EVMS School of Health Professions

Biomedical Sciences
PhD Program

Student Handbook

2018-2019

Last Revised July 30, 2018
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WELCOME

The Biomedical Sciences PhD Program at Eastern Virginia Medical School (EVMS) provides students with a foundation of biomedical science knowledge and intensive laboratory research training. Following two or three laboratory rotations in the first year, the student chooses an advisor and develops a dissertation research project. Focused research in the student’s chosen area of interest and advanced courses both broaden and deepen understanding of related research areas. Students are taught how to formulate research projects through the preparation of proposals, completing the candidacy exam at the end of the second year, and writing and defending a dissertation proposal by the end of the third year. Dissertation research continues under the guidance of an advisor and a faculty committee until a body of original, publishable work has been completed, written and defended.
KEY PROGRAM CONTACT INFORMATION

The program is administered by the Program Director and the Executive Committee. The Executive Committee is composed of the Program Director, Admissions Committee Chair, Curriculum Committee Chair, and Biotechnology Program Manager. The Biomedical Sciences Program Office at EVMS provides administrative support for the program.

Program Director
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PROGRAM POLICIES

THE HONOR SYSTEM

The EVMS Honor System is based upon the integrity of the individual. This system assumes that the student will accept his or her role in the EVMS community with self-respect and duty. Lying, cheating, and plagiarism will constitute violations of the Honor System.

Each piece of work submitted by a student is to be his or her own work unless prepared under other conditions specified by the course director. Enforcement of the Honor Code in the classroom is a responsibility shared by faculty and students. Instructors may, at their discretion, exercise the options of proctoring all types of examinations or arranging for others, including students, to proctor such examinations.

EVMS LABORATORY TRAINING REQUIREMENTS

Students participating in research at EVMS must complete the laboratory safety training required by the Office of Research. Required training includes Autoclave Safety, Chemical Hygiene, Biosafety, and Animal Research (CITI “working with the IACUC” and mouse modules). Information on these training courses will be given during orientation for new students and may also be obtained from the Office of Research. Depending upon the laboratory the student joins for their main research focus, it may be necessary to complete additional training requirements.

EVMS SCIENTIFIC MISCONDUCT POLICY

Students participating in research at EVMS must be familiar with and follow the EVMS Guide on Scientific Misconduct. Copies of the Guide are available from the Office of Research.

EVMS PATENT POLICY

Students participating in research at EVMS should be familiar with the EVMS Patent Policy. Copies are available from the Office of Technology Transfer, 446-7112.

STUDENT DISABILITY SERVICES DISCLAIMER

EVMS is dedicated to providing reasonable accommodations to qualified students with a documented disability. The student must self-identify with the Office of Student Disability Services as having a disability to begin the accommodation process. It is in the best interest of the student to begin the accommodation process as soon as you are aware that you may need them, as accommodations are not retroactive. All students must be able to fulfill the academic and technical standards of their academic program with or without reasonable accommodations; however accommodations are made available to aid in fulfilling those standards, not to waive them. If you have, or believe you have, a disability for which you wish to request accommodations under the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, you must contact the EVMS Disability Officer:
For more information about the disability accommodations process, please visit:
http://www.evms.edu/education/additional_resources/disability_guide_for_students/

PROGRAM RESIDENCY
All students must spend at least two subsequent semesters of residency at EVMS, during which they must be enrolled full-time.

STUDENT HEALTH INSURANCE
All students enrolled in the program are required to have a health insurance policy with major medical and surgical coverage. Students may either acquire individual insurance or sign up for the EVMS student health insurance policy. Those with individual or other group policies must obtain a waiver from the EVMS policy by filling out a form online by the appropriate deadline with the Human Resources office.

FINANCIAL AID
Financial Aid, including stipends and loans, is available to Biomedical Sciences Program PhD students. Please refer to the EVMS Graduate Student Compensation Policy for stipend levels (Appendix H). Questions on financial aid should be directed to the Office of Financial Aid. Since PhD students are paid a competitive stipend and pay no tuition or fees, student borrowing for the PhD program is not generally recommended.

OUTSIDE EMPLOYMENT
Full time PhD students supported by fellowships or stipends are not permitted to seek employment outside the program. In exceptional situations, short term laboratory, research or teaching jobs may be permitted, but jobs requiring significant time away from the research laboratory will not be allowed, and such employment may result in loss of stipend support. Any student considering outside employment must first obtain the approval of his/her Advisor and the Program Director.

ATTENDANCE POLICY
1. **Unexcused absences from classes will not be allowed.** Course directors reserve the right to subtract credit points for unexcused absences to the extent specified in the syllabus for each course. Absences may be excused, at the discretion of each course director, if the student contacts the course director within 24 hours after the missed class. Documentation of illness or other emergencies may be requested at the discretion of the course director.

2. **Anticipated excused absences from an exam will require the student to take the exam before the rest of the class.** Eligibility to take a make-up exam or change the date of a
scheduled exam will require documentation stating the reason for the absence. At the discretion of the course director, the make-up exam may have a different format and version than from the regularly scheduled exam. If the course director deems the excuse to be inappropriate, the course director may bring the issue to the Biomedical Sciences Curriculum Committee. The Committee will determine the eligibility of the student to be granted a make-up exam.

GRADING POLICIES

Grading Scale

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 94</td>
<td>A</td>
</tr>
<tr>
<td>93 - 90</td>
<td>A-</td>
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<tr>
<td>89 - 87</td>
<td>B+</td>
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<td>86 - 84</td>
<td>B</td>
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<td>83 - 80</td>
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<td>69 - 67</td>
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<tr>
<td>66 - 64</td>
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<tr>
<td>63 - 60</td>
<td>D-</td>
</tr>
<tr>
<td>59 or less</td>
<td>F</td>
</tr>
</tbody>
</table>

Pass/Fail Courses

A graduate student may earn pass/fail credit only in those courses so designated. At this time, only Research (BP898) and Dissertation (BP899) are designated as a Pass/Fail course.

Course Syllabi

Course Directors will provide students an official Course Syllabus (approved by the School of Health Professions Curriculum Committee) on the first day of class. The syllabus should be also be posted on the course’s Blackboard shell, and handed out or emailed to students. The Syllabus must include a (1) a Late Work policy for assignments and take-home exams; (2) Grading Policies (e.g., how much each exam, quiz, assignment and participation will count) and a Grading Scale (see above). Please ask the course director if you have any questions!
Incomplete Grades

The grade “I” indicates assigned work yet to be completed in a given course or an approved absence from the final examination. When an instructor assigns a grade of “I,” a written agreement is prepared and signed by the instructor and student that specifies the work remaining to be completed and the time frame for doing so. The work should be completed as soon as possible, but not later than the mid-point of the following grading period/semester unless special written approval is granted by the Course Director and Program Director for extraordinary circumstances. The student must petition the Course Director and the Program Director for such an extension at least two weeks before the end of the agreed upon deadline. Unless an extension has been approved by the Course Director and the Program Director, the “I” will convert to either an “F” or the grade as specified in the written agreement after the mid-point of the semester. An “I” grade may not be changed to a “W” under any circumstances.

Withdrawals

A student can withdraw from a course up until the mid-point of the grading period/semester and receive a W grade. Withdrawal after the midterm is not permitted without special approval by the Program Director. However, in the event of an illness or severe hardship beyond the student’s control, the student should submit a written petition for permission to withdraw from the course to the instructor and program director no later than the last day of classes. If permission is granted by the Program Director, a grade of W is recorded. If permission is not granted, then the student cannot withdraw from the class. A student who stops attending classes without withdrawing is assigned a WF grade unless the student’s performance was failing, in which case a grade of F will be assigned.

1. The deadline for withdrawal from courses will be the mid-point of the semester, or the midpoint of courses that run for a portion of the semester.

2. The student will fill out a Course Withdrawal Form, which must be signed by the student’s advisor and the Program Director.

3. Any change in student status (e.g., from full time to part time; leave of absence; withdrawal) requires submission of a Student Status Change Form. Students receiving financial aid must confer with the Office of Financial Aid if their student status changes.

MINIMUM ACADEMIC STANDARDS

To remain in good academic standing, the student must:

1. Maintain a cumulative GPA of 3.0 or greater on a four point scale. All required courses must be passed with a grade of C- or better. Grades below a C- will require remediation of the grade or repeating the course. **A student must have a cumulative GPA of 3.0 or better to receive the PhD degree.** Grades in courses accepted for transfer credit are not counted in the computation of grade point average. Grade reports are available online.
2. Pass the qualifying exam, the candidacy exam, and have the dissertation proposal approved within the time frames specified below.

