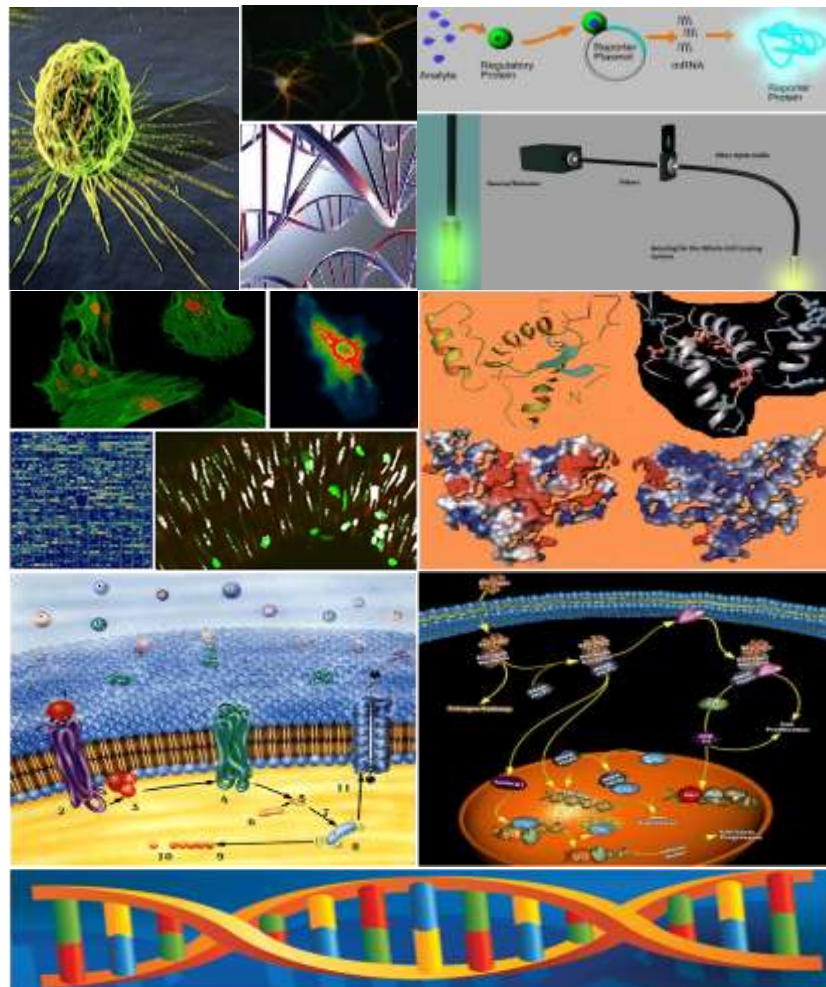




# GRADUATE PROGRAM

## STUDENT HANDBOOK 2016-17



# WELCOME TO THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY



Biochemistry and Molecular Biology are sciences at the epicenter of modern biomedical research. Understanding basic biochemical pathways is key to gaining new knowledge for the prevention and combating of disease, allowing for the expansion of current boundaries in medicine and science. In addition to medical applications, molecular biology is indispensable for the development of tools implemented for environmental and bionanotechnology problems. The Department of Biochemistry and Molecular Biology (BMB) at the University of Miami is committed to maintaining our discipline as a central science and strives for excellence by sustaining the current areas of strength, fostering interdisciplinary and clinical translational research, and expanding the research portfolio to evolving areas of inquiry and discovery. Our expertise in RNA biology, understanding DNA stability and repair, studying the biophysical nature of biomolecules, and gaining insight into cellular signaling pathways has been recently expanded by the arrival of researchers specialized in the design of natural and semi-synthetic biomolecules, as well as molecular-based devices that can be employed in translational medicine and other bionanotechnology applications. The commitment of the Miller School to increase growth in the basic sciences will continue to provide our Department with new and exciting opportunities to enhance our prominence in biomedical research.

A chief mission of our Department is to educate future generations of investigators and medical students to become critical thinkers and the leaders in their fields. The diverse composition of our Department in regards to research interests creates a unique and intellectually stimulating learning environment for students at the undergraduate, graduate, and postgraduate levels. We offer a host of courses to fulfill the curriculum to obtain a B.S. in Biochemistry, a MS and a Ph.D. in Biochemistry, as well as the basic science requirements for MD and MD/Ph.D. students. Our courses address the basic principles of biochemistry and molecular biology as well as the emerging science and future of the fields.

