

**Program in Cancer Biology**  
**Graduate Division of Biological and Biomedical Sciences**  
**Emory University**

*Information and Guidelines for Students and Faculty*

Revised and approved by the Cancer Biology Executive Committee 9/24/20

*The policies and regulations in this handbook are in immediate effect and supersede those in previous versions*

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**Notes on terminology:** despite the common usage within the CB 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 CB 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 CB Program Director.

**Abbreviations used in the text include** **CB**, Cancer Biology Graduate Program; **DGS**, Director of Graduate Studies; **GDBBS**, Graduate Division of Biological and Biomedical Sciences; **LGS**, Laney Graduate School; **MSTP**, Medical Scientist Training Program; **PLE**, Post-rotation Laboratory Experience.

These guidelines of the policies and expectations of the Program in Cancer Biology (CB) will be periodically reviewed and updated in an effort to keep them current. Official decisions on any aspect are rendered by the Executive Committee in consultation with the Director, DGS, and the faculty of the Program.

The CB Program provides students with the opportunity to develop theoretical and practical research competence in Cancer Biology and related disciplines. Research interests of the faculty are described on-line at the Graduate Division of Biological and Biomedical Sciences (GDBBS) and CB Program websites.

## **PART I. ADMISSION TO GRADUATE STUDIES**

### **A. Admission Requirements and Procedures**

The CB Program is designed for students pursuing a Ph.D. degree or the combined M.D./Ph.D. degrees. Application materials, admission requirements, financial information and degree requirements are available on the GDBBS website. All applications are made to the GDBBS with an indication of interest in the CB Program. The CB Program Recruiting and Executive Committees conduct a holistic review to evaluate applicants on research experience, academic background, personal essay, and letters of recommendation. A successful applicant typically has a strong science background in chemistry, mathematics, physics and biology. The Program will not admit students wishing to study for a Master's degree.

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**

Students who are currently training in other graduate programs are not normally admitted. We require that such students either complete or resign from their current graduate program before such applications will be considered. 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 submit a complete application, with the exception of letters of reference.
2. The admission committee will review this material 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 will 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**

The Graduate Division of Biological and Biomedical Sciences (GDBBS) supports students admitted to the CB Program. As such, they may choose to do rotations or dissertation research with any of the Graduate Training Faculty of the Division regardless of their program affiliation. Thus, a student may

be in the CB Program and his/her dissertation advisor could be a member of a different graduate program. In this case, it is recommended that the dissertation committee be carefully selected to ensure that the student's curriculum provides for training commensurate with other students in the CB Program.

In some cases, the student may wish to transfer to the graduate program where the proposed advisor 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 Director of the student's current program, to the Director of the intended program, and to the Director of the Graduate Division of Biological and Biomedical Sciences. Final approval of a student's transfer from one graduate program to another is made by the Dean of Laney Graduate School.

## **PART II. ADMINISTRATIVE STRUCTURE**

All graduate degrees offered by the CB Program are granted by the Laney Graduate School (LGS). The Dean of the Laney Graduate School 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 acts as the liaison between the Program and the GDBBS and LGS. 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 vote of the Program Faculty and approved by the Director of the GDBBS. The GDBBS Director also reviews the nominations for Director and DGS prior to the vote. Typically, the Director will not be a departmental chairperson and will serve a term of three years.

The Director of Graduate Studies (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.

### **B. CB Program Administrative Committees**

#### **1. Executive Committee**

The Executive Committee functions in an advisory role to the Program Director in all matters concerning graduate students and the Program. The committee will typically consist of 9 faculty members, including the Program Director who acts as Chair, DGS, Recruiter, Curriculum Chair, DEI Chair, Written Qualifying Exam Chair, Oral Qualifying Exam Chair, Faculty Membership Chair and one other at-large Member elected by the Program faculty and serving overlapping three-year terms. One student representative, elected by the student body, will also serve on the executive committee for a one-year term and will have full voting privileges except in matters concerning the standing of program faculty or student where he/she will be excused. 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. In the event that an at-large position becomes vacant mid-term, the Program Director shall appoint a CB Program faculty member to serve out the remainder of the vacated term. The duties of the Executive Committee include reviewing applications for admission and financial aid, reviewing

graduate student curricula and performance, administering Part 1 and 2 of the Qualifying Examination, assessing faculty participation and membership, facilitating communication both within the Program and beyond, and ensuring that all requirements for a degree have been met. Typically, each member of the Executive Committee will serve as the Chair of one of the program Committees (Recruitment, Part 1 and 2 Exams, Curriculum). The DGS presents students to the Committee each year to assess the progress of the students in the Program, including course work, dissertation advisor selections and dissertation committee composition. The Principal Investigator(s) of a relevant training grant will be considered an *ex officio* member of the Executive Committee with the ability to vote. The Executive Committee will meet as frequently as needed to handle programmatic issues. A quorum of 6/9 faculty members is needed to hold valid Executive Committee meetings and a simple majority is needed to make decisions. Any member of the Executive Committee can suggest that important matters need a full membership discussion and vote, at the discretion of the Program Director. Minutes of the meetings will be taken by the Program Coordinator and archived after review by the Program Director and other relevant faculty members.

## **2. Recruitment and Admissions Committees**

A Recruiter will be selected by majority vote of the Program Faculty and will typically serve a three-year term. The Recruiter serves as the head of a recruitment committee, which is composed of Program Faculty representing the broad research interests of the Program. The committee's main function is to review applications, prioritize applicants selected for interviews, send out invitations, organize the site-visit and interview recruits, and to collect all the information post-visit. The Committee will solicit feedback from current students post-visit for help in making offer decisions. The Committee makes a recommendation to the Program Director and the Executive Committee as to the ranking of the applicants for acceptance to the Program. Following approval of the list, the Recruiter informs the GDBBS and Graduate School of the selected applicants who will receive an official admissions invitation to join the program.