3. Select an Advisor and a laboratory for dissertation research by June 1 of Year 1. The Program Director, Initial Guidance Committee, and faculty will assist the student in identifying an appropriate laboratory. Selection of an off-campus advisor by PhD students is strongly discouraged and will only be approved in exceptional circumstances. PhD students wishing to do their dissertation research in a non-EVMS laboratory must obtain the permission of the Program Director and, if approved, must also identify a suitable co-advisor from the Biomedical Sciences faculty at EVMS. The student must select a Guidance Committee of at least four EVMS Biomedical Sciences Program Faculty by August 15 of the first year, and the Guidance Committee form must be submitted by August 31.

4. Extenuating circumstances: If the student believes there are extenuating circumstances why his/her performance has not met the minimum requirements of the program, he/she may submit a written petition to the Program Director. The Program Director will present the student’s petition to the Executive Committee. Considering their recommendations, the Program Director will reach a decision and inform the student in writing. If the student’s petition is rejected, the student will be subject to probation or dismissal from the program, as appropriate. Please refer to Health Professions policies for appeals/grievance procedures.

TRANSFER CREDITS

Requests to transfer graduate credits from another accredited US or Canadian institution are considered on an individual basis after students are admitted to the EVMS Biomedical Sciences Graduate Programs. International credits are reviewed on a case-by-case basis.

A student may transfer up to 12 graduate credit hours, if all of the following conditions hold:
- Graduate course credits were completed at an accredited US or Canadian institution and reflected on an official transcript;
- Transfers can feasibly occur within the matriculation limit of this Program;
- The grade earned is a ‘B’ or better; and
- Credits for the course were completed at a regionally accredited school or program in Biomedical Sciences.

All transfer requests must be made no later than one full term prior to graduation from the Program.

Students wishing to request graduate credits to be transferred into the Biomedical Sciences Graduate Programs must submit a copy of the syllabus for the course and a Transfer
Approval Request Form to the Program Director, who will consult with teaching faculty as appropriate.

Requests are subject to the approval of the Program Director. Approved transfer grades are included on a student’s transcript; however, transfer grades are not included in semester or cumulative GPA calculations.

ACADEMIC WARNING

An academic warning may be issued to a student who fails to meet program requirements, or who misses deadlines for submission of required forms, course evaluations, etc. An academic warning will become part of a student’s academic record. The Program Director will send the student a letter informing them of the requirements they have failed to meet, describing how they may fulfill the requirements, and indicating further actions that may be taken (e.g., academic probation) if the requirements are not met.

ACADEMIC PROBATION

1. If the cumulative GPA falls below 3.0, or if a student fails to meet program deadlines as specified in this Handbook, does not submit course evaluations in a timely manner (see Course Evaluations), or is not making adequate progress in dissertation research (see Appendix B, Section 6), the student may be placed on academic probation. Probation serves as a warning that grades and/or research productivity must improve if dismissal is to be avoided.

2. No student may remain on probation more than two consecutive semesters. Failure to attain a cumulative GPA of 3.0 after two semesters of probation will result in dismissal from the program. Students dismissed from the program are not permitted to take additional Biomedical Sciences courses at EVMS.

3. A student must make academic progress during the first semester on probation (e.g., the GPA must increase) or be subject to dismissal from the program.

4. Any student who is placed on academic probation twice will be dismissed from the program unless there are extenuating circumstances as determined by the Program Director as advised by the Executive Committee.

The Program Director will make every reasonable effort to notify students of their academic status. A letter will be mailed to each student placed on probation or dismissed from the program. Since mail may be delayed or misdirected, it is the responsibility of every student whose GPA falls below 3.0 to check with the Program Director to determine his or her academic status. Non-receipt of a letter by a student placed on probation or dismissed will not be grounds for claiming eligibility to enroll for a subsequent semester.
MISSING DEADLINES

Meeting deadlines of the Program will help students develop professionalism. Students who fail to submit required documents or forms or to register for courses more 2 weeks after the deadline will be placed on academic warning, and if the requirement is not completed 4 weeks after the deadline, the student will be placed on academic probation. These actions will become part of the student’s permanent academic record. Continued failure to meet deadlines for an additional 2 semesters will result in further disciplinary action, up to and including dismissal from the program.

DISMISSAL

No student may remain on probation more than two consecutive semesters. Failure to attain a cumulative GPA of 3.0 after two semesters of probation will result in dismissal from the program. Students dismissed from the program are not permitted to take additional Biomedical Sciences courses at EVMS.

APPEALING DISMISSAL

Reinstatement is generally not allowed, but special cases may be considered after a written appeal by the dismissed student to the Dean of the School of Health Professions, who will confer with the Executive Committee. Written appeals must explain (1) why the student is likely to succeed if reinstated, (2) how any deficiencies or extenuating circumstances have been resolved, and (3) present a plan for finishing the program.

CURRICULUM POLICIES

Continuous full-time registration is expected of all students in the program. A full-time course load is a minimum of 9 credits in the Fall and Spring, and 6 credits each Summer. Students must receive approval from the Program Director in advance for permission to register for less than 9 credits in the Fall or Spring, and 6 credits in the Summer, or for more than 14 credits in the Fall or Spring semesters. The exception to this policy is the Spring semester of Year 1, where a PhD student may register for a third rotation, bringing the credit total to 16 for this semester.

Finishing Requirements

Biomedical Sciences PhD students are required to defend their thesis within 6 months of leaving campus. The final dissertation must then be turned in within 6 months of the defense. If the student does not follow this timeline, no degree will be granted.

It is highly recommended that the student fulfill all requirements prior to leaving EVMS!
Turnitin Program Scanning of Major Writing Assignments

PURPOSES
1. To teach students proper ways to cite and use material from others’ work.
2. To teach students the difference between citation, quotation, and plagiarism.
3. To ensure that students’ writing assignments do not contain plagiarized material.

PROCEDURE
1. Students will be taught how to use the Turnitin program to ensure they have not unintentionally plagiarized.
2. Turnitin reports showing little or no similarity to published work or internet sources identified by the program must be submitted along with the following major writing assignments:
   a. Exam essay questions as requested by Course Directors
   b. Research proposal for Scientific Writing and Research Design (Spring of Year 1)
   c. Candidacy Exam (Spring of Year 2)
   d. Dissertation Aims Page, Dissertation Proposal (Fall of Year 3)
   e. Dissertation
3. Short phrases or standard descriptive wording of concepts or lists of items are acceptable, even if they are identical to phrases in published works of others.
4. Phrases or sentences longer than a few words that are very similar to published material, or which have had a small number of words changed, will not be allowed. Students must put ideas into their own words, even if the ideas come from published work (which should be properly cited).
5. Quotation should be discouraged, except in rare instances when a quotation is unique, historical, or expresses a new and important idea.
6. All results or ideas of others should be properly cited. The correct article(s) and/or book chapter(s) in which the results or ideas were published should be cited for each of these.
CURRICULUM (SNAPSHOT OF COURSES AND SEQUENCE)

Year 1

All students will take the following courses in Fall and Spring:

**FALL SEMESTER**
BP 700: Molecules to Cells 2 credits  
BP 701: Molecular and Cellular Techniques 2 credits  
BP 818: Introduction to the Laboratory 2 credits  
BP 703: Cell Communication and Signaling 3 credits  
BP 704: Molecular Genetics 1.5 credits  
BP 819: Lab rotation I 2 credits  
**Total Credits** 12.5 credits

**SPRING SEMESTER**
BP 706: Cell Energetics and Organ Function 5 credits  
BP 781: Applied Biostatistics and Bioinformatics 5 credits  
BP 708: Oral Communication Forum 1 credit  
BP 820, BP 821: Lab rotations II, III 2-4 credits  
**Total Credits** 13-15 credits

**SUMMER SEMESTER**
BP 898: Research 6 credits  
**Total Credits** 6 credits

**Laboratory Rotations**

All students will complete at least two eight-week laboratory rotations (BP 719, BP 720, in two different laboratories) during Fall and Spring of Year 1. Each laboratory rotation will consist of a minimum of 120 hours of laboratory work **(15 hours per week)**. A third rotation (BP 721) is optional in the second half of the Spring semester.

