive Committee is chaired by the Program Director. Two student representatives, elected for two-year terms by the student body, will also serve on the Executive Committee. The duties of the Executive Committee include reviewing applications for admission, graduate student curricula, student advancement toward degrees, faculty participation and membership, and administering the Qualifying Examinations. The Principal Investigator of any relevant training grant(s) will be considered ex officio member(s) of the Executive Committee. The Executive Committee will meet as frequently as needed to handle programmatic issues but at least once per semester, including the summer, or three times per year.

1. Recruitment Director and Committee

A Recruitment Director is selected from among the serving members of the Executive Committee of the Program on a year-to-year basis. The Recruitment Director serves as the head of a recruiting committee, which is composed of a broad representation of the research interests of the BCDB Program. The committee’s main function is to review applications, interview recruits, and advise the Recruitment Director.

2. Rotations Director and Committee

The Rotations Director is charged with overseeing all aspects of the required first-year Laboratory Rotations course (described below) and serves as course director. This includes organization of faculty presentations in the Fall prior to the start of the first rotation period, advising students in mentor selection, ensuring rotation
selection forms are completed, collecting and grading rotation reports, and assigning final overall grades for the Rotations course. The Rotations Director may appoint a Rotations committee comprised of faculty and senior students (typically, fourth-year students) to assist in the assessment and grading of rotation reports. While the size and composition of the Rotations committee may be adjusted from year to year, typically it will consist of three BCDB faculty (on three year appointments) and three senior students (on one-year appointments). Students and faculty are paired, and each pairing will grade and provide written critiques for one report from each first year student throughout the rotations course. The Rotations Director will report and obtain approval from the Executive Committee for each rotation selection or any concerns. The Rotations Director is the primary contact for all BCDB rotating students, including those doing summer rotations before beginning classes and those seeking to conduct ‘Post-rotation Laboratory Experiences’ after the end of the rotations course.

3. Curriculum Director and Committee

The Curriculum Director is charged with ensuring an optimal plan for the curriculum; including regular oversight and review of all required courses and their content, identifying and oversight of course directors, and student evaluations of both courses and training faculty/course directors. The Director shall appoint representative faculty and students, as needed, to assist and advise.

4. Qualifying Exam Director and Committee

The Qualifying Exam Director is charged with assembling, editing, proctoring, and grading Qualifying Exam Part I (written) at the end of the first year of coursework, but no later than four weeks after the last day of classes in the Spring semester. The Director may appoint faculty and student committee members to assist in these duties, as deemed necessary. The Qualifying Exam Director is also charged with oversight of Qualifying Exam Part II (orals), ensuring appropriate committee composition and timeliness of the exams. Finally, the Qualifying Exam Director will report the results of both Qualifying Exam Part I and Part II to the entire Executive Committee with a recommendation for any remedial action. Details of each exam are described PART IV, Section F.

5. Faculty Membership Director and Committee

The Faculty Membership Director is charged with reviewing any applications of new faculty to the program and making recommendations to the Executive Committee, first, as to whether to proceed with the faculty seminar, and later, as to the suitability for admission. The Faculty Membership Director is also charged with collecting information from all faculty members annually and reviewing the level of participation. The results of that review will be reported to the Executive Committee for any corrective action deemed necessary. The Faculty Membership Director shall appoint a committee of at least three senior faculty members to assist in these reviews.

6. Communications Director and Committee

The Communications Director is charged with oversight of the BCDB website and with interfacing with Division or LGS staff to ensure accuracy and compliance with any issues surrounding the website or other communications. This will require both routine maintenance and occasionally more substantial overhaul of websites as technologies evolve. The Communications Director is also the titular editor of the BCDB newsletter The Leading Edge. The Communications Director may appoint a committee of faculty members and students as deemed necessary.
7. **Student Progress Director and Committee**

The Senior Student Progress Director is charged with ensuring that students who have passed both qualifying exams and required coursework are making appropriate progress towards their degree. A component of this position is to ensure that students are up to date in meetings and paperwork to ensure compliance with these aspects of the BCDB Guidelines.

8. **Student Representatives to the Executive Committee**

The two student representatives of the Executive Committee are elected by BCDB students to serve two-year terms on the Executive Committee and act as full voting members in issues that affect the student body and program in general. Student members are charged with providing the Executive Committee with student concerns, suggestions, and feedback as well as communicating Executive Committee actions back to the student body. Student representatives will be excused from any discussion relating to specific students or faculty members.

C. **Dissertation Research Advisor Selection**

One of the most important decisions made by a graduate student is the choice of research advisor. The following criteria are among those that should be considered when evaluating potential advisors.

1. **Likely projects leading to publications**  
   What is the lab’s track record for publication? Are these publications in quality journals?  
   No creditable and competitive degree in an experimental science should be awarded without one or more full-length publications resulting from research. Any faculty member should be able to provide any student with their publication record.

2. **Support for the research**  
   Is there a research grant, e.g. 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. Faculty members who have grant support will typically provide a copy of the scientific portion of the application to a student who wishes to peruse it. Some federal grant information can also be reached via the Internet (e.g., the CRISP database lists NIH but not NSF funding).

3. **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 are well served?  
   First-class 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 methodologies.

Before finalizing your choice of a dissertation research advisor, discuss possible projects with several potential mentors. No final commitments should be made to a faculty member by the student (or vice versa) until completion of three rotations. At this time, the GDBBS Dissertation Advisor Assignment Agreement and the BCDB Addendum forms (available on the BCDB program website) should be completed and submitted to the Program Administrator. The mentor should also complete the **Documentation of Funding Sources for BCDB Mentors** form (available on the BCDB Program website) and submit it electronically to the BCDB Program Office at bcbd@emory.edu. Final approval of mentor...
choice is up to the BCDB Executive Committee. BCDB faculty members may not take more than two BCDB students per year into the lab and are strongly discouraged from taking more than two students from any program in any year.