## **3. Qualifying Exam Committees**

### **3.1. Part 1 Exam Committee.**

A member of the Executive Committee and 3 other faculty members compose the Part 1 qualifying exam (written exam) committee. The committee solicits exam questions from the course lecturers and composes the exam, which is subsequently approved by the Executive Committee.

### **3.2. Part 2 Exam Committee.**

A member of the Executive Committee serves as Chair of the Part 2 Committee and builds ad hoc exam committees for each student passing their Part 2 qualifying exam (oral exam) and establishes the schedule of the individual exams. The examiners are selected from a standing Committee of 8 faculty members and an ad hoc member selected by the student.

## **4. Curriculum Committee**

A member of the Executive Committee will serve as Chair of the Curriculum Committee. The Committee has 5 additional members, including the DGS, and a student representative. The Committee reviews proposals for modifications to the existing program coursework and additional requirements from the LGS or GDBBS to remain compliant with teaching requirements and regulations.

## **5. Faculty Membership 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. Diversity, Equity, and Inclusion (DEI) Director and Committee**

The DEI Director is charged with development of DEI training of the CB faculty, staff, and students and with interfacing with Division or LGS staff for matters pertaining to DEI. The committee shall be composed of 2-3 faculty and 2-3 students, at the discretion of the DEI Director. The DEI committee shall make suggestions to the Elkin Lectureship Committee for invited speakers. The DEI committee will also work with the Recruitment and Admissions Committees to coordinate activities for recruitment visits (social activities, informational, etc.) to ensure that recruiting efforts reflect the diverse nature of candidates interested in the CB program. The DEI committee shall also make recommendations of which students to provide program support for attendance at ABRCMS, SACNAS, or other relevant national scientific meetings. The DEI committee shall regularly collect feedback from the CB faculty and students on the DEI climate and refer any grievances, issues, or complaints relevant to DEI to the Executive Committee. The DEI committee will collect data to compare the year-over-year (YOY) performance of the DEI committee and inclusion efforts initiated by the CB program. This data will be used to determine and implement best practices for the CB program and can be used in grant applications which support the recruitment and retention of underrepresented students in the CB program.

## **C. Dissertation Advisors**

One of the most important decisions made by a graduate student is the choice of research advisor. Before deciding on a research advisor, students should discuss possible research projects with program faculty whose work may be of interest to them. This, and the experience from laboratory rotations should allow the student to make an informed decision. Although there is no set of uniform criteria, and individual experience and needs will differ, some factors that the student may want to consider when selecting a research advisor include their level of interest in the research area, the projects available for study, the time, resources and space an advisor has to devote to the student's research, the laboratory environment, and compatibility with the advisor.

### **1. Dissertation Advisor (PhD degree).**

It is expected that at the end of the third lab rotation, each student will select a Dissertation Advisor who will assume the primary responsibility for direction of course and research activities necessary to complete the PhD degree. This will normally occur by the end of the Spring semester of the first year. A student may request to postpone advisor selection and take an additional (fourth) rotation, with the agreement of the DGS.

Students and faculty cannot make any final commitments until completion of three rotations. Once a choice has been made, the student and prospective advisor must complete the *Request for*

*Assignment* form (available on the CB website) and the GDBBS *Advisor-Advisee Agreement* form (available on the GDBBS website) and submit them to the Director of Graduate Studies. The Dissertation Advisor is responsible for getting their Departmental Chairperson to sign the GDBBS form and must complete the funding documentation portion of the form. The Program Director and Executive Committee will then evaluate the request, making every effort to accommodate the student's wishes. To ensure that the quality of advising and training is maintained, the Executive Committee will normally approve the assignment of a maximum of two CB predoctoral students from any single matriculating class to any single advisor. The Executive Committee may waive this rule under exceptional circumstances if adequate justification can be presented.

After the third rotation period, a student without a dissertation research advisor may request approval from the DGS to postpone advisor selection and rotate 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. Fourth rotations should begin no later than the week after the Part I Qualifying Examination. Further rotations are permitted in principle but require prior approval of the DGS and prospective research advisor.

All rotations 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 dissertation research advisor before the start of Fall semester of Year 2 will be considered not to be making satisfactory progress towards the degree and the CB Program may recommend to the LGS that the student be dismissed after review by the CB 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.**

## **2. Changing Advisor.**

While it is expected that most students will continue their research work with their faculty advisors until they complete their 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, PA, and the GDBBS Assistant Director of Student Affairs for guidance on their options and to form a plan of action immediately. The DGS will then serve as an interim advisor during a transition period while the student identifies a new advisor. The GDBBS will provide support for students during the transition period for a limited period of time. During this period the existing dissertation/thesis committee will continue to serve to help guide the student through the transition. The length of the transition period should be as 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.

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 predoctoral 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 sixty days, then that student will be considered unable to make satisfactory degree progress and the CB Program may recommend to the LGS that the student be dismissed from the Program after review by the Executive Committee.

## D. Student Advisory (Dissertation) Committees

### 1. Function and Composition of the Committees

The primary responsibilities of the PhD dissertation committees is to oversee the progress of the student in the research portion of their training, including assisting the student in creating and executing an original, productive research project, assisting in the preparation of an acceptable written dissertation or thesis, and administration of the final oral examination (*aka*: the dissertation or thesis defense).

The **Dissertation Committee (PhD)** should be selected by the end of year two in residence and the first meeting held no later than six months after completion of Part 2 of the Qualifying exam, typically by the Fall of the third year. The committee is selected by the student in consultation with the dissertation advisor, following which the *Dissertation Committee Signature* form (available on the CB and LGS websites) must be submitted to the Director of Graduate Studies (DGS) for approval. Student must obtain approval no later than March 15 of their third year. Students who do not meet this deadline will be placed on academic probation, will not be eligible for PDS funds, and may forfeit financial support. These sanctions will be lifted when the student files a dissertation committee form.