**Qualifying Exam**

Students who do not maintain A’s or A-’s in first year courses will be required to take the Qualifying Exam in the Summer after Year 1. Further details of this Exam are described [below](#) on page 16.
Year 2

**FALL SEMESTER**
- BP 771: Methods & Logic in Translational Biology 4 credits
- BP773: Responsible Conduct in Science 1 credit
- BP 708: Oral Communication Forum 1 credit
- BP 709: Scientific Writing and Research Design 1 credit
- BP898: Research 3 credits
- Electives (2-3 credits, as available) 2-3 credits

**Total Credits** 10-13 credits

**SPRING SEMESTER**
- BP 708: Oral Communication Forum 1 credit
- BP898: Research 3-9 credits
- Electives (2-6 credits, as available) 2-6 credits

**Total Credits** 9-13 credits

**SUMMER SEMESTER**
- BP 798: Research 6 credits

**Total Credits** 6 credits

**Advanced Elective Courses**

1. Biomedical PhD students should enroll in at least 6 credits of advanced elective coursework.
2. The student’s advisor must meet with the student to discuss which course(s) would best serve the student’s educational interests.
3. The advisor must email the Program Director to inform him or her that they have discussed the requirement with the student.
4. The student and advisor must specify the advanced course(s) chosen (at least 2 credits) which the student will take, which will better serve their training. Alternative advanced courses include Special Topics (independent study with the advisor or other faculty); courses from other EVMS programs, and Biotechnology Program courses listed in the Handbook; and appropriate graduate courses at ODU or NSU.
5. Please take time to plan in advance, as not all elective courses are offered every semester. Some may not be offered more frequently than every other year. Additional electives may become available after the publication of this Handbook, and be available to students after they are formed.
BIOMEDICAL SCIENCES GRADUATE COURSES

BP762: Advanced Molecular and Cellular Techniques* (Spring) 2
BP728: Proteomic Technology (Spring)* 2
BP727: Genomics and Microarray Technology (Spring)* 2
BP795: Special Topics Varies
BP 780: Writing Elective 1

*An additional laboratory fee will be charged for these Biotechnology Master’s courses

OTHER EVMS/ODU/NSU COURSES

MPH 614: Principles of Epidemiology 3
MPH 727: Organizational Management 3
MPHE 624: Data Management with SAS 3
MPHE 737: Infectious and Chronic Disease Epidemiology 3
MPHE 501: Instructional Methods 3
MALS 502: Comparative Anatomy and Physiology (online) 3
RCS 806: Developmental Biology (online) 3
CS 723/823: Introduction of Bioinformatics (ODU) 3
Introduction to Genomics and Bioinformatics (ODU) 3
Computational Biology (ODU) 3
Advanced Bioinformatics (ODU) 3
Practical Computing for Biology (ODU) 3
Chromosome Biology and Human disease (ODU) 3

NOT ALL ELECTIVE COURSES ARE OFFERED EACH SEMESTER OR EACH YEAR

Candidacy Exam
See below and Appendix D for a more detailed description and timeline of this exam.

Years 3 to End of Program
BP 708: Oral Communication Forum, BP898: Research, and BP899: Dissertation
DETAILED CURRICULUM

Year 1: Basic Biomedical Sciences and Research Skills

The Incoming Faculty Mentor or Program Director will advise each student about required coursework. During the first year, the student must satisfactorily complete all required courses, including two laboratory rotations. Up to 12 credits of graduate courses taken at other institutions may be transferred into the curriculum of each student at the discretion of the Initial Guidance Committee (see Appendix B for description of this committee’s role).

Students will meet with the Initial Guidance Committee in the Spring Semester of Year 1 to advise them on laboratory rotations and choosing an Advisor.

RESEARCH LABORATORY ROTATIONS

Each student must complete two research laboratory rotations during the first year in the Program, each in a separate laboratory.

1. PhD students must choose laboratory rotations based on oral presentations or abstracts provided to them by the faculty in the fall semester of the first year. PhD students may ONLY rotate in laboratories able to train and financially support a PhD student. A list of faculty mentors who meet these requirements will be provided to first year students by the Program Director.

2. Each laboratory rotation will be for an 8 week period and requires at least 120 hours of lab time (15 hours/week). Given the course load during the first year, it is recommended that students not spend more than 20 hours/week in the lab.

3. The rotations must be completed by the end of the first year.

4. Waivers of rotations or exceptions to this policy must be requested by the student in writing and approved by the Program Director or designee in advance of the rotation period in question. An example of an exception that may be approved would be for a student who enters the program with previous graduate training and who has identified a specific research interest. Such a student may be allowed to begin and continue research in an appropriate laboratory. Students who have identified a laboratory after two rotations will be allowed to do a third rotation in a different laboratory to learn specific techniques.

QUALIFYING EXAM

The Qualifying Exam is taken after the Spring of Year 1 (late June or July) as directed by the Curriculum Committee. The Exam will assess comprehension and integration of the concepts and knowledge learned in Year 1 courses. Students who earn all A’s or A-’s in their major first year courses (Molecules to Cells, Molecular and Cellular Techniques, Cell Communication and Signaling, Molecular Genetics, Cell Energetics and Organ Function, and Applied Biostatistics & Bioinformatics) will be exempted from the Qualifying Exam. Those with lower grades will be examined only in areas in which course grades were lower than A-. Students who completed equivalent courses in another graduate program may be exempted from the exam at the
discretion of the Initial Guidance Committee. Students who fail the Qualifying Exam twice will be dismissed from the PhD Program; however, the Executive Committee may admit such a student into the Biomedical Sciences Research Master’s Program.

ADVISOR & GUIDANCE COMMITTEE

By June 1 following the completion of Year 1, each student will select a Dissertation Advisor. With the help of the advisor, the student will select a Guidance Committee, chaired by the Advisor, by August 15. It is recommended that the Incoming Faculty Mentor be considered when developing the Guidance Committee in order to maintain continuity in the student’s training. The Guidance Committee must include at least 4 members of the Biomedical Sciences Program Faculty (see Appendix I). The Committee should advise the student on additional advanced elective courses for the second year, and will guide the student in their research project. Please submit the signed “PhD GUIDANCE COMMITTEE” form to the Program Office by August 31.

For more details in the roles of the Dissertation Advisor and Guidance Committee, and the functions they perform, please see Appendix B.

HOURS IN THE RESEARCH LABORATORY

Research is a full-time job and students should be highly motivated, without a requirement for a minimum number of hours to be worked. After the first year, students are required to be in their research laboratories full-time and should work a minimum of 40 hours per week, minus required class attendance hours. To make progress in their research, most students will find it necessary to work longer hours, including evenings and/or weekends.
Year 2: Specialization

During Year 2, the student will satisfactorily complete both the remaining required courses, as well as elective courses approved by their Research Advisor and/or Guidance Committee.

CANDIDACY EXAM

During the Spring of Year 2, students in the PhD Program will complete the Candidacy Exam (detailed instructions and timeline in Appendix D). In order to be eligible for this Exam, the student must have a GPA of 3.0 or better. A student with a GPA below 3.0, or one who is put on Academic Probation for failure to meet other program requirements, will not be allowed to take the Candidacy Exam until he or she is no longer on Academic Probation. This Exam must be successfully completed by July 1, including any portions that must be retaken. If not completed successfully by this date, the PhD student will be dismissed from the PhD Program, but would have the option of earning a Research Master’s degree if their research and coursework performance is satisfactory and all requirements for this degree have been met.

Students in the PhD Program who complete Year 2 coursework with a cumulative GPA of 3.0 or higher, and pass the Candidacy Exam may proceed with Dissertation Research.
Year 3: Dissertation Proposal

During Year 3, students in the PhD Program will engage primarily in Dissertation Research. However, students may continue to take additional coursework if the student’s Dissertation Advisor agrees.

DISSERTATION PROPOSAL

PhD students must submit a Proposal of their Dissertation Research to their Guidance Committee and receive approval no later than December 15 of Year 3. Detailed instructions and the timeline for this requirement can be found in Appendix E.

A Specific Aims page must be approved by the student’s Committee by August 15 of Year 3. The standard format for the dissertation proposal is that used for NIH F31 grant applications. However, alternative formats for students applying for external fellowships may be accepted at the discretion of the Guidance Committee.
Year 4 to Completion of Program:

Students will complete the Required Activities for Biomedical Sciences PhD Students as indicated on page 27.

Before completing the Program, the student must register for 6-9 credits of “Dissertation” in their final semester. This is decided upon meeting with the Guidance Committee to discuss the student’s readiness for this step. The form “PERMISSION TO TAKE THE PhD EXAMINATION” must be signed by the student’s Guidance Committee members before the student will be allowed to register for “Dissertation” credits. When this form has been approved, the student will be exempted from Oral Communication Forum for the remainder of the Program.

If a student does not complete and submit their dissertation to their committee and the program office 30 days prior to the start of the new semester, they will be required to register for BP899.

Please see “Final Steps to Graduation” (Appendix F) for a detailed description of the process of finishing requirements for the PhD degree, including writing, defending, and submitting the Dissertation.

It is expected that a well-prepared and highly motivated student can complete the PhD Program within six (6) years. All requirements for the doctoral degree must be completed within eight (8) calendar years from the date of matriculation into the doctoral program. Exceptions must be approved by the Program Director and the Dean of the School of Health Professions. Students whose graduate study is interrupted by military service will be granted an extension of this limit for the period of their military service, not to exceed 5 years.