D. Student Advisory (Dissertation/Thesis) Committees

1. Function of the Committee
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 administration of the final oral examination (aka dissertation defense). The first committee meeting must be held no later than six months after Part II of the Qualifying Exam. Any later change in the membership of the committee must be approved by the DGS and is subject to approval by the Executive Committee. Students are encouraged to meet with committee members outside of committee meetings to seek advice on research, career, and other issues.

2. Formation of the Committee
An advisory (thesis) committee must be selected and forms documenting committee membership must be turned into the Program Administrator with all required signatures no later than the first day of class of the Spring semester of year two in residence. The committee is selected by the student in consultation with the dissertation research advisor, following which the Dissertation Committee form (available on the BCDB Program website) must be submitted to the Program Administrator for approval by the BCDB Executive Committee. The committee is comprised of the dissertation advisor plus at least four other faculty members, at least three of whom must be BCDB faculty members. The fifth member of the committee may be from outside the Program and even from outside of Emory. It is permissible to have additional members on the committee. Any three members of the committee (excluding the advisor) will constitute a quorum for the purposes of a meeting. The advisor must be present at all meetings, and all members must be present for Part II of the Qualifying Exam and the oral dissertation defense.

3. Format of Committee Meetings
A student scheduled to meet with their committee should prepare a brief written summary of items to cover during the meeting and distribute it to the committee at least one week prior to the meeting. Rather than re-stating the entire project, this document should focus mainly on the outcome of experimentation conducted since the previous committee meeting. This will help the committee to determine the extent of interim progress made, allow time for feedback prior to the meeting and help focus the content of the meeting. In addition to the written update, students should also provide their committee members with an updated NIH style biosketch including any publications, abstracts, meeting presentations, and awards. Students experiencing significant difficulty in scheduling a committee meeting should contact the DGS for advice.

4. Frequency of Committee Meetings
The first formal committee meeting must be held no later than six months after passing Part II of the Qualifying Exam. This first committee meeting should follow closely the student’s first research talk in the Wednesday seminar class (BCDB 790r Advanced Graduate Seminar) whenever possible. Thereafter, BCDB Program students are required to meet with their committee every six months, up to and including year five of graduate study. In the sixth and subsequent years, students are required to meet with their committee at least every four months. An important function of the committee is to determine at each meeting whether adequate progress is being made. Thus, the frequency of meetings may be increased at the discretion of the committee at any time during this period. In cases where student progress is deemed to be inadequate, the committee may opt to identify specific goals for the following period. If the committee subsequently determines that lack of progress is due to insufficient effort on the part of the student, this may constitute grounds for suspension of stipend support or termination from the Program.

5. Documentation and Tracking of Committee Meetings
A Committee Progress form should be taken to the meeting by the student. This form (available on the BCDB website) must be filled out, signed by the committee members and returned to the BCDB Program Office immediately after the committee meeting. The completed form is placed in the student’s file and
serves as a record to indicate progress in graduate research. The form also contains specific feedback to the student regarding goals to be accomplished before the next meeting. Committee members are strongly encouraged to fill out this section of the form, as it has proven to provide useful guidance and tracking for the student. Compliance with guidelines for committee meetings will be monitored by the Student Progress Director and periodically reported to the BCDB Executive Committee. Students should be aware that the summer months are notoriously difficult times in which to organize a committee meeting. It is suggested that summer meetings be planned well in advance of the deadline. Delinquency of committee meetings may be considered grounds for cancellation of stipend support or termination from the Program.

E. Student Responsibilities

It is the student’s responsibility to meet the Graduate School and GDBBS requirements for a degree within a reasonable timetable. All students should familiarize themselves with and adhere to the Graduate Student Honor Code as outlined in the Graduate Student Handbook. This deals with the professional standards and conduct demanded of all graduate students, as well as the procedures for reporting and adjudicating any violations. Continuance of stipend support is predicated upon satisfactory progress by the student toward a degree and adherence to the Honor Code.

PART IV. PROGRAM REQUIREMENTS

A. Coursework

All BCDB students take the required coursework in years one and two. This core curriculum is intended to give each student the necessary foundation to be successful in biomedical research, including graduate training in the basic sciences and formalized instruction in oral and written scientific presentations. Students may take additional coursework; the core curriculum is intended to indicate the minimum requirements for all BCDB students.

BCDB students in year two and beyond must register for, attend and pass the weekly graduate student seminar series (BCDB790r Advanced Graduate Seminar), in both the Fall and Spring semesters. First year students are required to attend the Advanced seminar as part of their Introductory Seminar class. Each student in year two and beyond is required to present their research results annually in this forum. A senior student who plans to complete their dissertation defense within a given year may request being excused from the mandatory attendance requirement and presenting in BCDB790r only if their scheduled seminar date is within three months of their dissertation seminar date, and after consultation with the Course Director of BCDB790r.

NOTE ABOUT ELECTIVES: The list of available courses is continually changing so students must consult the current LGS Course Atlas to obtain accurate information. Not every elective course is offered every semester or every year.

*Credits = Credits counting toward full-time status for that semester (must total at least 9 per semester)
**Credits to AS = Credits acknowledged by LGS that count toward the 18 needed to achieve Advanced Standing.
**Credits to Cn = Course credits acknowledged by LGS that count toward the 12 needed to achieve Candidacy
***Credits for Fall Term Laboratory Rotations are awarded in Spring Term, when final grade is determined after completion of all 3 rotations.