The Department serves the worldwide scientific community through leadership roles and active participation in national and international conferences, serving in study sections and on federal agency panels. Additionally, our Department's faculty roster encompasses editors of journals and members of editorial boards, as well as board members of national and international governmental centers and members of advisory boards of companies in the private sector. Moreover, the Department is committed to serve the community by participating in a variety of outreach events to promote awareness of the importance of science and technology in relation to public health and the environment.

Our Department is also unique for hosting the internationally recognized annual Miami Winter Symposium, created by Professor William Whelan, the first leader and Chair of the Department. The Miami Winter Symposium is currently managed by Elsevier Publishing and features world-renowned speakers in emerging areas of science and technology. This event cements our Department's goal of furthering education and discovery in biochemistry and molecular biology on an international level.

Sylvia Daunert, Ph.D.  
Professor and Lucille P. Markey Chair

## **GRADUATE PROGRAM DIRECTOR'S WELCOME**



Welcome to the BMB at University of Miami Miller School of Medicine! We are so pleased that you have decided to join us. The BMB is dedicated to excellence in basic research and teaching. The department is housed in the Gautier Building, which is located in the Research Quadrangle at the University of Miami, Miller School of Medicine. The aim of graduate education in the department of BMB is to prepare students for careers in biochemistry and molecular biology. The BMB graduate program provides the student with outstanding educational opportunities and a broad knowledge in the various aspects of modern biochemistry and molecular biology. Independent laboratory research is emphasized at all stages of the student's career. The

BMB students also participate in cutting-edge research on a variety of topics and publish their work in some of the best peer-reviewed journals in the world.

### **Ph.D. in BMB**

In agreement with the overall mission of both the University of Miami and the Miller School of Medicine, the BMB Ph.D. program strives to provide superior training in biochemical and molecular biological research and education to students seeking a Ph.D. degree. As part of a research-oriented university, the department, through its students, creates new knowledge. In addition, the department serves the community with its expertise in biochemical and molecular biological issues. As the result of our teaching efforts, the new Ph.D.'s created will be able to find positions in academia and/or industry.

### **ADMISSION INTO BMB Ph.D. PROGRAM**

The University of Miami Miller School of Medicine has a centralized admissions point that allows students to explore multiple research areas of interest before deciding on a specific program to complete their dissertation work. All students are admitted through the Program in Biomedical Sciences (PIBS) for the PhD programs in Biochemistry & Molecular Biology, Cancer Biology, Microbiology & Immunology, Molecular Cell & Developmental Biology, Molecular & Cellular Pharmacology, Neuroscience, Physiology & Biophysics, and Human Genetics & Genomics. The PIBS Admissions Committee will review applications as they are received. We encourage all applicants to submit their application by December 15th. After successful completion of all required courses and laboratory rotations of PIBS's program, students will select the BMB graduate program and laboratory of choice. This transition has to be formalized by signing documents by mentor, student and the BMB graduate program director. All BMB related forms and documents are available at the BMB website under Academics-BMB graduate program-forms.

To learn more about the Graduate Program in Biochemistry & Molecular Biology, please click on the provided BMB Brochure link, as well as review the research interests of individual BMB faculty members. Please feel free to directly contact BMB Graduate Program Director, Dr. Sapna Deo, or any other BMB faculty member to discuss potential research opportunities.

## **GRADUATION REQUIREMENTS FOR BMB PROGRAM**

The requirements for graduation include the following:

- Successful completion of at least 32 credit hours of required courses and electives
- Successful completion of the Qualifying Examination
- Execution of an original research project facilitated by a thesis committee that attests to research sufficiency
- Completion of 60 credit hours including course and research credits.
- Submission and defense of a doctoral dissertation

For the didactic phase of graduate training, students participate in a set of core courses. Through these courses the students obtain a broad, coherent background in basic aspects of biochemistry, molecular biology, structural biology, and cell biology. This material is supplemented with presentations at research journal clubs and more advanced courses in biochemistry and molecular biology.