Research Credits

All students must complete a minimum of 18 credits of Research (including credits from Lab Rotation III [BP821], if taken in the laboratory of the advisor), and Dissertation [BP899] over the course of their tenure in the Biomedical Sciences PhD Program.
REQUIRED ACTIVITIES FOR BIOMEDICAL SCIENCES RESEARCH PHD STUDENTS

Individual Development Plan (IDP)
An IDP must be completed annually by each student, second year and above. The purpose of this form is to aid the student in developing their career plan, and explore their goals as they develop as scientists over the course of the program. By submitting this plan each year, both student and mentor have the opportunity to revisit the student’s goals, and make changes to the student’s path as needed. The student will submit the form to the their advisor. The student and advisor will then meet to review the student’s career goals and the progress they are making towards them. The final plan will be approved by the advisor, and must be submitted to the Biomedical Sciences Program office in mid-December (end of Fall semester).

Documented Seminar Attendance
Students are required to attend EIGHT (8) basic science seminars, rather than clinical presentations, given by faculty-level scientists at EVMS, ODU, LifeNet Health, and other local biotechnology companies. Students must submit a form including a paragraph describing the seminar, which must be signed by a member of the Biomedical Sciences faculty certifying that the seminar qualified and that the student attended the seminar. Please submit forms to the Program Office monthly. Students who do not submit forms within 2 weeks of the end of the Spring semester will be placed on academic warning, and if the forms are not submitted 4 weeks after the end of the Spring semester, they may be placed on academic probation.

Attendance at Research Day, Graduate Student Research Conference
Attendance at Research Day (mid-October) and Graduate Student Conference (Spring) is required, and will be documented with a sign-in sheet.

Annual Oral Presentation of Research
The student should present their research at a venue outside of their own laboratory research group at least once annually. Possible venues include graduate student research conference, regional and national meetings, departmental seminars or chalk talks, and interest groups (e.g., diabetes/obesity). Presentations to the Guidance Committee or during BP 708 do not count towards this requirement. This requirement applies to PhD students in their second year and beyond. Presentations should be documented on the Oral Presentation Form, which is to be signed by the student’s advisor. Please submit signed forms to the Program Office within two weeks of giving the presentation.

Course Evaluations
Students are REQUIRED to submit course evaluations for all courses taken. Students who do not submit course evaluations within 2 weeks of the end of a semester will be given an academic warning, and if the evaluations are not submitted 4 weeks after the end of a semester, they will be placed on academic probation. These actions will become part of the student’s permanent academic record. Continued failure to submit course evaluations by the deadline for an additional 2 semesters may result in further disciplinary action, up to and including dismissal from the program.
POLICY FOR BIOMEDICAL SCIENCES STUDENTS WISHING TO LEAVE A LABORATORY:

1. A conflict or problem that cannot be resolved between an advisor and a student should be reported to the Program Director by either party.

2. The Program Director (PD) will meet with the student and advisor to try to resolve the problem.

3. If the problem is not resolved, the student and advisor will be required to meet with the student’s Dissertation Committee and the PD or other EVMS officials, as appropriate.

4. If, after attempts to resolve the conflict or issue, either the student or the advisor wishes to terminate the mentoring relationship, a written request must be submitted to and approved by the PD. The request should give reason(s) why the mentoring relationship should end.

5. An advisor who wishes to dismiss a student from the laboratory must give a PhD student written notice at least 90 days before stipend support can be suspended. The student is expected to continue to work in the laboratory during this period, unless extenuating circumstances prevent it. Waiver of this requirement must be approved by the PD.

6. If the student wishes to leave a laboratory, the advisor and the PD must receive written notice of termination of the mentoring relationship. The student will leave the lab at a date mutually agreed on by the student and the advisor, but the maximum time after giving the PD written notice will be 90 days. The student will continue to perform research in the mentor’s laboratory until the termination date.

POLICY FOR PHD STUDENTS DESIRING AN M.S. DEGREE

Students in good standing in the PhD program who have completed the requirements for the Biomedical Sciences Research M.S. degree may request, with justification of appropriate need, that they be awarded the M.S. degree prior to completion of the PhD. An example of need would be a requirement for a graduate degree to qualify for a position to be taken after completing the PhD degree. Students who withdraw from the PhD program or are dismissed due to unsatisfactory progress in the research component as determined by the Dissertation Committee, but who have completed the requirements for the M.S. degree, may also request that they be awarded the M.S. A student requesting the M.S. should write a justification and submit the request for approval first to the Advisor, then, if approved by the advisor, to the Dissertation Committee, and finally to the Program Director. Eligibility for the M.S. degree will be determined by the Program Director. If the request is approved by the Advisor, Dissertation Committee, and Program Director, the student will be awarded the M.S. degree with the non-thesis option. However, a student who is leaving the PhD program may request permission to write an M.S. thesis and defend it, with the approval of the student’s Dissertation Committee.
APPENDIX A: STUDENT CHECKLIST: BIOMEDICAL SCIENCES PHD DEGREE PROGRAM

FALL SEMESTER – YEAR 1

☐ READ the Biomedical Sciences PhD Program Handbook. Program Forms are found on the Program’s web page.

☐ Set up laboratory rotations in advance. Rotations should be chosen based on the student’s interests and the ability of the laboratory to support the student’s stipend after Year 1.

☐ December 31: Submit Fall Course Evaluations.

SPRING – YEAR 1

☐ Complete all required courses two to three Laboratory Rotations

☐ Meet with Initial Guidance Committee regarding lab rotations and choice of Advisor

☐ May 31: Submit Spring Course Evaluations and Seminar Attendance Forms.

SUMMER SEMESTER – YEAR 2

☐ June 1: Select a Laboratory for Dissertation Research and inform Program Office.

☐ Complete qualifying exam, if required.

☐ August 15: Establish Guidance Committee and get approval for advanced courses.

☐ August 31: Submit Guidance Committee form to the Program Office.

FALL & SPRING SEMESTER – YEAR 2

☐ Complete Advanced Coursework

☐ Meet with Guidance Committee in the Fall Semester; Submit “RECORD OF GUIDANCE/DISSERTATION COMMITTEE MEETING” form and minutes of meeting to Program Office within 2 weeks of the meeting.

☐ December 15: Submit First Individual Development Plan to Program Office.

☐ December 31: Submit Fall Course Evaluations.

☐ April 15: Initial Candidacy Exam must be taken. If Exam must be retaken, this requirement must be completed in its entirety by July 1.

☐ May 1: If passed the first time, the final, revised Candidacy Exam document must be submitted to Program Office with signed form indicating the requirement is successfully completed.

☐ May 31: Submit Spring Course Evaluations and Seminar Attendance Forms.

☐ July 1: If exam is taken twice, the final, revised Candidacy Exam document must be submitted to Program Office with signed form indicating the requirement is successfully completed.

YEAR 3

☐ August 15: Dissertation Proposal Specific Aims page must be written, defended, and approved by the Guidance Committee, with the signed form submitted to the Program Office.

☐ November 10: Dissertation Proposal should be submitted to the Guidance Committee no later than this date to ensure time to review prior to defense.
December 1: Dissertation Proposal should be defended by this date.

December 15: Dissertation Proposal should be completed, defended, and approved. The signed form, and an electronic copy of the proposal, should be submitted to the Program Office.

December 15: Submit 2nd Individual Development Plan to Program Office.

December 31: Submit Fall Course Evaluations.

May 31: Submit Spring Course Evaluations and Seminar Attendance Forms.

YEAR 4 TO END OF PROGRAM

Register for, and take, Oral Communication Forum (Fall and Spring only) and Research credits (all semesters) each semester until final semester.

December 15: Submit Individual Development Plan to Program Office each year.

December 31: Submit Fall Course Evaluations each year.

May 31: Submit Spring Course Evaluations and Seminar Attendance Forms each year.

Hold Guidance Committee meeting EACH YEAR!

Complete research.

Submit manuscript(s) for publication. One first author journal article in a mid-tier journal must be accepted for publication before the student may receive the PhD degree.

Submit “PERMISSION TO TAKE THE PhD EXAMINATION OR REQUIREMENT” form to Program Director.

For format of Dissertation, see the “Guide for Preparation of Theses and Dissertations” available from the Program office.

Final copy of dissertation submitted to the Dissertation Committee at least 3 weeks prior to the defense. The date, time, and place of the defense, as well as the title of the dissertation must also be given to the Program Office at this time.

Submit an electronic copy of the Dissertation to the Program Office 2 weeks before the defense to check formatting. Submit Turnitin report; Make corrections; both documents must be approved by Program Director.

Present seminar and defend dissertation; submit “RESULT OF PhD EXAMINATION OR REQUIREMENT”

Revise dissertation and obtain approval/signature of committee members

Submit the Dissertation Acceptance and Processing form to the Program Administrator. The original and 1 or more copies must be delivered to the bindery by the student. Return the receipt. Return one copy of the bound dissertation to the Program Office for submission to the EVMS Library, and provide one copy to the Advisor.