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<tr>
<th>Course #</th>
<th>Course name</th>
<th>Credits*</th>
<th>Credits AS**</th>
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<td>Foundations in BCDB I</td>
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<td>Introductory Graduate Seminar</td>
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<tr>
<td>BCDB597r</td>
<td>Laboratory Rotations ***</td>
<td>2</td>
<td>2</td>
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<td>JPE600</td>
<td>Scholarly Integrity Core Class</td>
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<td>BCDB597r</td>
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<td>Two-day exam – organized by program, ~ mid-May</td>
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<td><strong>Year 01-Summer</strong></td>
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<td>mentor chosen (~end of rotation 3), dissertation research underway, TATTO training</td>
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B. Laboratory Rotations

Laboratory rotations are intended to provide students an opportunity to sample different laboratory environments, assess available research projects and determine whether a potential mentor will be suitable for them as a Ph.D. dissertation research advisor. Equally, laboratory rotations afford faculty an opportunity to assess students' knowledge, research skills, motivation, work ethic, and how they might fit into their research program.

Rotations Timetable and Mentor Selection. The first rotation typically begins in the third full week of the Fall semester following presentations by faculty and time for students to meet one-to-one with potential rotation mentors. Students are strongly encouraged to meet with a large and diverse group of potential PIs during this period, to gain perspectives on the opportunities available and to begin to familiarize themselves with the range of topics for future research. Students have a wide choice of potential research advisors from within the BCDB Program; the only restrictions upon mentor selection are that the mentor for the first rotation must be a faculty member of the BCDB program and all mentors must be members of the GDBBS training faculty. Prior to each
rotation, a “Rotation Mentor Selection Agreement” form must be submitted to the BCDB Office. Forms and a detailed schedule of specific dates and deadlines will be provided at the start of the Fall semester and are also available on the BCDB webpage. Students electing to do a first rotation the summer before the start of Fall classes must arrive no later than July 1st (confirm the start date with the BCDB Program Administrator). The first week will be spent interviewing faculty mentors, members of their laboratories, or others before making the choice of summer rotation advisor/mentor. By the start of the second week the signed mentor selection form is due in the Program Administrator’s office.

Laboratory Rotations Course Requirements. Students must complete a minimum of three laboratory rotations of about 10 weeks, as part of their Year 1 curriculum. Research reports are required from the student after each rotation, as they are graded and factored into the Rotations course grade. Details of the content and format of the written report, along with tips for writing, are provided on the BCDB webpage. It is expected that mentors will assist by reading draft(s) of the report, or parts of it, and providing general comments for discussion. It is in the student’s interests to get such feedback during the composition of the report but it is also the student’s responsibility to allow sufficient time for this to happen and to meet any agreed deadlines for providing the draft copy. Rotation mentors are required to submit a letter grade for performance in the lab along with written comments supporting their grade. Grades for individual rotations are a combination of grades from the rotation mentors and members of the Rotations Committee who critique the reports. The Chair of the Rotations Committee will assign an overall grade for the laboratory rotations course using individual grades awarded for each rotation.

The DGS will serve as advisor until a student has acquired a Ph.D. dissertation research advisor. After completion of the rotations course requirements, typically at the end of the third rotation period, each student must have an advisor who has the primary responsibility for direction of course and research activities necessary for a graduate degree in BCDB. Paperwork for Ph.D. advisor selection must be submitted within two weeks of the end of the final rotation.

Post-rotation Laboratory Experience (PLE). After the third rotation period, a student without a dissertation research advisor may request approval from the DGS to postpone advisor selection and obtain additional laboratory experience during the summer semester. Such requests should be made as soon as possible but no later than the research advisor selection deadline, two weeks after the end of the third rotation period. The PLE must then begin no later than the first Monday following the Part I written qualifying exam. Any student who does not meet these deadlines or is without a research advisor for more than two weeks will be considered not to be making satisfactory progress toward the degree. Any change of mentor for additional PLE(s) requires prior approval of the PI and DGS. As a PLE is not part of the formal Rotations course, no written report is required, and the student may proceed to formal research advisor selection at any time with approval of the PI and DGS.

All PLEs must be completed by the start of Fall semester of Year 2. Any student still unable to find a member of the GDBBS faculty who will agree to serve as research advisor before the start of Fall semester of Year 2 will be considered not to be making satisfactory progress towards the degree and may be terminated from the BCDB Program after review by the BCDB Executive Committee. It is the primary responsibility of each student to have an advisor, as the advisor and associated lab resources are essential requirements for the student to make scientific progress.

C. Grade Criteria

Students must attain an average grade of B or better in coursework each semester. A grade less than B in any required BCDB course is unacceptable. Mentors will assign grades in IBS699r (Advanced Research) or BCDB799r (Dissertation Research) and are encouraged to use grading that reflects progress made each semester. Students with an average grade of less than B or who receive a grade of less than B in a required course will be placed on academic probation, subject to review by the Executive Committee. Students on academic probation due to their grade point average have one semester to bring their grade point average
above the minimum. Those who have received an unacceptable grade may not receive a grade less than B in any subsequent coursework. Failure to satisfy these criteria is grounds for termination from the Program.

*Repeat assessment of unsatisfactory progress by the student’s committee also constitutes grounds for termination from the Program.*

**D. Coursework Credit Hours (credits) – Requirements**

**Full Standing**

The core curriculum in year 01 gives students the 18 credits needed to progress to Advanced Standing. At least 14 of 18 credits must be in coursework other than Directed Study (597r or 797r), Advanced Research (IBS699r) or Dissertation Research (BCDB799r). Credit from TATTO and any English as a Second Language (ESL) courses do not count toward a degree in either full or advanced standing years.