### **BMB REQUIRED COURSES**

<b>Year &amp; Semester:</b>	<b>Course</b>	<b>No. of credits</b>	<b>Total:</b>
1st Yr.- Fall Semester	PIBS701	5	
	PIBS702	3	
	PIBS731 (Rotation)	1	10
1st Yr.- Spring Semester	BMB714	2	
	BMB715	2	
	Biostatistics	2	
	PIBS731 (Rotation x2)	2	
			8
2nd Yr.- Fall Semester	BMB701 / 702	2	
	BMB709	3	5
2nd Yr.- Spring Semester	BMB701 / 702	2	2
3rd Yr.- Fall Semester	BMB701 / 702	2	2
3rd Yr.- Spring Semester	BMB701 / 702	2	2
4th Yr.- Fall Semester	BMB701 / 702	2	2
4th Yr.- Spring Semester	BMB701 / 702	2	2
		<b>Grand Total</b>	<b>32</b>

## **COURSE DESCRIPTIONS**

The BMB graduate program Operating Committee assists each entering student in tailoring a program to match his or her interests. First year students take courses in a core curriculum taught by the faculties from the basic science departments. Courses are taught not only by formal lectures but also as seminars and informal discussions. The BMB graduate program's curriculum is designed to provide broad knowledge in the various aspects of molecular biology and biochemistry in addition to intensive training in certain specialized areas of research according to the student's interests.

### **BMB Required Courses**

BMB 701 – Journal Club

BMB 702 – Biochemical Science Seminar

BMB 709 – Advanced Biochemistry & Molecular Biology

BMB 710 – Advanced Topics in Biochemistry

BMB 714- Molecular Genetics

BMB 715- Structural Biology and Applications to Drug Discovery

BMB 716- Bioinformatics of Gene Regulation and Protein Function

BMB 830 – Doctoral Dissertation

BMB 840- Doctoral Dissertation

BMB 850 – Research in Residence

### **1. BMB 701- Journal Club**

All registered BMB graduate students must participate in the Research Journal Club/Seminar. Junior students are required to critically review published paper(s) of their choice and describe in detail the findings described therein. Senior students are required to present their research findings in an open forum.

### **2. BMB 702 – Biochemical Science Seminar**

The Biochemistry and Molecular Biology (BMB) department has an active seminar program that meets on every Friday at noon. In this program seminars are presented by the BMB faculty (primary and secondary), invited speakers within the University of Miami and from other universities, government agencies, and industry. All BMB Graduate Students enrolled in this course will be required to attend this seminar and will have informal interactions with speaker, and exchange ideas at lunch on the seminar day.

### **3. BMB 709- Advanced Biochemistry & Molecular Biology**

This course is offered every fall. This course brings the student to the forefront of research in Biochemistry, Molecular Biology, and Molecular Genetics. The course material is discussed exclusively in the form of original research papers and lectures. Based on this experience, students are required to propose experimental approaches to biological problems and defend them.

### **4. BMB 710- Advanced Topics in Biochemistry**

This course is offered by various faculty members in the department on a rotating basis depending upon their expertise. For example, an advanced topic course in bionanotechnology and biosensing offered by Dr. Deo covers these topics through lectures. Another advanced course topic taught by Dr. Zhang is DNA repair.

### **5. BMB 714- Molecular Genetics**

This course deals with fundamental genetic concepts and mechanisms and their application to biomedical research. The objective is to build a foundation in genetic principles and help students develop practice genetic design and analysis typical to graduate research. The course is divided into two parts: a first part on general genetic mechanisms and their application in prokaryotes and second part with Mendelian inheritance and diploidy and applied genetics in eukaryotes. Problem solving is emphasized in homework and exams. Topics include mutation, complementation, segregation, recombination, suppression, gene regulation, genome structure and dynamics and basic population genetics. This course provides fields such as molecular biology, microbiology, cell biology, cancer biology, pharmacology and functional human genomics.

### **6. BMB 715- Structural Biology and Applications to Drug Discovery**

This course provides an introduction to structural biology, and illustrates how understanding the relationship between structure and function of biological macromolecules drives drug discovery. The course will be in three parts, with the first covering experimental and computational tools of structural biology – X-ray crystallography, cryo-electron microscopy and molecular modeling. The second part of the course will look at two examples where structural biology has influenced drug design – traditional enzyme inhibitor type drugs and channel blocker drugs. The final part of this course will look at structures of nucleic acid (DNA and RNA) binding proteins and how they inform drug discovery.