Exit Interview with Program Director (required) before leaving campus.

Graduation Ceremony (optional)
APPENDIX B: GUIDANCE COMMITTEES

FIRST YEAR ADVISOR

The Program Director, along with an assigned mentor (Incoming Faculty Mentor), will serve as the Advisor for first year students.

INITIAL GUIDANCE COMMITTEE

The Initial Guidance Committee consists of the Executive Committee of the Program, or other faculty members appointed by the Program Director (including the student’s Incoming Faculty Mentor). The Guidance Committee will counsel first year students about required and elective coursework and choosing an advisor for their research.

The roles of the Initial Guidance Committee include:

1. Determine the student’s academic background.
   
   The Program Director will review the student’s previous training and identify any previous graduate courses that may be substituted for required courses. The Program Director will present recommendations to the Initial Guidance Committee prior to the beginning of fall semester.

2. Determine the student’s objectives in the program and career goals.
   
   The student’s objectives in the program and goals upon graduation are related. It is essential to know these goals to schedule appropriate coursework and to give guidance concerning research and training opportunities at EVMS.

3. Provide guidance to satisfy the student’s goals while meeting all the program requirements.
   
   In the Spring Semester of Year 1, the Initial Guidance Committee will meet with the student to review the student’s goals and assist the student in selecting the appropriate research advisor.

4. Counsel the student in the early phases of research.
   
   The program encourages students to begin exploring their research interests at the earliest opportunity to facilitate selection of a research mentor and dissertation project. The student should utilize the Initial Guidance Committee for counsel on research activities prior to choosing an advisor.
GUIDANCE/DISSERTATION COMMITTEE

This Committee is to be set up for each student by **August 15** in the Summer of Year 2, following selection of a Research Advisor. The “PhD GUIDANCE COMMITTEE” form is to be signed by the committee members and submitted to the Program Director by **August 31**. The Guidance Committee must be composed of at least four Biomedical Sciences Program faculty members. Additional members may be added who are not program faculty, but who have special expertise of value for the dissertation research. These members must have an appointment at an academic institution. Exceptions can be made by the Program Director if a non-academic scientist has unique technical expertise needed by the student. Non-academic members will be non-voting members of the Committee.

The Guidance Committee shall counsel the student during the research and dissertation phase of their training. Additionally, the Guidance Committee shall provide career counseling to help the student achieve career goals.

The committee will:

1. Determine the student's research interest.
   a. The student and the Chair of the Guidance Committee (research Advisor) will identify a feasible project in an area of mutual interest.
   b. A brief project description should be presented orally to the Guidance Committee for comment, modification and approval in the **Fall semester of Year 2**.

2. Counsel and aid the student during the research phase through Committee Meetings.
   a. The Guidance Committee will guide the student during the dissertation research phase, help solve problems, and help the student with technical difficulties arising with their project. However, the work is to be the student's own and the research must be on an original and significant problem.
   b. The Guidance Committee will meet with the student at least once in the **Fall Semester of Year 2** to review the student's progress, brief project description, and respond to problems or questions the student has.

3. Administer the Candidacy Examination.
   a. For detailed instructions and a timeline for this Examination, see **Appendix D** of this document.
   b. This Examination is comprised of both written and oral portions. The written portion of the Exam consists of a mock grant proposal in a research area substantially different from the student’s general research area. If the student has already written 2 grant proposals and the Committee agrees, the student may write a review article in place of the proposal. The topic of the review article must still be substantially different from the student’s research area.
c. The Committee MUST approve the topic of the proposal by February 1 of Year 2.
d. The Committee MUST refrain from providing guidance in the preparation of the written portion of this Exam, as this Exam is used to determine the student’s ability to formulate and defend an original proposal on their own.
e. The Committee should receive the full proposal no later than March 15 in order to have sufficient time to review the document ahead of the oral presentation.
f. The oral component of this Exam will consist of a presentation (30 minutes or less) by the student of the proposal, followed by questions from the Committee. The questions should challenge the student to defend their ideas and analyze weaknesses in the proposal. It should also test the student’s knowledge and thinking in subject areas covered in the student’s advanced coursework.
g. This Examination will be administered by April 15 of Year 2 (first attempt).
h. If more than one Committee member votes that the student has failed, the examination has been failed. The Committee can opt to fail the student on only one or both components of the Exam. The Committee MUST make this decision at the time of the meeting, rather than waiting until a later date.
i. If the student successfully writes and defends their Exam, they must complete any revisions suggested by the Committee. The Committee will then review these revisions. These revisions, if acceptable, must be submitted by May 1 as described below.
j. Results of the written and oral portions MUST be submitted to the Program Office using the “RESULT OF PhD EXAMINATION OR REQUIREMENT” form. This form, in addition to the approve proposal, must be submitted to the Program Office within 14 days of a successful examination (no later than May 1).
k. If one, or both, portions of the Examination needs to be repeated, the oral and written examination must be completed in its entirety no later than July 1.
l. The student has two opportunities to pass the written and oral portions of the Examination.
   i. A student who passes the written portion on the first try need not repeat that portion if only the oral portion is failed.
   ii. If the written Examination is failed, the document must be resubmitted and the exam passed within 30 days.
   iii. If the oral portion is failed, it must be retaken within 30 days of the first attempt.
   iv. A second failure on either portion of the Examination will result in dismissal from the PhD Program.
   v. A student who is dismissed from the PhD Program under these circumstances
may obtain a Master’s degree (non-thesis) if the requirements have been met, or may be allowed by the Committee to write and defend a Master’s thesis based on the student’s research (see Policy For PhD Students Desiring An M.S. Degree)

   a. The Guidance Committee will guide students by constructive review in developing a detailed Dissertation Research proposal, which outlines the goals and research to be accomplished by the student for the Dissertation Project. Detailed instructions and a timeline can be found in Appendix E.
   b. The Committee will approve the Specific Aims page by August 15 of Year 3.
   c. The Committee will review the student’s proposal, which must be provided to the Committee by November 10.
   d. The Guidance Committee will meet for the student’s defense of the Dissertation Proposal no later than December 1 of Year 3.
   e. The student will revise the Proposal, and the Committee will review revisions by December 15. If approved, the Committee will sign the form “RESULT OF PhD EXAMINATION OR REQUIREMENT” for the student to submit, along with the approved Proposal, to the Program Office by December 15 of Year 3.
   f. If the Proposal and signed form are not submitted to the Program Office by this deadline, the student may be dismissed from the Program, unless the Program Director has approved an exception due to serious extenuating circumstances.

5. Counsel the student during the dissertation research phase.
   a. The Guidance Committee will guide the student during the dissertation research phase, help solve problems, and help the student with technical difficulties arising with their project. However, the work is to be the student's own and the research must be on an original and significant problem.
   b. The Guidance Committee must meet with the student at least once per year. The members should be available for additional communication outside of the meetings should the student have problems or questions that arise.
   c. The Executive Committee will provide the Guidance Committee a list of questions that the student must be prepared to answer at each Guidance Committee meeting. Examples include:
      i. “What are your major research accomplishments since the last committee meeting?”
      ii. “What are the major challenges you face in your project, and how do you plan to overcome them?”
d. Any comments, discussion, and decisions from the Committee must be included in the student’s Committee Meeting Minutes which must be submitted to the Program Office. The minutes must be approved by the student and Research Advisor.

6. Ensure that the student continues to make progress on the research project.
   a. A student whose research progress is found to be unsatisfactory by a majority of the committee shall be placed on academic probation.
   b. The student will then be given a minimum of three months and a maximum of one semester to address the concerns specified by the Committee. At the end of the probationary period, the committee will meet again with the student to determine if the student's progress is satisfactory.
   c. If it remains unsatisfactory, the Committee Chair will report this to the Program Director. The student will be dismissed from the program unless the student successfully appeals the decision to the Program Director, who will confer with the Executive Committee.