**Advanced Standing**

The LGS requires minimum accumulated coursework of 36 credits in Advanced Standing for the Ph.D.: 18 credits M.S. requirements or equivalent, **24 credits in Advanced Research IBS699r and/or Dissertation Research BCDB 799r, and 12 course credits in Advanced Standing.** All 12 course credits must be at 500 level or above. **Note:** Following admission to Advanced Standing, a minimum of 36 credit hours must be accrued before a student may become eligible to advance to Candidacy (see below).

At the discretion of the Executive Committee, a student may be admitted to Advanced Standing by fulfilling either of the following criteria: 1) after 18 semester-hours residence credit in full standing at Emory (usually two academic terms) or 2) entry into Graduate School with a master’s degree or equivalent in the same, or a closely related, field of study. In the latter case, the student must petition the Executive Committee to achieve Advanced Standing.

**E. Residency Requirements (Same as Graduate School requirements)**

**Full Standing**

2 full semesters (minimum of 9 credits / semester)

Courses applied toward residency requirement must be on 400-level or above and exclude English language (ESL) classes.

**Advanced Standing**

4 full semesters (minimum of 9 credits / semester)

Courses applied toward residency requirement must be on 500-level or above and exclude English language (ESL) classes.

**Candidacy**

As soon as the requirements are met, students should submit the *Application for Admission to Candidacy* form (available at the BCDB website) with the appropriate signatures. This **must** be completed at least one semester prior to submission of a dissertation and failure to do so may result in delay in awarding of the degree. To be eligible to advance to Candidacy, 36 credit hours in Advanced Standing must be completed as detailed in Section D, above.

**F. Steps to Degree**

1. **Qualifying Exams**

    **Part I**

    The Qualifying Exam Part I is a written examination of general or background knowledge and critical thinking, and is designed to accomplish two goals. The first is to motivate all students to learn and critically evaluate a broad range of scientific information in the basic biomedical sciences. We hope that in preparing for this exam,
students will overcome the natural tendency to categorize scientific topics according to the courses or seminars in which they may have been presented, and to appreciate the inter-relatedness of all of these areas. The second goal of the Part I exam is to test both the knowledge base and critical thinking/writing of each student so that both the student and the Executive Committee can determine whether that student is prepared to progress in the Program. Hence, some questions on the exam may draw on specific information presented in classes or seminars, while other questions will require that students interpret and synthesize given data, propose hypotheses and describe appropriate experiments to test those hypotheses.

The Part I exam is given during May of the first academic year in residence and consists of a written examination of essay-type questions. The examination is closed book and is administered over the course of two days, with up to six hours to answer five out of six questions per day. The examination is prepared from questions solicited from the Program faculty and reviewed by the Qualifying Exam Committee and selected senior students. These questions cover a broad range of topics and are arranged into two sets of six questions each, of which students choose five to answer from each set. At the end of the exam, each answer is independently evaluated by at least two faculty members who each assign a numerical grade. To pass the exam, students must (1) score 7/10 or higher on 7 of the 10 questions they choose to answer, and (2) receive a score of 70% or higher. Students not meeting these requirements will be handled on a case-by-case basis by the Executive Committee, but may be required to take another exam or may be terminated from the Program. If a retake is granted, it will be conducted by the BCDB Executive Committee.

Part II

The Qualifying Exam Part II is designed to assess the student's ability to integrate different aspects of the first two years of graduate training; including lab work, data interpretation, hypothesis development, research design, presentation of research, and all other course work. The exam should require no more than two and a half hours and must be completed before June 1 of the student's second year in residence. It is the student's responsibility, though with consultation with the mentor, to assemble the committee and schedule the exam. Because end-of-term activities and summer travel are approaching or already underway by late April, the student is advised to schedule the exam at least two months in advance.

Two weeks prior to the examination the student must distribute to the examining committee (1) a research proposal, and (2) their answers to all questions answered in the Qualifying Exam Part I (written exam). The proposal is typically the grant written in the grants class (IBS 522r), though it may be modified/updated by the student in efforts to optimally illustrate the proposed thesis project. The written proposal will not be evaluated by the examining committee but likely will serve as a focal point for questions and discussions. Similarly, the answers to Qualifying Exam Part I will not be considered in evaluating the student in Qualifying Exam Part II but may be used as a source of questions, particularly in efforts to ensure that the student has taken corrective action to correct deficiencies.

The composition of the examining committee will be made up of the thesis committee that is assembled by the student and mentor. If the dissertation committee includes a current member of the BCDB Executive Committee, that person will act as chair of the exam. If no member of the BCDB Executive Committee is present on the examining/thesis committee, or if the dissertation research advisor is the only member of the Executive Committee, then the BCDB Program must be alerted, and an Executive Committee member will attend the exam to serve as non-voting Chair. The Chair is responsible for being fully apprised of all rules surrounding the exam. Prior to the start of the exam itself, the Chair of the Examination Committee will describe to all the purpose of the exam, the rules of engagement, and the criteria by which the evaluation will be performed. If the thesis committee includes a person who is not a member of the BCDB Program, a current BCDB faculty member may substitute for this person in the examination. Any substitution must be reported by the student prior to the exam to the BCDB Program Office, the DGS and the examination committee (email communication is sufficient). Participation by the mentor throughout the exam is restricted to observing and answering questions posed by the committee specifically to him/her.

The examination consists of two parts. In the oral presentation, the student presents a pre-prepared summary or description of their research project; emphasizing the significance, hypotheses, specific aims, and the
methods proposed. The presentation is followed by the oral examination, in which the student responds to questions from the examination committee.

**Oral Presentation**
The oral presentation is limited to 15 minutes, though it may be extended by questions from the committee. The oral presentation should provide a brief background of the subject of the proposed dissertation research, the significance of the work, the hypotheses to be tested, the research design, and the interpretation or analyses of predicted outcomes. Committee members should limit interruption of the student during the oral presentation to clarification of specific points. Students are encouraged to rehearse their oral presentation in front of others; however, these rehearsals must exclude faculty participation.