Any later changes in the membership of the dissertation committee must be approved by the DGS and is subject to approval by the Executive Committee. Changes to the dissertation committee should be recorded on the *Dissertation Committee Change Form* (Laney Graduate School website) and submitted to the Laney Graduate School office.

The Dissertation committee must include (as a minimum) the dissertation advisor, plus four additional faculty members, at least **three** of whom are members of the CB Program. If desired, one or more additional members may be drawn from the faculty of other programs in the Graduate School or from outside of Emory. The advisor plus any three members of the committee 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 the student's dissertation defense in person or by videoconference.

### 2. Format of Committee Meetings

A student scheduled to meet with their committee should prepare a brief written summary (no more than 2 pages) of items to cover during the meeting and distribute it to their 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 experiments conducted/ updates 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. The update should include any publications, abstracts, meeting presentations, and awards.

The format of the committee meeting will vary but typically will involve a concise presentation (typically 20-30 min) by the student of the hypotheses and overall objectives of the work, research progress to date, and some discussion of priorities and future plans. The presentation will serve as a platform for the committee to initiate questions and to openly discuss progress, research priorities and directions. The committee will deliberate in private without the student to determine if sufficient progress has been made at the end of each meeting. Once the student returns to the meeting, the members of the committee will then meet privately with the student without the

advisor present to determine if there are any mentoring issues that should be addressed. Specific goals for the next period will be discussed with the student and recorded on the *Dissertation Committee Progress* form (on the CB web site). Mentoring issues should be documented by email to the DGS from a representative of the committee. If the advisor is the DGS, the email should go to the Program Director. The duration of a committee is variable, but will typically last no more than 1-2hrs.

### 3. Frequency of Committee Meetings

The Committee should be considered a source of scientific and scholarly advice for the student, as such the student should feel free to convene a meeting with their committee or individual committee members at any time they feel additional support or direction may be useful.

An important function of the committee is to determine whether adequate progress is being made. Thus, the frequency of meetings may be increased at the discretion of the committee or at the request of the student at any time. The committee is strongly encouraged to identify specific goals for each following period to provide direction for the student's project, which will be indicated in writing on the *Dissertation/Thesis Committee Progress* form. If the committee subsequently determines that lack of progress is due to insufficient effort on the part of the student, the student's research grade for the current term will reflect this lack of effort, which could result in the student being placed on probation or recommended for dismissal to the Laney Graduate School.

The first formal **PhD dissertation committee meeting** must be held no later than six months after passing Part 2 of the Qualifying Exam, typically in the Fall semester of the third year. Thereafter, CB Program predoctoral 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. A student's research seminar in the Friday seminar class (CB 790r Advanced Graduate Seminar) can serve as the presentation portion of one of the two required committee meetings, and is in fact encouraged, as long as (1) the required committee quorum is present at the seminar; and (2) a meeting of the committee for directed discussion with the student occurs immediately or closely (within a week) after the formal presentation.

### 4. Documentation and Tracking of Committee Meetings

The student should bring a *Dissertation/Thesis Committee Progress* form to each meeting. **This form** (available on the CB website) **must be filled out, signed by the committee members and returned to the CB 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. The DGS and Executive Committee will track compliance with guidelines for committee meetings. The *Student/Dissertation Committee Feedback* form, which documents any mentoring issues that the student expresses to the Dissertation Committee, should also be provided to the DGS immediately after each committee meeting.

## E. Student Responsibilities

It is the student's responsibility to meet the Laney Graduate School and GDBBS requirements for a degree within a reasonable timeframe. All students should familiarize themselves with and adhere to the Laney Graduate School Honor Code and Conduct 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 and Conduct Codes.**

## **F. Grievance Policy**

Students who have a potential grievance related to some aspect of their Program may discuss it with their DGS, PA, the GDBBS Assistant Director of Student Affairs and/or the LGS Assistant Dean of Student Affairs for consultation before taking action, if desired. If the student decides they want to file an official grievance, they should notify their Program Director and/or DGS by providing a letter addressed to the Director and/or DGS that describes the grievance and relevant details. **If the grievance is related to an academic component or milestone, the student should submit their grievance letter within 30 days of the date the outcome was conveyed (i.e.; notice of qualifying exam result or posting of grade to transcript).** The Director and/or DGS may try, if possible and deemed appropriate, to resolve the grievance informally in conversation with the student and relevant parties. If this is not successful or not appropriate, the Director and/or DGS will inform the Division Director and Assistant Director of Student Affairs for GDBBS that the student is moving forward with a formal grievance process. Next, the Director and/or DGS will convene a meeting of the Program Executive Committee, which will review the grievance and provide an appropriate response. The Director and/or DGS may gather additional relevant information and will provide all information and the student's grievance letter to the Committee. The Committee will meet face-to-face to discuss the grievance and review relevant materials. A majority of the EC must be present and only those present may vote on the outcome. Votes will be taken via electronic ballot to ensure confidentiality. In all cases grievance decisions are confidential and should not be shared outside of the grievance meeting. The Director and/or DGS will notify the Division Director and Assistant Director of Student Affairs for GDBBS of the outcome. Finally, the Director and/or DGS will provide a letter to the student via email notifying them of the outcome and options for next steps.

If the grievance concerns the Director and/or DGS, the student should review the GDBBS Grievance Policy found in the GDBBS Handbook for guidance.

If the grievance concerns the GDBBS Director, the student should bypass the Program and Division and follow the LGS Grievance Procedure found in the LGS Handbook under Honor, Conduct, and Grievance, Section 4.