7. Counsel the student during the dissertation writing and presentation phase.
   a. The Guidance Committee will guide the student in the writing and oral presentation of the Dissertation. Although the writing is to be reviewed and criticized by the Advisor and the Guidance Committee, the writing must be the student's own. The student should follow the current guidelines for writing dissertations, which can be obtained from the Program Administrator or Program Director.
   b. The Guidance Committee will review the Dissertation, which should be submitted to committee members 3 weeks before the defense. The Dissertation must also be submitted to the Program Administrator to check formatting and to the Turnitin Program within this time frame. (see Turnitin Program Scanning of Major Writing Assignments policy). Should the student not submit their dissertation to their Guidance Committee 30 days prior to the end of the semester in which they had planned to defend, they will be required to register for an additional semester of BP 899: Dissertation Research.
   c. Once this process is complete, the student can proceed to scheduling the Dissertation Defense.

   a. The aim of the defense is to explore with the candidate the methodological and substantive contributions of the dissertation. The dissertation should be in near-final form prior to scheduling the oral defense. The time, date and place of the dissertation defense will be provided to the Program Administrator and Director by the student 3 weeks in advance. The Program Administrator will notify the program faculty, students and administrators at EVMS of the date of the defense at least two weeks in advance. The location is chosen by the student and the Advisor, and should
have sufficient room for at least twenty people to attend.

b. The defense will consist of two components: an oral presentation of the student's research to an open audience and a closed session for the student and Guidance Committee only.

   i. The public seminar is open to the entire EVMS community, followed by a question period for the audience.

   ii. The audience is then excused and the student and Committee meet for further examination and questioning by the committee. The student is then excused and the committee members discuss the student's performance.

   iii. If more than one committee member votes to fail the student, the result will be a failure. The student is then informed of the decision.

c. The result will be reported to the Program Director using the form “RESULT OF PhD EXAMINATION OR REQUIREMENT” within 10 days. In case of failure, the committee may recommend that the student be dismissed from the program or that the student be permitted a re-examination no earlier than three months after the first defense.


   a. Following approval by the committee, the final copy of the Dissertation must be submitted to and approved by the Program Director, along with the signed “DISSERTATION ACCEPTANCE AND PROCESSING” form.

   b. The student must follow the remaining steps in Appendices F & G in order to meet degree requirements for the PhD.

   c. The Committee should be aware that the Dissertation must be approved and submitted for binding within 6 months of a successful oral defense. If the dissertation is not approved and submitted in this time frame, the student will be dismissed from the Program.

   d. The Program Director may grant extensions to the 6 month deadline, but only for very serious extenuating circumstances, such as a major illness.

   e. The Research Advisor may discontinue paying a PhD student’s stipend 30 days after the oral defense. The stipend should be paid during this period if the student remains at EVMS and is primarily working on dissertation revisions, publications, and experiments in the Advisor’s laboratory. If the student accepts a full time position within 30 days of the defense, the stipend may be terminated on the student’s last day.
APPENDIX C: STUDENT OBLIGATIONS AND RESPONSIBILITIES

The student shall:

1. Be diligent and dedicated to their studies and research while a student at EVMS in the Biomedical Sciences PhD Program.

2. Be responsible for working with their Guidance Committee to schedule committee meetings in a timely manner. The student should meet with their Guidance Committee at least once each year.

3. Arrive at their committee meetings well prepared.

4. Record minutes of their meetings, to be approved by the Research Advisor. These minutes shall be detailed and describe the discussion and decisions made by the committee, and must be signed by both the student and the advisor. The form "RECORD OF GUIDANCE COMMITTEE MEETING" and minutes must be submitted to the Program Office within 2 weeks of each meeting.

5. Procure Program Director approval to make changes to their Guidance Committee by submitting the form “REQUEST FOR CHANGE IN GUIDANCE COMMITTEE”.

6. Write, schedule, and defend the Candidacy Exam (see Appendix D).

7. Submit the DISSERTATION PROPOSAL to the Guidance Committee as described in Appendix E.
   a. The student is responsible for writing, scheduling meetings, and defending their proposal to the Guidance Committee.
   b. The student shall make revisions as requested, and submit these to the Program Office by the deadline stated in Appendix E.

8. Submit annual INDIVIDUAL DEVELOPMENT PLANS to the Program Office.

9. Submit Seminar Attendance Forms to the Program Office as required.

10. Submit Course Evaluations as required.

11. Give an Oral Research Presentation outside of the student’s laboratory group each year.

12. Follow FINAL STEPS TO GRADUATION (Appendix F), when the student has met the required milestones and achievements.
APPENDIX D: CANDIDACY EXAM

The Candidacy Exam occurs in the Spring of YEAR 2. All PhD students are required to prepare for, take, and pass this Examination according to the schedule and guidelines.

PURPOSE:
The purpose of the Candidacy Exam is to show that the student can assimilate scientific knowledge, experimental design, and laboratory skills learned by this point in the program to develop an original proposal. By requiring the development of a proposal outside of their research field, we are better able to assess their ability to formulate and defend an original idea with minimal overlap of the Research Advisor’s main research interests.

SCHEDULE:
1. **February 1:** Student must have approval of their topic by the Guidance Committee.
   a. The student must discuss ideas with their Committee members for their mock grant proposal, which should be in a different research area from the general area of the student’s research.
   b. This discussion may occur via email, in place of having a scheduled meeting; however, it is recommended that this discussion begin at the first Guidance Committee meeting held in the Fall of Year 2.
   c. Approval must be granted no later than February 1.
   d. The student and Guidance Committee will also set the date for the Candidacy Exam at this point in time, which must occur before **April 15** (see below). **It is the student’s responsibility to pre-arrange a meeting date when committee members can attend.**

2. **March 15:** Grant proposal for the Candidacy Exam is due to the Guidance Committee members.
   a. The student shall submit their mock grant proposal on a topic unrelated to the general area of their research to their Guidance Committee.
   b. The proposal should be written in an NIH R21 format, using data from the literature as preliminary data. ([http://grants.nih.gov/grants/funding/r21.htm](http://grants.nih.gov/grants/funding/r21.htm))
   c. The document must be typed in at least 10 point font, and may not exceed 7 single-spaced pages.
   d. This document must be submitted to Turnitin prior to submitting to the Committee.

3. **April 15:** Candidacy Exam Proposal must be defended, and examination taken by this date. The student will:
   a. Present the proposal orally in a brief presentation (no longer than 30 minutes)
   b. Defend the ideas, and answer questions based on the document and the student’s advanced coursework.
c. If the student is unable to schedule a time prior to April 15 during which all committee members can meet, the student and advisor may petition the Program Director to request a substitute committee member. The substitute must be a member of the Biomedical Sciences Faculty, and should have similar expertise as the absent committee member. Only one substitute will be permitted.

d. The student's advisor MUST be present for the examination.

e. The Committee must decide at the time of the examination if the student has passed or failed the oral and written components of the exam. Results must be reported to the Program Director within 14 days of the exam on the “RESULT OF PhD EXAMINATION OR REQUIREMENT” form. If the student passed the Exam, they must also turn in the final, revised document to the Program Office, due no later than May 1.

f. If the written document requires major revisions, the student will receive a failing grade on the written portion (see 5b for instructions).

g. Failure to take the examination by April 15 will be considered a failure of both components of the examination. In this case, the student will be allowed to take the examination ONLY ONE TIME. The student must pass the examination by May 15, or be dismissed from the program.

4. **May 1:** Final, revised document must be submitted to the Program Office, with the signed form (“RESULT OF PhD EXAMINATION OR REQUIREMENT”)
   
a. If the written component of the exam requires minor revisions, the student will make the revisions within 7 days to be reviewed by the Committee members who gave the examination, and will submit the approved document to the Program Director within 14 days of the examination. The revised written document must be approved by all committee members and submitted to the Program Director by May 1.

5. **May 15:** Deadline to re-take a portion of the Exam if the student fails EITHER the written OR the oral portion of the Candidacy Exam.
   
a. If the student fails the written portion, they will be required to revise the document. The revised written document must be approved by all committee members and submitted to the Program Director within 30 days of the first Exam (by May 15).

   b. If the student fails the oral portion of the Exam, the student may attempt the oral examination a second time, but the examination must be passed within 30 days of the first Exam (by May 15).

6. **June 1:** Final re-written proposal due for students who were required to re-take ONE component of the Exam.

7. **June 15:** Deadline to re-take the Candidacy Exam if the student failed BOTH parts of the exam in the initial attempt.
8. **July 1:** Final re-written proposal due for students who were required to re-take BOTH components of the Exam.

9. The Program Director may grant extensions, but only if there are very serious extenuating circumstances, such as a major illness.

10. Students who fail the Candidacy Exam twice will immediately stop receiving their stipend. The student would have the option of earning a Research Master’s degree should their research and coursework performance meet the requirements for completion of the Research Master’s degree.
APPENDIX E: DISSERTATION PROPOSAL

PURPOSE:
The purpose of the Dissertation Proposal is several-fold:

1. It helps serve as a road map for the student’s project as they move further into their dissertation research. Focusing on a project and defining the approach to be taken requires the student to think through all aspects of the project.
2. The process of writing the proposal will strengthen the student’s writing skills, which are vital to success not just in academic research, but also many career paths which the student might choose to pursue.
3. This process enables the student to gain additional experience in envisioning, conceptualizing, and planning a research project.

The Dissertation Proposal is purposefully formatted in a way that enables easy submission to the NIH (or other Pre-doctoral Fellowship Programs) so that the student can attempt to secure their own pre-doctoral funding.

SCHEDULE:
The Dissertation Proposal should be written and defended in the Fall Semester of Year 3.