**Oral Examination**
Following the student’s oral presentation, the committee members are permitted to ask brief questions regarding the presentation. Each committee member is then given ten minutes to ask any question they deem appropriate, without interruption by other committee members. At the end of each 10-minute question period, all committee members are given five minutes for follow-up questions on the topics covered in the preceding ten minutes. This format continues until each of the four exam committee members has had the opportunity for two, 10-minute periods in which to ask questions (i.e., twice around the table, for a total of no more than two hours (8 x 15 minutes). A five to ten minute break between rounds may be called for by the student or any member of the committee. The second round of ten-minute question periods per committee member may be shortened at the discretion of each committee member. While the research proposal will serve as a focus of the examination, topics of questions may include any areas identified as deficient during the oral presentation or later questioning.

**Requirements to Pass Part II**
Following the completion of the oral examination, the student and mentor are excused from the room and the student’s performance discussed by the committee. The student must have demonstrated general/background and more detailed knowledge relevant to the research proposal, and the ability to integrate different aspects of the first two years of their graduate training; including course work and lab work with data interpretation, hypothesis development, research design, and presentation of research. That is, the committee is asked to assess whether the student is poised to embark upon an independent research project in which the student will supply the majority of the planning, execution, and interpretation of the data and write up the results for publication. At least three of the four voting members of the examination committee must cast a passing vote in order for the student to pass the exam. The student is informed of the results of the exam by the entire committee at the completion of their discussions. In the case of a failed exam, the examining committee will send to the BCDB Executive Committee their decision of the failed exam and may propose a follow up. However, the Executive Committee will decide whether the appropriate response is to allow the student to re-take the exam or there is sufficient cause for termination from the Program. If a re-take is approved, it will be conducted by the BCDB Executive Committee and must be scheduled to occur within 30 days of the original exam. Any student failing the re-examination will be terminated from the Ph.D. program but may, with the approval of the examination/thesis committee and mentor, petition the Executive Committee to write a Master’s Thesis.

2. **Application for Admission to Candidacy, Doctor of Philosophy**
This application should be made as soon as preliminary requirements are met, but must be made at least one semester before the semester in which the Ph.D. is to be awarded. The Application for Admission to Candidacy form is available on the LGS, GDBBS, and BCDB Program websites.

During the period of research, the dissertation committee must meet with the student at least every six months up to and including year five of graduate study, and every four months in year six or beyond, to review the progress of the research and the preparation of the dissertation. Upon completion or anticipated completion of the dissertation research the committee grants permission to the student to write. This “permission to write” is indicated by the check box in the committee meeting report. A maximum period of six months (four months for
students in year six and above) is permitted between the time a student receives approval from their committee to write and the private examination (dissertation defense) takes place. Failure to meet this deadline will require another committee meeting at which a decision must be made to extend this deadline or take alternative actions resulting from failure to progress toward the degree. An Application for Degree form (available on the LGS and BCDB Program websites) must be completed and submitted in the semester in which the degree will be awarded. Petitions for exceptions must be made in writing by the student to the BCDB Program Director and DGS.

The LGS and BCDB Program require the successful completion of two tasks before a degree will be granted: (1) submission of the written dissertation, (2) a closed-session oral examination (dissertation defense). Each requires the unanimous approval of the student’s committee before proceeding to the next task. In addition, the BCDB Program requires an advertised, public seminar of the research be given by the student. The BCDB program requires that these be completed in order and each is described in more detail below.

a) Written dissertation. The general organization of the dissertation should be discussed and approved by the advisor and committee before it is written. The written dissertation must conform to Graduate School Guidelines, but in general will consist of an original account of the background, approach, experiments, and conclusions of the dissertation research. Instructions for the format (e.g., font, margins, figures, etc) of written dissertations can be found on the LGS website. Published papers may be bound as chapters in the dissertation, with approval of the committee, but original introductory and concluding chapters must be added. The cost of preparation of the dissertation is borne by the student. Except in very rare circumstances, there will be one or more first-author, primary, peer-reviewed papers that shall have been published or accepted for publication before the dissertation defense is scheduled.

After the dissertation has been read and approved by the dissertation research advisor, the student must give a copy to all members of the committee. The dissertation must be complete at this time, including figures and references. The candidate will verify that the dissertation meets all graduate school requirements. No sooner than two weeks after distribution of the dissertation a final committee meeting must be held. This length of time should give committee members enough time to read the dissertation thoroughly before the meeting. Recommendations for substantive changes to the dissertation by committee members and revisions of it by the student must be made prior to the final committee meeting. Unanimous approval of the written dissertation is required at this last committee meeting. Minor editing of the written dissertation may occur at later times, prior to submission of the final document to the LGS. With approval of the written dissertation the defense then takes place, at that same meeting. In unusual circumstances in which scheduling problems cause excessive delays, no more than one committee member may be absent from this final committee meeting and oral defense. Any member absent from that meeting must meet individually with the student to both approve the written dissertation and perform an oral examination. All members of the committee must approve and sign off on the written dissertation and passing of the oral defense before the seminar can be scheduled.