Finally, if the student does not feel their situation is resolved at the conclusion of the Program Grievance process, they can refer to the GDBBS Grievance policy for guidance on additional options for seeking resolution.

## PART III. PHD PROGRAM REQUIREMENTS

### A. Coursework

All CB 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 CB students.

Each student in year two and beyond will have customized elective(s), agreed upon by the student and dissertation advisor. Students must take a minimum of one elective. Credits from Directed Study, unless approved by the DGS, do not count towards the one-elective requirement. All CB students must register for, attend, and pass the weekly graduate student seminar series (CB790r Advanced Graduate Seminar), in both the Fall and Spring semesters until their dissertation defense is scheduled. 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 semester may request to be excused from presenting in CB790r only if their scheduled seminar date is within three months of their dissertation defense date, and after consultation with the Course Director of CB790r. During the first two years of classes the students will be exposed to 8 hours of training in the area of scholarly integrity as part of the courses CB570r (year 1) and CB790r (year 2). The topics covered will include data management (0.5h), mentoring (0.5h), authorship (0.5h), peer-review (0.5h), collaboration (0.5h), human subjects (1h), animals (1h), scholarly misconduct (1h), conflict of interest (1h), ethics of teaching (0.5h), and public scholarship (1h).

*Required Courses are marked in **BOLD***

*NOTE ABOUT ELECTIVES: The list of available courses is continually changing so students must consult the current Laney Graduate School 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 Laney Graduate School that count toward the 24 needed to achieve Advanced Standing.*

*\*\*Credits to Cn = Course credits acknowledged by Laney Graduate School that count toward 16 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.*

*# Students will be required to take two Elective courses totaling at least 7 credit hours in year 2 which will be applied toward their requirement for candidacy*

Course #	Course name	Credits*	Credits AS**
<u>Year 01-Fall</u>			
<b>CB 533</b>	Principles of Cancer Biology I	7	7
<b>CB 570r</b>	Introductory Graduate Seminar	2	2
<b>CB 597r</b>	Laboratory Rotations	2	2
<b>JPE 600</b>	Jones Program in Ethics course	0	0
<b>CB 790r</b>	Advanced Graduate Seminar	2	2
<u>Year 01-Spring</u>			
<b>CB 534</b>	Principles of Cancer Biology II	7	7
<b>CB 570r</b>	Introductory Graduate Seminar	2	2
<b>CB 597r</b>	Laboratory Rotations***	2	2
<b>CB 790r</b>	Advanced Graduate Seminar	2	2
<u>Year 01-Summer</u>			
<b>CB 699r</b>	Dissertation Research (pre-candidacy)	9	9
	Advisor chosen, dissertation research underway, TATT 600 Part 1 – Qualifying Exam (June)	1	1

Course #	Course name	Credits*	Credits Cn**
<u>Years 02-Fall</u>			
<b>IBS 761</b>	Cancer Pharmacology	3	3
<b>CB 790r</b>	Advanced Graduate Seminar	2	2
<b>IBS XXX</b>	Elective #	3-4	3-4

<b>CB 699r</b>	Advanced Research (until approved for candidacy)	4	0
<u>Years-02-Spring</u>			
<b>CB 790r</b>	Advanced Graduate Seminar	2	2
<b>IBS 522</b>	Hypothesis Design and Scientific Writing	4	4
<b>IBS 562</b>	Cancer Clinical Colloquium*	2	2
<b>CB 699r</b>	Advanced Research (until approved for candidacy)	4	0
Part 2 Qualifying Exam (to be completed by June)			
<u>Year-02 – Summer</u>			
<b>CB 699r</b>	Dissertation Research (pre-candidacy)	9	9
Dissertation committee chosen; first committee meeting scheduled for Fall			
<u>Years-03 and beyond</u>			
<b>CB 799r</b>	Dissertation Research (candidacy) (to make total units = 9 per semester)	9	9
<b>CB 790r</b>	Advanced Graduate Seminar	2	2

*\*this course if offered every other year, so students will take it in year 2 or 3*

*Recommended Electives:*

Fall:

IBS 746 Graduate Human Genetics

IBS 500R Seminar on Advanced Data Analytics Objectives

Spring:

IBS 538 Statistical Design and Analysis of Experiments

IBS 561 Eukaryotic Chromosome Organization and Function

IBS 574 Computational Biology and Bioinformatics

MSP 717 Principles of Therapeutic Discovery

**B. Grade Criteria**

Grades in the Laney Graduate School range from A (4.0) to C (2.0) and F (0); there is no D grade. Some courses are taken on a Satisfactory/Unsatisfactory (S/U) basis. Advisors will assign grades in IBS699r (Advanced Research) or CB799r (Dissertation Research) and are encouraged to use

grading that reflects performance and overall progress made each semester. Students must maintain an average of B (3.0) or better in coursework each semester. Students with a semester GPA below 3.0 will be put on academic probation, and be notified in writing of such by the LGS. Students on academic probation due to their grade point average have one semester to bring their grade point average above the minimum. Students who receive a grade of less than B in a required CB course will be put on academic warning in the program. They will be notified in writing by the Program Director and the DGS and the Executive Committee will be informed.

GDBBS policy dictates that if a student's term GPA is below 3.0 in any one term of work, that student will be placed on academic probation. Grades of U or F in a course, regardless of credit hours, will also lead to the student being placed on academic probation. Two consecutive terms of probation or four terms of probation at any point in the student's graduate career will lead to the Division recommending to the LGS that the student be dismissed from the Program. If a student believes their grade is incorrect, they should file an appeal. If a student has an issue with the process of how the grade was assigned, they should file a grievance at the program level.