### **7. BMB 716- Bioinformatics of Gene Regulation and Protein Functions**

Among the skills required to become a successful interdisciplinary life scientist is the ability to navigate biological databases to better understand gene and protein function. Genome sequences contain the signals that guide differential gene expression and encode structural RNAs, regulatory RNAs and proteins. This course will introduce the tools, databases and evolutionary considerations that help us understand the regulation of gene expression and predict protein function. The biochemical and regulatory functions encoded in genomic DNA sequences will be explored using bioinformatics techniques including gene finding, BLAST searches, PubMed searches, high-throughput dataset mining, multiple alignments, phylogenetic analysis, identification of conserved functional domains and motifs, assessment of protein-protein and protein-ligand interactions, gene context and co-occurrence analysis, secondary and tertiary

structural analysis, metabolic and cellular modeling, and phenotypic analysis. The databases, tools and tutorials available at websites developed by the National Center for Biotechnology Information, EMBL-EBI, the Protein Data Bank, and others will be used as supporting course materials. Each week will have a set of online videos and instructions to complete before the weekly live lecture. The live lecture consist of a one hour slide presentation and one half-hour of Q&A discussions. Competency in bioinformatics will be assessed by a midterm and a final exam.

#### **8. BMB 830- Doctoral Dissertation**

Required for all Ph.D. candidates. The student will enroll for credits as determined by the Office of Graduate Studies, but not less than a total of 24. No more than 12 hours of research may be taken in a regular semester, and no more than 6 in a summer session. If a student has (A) passed qualifying exam(s) and (B) is engaged in an assistantship, he/she may still take the maximum allowable credits (24 credits in total).

#### **9. BMB 840- Doctoral Dissertation- Post Candidacy**

Required for all Ph.D. candidates. The student will enroll for credits as determined by the Office of Graduate Studies.

#### **10. BMB 850- Research in Residence**

This course covers research in residence for the Ph.D. degree after the student has been enrolled for the permissible cumulative total in appropriate doctoral research. Credit is not granted. May be regarded as a full-time residence as determined by the Dean of the Graduate School.

### **COURSE WAIVER POLICY**

Some of the classes required to obtain PhD degree in BMB can be waived for MD/Ph.D. and Masters students on a case-by-case basis by the Operating Committee of the BMB graduate program. Since graduate courses are more intensive and focused than undergraduate courses, the decision to waive courses will be based on the student's background including prior undergraduate and graduate coursework, current academic performance, and area of research. The Operating Committee can waive a maximum of 8 credits. However, a student who holds a Masters degree can request to waive up to 12 credits.

Students who wish to waive courses must provide graduate program coordinator with a copy of their transcripts, course descriptions for courses to be considered, and a cover letter. All documents must be in English.

**TIME COMPLETION POLICY:** *We will follow the PIBS Policy and comply with the policy of the graduate school.* The current PIBS policy as stated in the letter of admission is, "students normally complete their Ph.D. within 6 years. Accordingly, financial support beyond the 6<sup>th</sup> year will be provided only if circumstances warrant." This does not mean a student will be automatically dismissed after 6 years. The mentor and program director will meet to discuss the student's future.

## **QUALIFYING EXAMINATION**

In the Fall/Spring Semester of their second academic year, students will be evaluated on the basis of their academic performance and by completion of the Qualifying Examination (QE). The format of this examination is the definition of a novel research problem and the development of a proposal to address the stated question and hypothesis. The significance, feasibility, and the relationship of the proposal to the literature will be important criteria for evaluation.

The Qualifying Examination determines, in part, the student's eligibility for admission to candidacy for the Ph.D. degree. The examination is designed to test the student's basic knowledge of biochemistry and molecular biology, as well as assess creativity and rationality of research design.

The Qualifying Examination is comprised of two parts:

1. Submission of written thesis proposal
2. Oral defense of the proposal

Follow the proposal guidelines as per the fellowship application to the agency of your choice. The proposal should be submitted to the student's *dissertation committee*, BMB Graduate Program Director and Coordinator **two weeks prior to the oral examination**. It is the student's responsibility to ensure timely submission of the proposal to the entire committee. The proposal presentation and oral examination is the student's defense of the proposal and normally lasts from two to three hours. The grading of the qualifying exam is equally weighted between the written research proposal, presentation and the student's oral defense, and is pass/fail. In order to be admitted to candidacy, the student should maintain a grade point average of 3.0 or better and must pass the qualifying examination. All BMB students must bring the qualifying/proposal form and admission to candidacy form to the meeting for committee members to sign along with signed data verification form. These forms are available at the BMB website under Academics-BMB graduate program-forms.

**Admission to Candidacy:** When a student has met all requirements and passed the qualifying examination, admission to candidacy is approved. No student can receive their degree in the same semester or summer session in which he or she is admitted to candidacy. Students will complete the Admission to Candidacy form after they have passed their Qualifying Exam.