b) Oral dissertation defense. The oral examination (dissertation defense) takes place at the same meeting of the committee at which the written dissertation is approved. Approval by the entire committee of both the written dissertation and oral defense are required, though one member may be absent from the final meeting. At no time during the oral defense should the advisor answer questions posed to the student. The student should consult the committee well before the defense date as to the details of the format to be used. Some committees may prefer a short (up to 15 min) presentation to help focus the examination, while others may feel the dissertation provides an adequate source of topics for the exam. The candidate must orally defend the dissertation and related areas to demonstrate an appropriate level of knowledge and expertise in research design and interpretation. After the exam, the student will be excused, and the student’s performance will be discussed and evaluated by the committee. All committee members must confirm in writing that the student has successfully defended the dissertation. Alternatively, any perceived deficiencies must be documented in a specific plan for remediation at this meeting. With the unanimous approval of successful completion of the oral dissertation defense, the student shall schedule the public seminar to be held no sooner than two weeks after the dissertation defense. During this interval it is expected that all final changes to the written dissertation will be completed such that the final document is available to the committee before the public seminar.
c) Dissertation seminar. The public dissertation seminar is a formal scientific presentation. The atmosphere should be one that encourages critical questioning so that the student can demonstrate his/her expertise in an open forum. Care must be taken to preserve the formality of the occasion. At no time should the student or members of the audience be led to believe that a pass is automatic. The dissertation research advisor will outline the format of the seminar and introduce the student and their research in a manner similar to other research seminars. The advisor and the student should avoid personal comments as well as mention of subsequent parties at this time. Personal comments, congratulations and acknowledgements are more appropriate for the celebration following a successful completion of the dissertation seminar. The seminar consists of a 40-50 minute oral presentation by the candidate of a summary of the project, its significance, and future directions. After the student's presentation, questions from the audience are encouraged. The committee and advisor will meet with the candidate immediately after the seminar to evaluate the seminar and provide feedback and final approval that all requirements for the PhD have been successfully completed. While unanimous approval of the seminar is required by the committee, it is allowable for one (and only one) member of the committee to be absent from the public seminar, to facilitate scheduling and timely completion of required components of the degree. The student will schedule a separate meeting with that absent committee member to satisfy this requirement.


Upon submission of a written dissertation, completion of a successful oral defense, and seminar, the student must complete and submit to the Division office the Report of Completion of Requirements for Doctoral Degree form (available on the LGS, GDBBS, or BCDB Program websites).

G. Master’s Degree

The BCDB Program is a doctoral program and as such does not normally support work toward a terminal degree of Master of Science (MS). However, under certain circumstances, a student may request permission to terminate graduate study by completing the requirements for a Master’s degree. These include failure to pass Part II of the qualifying exam, poor progress during dissertation research, or simply a request on the part of the student to leave the program with an M.S. instead of a Ph.D. Based upon the student's performance, as assessed at various times during the degree program, the Executive Committee may also recommend such action.

Students may declare their intention to seek a Master’s degree only after having passed Part I of the qualifying exam. When a student declares after passing Part II, he/she may discontinue enrollment in didactic coursework and Teaching Assistant Training and Teaching Opportunity (TATTO) activities. However, to remain in standing as a full-time student, the student must continue to enroll for the required number of credit hours of thesis research. Instead of either IBS699r (Advanced Research) or BCDB799r (Dissertation Research), Master’s degree candidates must enroll in IBS 599r (Thesis Research). The student will have one year from the date of declaration to complete the requirements for the Master’s degree.

When a student declares an intention to seek the MS degree during the third year in residence, (i.e., after successful completion of Part II of the qualifying exam), the student must complete the requirements before August 1 of the third year in residence.

If a student has been in residence for three years or more, having met all requirements for the doctoral program up to that point, and then declares for the MS, the student will have three months to complete the requirements for the MS. Students who have declared for the MS degree and fail to meet the requirements within the specified time will not be eligible for receiving stipend support from any source, and will be asked to leave the Program.

Requirements for the MS degree include satisfactory completion of all required coursework, passing Part I of the qualifying exam, and completion of a Master’s thesis. Students seeking an MS degree are not required to
participate in the TATTO program. A thesis committee must be formed as described for the committees in the doctoral program. The thesis must minimally describe the significance of the research proposal, the hypotheses being tested, the experimental approach(es) undertaken, any data generated (with appropriate analyses, controls, limitations, etc.), conclusions drawn, and a proposal for future work. The thesis must represent a scholarly body of work indicating a rigorously applied research effort. Both the written thesis AND its oral defense must be passed by the thesis committee before a degree is awarded. The decision by the thesis committee to award the degree must be unanimous. A Master’s thesis presentation may be closed to the public, i.e., attended by only the thesis committee members. The BCDB Executive Committee will be notified when the defense is scheduled.

An Application for Degree must also be completed and submitted by the deadline for the semester in which the student expects the degree to be awarded. Upon completion of all of the requirements, the student must complete a Report of Completion of Requirements for Master’s Degree, which the members of the thesis committee must sign indicating their PASS or FAIL vote. This form must also be signed by the Program Director or Director of Graduate Studies. These forms are available on the LGS and GDBBS web sites. Both signed forms must be returned to both the Division Office, which will forward it to LGS for approval.

H. Changing Advisor

While it is expected that most students will continue their research work with their faculty advisors until they complete their PhD degrees, this relationship may be ended at any time and by either party (student or faculty). Should this occur, the student and the advisor should contact the DGS immediately. The DGS will then serve as an interim advisor during a transition period while the student identifies a new advisor. During this period the existing committee (less the old advisor) will continue to serve to help guide the student through the transition. The length of the transition period should be a short as possible, consistent with the ability of the student to make a careful choice of a new advisor, but must not exceed sixty days.

Students have a wide choice of potential research advisors from within the BCDB Program and the wider community of faculty in the GDBBS. It is the primary responsibility of each student to have an advisor, as the advisor and their lab resources are essential requirements for the student to make scientific progress. If a student who has completed at least three rotations is unable to find any member of the GDBBS faculty who will agree to serve as advisor, and this status lasts more than thirty days, then that student will be considered unable to make satisfactory degree progress and may be terminated from the Program after review by the Executive Committee.