*Repeat assessment of unsatisfactory progress by the student's dissertation committee also constitutes grounds for the CB Program to recommend to the LGS that the student be dismissed from the Program.*

## **1. Appeals**

Students who believe that an assigned grade is incorrect should first discuss the assigned grade with the course instructor. After discussion, students who do not think the problem has been resolved in this manner should address their concern to the Program Director or DGS, who will seek to resolve the matter with the instructor and the student. Consistent with principles of academic freedom, responsibility for evaluation of a student's course performance rests with the course instructor. Use of this procedure for resolution of a grade dispute will not prejudice in any way a student's rights under their Program, GDBBS, Laney Graduate School, or University student grievance procedures.

## **C. Coursework Credit Hours (credits) – Requirements**

Full residence in any semester requires satisfactory completion of a minimum of 9 semester hours of courses, research, or directed study acceptable for graduate credit. Students must complete and submit to the Laney Graduate School the Application for Admission to Candidacy form. Students cannot apply for candidacy and graduate in the same semester. At this time, all students are expected to be in candidacy no later than September 15<sup>th</sup> of their fourth year of study. The Laney Graduate School strongly recommends timely filing of candidacy. At the very latest, students must be admitted to PhD candidacy at least one semester before applying for the degree.

## **D. Laboratory Rotations**

Laboratory rotations expose students to different research approaches and techniques of modern science. They help define a student's research interests and assist in the selection of an advisor by providing the student with an opportunity to sample different lab environments/research areas, to assess available research projects, and to evaluate compatibility with the lab and potential advisors. Rotations also allow faculty to observe and evaluate the aptitude of first-year students for research. Expectations for time spent in the laboratory should be clearly established between the faculty member and the student before beginning each rotation. In general, students are expected to be working on their projects when not attending class or studying.

Students are encouraged to use the Faculty research talks (held in the first 2-3 weeks of the first Fall semester) and to talk to several potential rotation advisors before deciding in which labs they are interested in rotating. Selection of rotations should be made in consultation with the DGS, who will serve as advisor until a student has decided upon a formal dissertation advisor. A *Rotation Advisor Selection* form (available on the CB Program website) must be submitted to the DGS for each rotation.

Students are expected to complete at least three rotations in their first year. Students may also choose to do a fourth rotation in the summer following the first academic year.

Upon completion of each rotation, the student will be required to give a 15 min oral presentation as part of a mini research symposium consisting of all rotation students and their advisors to be held within one week of the completion of the rotation period, and should be in the format of a short research report detailing the introduction/goals, experimental methods, and results. Laboratory rotations are graded with a letter grade (A, B, C or F), and are determined by the faculty sponsor and reported to the DGS. A *Laboratory Rotation Completion* form (available on the CB website) should be completed by the student and rotation advisor and submitted to the DGS.

## **E. Teaching Experience**

The Laney Graduate School requires each student to serve as a Teaching Assistant (TA) (TATT 605) 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) two-day course (TATT 600). If the student has had substantial teaching experience he/she may request to have the requirement waived. See the GDBBS Assistant Director of Student Affairs in the GDBBS office for further details on how to document your experience.

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 more professors. Students are encouraged to state a preference for the type of assignment to the instructor of the course in which they wish to teach.

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. It is important that additional teaching opportunities do not negatively impact adequate progress to completion of the PhD, and that permission of the advisor is obtained prior to commitment to additional teaching by the student.

The [GDBBS website](#) offers more details about your TATTO experience.

## **F. Steps to Degree**

### **1. Qualifying Exams (Parts 1 and 2)**

## **Part 1**

Part 1 of the qualifying exam is a written examination of “general or background” knowledge and critical thinking, and is designed to test general knowledge of cancer biology and other basic biomedical sciences as laid out in general texts and covered in the core introductory courses of the Program. The goal of the Part 1 exam is to test both the knowledge base and critical thinking/writing of each student so that both the student and the Faculty can determine whether that student is prepared to progress in the Program. Hence, some questions on the exam may draw on specific information exposed to in required 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 1 exam is given during June 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 one day. The examination is prepared from questions solicited from the Program faculty and reviewed by the CB Executive Committee. At the end of the exam, each answer is independently evaluated by at least two faculty members who each assign a numerical grade. The exam consists in 10 questions covering the breath of topics in cancer biology and related basic biomedical sciences. The students have to answer 8/10 questions. To pass the exam, students must (1) score 7/10 or higher on 6 out of the 8 questions they choose to answer and (2) receive a composite score of 70% or higher. At the consideration of the Executive Committee, a student failing to achieve these minimum standards will be allowed one re-take of the exam. The student must have achieved at least a 60% to be eligible for a re-take of the exam, and the re-take exam must be held within 1 month of having failed the 1<sup>st</sup> exam. The re-take decision will be based on the exam as well as the student’s overall performance in the program to date. The retake exam will be an oral examination by 4 members of the Executive Committee and the student will pass if no more than one of the examiners disapproves. Students who fail the second attempt will be recommended for dismissal from the Program. A passing score on Part I of the Qualifying Exam is required for a student to proceed to Part II.

## **Part 2**

Part 2 of the qualifying examination takes the form of an oral examination consisting of the oral defense of a written research proposal and an oral examination to evaluate the students’ mastery of scientific concepts, including material covered in Part 1. The exam 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 mastery of required CB coursework. As such, questioning will draw on aspects of the scientific principles, knowledge of the pertinent literature and defense of the hypotheses and experimental design as laid out in the written proposal, but will in addition more broadly address the student’s mastery of relevant scientific concepts. 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 exam **must be completed before the end of June** of the student's second year in residence.