**Dissertation Committee:** The dissertation committee consists of at least three BMB faculty members in total. At least one member must hold primary appointment in the BMB department. In addition to the student *dissertation committee* members selected by the student, the *qualifying examination committee* will comprise two additional BMB Graduate Faculty members. The Operating Committee will select the two additional committee members. The two additional members after the first meeting will not further participate on the dissertation committee. For final PhD defense an additional external member will be added. The Qualifying Examination Committee will consist of five members. Please complete and submit the form entitled "request for permission to take qualifying examination" for the approval of your thesis committee. This form is available at the BMB website under Academics-Graduate Program-Forms (<http://biomed.miami.edu/default.asp?p=895&s=150>).

**Progress Reports and Meetings:** If you have published a manuscript, you can use the manuscript as a progress report. The student should highlight recent research progress and any changes made to the project since the Qualifying Examination and previous progress meeting. The proposal



should be submitted to the committee one week prior to the meeting. **It is the responsibility of the student to ensure that the dissertation proposal and progress meetings are held every six months (or less if stipulated by the *Dissertation Committee*).**

Students are required to bring the progress evaluation form to the meeting for committee members to sign along with signed data verification form. These forms are available at the BMB website under Academics-BMB graduate program-forms. In addition, students are required to present their research in Research Journal Club as a part of BMB 601 and also attend all the seminars and educational activities that are organized by BMB.

If the Dissertation Committee determines that the student is not making satisfactory progress or that there is a consistent lack of progress, the Dissertation Committee will take appropriate action. If the student's progress remains unsatisfactory for more than one six months, the Dissertation Committee must decide whether the student should: 1) Change his/her research project and 2) change mentor and laboratory. Consistent lack of progress for more than a year may result in dismissal from the BMB graduate program. The students who are in the BMB program for 5 years or more will meet with their *Dissertation Committee* every three months. The Committee will make a determination that adequate progress towards the Ph.D is being made and will vote on the continuation of stipend support.

## **SUFFICIENCY REQUIREMENTS**

1. Grade point average of 3.0 or better.
2. Completion of 28 credit hours of required courses.
3. Successful completion of research work with at least one first author published and/or accepted manuscript (not review article). However, the student's dissertation committee can request a waiver of this rule if the committee feels that the student has done scholarly work and made significant progress. In cases of request for waiver, the dissertation committee will explain reason for waiver, and the final decision will be made by the BMB Operating Committee.
4. Students have 4 months to write and defend the thesis work starting from sufficiency date.

The Sufficiency Meeting Document consists of:

- 1) An outline of the dissertation showing what will be in each chapter. 2) All data figures (these may be draft versions).

### **Progress reports are submitted at sufficiency meetings with sufficiency documents.**

Progress reports should be a clear and concise presentation of the accomplishments in the dissertation research project since the last meeting. This summary should include key points of the student's progress since their last committee meeting. Students are encouraged to seek the advice of their Research Mentor in completing this document.

### **Guidelines for the written progress report include:**

- Summarize findings and progress since the last committee meeting.

- Describe any changes or modifications of the planned experiments and the reasons for the changes.
- Present proposed plans for the next group of experiments
- The document need not contain ALL of the experimental work since the last progress meeting but should be a selection of the work you consider most important/relevant.
- At the progress meeting itself, it is acceptable to present some experimental results not included in the written progress report.
- The total length of the report is not to exceed 3 pages including figures (12 point font, single spaced). You may append any papers submitted, in press or published.

Each committee member must receive the Progress Sufficiency Meeting Documents **at least 1 week before** the meeting.

## **THESIS DEFENSE**

The Graduate School requires that all members of the *Dissertation Committee* and external examiner must attend the seminar, oral defense, and sign off on the final document. In the case of emergencies the Graduate Program Director can consult with the Mentor to allow a single individual to be absent from the defense.

The defense involves the review of all experimental data and the entire written thesis. During the defense, the Dissertation Committee Chair is responsible for allotting appropriate time for questions by all participants. Students are expected to understand the significance of their findings, display adequate knowledge of the relevant literature and know the theory and limitations of methods employed. Candidates must demonstrate the ability to independently design, execute and interpret original experiments. The thesis work and the oral defense must be approved by all committee members. This group is empowered to pass or fail a student's dissertation document/and or the oral defense. The signed forms will be submitted to the Graduate School unless revisions are required. If revisions are necessary, signatures will be held until the document is revised and approved.

## **Electronic Thesis and Dissertation (ETD)**

The Graduate School's ETD web page compiles all matters of electronic Thesis and Dissertation (ETD). This web page includes guidelines, instructions, templates, important dates and deadlines to help you submit your final thesis defense and graduate successfully. Students are no longer required to turn in hardcopies of their thesis or dissertation since everything is available electronically.