I. Professional conduct

Behavioral Expectations for Graduate Professional Education
The BCDB curriculum is prepared and delivered by subject matter experts to a select group of adult professional students. The faculty and students share responsibility for maintaining a professional environment both in the classroom and in all program and laboratory situations. In the classroom, faculty responsibilities include beginning and ending class on time, presenting lectures that are relevant and current, responding to pertinent questions, and leading and moderating discussions related to the content of the lecture. Student responsibilities include arriving on time, attention to the lecture, raising pertinent questions, and maintaining a quiet and disciplined environment to maximize the learning experience for all.

Specifically, students demonstrate their professional demeanor and respect for the educational process by permitting the lecturer to present the material, and classmates to concentrate on the lecture material. To maintain a professional classroom environment to maximize the learning experience, students and faculty will be: (1) Respectful to those presenting the material and to those trying to listen to and understand the material, (2) Quiet, because extraneous talking is disruptive and distracting and will not be permitted (electronic devices will be silenced, cell phones will not ring or be answered during class, and laptop computer use will be confined
to taking notes and other lecture-related activities at the direction of the instructor), (3) Punctual (a) Faculty will start on time, (b) students entering and exiting the classroom after the class starts disrupt the presenter and fellow students, so students must arrive before class, and be ready (quiet, in their seats with notes out) to begin at the scheduled time, (c) a student arriving after the class has started, should enter as quietly as possible and should sit in the back of the classroom to avoid interrupting the lecturer or disrupting students’ focus on the lecturer material, (d) faculty will finish at the scheduled time.

Recommendations for Optimal Classroom Learning and Professional Behavior
Faculty members recognize that methods of learning vary and are unique to individuals. Active listening, note-taking and asking appropriate questions during classroom activities maximize the learning experience. Because electronic communication (texting, e-mailing, twitter, Facebook, etc.) during classes interferes with the learning of nearby students, and may be disruptive to the classroom as a whole, all participants will refrain from these practices and focus on the classroom content.

Faculty and students have the shared responsibility to maintain a positive learning environment for all students. Faculty members have the right to reprimand politely and/or excuse anyone disrupting the classroom experience, in order to maintain an optimal learning environment for students. A student(s) and/or his/her/their class representative(s) are encouraged to first register any concerns or complaints to the individual faculty member to resolve the issue at the local level and in a timely manner. If this does not lead to appropriate resolution, then the student(s) may contact the BCDB program DGS and/or Director or GDBBS Director to discuss and resolve any issue relevant to maintenance of a professional environment.

Students expect the faculty to establish and maintain a classroom environment conducive to effective learning, including modeling appropriate professional behavior and holding themselves and students accountable. The faculty appreciates and expects students’ understanding, commitment, cooperation, and contributions to maintaining an appropriate and enriching teaching and learning environment. Students share at least some of these responsibilities and are encouraged to promote professional conduct at all times.

The research laboratory, seminars, and other program or departmental activities should also be viewed as professional events and the same rules of conduct should be in observed. The use of cell phones and music in the laboratory should be discussed with the PI but in general should be kept to a minimum and only when not disruptive to others.

PART V. OTHER ACTIVITIES

A. Teaching Experience

The LGS requires each student to serve as a Teaching Assistant (TA) for at least one semester during their graduate career, usually during the second year. The primary purpose of the teaching experience is to aid students in strengthening organization and communication skills. Prior to beginning the teaching experience, students are required to participate in the Teaching Assistant Training and Teaching Opportunity (TATTO) course. A student should get their advisor approval before seeking addition teaching assignments.

Teaching opportunities for GDBBS students vary by the type of course, amount of responsibility, and time commitment associated with the teaching assignment. Teaching experiences range from overseeing one component of a laboratory course meeting once each week to co-teaching an undergraduate class with one or two professors. Students are encouraged to state a preference for the type of course they would like to TA. Students should consider their time commitments during the semester they will be teaching as well as their professional goals when choosing which courses to TA. For students wishing to gain more pedagogical experience, additional teaching opportunities are available beyond the one-semester requirement, some of which may provide additional academic credit or a small additional stipend.
B. Ethics Training and Professionalization Workshops

In addition to required coursework the program Executive Committee is specifically empowered to make attendance at other events a requirement for all or a subset of students. Examples include:
(1) All first- and second-year students are required to attend all sessions of the Ethics discussions within the BCDB program. Students in years three and above are required to attend at least one per semester.
(2) All first- and second-year students are required to attend all Professionalization Workshops within the BCDB program. Students in years three and above are required to attend at least one per semester.
(3) All incoming/first year students are required to attend the program Retreat.

C. Seminars, Journal Clubs, and Symposia

Seminars hosted by a variety of programs and departments are given by invited speakers throughout the academic year. Students are encouraged to participate in the scientific discussions and, when possible, arrangements are made for students to meet with guest speakers. In addition to the numerous seminars, other opportunities to participate in scientific discussions include journal clubs, data clubs, and yearly student-organized symposia. Attendance and participation at any BCMB symposium is mandatory for all training grant-supported students and strongly encouraged for all BCDB students. The BCMB training grant also supports a journal club; attendance is encouraged for all BCDB students and faculty and is required for first-year students. These activities are not credited courses, but a well-rounded graduate education will typically involve routine attendance at these events, which should be seen as an opportunity to learn about work in other fields.

D. Regional and National Scientific Meetings

Students are encouraged to present their research at regional and national scientific meetings. Some travel money is available for students making presentations at open meetings. These travel awards are given no more than once per student per year (September 1 – August 31). Applications for support should be made to the LGS and/or the student’s department. Travel funds from the LGS are limited in amount per year, and in total amount per student so are unlikely to cover all costs. Students are encouraged to apply for travel awards from meeting organizers or other outside sources, with consultation from their advisor.