The written proposal should focus on the student’s dissertation research and must be distributed to the Oral examining committee at least one week prior to the oral examination and should be written in a format similar to that of an NIH or other fellowship application (i.e. specific aims, significance, innovation, research design and methods). The inclusion of preliminary data in support of the proposal is optional, but can include the student’s own data or that generated by the lab. The source of all data in the proposal should be acknowledged by the student. The purpose

of the proposal and defense is not to determine the ultimate content of the student's doctoral dissertation. Thus, the student should be less concerned with preliminary data than with the knowledge of theoretical and technical issues related to the proposed studies. Although the written proposal helps to focus the first part of the oral examination, it is not evaluated *per se* by the committee.

The examination will begin with the student providing a 5-10 minute overview of their current research using the dry ink board (no slides/overheads). The examination then follows a format in which each committee member is given up to 10 minutes to ask any question they deem appropriate, without interruption by other committee members, followed by 5 min open examination by all members of the committee as follow-up on the initial topic. 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). The first round of questioning will constitute the defense of the written proposal, whereas the second round, may more broadly assess mastery of scientific concepts and synthesis as laid out above. The student or any member of the committee may call for a 5-10 minute break between rounds. The second round of ten-minute question periods per committee member may be shortened at the discretion of each committee member.

A committee consisting of three members of the standing Oral Exam Committee and one CB member chosen by the student will administer the exam. One member of the standing committee will serve as Chair, and is responsible for being fully apprised of all rules surrounding the exam. Prior to the start of the exam itself, the Chair of the Examining Committee will describe to all the purpose of the exam, the rules of engagement, and the criteria by which the evaluation will be performed. The research advisor will be present for the exam but their participation will be restricted to time keeping and observation. The advisor will not participate in the examination or discussion of outcome.

Following the completion of the oral examination, the student and advisor are excused from the room and the student's performance discussed by the committee. An initial anonymous ballot will be taken prior to discussion. 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. After any discussion the committee will conduct a final vote. The only allowable outcomes of the exam are pass or fail; a "marginal pass" or a "conditional pass" dependent on the student completing an assignment is not permissible. Once voting is complete, the entire committee informs the student and advisor of the results of the exam. In the case of a failed exam, the exam committee will make a recommendation to the Executive Committee whether the appropriate response is to allow the student to re-take the exam or there is sufficient cause for termination from the Program. The Executive Committee will be responsible for the final determination. Students who required two attempts to pass Part I of the qualifying exam must pass Part 2 of the qualifying exam on the first attempt and will not be given an opportunity for re-take. If a re-take is proposed, it must be scheduled to occur within 30 days of the original exam. Any student failing the re-examination will be recommended to the Dean for dismissal from the Ph.D. program but may, with the approval of the examination committee and advisor, petition the Executive Committee to change their course of study to one of a terminal Master's degree. If desired by the student, appeals can be processed as described above in Section B.1.

## **2. Application for Admission to Candidacy, Doctor of Philosophy**

All Cancer Biology students should apply for candidacy **as soon as** they complete preliminary degree requirements. Candidacy is a marker of program quality and reflects nationally and internationally on

program success. Failure to apply for candidacy at the appropriate time can delay fellowship continuation and in some cases graduation. **Note: Students cannot apply for candidacy and graduate in the same semester.**

To be eligible for candidacy, a student must meet the following requirements:

1. Complete all program requirements for candidacy: coursework and other training required by the degree program, including program required JPE training
2. Complete qualifying examinations required by the degree program
3. Complete TATTO 600, TATTO 605, and JPE 600 (also see item 1)
4. Resolve any Incomplete (I) or In Progress (IP) grades
5. Be in good standing with a minimum cumulative 2.70 GPA
6. Have earned at least 54 credit hours at the 500 level or above

Students must reach candidacy by September 15 of their fourth year. Students who do not meet this deadline will be placed on academic probation, will not be eligible for PDS funds, and may forfeit financial support. These sanctions will be lifted when the student is admitted into candidacy. The LGS Candidacy Signature Form is available on the Cancer Biology website and should be completed with required signatures and a copy of your most recent transcript from OPUS. The form and transcript are submitted on the LGS Student Online Action site: <https://shibboleth-idp.collegenet.com/idp/Authn/UserPassword>.

The candidacy policy is effective starting Fall 2017 (including students who participated in Early Start in Summer 2017). For students who entered their program prior to Fall 2017 they must reach candidacy no later than August 1 before their fifth year of study, and they will not be placed on probation if they fail to meet the candidacy deadline.

### **3. Peer-Reviewed First-author Publications**

An essential step towards completion of the PhD degree is the publication of a first-author peer-reviewed paper in a scientific journal. Except in very rare circumstances, there will be one **or more** first author, primary, peer-reviewed papers authored by the student that shall have been published or accepted for publication before the dissertation is written or the private defense is scheduled. Simple submission of a first-author manuscript for review at a scientific journal or online publication of a non-peer-reviewed pre-print service (e.g. bioRxiv) does **not** meet this expectation. The permission to defend form must be completed and signed by the advisor and DGS. Any exceptions to defense without an accepted first-author publication must be approved by the CB Executive Committee.

### **4. Written Dissertation document**

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 the dissertation document and schedule a private defense. *An Application for Degree* form (available on the LGS and CB Program websites) must be completed and submitted in the semester in which the degree will be awarded. The student must make petitions for exceptions in writing to the CB Program Director and DGS.

**Structure of the 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. After the dissertation has been read and approved by the dissertation research advisor, the student must give a hard or electronic copy to all members of the committee. The dissertation must be a complete professional document at this time, including cover page, table of contents, chapters with fully formatted citations, final figures with legends, reference section and pagination. The candidate will verify that the dissertation meets all graduate school requirements. *No sooner than two weeks* after distribution of the dissertation to the committee, the private defense will be held. This length of time should give committee members enough time to read the dissertation thoroughly before the meeting. The unanimous approval of this document by the student's dissertation committee is required to pass the private defense. Recommendations for substantive changes to the dissertation by committee members and revisions of it by the student must be made prior to the private defense. Requests for minor editing/corrections of the written dissertation may still occur at the private defense, and must have been completed before the public defense. All members of the committee must approve and sign off on the written dissertation prior to submission of the final document to the LGS.