1. **August 15**: Specific Aims page must be written, defended orally, and approved by the student’s Guidance Committee.
   a. The Specific Aims page should outline the rationale, objective/hypothesis, aims, and expected results for the proposed project within 1 single-spaced page. The major experimental approaches that will be used to fulfill each aim should be stated. This document must be submitted to Turnitin prior to presenting the aims to the Guidance Committee.
   b. The student should present an outline of the Specific Aims page orally to their Committee.
   c. Guidance Committee members should indicate their approval of the Specific Aims page by checking the “Dissertation Proposal Specific Aims” box on, and signing, the “RESULT OF PhD EXAMINATION OR REQUIREMENT” form.
   d. Revisions may be requested by the Committee. These revisions must be approved by the Committee, and submitted to the Program Office within 30 days of the Committee Meeting.
   e. Students who do not submit the approved Specific Aims and form within 2 weeks of the August 15 deadline will be placed on academic warning. If these documents are not submitted within 4 weeks of the deadline, the student will be placed on academic probation.
2. The student should develop a full proposal based on the NIH F31 format (see https://www.nigms.nih.gov/training/indivpredoc/pages/predoctoral-f31-sample-applications.aspx for additional information and examples).
   a. The Dissertation Proposal should be submitted to the Committee at least 3 weeks prior to the meeting at which the Proposal is to be defended (therefore, no later than November 10).
   b. The full proposal should include all sections required in an F31 application. The focus should be on the experimental plan, rather than extensive Background & Significance.
   c. The Research Plan should include, for each Specific Aim: rationale, experiments to be performed, brief description of methods, expected results, potential pitfalls, & alternate approaches.
   d. The length of the Proposal should not exceed the page limits of the current NIH F31 grant application.
3. December 1: The student must present and orally defend their Dissertation Proposal to their Guidance Committee no later than December 1 of Year 3.
4. December 15: The final approved proposal, and the signed form (“RESULT OF PhD EXAMINATION OR REQUIREMENT”) must be submitted to the Program Office by December 15 of Year 3.
   a. An electronic copy of the final, approved proposal should be submitted to the Program Office with the signed form.
   b. If the Proposal and signed form are not submitted to the Program Office by this deadline, the student may be dismissed from the Program, unless the Program Director has approved an exception due to serious extenuating circumstances.
5. The student is to inform the Guidance Committee of deviations from the Specific Aims as the research project develops. The Committee will evaluate the rationale for such changes as they arise.
APPENDIX F: FINAL STEPS TO GRADUATION

For students planning to graduate within the next year:

For students entering the Program in 2015 and later, at least one first-author journal article must be accepted for publication in a mid-tier peer-reviewed journal before a student can be given permission to defend the dissertation. Submission of a second manuscript before graduation is strongly encouraged, and the student’s Guidance Committee may require such submission. The article(s) should be full research reports and may not include review articles or purely technical advances. Exceptions will be made only under unusual extenuating circumstances, such as insurmountable technical problems outside the student’s and advisor’s control, and must be approved by the student’s Committee and the Executive Committee of the Program.

The student should take the following steps to ensure completion of all degree requirements:

1. If the Guidance Committee expects the student to receive the PhD within 6 months, the Committee members must sign the form "PERMISSION TO TAKE THE PhD EXAMINATION". It is not necessary to state a defense date (just estimate the month). It takes most students 3-4 months to write their dissertations when the research is almost complete.

2. After the “PERMISSION TO TAKE THE PhD EXAMINATION” form is approved, the student should register for 9 credits of Dissertation (BP899) for the next semester (6 credits if during the Summer). Participation in Oral Communication Forum will be waived. If the committee does not think the student will finish in the above timeframe, the student should register for Research credits and take Oral Communication Forum.

3. Write the dissertation; it must be complete and approved by the advisor before distribution to the committee. Use the format specified in the most recent Guide to Preparation of Theses and Dissertations, available from the Program Office. The dissertation must be given to committee members at least 3 weeks prior to the defense to allow sufficient time for them to read it. At the same time, the dissertation should be given to the Program Administrator to check formatting. The dissertation must also be submitted to Turnitin before the defense and the PDF report sent to the Program Director and Administrator (see Turnitin Program Scanning of Major Writing Assignments policy).

4. When a defense date is set, send the Program Director and Administrator an email with the title, date, time and place of the defense 3 weeks prior to the defense.

5. Students must inform the Program Director at least 4 months in advance of their estimated defense date. The director will nominate them at a general faculty meeting to receive the PhD degree. All requirements must be finished before the degree will be awarded.

6. Defend the Dissertation. If the oral defense is passed, the form, "RESULT OF PhD EXAMINATION OR REQUIREMENT," should be submitted. All program forms are found on the program web page, as well as in your Orientation notebook (see Appendix J).
7. **Revise the Dissertation** as instructed by the Committee. After revisions are accepted, submit the form "DISSERTATION ACCEPTANCE AND PROCESSING" to the Program Administrator with an electronic or paper copy of the dissertation (not on bond paper!). Allow 1-2 weeks for review of formatting (this may be done before the defense to expedite review). Revise as instructed and get final approval from the Program Director.

8. **Print out the original and at least one copy on 25% cotton bond paper (for the EVMS library and the advisor; a student copy is optional).** Committee members must sign the title page in ink; copies of this page are used in the other copies of the dissertation. A copyright statement in the document is sufficient to copyright the document.

9. Submit all copies for binding at Long's-Roullet Book Binders, Inc., 2800 Monticello Avenue, Norfolk; pay the fees. A copy of the receipt for binding must be given to the Program Administrator. **The Dissertation must be submitted and approved within 6 months of a successful defense, or the student will be dismissed from the Program (see Appendix B, Section 9).**

10. If all the above requirements have been met, the Program Director will inform the registrar that the student has completed all requirements for the degree. **The PhD degree will be awarded by EVMS at the time requirements are completed.** EVMS only has only one commencement ceremony in May. Participation in the graduation ceremony is not required and does not award the degree. A diploma will be ordered by the registrar’s office, but a delay of several months may occur, as signatures are required.
APPENDIX G: DISSERTATION FORMATTING AND SUBMISSION

FORMAT OF DISSERTATION

The Dissertation will follow the format in the current guide to Theses and Dissertations, which may be obtained from the Program Director or Program Coordinator.

STEPS TO FINALIZING DISSERTATION

1. The Dissertation and the Turnitin software report will be submitted to the EVMS Biomedical Sciences office after the committee has approved the document. The Program Coordinator will review the Dissertation for formatting, and the student will be given a list of items that need to be corrected to conform to the formatting standards (see above). After the corrections are made, the document will be approved by the Program Director.

2. The student will submit the original of their Dissertation, plus 1-3 copies, all on 25% cotton bond paper:
   a. 1 copy for EVMS Library
   b. 1 copy for advisor
   c. 1-2 copies to student (Optional)

3. The student will take the copies to the bindery. The student normally pays the cost of binding, but the Advisor may cover this cost. After the fees have been paid, the student will bring the receipt for payment to the Program Coordinator.

4. The student’s degree will be then awarded on the date all requirements were completed.

5. The PhD Dissertation must also be submitted to the Program Coordinator as a PDF file of the final approved and correctly formatted version. The PDF file version will be archived in the program office. The document is legally copyrighted without registration.
APPENDIX H: EVMS BIOMEDICAL SCIENCES PHD STUDENT COMPENSATION POLICY

1. **Scholarship Level**: All students will receive the same dollar amount of compensation except as stated below. The Biomedical Sciences Program is committed to providing stipend support to every PhD student in good academic standing until the student graduates (with rare exceptions as noted in section 4(c) below). All full-time PhD students in good standing will receive a full tuition waiver. In addition, PhD students’ fees will be paid by the Program.

2. **Incoming students**: These students are generally paid via an EVMS stipend, which is currently $29,705 per year. All students in their first year will be classified as a Graduate Research Assistant, Grade GR-B.

3. Effective **July 1** of the summer following Year 1, students are typically paid via grant funding or other funding arranged by the student’s Advisor (e.g. Incentive funds, Departmental funds). Combinations of different sources of funds may be utilized. Students are paid through EVMS Human Resources as "graduate research assistants", although it should be remembered that the "job" of a "graduate research assistant" is to be a full-time student. All students are classified as Graduate Research Assistants, Grade GR-B, except those who are classified as GR-C, as described below.

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Graduate Research Assistant Grade</th>
<th>Compensation Level</th>
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</thead>
<tbody>
<tr>
<td>PhD Students</td>
<td>GR-B</td>
<td>$29,705</td>
</tr>
<tr>
<td>Independent Graduate Fellowship*</td>
<td>GR-C*</td>
<td>$32,205</td>
</tr>
</tbody>
</table>

*Requires approval of the student’s advisor and the Program Director

It is the student and mentor's responsibility to request a change the student’s compensation level via a personnel action request form through the Program Coordinator, which is then approved by the Program Director.