E. Vacation and Leave

Graduate study is a full time endeavor. Students receive a stipend and are expected to be actively attending classes or conducting research and working toward the degree year round, whether classes are in session or not. Students are allowed two weeks of vacation time, in addition to official University holidays. They are New Year’s Eve, New Year's Day, Martin Luther King Holiday, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Friday following Thanksgiving, and Christmas (2 days). Fall Break, Spring Break and the break between semesters are not official holidays. Unauthorized absences may result in a proportional reduction in the student stipend and/or dismissal. If a student needs to take more time off, they must discuss this with their Program’s Director of Graduate Studies and their Dissertation Advisor. See also the policies on Leaves of Absence and Parental Leave described below.

F. Parental Leave

Students requesting parental leave for the birth or adoption of a child should submit a written request to the Dissertation advisor (or the Program DGS if the student hasn’t chosen an advisor) with copies to the Program and the GDBBS offices. The term of the leave must be approved by the Dissertation advisor and the program DGS. The GDBBS must be notified of all proposed leaves. The GDBBS will notify the student of the duration and conditions of the approved leave and the student shall accept this leave by returning a signed copy of the
The suggested term of approved paid leave is six weeks. If more leave is required the student may request an unpaid leave of absence.

G. Leaves of Absence

Requests for an unpaid Leave of Absence for any student must adhere to Graduate School guidelines (LGS Handbook), must be approved by the Program Executive Committee of the student’s Program, and then forwarded to the GDBBS office for the Director's approval. The Dean of the Graduate School must give the final approval for any leave. Students on unpaid leave are not considered registered students and will only receive health insurance until the end of the semester in which they go on leave (as long as they go on leave after the date of record for that semester). If the leave extends into the next semester the student is eligible to purchase health insurance coverage under COBRA guidelines. Students may only return from a leave at the beginning of a semester.

PART VI. BCDB GUIDELINES FOR THE M.D./PH.D. DEGREE PROGRAM

A. Participation in BCDB Program

Medical Scientist Training Program (MSTP) students choose a dissertation research advisor and a graduate Program under the guidelines of the MSTP Program. Unless otherwise specified, the MSTP student is expected to fulfill all the requirements for the degree and participate fully in the BCDB Program. MSTP students are subject to the rules outlined by the BCDB Guidelines (see above). Because MSTP students begin their BCDB coursework in the middle of the M2 academic year, the course of study differs from that of PhD-only students. The standard curriculum is described below but it is important that new students meet with the DGS to avoid any possible confusion.

B. Coursework requirements

MSTP students are admitted to the Graduate Program in Advanced Standing and are expected to start coursework as close to the beginning of the Spring semester of M2 as possible but no later than one week following completion of their board exams, around the end of January. MSTP students enter the BCDB curriculum by taking all required BCDB 1st Year Spring courses (Foundations (BCDB502), Introductory Graduate Seminar (BCDB 570R), and BCMB Journal Club).

MSTP students may choose to take Part I of the BCDB qualifying exam immediately following M2 Spring classes (see below). MSTP students who pass Part I at this point will take the required second-year BCDB courses and are exempt from the Fall Foundations course.

MSTP students who do not take or pass Part I of the Qualifying Exam prior to beginning Year G1 courses will be required to take the Fall Foundations course in addition to the required second-year BCDB courses.

Requests for exceptions to these course requirements must be submitted in writing to the Program Director and DGS of the BCDB Program and will be evaluated on a case by case basis.

C. Timing of Qualifying Exams

MSTP students may choose to take Part I of the Qualifying Examination immediately following M2 Spring classes. Failure of Part I of the exam at this stage will be without prejudice to both the student’s standing in graduate studies and their eligibility to take Part I at the end of their G1 year. Alternatively, MSTP students may opt to take Part I of the exam at the end of the G1 year. In either case, passing Part I of the Qualifying Exam is subject to the same criteria and regulations as PhD-only students. The deadline for completion of Part
II of the Qualifying Exam is June 1st, approximately one year after completion of the Part I exam, although scheduling the exam earlier is encouraged.

**D. Teaching Requirement**

The teaching requirement of the Graduate School is to be fulfilled by the end of the MSTP student’s G1 year. Exceptions to meet the teaching requirement beyond the G1 year will be granted on a case by case basis.

**E. Length of Time to Degree**

MSTP guidelines encourage the completion of the Ph.D. portion of the degree in three years. While every effort will be made to meet this guideline, it should be recognized that the student is expected to complete a dissertation based upon original research, and that this dissertation must meet both MSTP and BCDB standards. Expectations regarding authorship on publications or other standards for the PhD degree must meet or exceed those set by both programs. Consequently, it may be necessary to extend the degree program beyond the three-year guideline.

**PART VII: GRIEVANCE POLICY**

It is the policy of the LGS that “students who wish to outline grievances or disagreements of program nature should first address either the program Director or the appropriately designated committee in their program”. Thus, students who have a grievance related to any aspect of the BCDB program should report it to the Program Director. The student should describe the grievance and relevant details in a letter addressed to the Director, who will try, if possible, to resolve the grievance in conversation with the student and relevant parties. If this is not successful, the Director will appoint a committee of three BCDB faculty members (or faculty members outside the program if the situation warrants) or use an existing standing committee, who will review the grievance and propose an appropriate response. If it is impossible to resolve the grievance within this committee or within the framework of the BCDB administrative structure, the Director will forward the grievance to the Director of the GDBBS. The GDBBS Director will then decide either to handle it within the Division or forward to the Office of the Senior Associate Dean of the LGS. From that point forward, the grievance will be handled according to the Grievance Procedure outlined in the LGS Handbook. If the issue is with the BCDB Director, the student should go directly to the GDBBS Director.