## **5. Defense of the Ph.D. Dissertation**

After the written dissertation has been formally submitted and approved by the dissertation committee, the students have to complete a closed-session oral examination (private dissertation defense) and an advertised, public seminar of the research (public defense) before graduation.

a) Private dissertation defense. The oral examination (dissertation defense) takes place at the same committee meeting where the written dissertation is approved. Approval by the entire committee of both the written dissertation and oral defense are required. The committee has to receive, at least 2 weeks prior to the meeting, the formal dissertation document. The committee members will inform the student if any substantive changes to the dissertation are required, in which case the private defense will be postponed until they are completed. The private defense will start with a short (up to 20 min) professional presentation summarizing the dissertation. The examination then follows an oral examination format in which each committee member is given the opportunity to ask questions. The candidate must orally defend the dissertation and related areas to demonstrate an appropriate level of knowledge and expertise in research design and interpretation. At no time during the oral defense should the advisor answer questions posed to the student. After the defense, 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 and another private defense scheduled.

All committee members must be present for this final committee meeting/private defense. Video conferencing of committee members is acceptable if absolutely necessary. If due to extenuating circumstances a committee member misses the meeting, they must inform the DGS and meet individually with the student to both approve the written dissertation and perform an oral examination in the presence of the student's advisor.

After the unanimous approval of successful completion of the private oral dissertation defense, the student will complete all final changes to the written dissertation, and then is permitted to schedule the public seminar to be held no sooner than two weeks after the private dissertation defense.

b) Public dissertation seminar and defense. The dissertation seminar is a formal scientific presentation and public defense. The dissertation research advisor will formally outline the format of the seminar to the audience and introduce the student and their research in a manner similar to other research seminars. The format for the public seminar consists of a seminar (~45 minute) by the candidate that includes a broad introduction tailored to a public audience, an introduction to the specific topic of the dissertation project, a summary of the key findings, its significance, and future directions. After the student's presentation, the dissertation committee members can each ask questions in the presence of the audience. Subsequently, the presentation is open for questions from the public. The atmosphere should be one that encourages dissemination of scientific knowledge to the public and critical questioning so that the student can demonstrate his/her expertise in an open forum. The dissertation seminar tests the student's ability to communicate scientific information to a public audience and helps the public understand the research done at the university level. 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.

## **6. Dissertation Completion Time**

Students are expected to complete their dissertations and apply for their degrees within six years.

If a student has not completed the degree at the end of the seventh year, the program may grant a one-year extension. If a one-year extension is granted, the program will submit notice of this extension to the Dean, no later than August 1 of the seventh year (before the eighth year). The notice will contain a completion timeline signed by both the student and the dissertation committee chair or co-chairs. Students who enroll for this extension year will be responsible for some tuition, as detailed in the LGS handbook section 2.2.1 (A).

If a student has not completed the degree at the end of the eighth year, the student may continue work for at most one additional academic year and only with approval from the Dean. To obtain approval, the program will submit a request to the Dean no later than August 1 of the eighth year (before the ninth year). The request will (a) outline the reasons the student has not completed, (b) consider whether the student needs to repeat any part of the qualifications for candidacy or obtain approval of a new dissertation prospectus, and (c) present a detailed completion timeline signed by both the student and the dissertation committee chair or co-chairs. Students who enroll for this extension year will be responsible for some tuition, as detailed in the LGS handbook section 2.2.1 (A).

## **7. Report of Completion of Requirements for Doctoral Degree**

**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 website).**

## **H. Terminal Master's Degree**

Under certain circumstances, student in the doctoral CB program may request permission to terminate graduate study by completing the requirements for a terminal Master's degree. These include, for example, failure to pass Part 2 of the Qualifying exam. Based upon the student's

performance, as assessed at various times during the degree program, the Executive Committee may also recommend such action. The request to seek a terminal Master's degree should be made in writing to the Program Director. The Executive Committee in consultation with the dissertation advisor will make the decision. *It should be noted that there is no guarantee of continued stipend support once a student has declared an intention to seek a terminal Master's degree.*

Students may declare their intention to seek a Master's degree only after having passed Part 1 of the qualifying exam. When a student declares after passing Part 1, he/she should immediately discontinue enrollment in didactic coursework and Teaching Assistant Training and Teaching Opportunity (TATTO) activities. To remain in standing as a full-time student, the student must continue to enroll for the required number of credit hours of dissertation research. The student will have a maximum of one year from date of declaration (i.e. the end of the Spring semester of year 3) 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 2 of the qualifying exam) and having met all requirements for the doctoral program up to that point), 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 their intent to pursue a MS degree but fail to meet the requirements within the specified time will not be eligible to receive 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 1 of the qualifying exam, completion of a written Master's thesis, and an oral defense of the thesis research. Students seeking an MS degree are not required to participate in the TATTO program. A master's thesis committee must be formed as described for the dissertation committees in the doctoral program. The master's thesis must represent a scholarly body of work indicating a rigorously applied research effort and must minimally describe the significance of the research proposal, the hypotheses being tested, the experimental approach(es) undertaken, any data generated, conclusions drawn, and a proposal for future work. Both the written master's thesis AND its oral defense must be passed by the master's thesis committee before a degree is awarded. The decision by the master's thesis committee to award the degree must be unanimous. Attendance by the thesis committee members is sufficient for the Master's thesis oral presentation, i.e. there is no public defense.