4. **Exceptions:**
   a. **Independent Fellowships**: We encourage students to obtain external funding through PhD fellowships. Successful students will receive a stipend equivalent to the award, even if greater than the EVMS stipend level. If the award is less than the EVMS stipend level, the student’s mentor will be responsible for providing funds to the equivalent EVMS level. If the award stipend is significantly higher than the EVMS stipend level, the advisor may request reclassification of the student to the GR-C level.

   b. **Termination of Stipend**: The intent of the program is to provide a stipend to all PhD students in good standing until graduation. However, the stipend is not guaranteed. If a PhD student is not progressing in their research at an adequate pace as determined by the student’s Dissertation Committee, the committee may set a deadline for a specific requirement (e.g., dissertation defense; submission of approved dissertation). If the deadline is not met, the committee may recommend to the Program Director that the student’s stipend be terminated. If the student fails to meet
the deadline and the Program Director concurs, the termination of stipend will be communicated to the student in advance and in writing by the Program Director.

5. **Vacation & Sick Leave:** PhD students may take **up to three weeks of vacation and three weeks of sick leave per year (July 1-June 30)** if approved by their Advisor using the "GRADUATE ASSISTANT VACATION & SICK LEAVE FORM," which must be submitted to the Program office.

6. **Leave of Absence:** A student who uses all vacation and sick leave may take a Leave of Absence (medical or personal) from the program. During this time, the student is not eligible to be enrolled in classes or to receive a stipend. The student and Program Director must submit a “LEAVE OF ABSENCE/WITHDRAWAL” form to the Registrar’s office (this form is available from the Registrar). The Advisor must notify Human Resources and the Program Director via a personnel action sheet that the student has taken a Leave of Absence. The student will not receive a stipend during the Leave. The student must also submit a Student Status Change form with the Program office. Leaves of Absence are limited to 365 days. Following the Leave of Absence, the student must either resume full participation in the program or will be withdrawn from the program. Students may also be eligible for Family Medical Leave (e.g., for childbirth, major family illness) and should consult Human Resources on how to apply for this leave.

7. **Payment Method and Taxability:** Students classified as Graduate Research Assistants will be paid at the end of each month through EVMS Payroll and will receive an IRS Form W-2 for each tax year. Stipends are considered taxable income and will be subject to income taxes. However, a waiver of Social Security and Medicare taxes may be obtained by filling out a form at the EVMS Payroll office.

8. **Stipend policy for PhD students who previously completed at least one year in the EVMS Research Master's program:**
   
a. Students who completed two years of the Research Master’s Program and continue research in the same laboratory will be supported by their advisor’s funds from the time they enter the PhD program.

   b. Students who completed one year in the Research Master’s Program will receive one year of stipend support from the Biomedical Sciences Program.

   c. Students who change laboratories upon entering the PhD program will receive a stipend from the Program during rotations, but upon selecting an advisor for their dissertation research, the advisor will be required to support their stipend.

9. **Long-term Employees:** Long-term employees may seek entry into the PhD Program and perform their dissertation research in the laboratory in which they are employed. However, they must terminate their employment and become full-time students receiving the usual stipend when they enter the Program.
APPENDIX I: ADMINISTRATION AND PROGRAM FACULTY

EXECUTIVE COMMITTEE

To assist the Program Director and ensure adequate input by participating faculty members at EVMS, the Program’s Executive Committee sets program policy. The Committee consists of the Program Director, Chair of the Curriculum Committee, and Chair of the Admissions Committee. The Program Director calls meetings as needed, records and distributes minutes and an agenda for each meeting, and will serve as Chair. The Committee will approve and be responsible for Program faculty issues and policies.

PARTICIPATING FACULTY

EVMS Department of Internal Medicine (Name, Office Room Number, Lab Room Number)

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Room Number</th>
<th>Lab Room Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margaret Morris, PhD</td>
<td>Lewis Hall 2126</td>
<td>Lewis Hall 2119</td>
</tr>
<tr>
<td>Jerry Nadler, M.D.</td>
<td>Hofheimer Hall Suite 410</td>
<td>Lewis Hall 2130</td>
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</table>

EVMS Department of Microbiology and Molecular Cell Biology

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Richard Ciavarra, PhD</td>
<td>Lewis Hall 3166</td>
<td>Lewis Hall 3161</td>
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<tr>
<td>Dianne Daniel, PhD</td>
<td>Lewis Hall 3152</td>
<td>Lewis Hall 3162</td>
</tr>
<tr>
<td>Elena Galkina, PhD</td>
<td>Lewis Hall 3180</td>
<td>Lewis Hall 3143</td>
</tr>
<tr>
<td>Julie Kerry, PhD</td>
<td>Lewis Hall 3174</td>
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<tr>
<td>Aurora Esquela Kerscher, PhD</td>
<td>Lester Hall 421</td>
<td>Lester Hall 460-461</td>
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<tr>
<td>Woong-ki Kim, PhD</td>
<td>Lewis Hall 3047</td>
<td>Lewis Hall 3053</td>
</tr>
<tr>
<td>Neel Krishna, PhD</td>
<td>Lewis Hall 3184</td>
<td>Lewis Hall 3054</td>
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<tr>
<td>Patric Lundberg, PhD</td>
<td>Lewis Hall 3186</td>
<td>Lewis Hall 3057</td>
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<tr>
<td>David Mu, PhD</td>
<td>Lester Hall 420</td>
<td>Lester Hall 442-445</td>
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<tr>
<td>Julius Nyalwidhe, PhD</td>
<td>Lester Hall 424</td>
<td>Lester Hall 458-459</td>
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<tr>
<td>O. John Semmes, PhD</td>
<td>Lester Hall 426</td>
<td>Lester Hall 462-465</td>
</tr>
<tr>
<td>Julia Sharp, PhD</td>
<td>Lewis Hall 3114</td>
<td>Lewis Hall 3115</td>
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<tr>
<td>Amy Tang, PhD</td>
<td>Lester Hall 423</td>
<td>Lester Hall 454-457</td>
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<tr>
<td>David Taylor-Fishwick, PhD</td>
<td>Lewis Hall 2128</td>
<td>Lewis Hall 2151</td>
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EVMS Department of Pathology and Anatomy

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<tr>
<th>Name</th>
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<tr>
<td>Paul Aravich, PhD</td>
<td>Lewis Hall 3075</td>
</tr>
<tr>
<td>Earl Godfrey, PhD</td>
<td>Lewis Hall 3077A</td>
</tr>
<tr>
<td>Gyorgy Lonart, PhD</td>
<td>Lewis Hall 3077</td>
</tr>
<tr>
<td>Larry Sanford, PhD</td>
<td>Lewis Hall 2051</td>
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<tr>
<td>Laurie Wellman, PhD</td>
<td>Lewis Hall 2053</td>
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EVMS Department of Pediatrics

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Kenji Cunnion, MD</td>
<td>Lewis Hall 3041</td>
</tr>
<tr>
<td>Tushar Shah, MD</td>
<td>Lewis Hall 3045</td>
</tr>
</tbody>
</table>
EVMS Department of Physiological Sciences
Frank Castora, PhD
Anca Dobrian, PhD
Yuliya Dobrydneva, PhD*
Diane Duffy, PhD
Eva Forgacs-Lonart, PhD
Vitold Galkin, PhD
Frank Lattanzio, PhD
Khalid Matrougi, PhD
Gerald Pepe, PhD
Howard White, PhD
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Lewis Hall 2045
Lewis Hall 3130
Lewis Hall 3126
Lewis Hall 3025
Lewis Hall 2049
Lewis Hall 2059
Lewis Hall 3132
Lewis Hall 2029
Lewis Hall 3139
Lewis Hall 2040
Lewis Hall 2037
Lewis Hall 3137
Lewis Hall 3140
Lewis Hall 3030
Lewis Hall 2032
Jones Institute 346
Lewis Hall 2012

EVMS Department of Obstetrics and Gynecology
Silvina Bocca, M.D., PhD
Gustavo Doncel, M.D., PhD
Irina Zalenskaya, PhD
Jones Institute 425, 414
CONRAD @ Arlington, VA
Jones Institute 319

EVMS Department of Radiation Oncology
Richard Britten, PhD
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Lewis Hall 2167

EVMS Department of Psychiatry
Stephen I. Deutsch, M.D., PhD
Hofheimer Hall
Lewis Hall 3058

Old Dominion University
Roy Ogle, PhD (rogle@odu.edu)
Harold Riethman, PhD (hriethma@odu.edu)
Patrick Sachs, PhD (psachs@odu.edu)

Other
William McPheat, PhD* (willie.mcpheat@gmail.com)
Michael Francis, PhD (Embody, mpf3b@virginia.edu)

*Adjunct Faculty