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 dissertation committee must sign indicating their vote. The Program Director or Director of Graduate Studies must also sign this form. An *Application for Degree* form must also be completed and submitted to the GDBBS. These forms are available from the Laney Graduate School, the GDBBS office or the CB web site. Both signed forms must be returned to both the Division Office and the Laney Graduate School.

## **PART IV. CB GUIDELINES FOR THE COMBINED M.D./PH.D. DEGREE PROGRAM**

### **A. Participation in the CB Program**

MSTP students choose a dissertation advisor and a graduate Program under the guidelines of the MSTP. Unless otherwise specified, the MSTP student is expected to fulfill all the program and LGS requirements for the Ph.D. degree and to participate fully in the CB Program as outlined above. MSTP students are subject to the same rules outlined in the CB Guidelines. Because MSTP students enter the CB program after their M3 academic year, the course of study differs from that of PhD-only students. Curriculum guidelines are described below, but it is important that new students meet with the Director and/or DGS to assist in the development of a personalized training plan.

## **B. Coursework requirements**

MSTP students are admitted to the graduate Program in Advanced Standing and are expected to start graduate coursework/rotations after their M3 year after completion of Foundations of Medical Knowledge, in accordance with MSTP program guidelines. Under normal circumstances, specific core course (e.g., IBS 562 Cancer Clinical Colloquium) requirements are waived. MSTP students are required to take the CB core coursework, including Cancer Biology I and II (CB533/CB534) and Cancer Pharmacology (IBS761). MSTP students are encouraged to fulfill the Cancer Biology II requirement during the Spring M2 semester. MSTP students should also be enrolled in Advanced Graduate Seminar (CB790r) throughout their graduate training, including the Spring of the M2 year.

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

## **C. Teaching Requirement**

The teaching requirement of the Laney Graduate School is to be fulfilled by the end of the G2 year. MSTP students generally complete their TATTO and teaching requirements in year G2, but have the option to do so in G1 with approval from the DGS. Exceptions to meet this requirement beyond the G2 year will be granted on a case-by-case basis.

## **D. Timing of Qualifying Exams**

Part 1 of the Qualifying Examination will normally be taken at the end of the MSTP student's first year in graduate residence (i.e. at the end of G1), with the first year PhD students. Part 2 of the Qualifying Exam will be completed by the end of June, approximately one year after completion of the Part 1 exam (i.e. at the end of G2), on schedule with the 2<sup>nd</sup> year graduate students. Policies regarding the requirements for passing the exam and mechanisms for re-examination and appeal are as described above for the Ph.D. students.

## **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 the MSTP and CB standards as outlined above. 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 V. OTHER ACTIVITIES**

### **A. 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 and run CB and GDBBS symposia. Attendance and participation at the Winship Cancer Institute Scientific Symposium is mandatory for all CB students and attendance at the annual GDBBS DSAC symposium is very strongly encouraged. These activities are not eligible for formal credit, but add to a well-rounded graduate education and should be viewed as an opportunity to learn about work in other fields.

### **B. 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 Graduate Student Council, the Division and the Program. Forms are available on the CB web site.

### **C. Student 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, including the period between terms. The time between terms (along with Fall and Spring Break) is considered an active part of the training period. Students should discuss breaks with their DGS (if in the first year) or Dissertation Advisor (after advisor selection) and receive approval in advance. Breaks should typically be limited to two weeks per year. Unauthorized absences may result in an unsatisfactory research grade for the term (i.e., in fall, spring, or summer), and could thereby lead to probation.

### **D. Parental Accommodation Policy**

LGS Parental Accommodation Policy is for students with substantial parenting responsibility as a result of childbirth, care of newborn, or a newly adopted child. This policy guarantees PhD students a minimal level of accommodation during the transition of parenthood. For more information on the policy, eligibility requirements, and application procedure, go to the Laney Graduate School website.

### **E. Other Program Activities**

The students in the graduate program in CB are an integral and vital part of the CB community. As such, they are encouraged to participate in diverse activities such as help with the annual new student recruitment process, participate in the program annual retreat and other social events that build community and create professional networking.

### **F. Outside Employment**

Doctoral education demands full-time effort. Students receive stipends and tuition fellowships in order to allow them to commit the necessary time to their studies and research. Unrelated employment serves as a distraction and interferes with the ability of students to meet degree requirements in a timely manner. For these reasons, employment not directly related to students' degree requirements and professional development goals is strongly discouraged.

If additional income is absolutely necessary while a student is enrolled in the degree program, s/he must receive **prior** approval from her or his advisor and the Program Director/Director of Graduate Studies. The Program Director/Director of Graduate Studies has the prerogative to bring the request to the program's Executive Committee for discussion. Requests to work more than 10 hours a week require written approval from the GDBBS Director and then the Dean of the Laney Graduate School. Students who wish to request permission to seek employment should allow 30 days for review. In the rare cases in which approval is granted, students must ensure that employment does not interfere with research performance, progress toward degree, or any program requirements, including seminar attendance.

### **Student Support Services**

Graduate school can be a stressful time on your body and mind. Be sure you are taking care of yourself. Go to Laney Graduate School student support page and the LGS/GDBBS support page for links to all student support services available to you.

<https://www.gs.emory.edu/guides/students/support.html>

### **Office of Accessibility Services (OAS)**

"Emory provides all persons an equal opportunity to participate in and benefit from programs and services afforded to others. The Office of Accessibility Services (OAS), part of the Office of Equity and Inclusion, assists qualified students, faculty and staff with obtaining a variety of services and ensures that all matters of equal access, reasonable accommodation, and compliance are properly addressed." OAS "is committed to providing access to campus resources and opportunities to allow students with disabilities to obtain a quality educational experience."

Qualified students need to register with OAS and make a request for services. Confidentiality is honored and maintained.