Please refer to the ETD web page before writing your final thesis. Students can contact Doreen Yamamoto, Dissertation Editor, if they have questions concerning the details of preparation and submission of the thesis dissertation.

ETD Link- [www.miami.edu/etd](http://www.miami.edu/etd)

Doreen Yamamoto- (305) 284-4154 Email: [dyamamoto@miami.edu](mailto:dyamamoto@miami.edu)

## **GRADUATION**

It is the responsibility of all students to apply for graduation through myUM during their final semester before the date indicated on the Graduate School calendar.

The academic calendar has specific deadlines for graduation. It is the student's responsibility to be aware of the exact dates and to coordinate the dissertation defense accordingly after submission of a final thesis is accepted by the Graduate School.

## **PLAGIARISM**

Plagiarism is explicitly outlawed at University of Miami Miller School of Medicine (UMMSM). The BMB graduate program will not tolerate Plagiarism. Students who are found to have plagiarized may be asked to withdraw from the program. Plagiarism is not always easy to define; students who are unsure whether a particular practice is acceptable are urged to discuss the issue with the faculty instructor or mentor.

## **DISMISSAL AND APPEALS**

Students can be dismissed by the Program for academic or professional reasons. Decisions on dismissal are made by majority vote of the Operating Committee. To appeal a major programmatic decision (e.g., dismissal, denial of degree, termination of stipend), students should first present their reasons for appealing to the Graduate Program Director and Operating Committee. This appeal will be given a fair and impartial hearing followed by a decision made by majority vote. If the student remains dissatisfied with the result of this appeal, the student may appeal the program decision, in writing, to the Associate Dean for Graduate Studies, within 30 days of the program's final decision. Decisions by the Associate Dean are appealable to the Dean of the Graduate School through the filing of a formal Graduate School Grievance.

[http://www.miami.edu/index.php/graduate\\_school/current\\_students/](http://www.miami.edu/index.php/graduate_school/current_students/)

## **LEAVE OF ABSENCE/VACATION POLICY**

This statement applies to full time students in good academic standing at the UMMSM. In general, trainees may receive stipends during the normal holiday periods observed by UMMSM (New Year's Day, M.L. King's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day). Students may also receive stipend support for up to 15 calendar days of sick leave per year. Students may also receive stipends for up to 30 calendar days of parental leave per year for the adoption or birth of a child, if the use of parental leave is requested from the Program Director.

Students are also permitted to receive stipend support during a reasonable number of vacation days. The exact number and timing of vacation days is negotiated between student and mentor, but vacation days are normally expected to be no more than 2 weeks per year (10 business days). Individuals requiring periods of time away from their research training experience longer than specified here must seek approval from their Program Director for an unpaid leave of absence. At the beginning of a leave of absence, the trainee must submit a written request which includes the reason for the request as well as the date the leave will begin and end. This request, once approved by the Program Director, should be submitted to the Office of Graduate Studies which will seek the necessary approval from the Associate Dean.

## **FELLOWSHIPS**

The Biochemistry and Molecular Biology (BMB) Graduate Program requires that all external and internal graduate fellowship proposals submitted by BMB graduate students be submitted through the BMB Department. Any awarded fellowships need to be allocated to BMB and administered by BMB. All faculty part of the BMB Graduate Program are required to follow this policy with no exceptions. Fellowship applications need to be submitted to the University's Central Research Administration Office no later than 5 days before the deadline. Thus, it's very important that you begin working on your application well in advance. For direct Fellowship submission assistance, please contact Yvonne Marcus @ 6-6261.

## **IMPORTANT GRADUATE FORMS**

Please contact the Graduate Program Coordinator for the important forms below:

1. SACS Assessment form (For Qualifying Exam, Progress Report, Doctoral Dissertation)
2. Request to take Qualifying Exam
3. Qualifying Exam Verification of Data
4. Admission to Candidacy
5. Certificate of Defense Approval for Doctoral Dissertation
6. Ph.D. Signature Page
7. Petition for Transfer of Credit
8. Student Time off Request
9. Leave of Absence
10. BMB Graduate Exit Survey
11. BMB Graduate Alumni/ae Profile
12. BMB Graduate Student Clearance Checklist

## **Graduate Program Faculty**

Andras, Ibolya Edit	Primary
Barrientos, Antonio	Secondary
Beurel, Eleonore	Primary
Bhattacharya, Sanjoy K	Secondary
Cote, Richard J	Secondary
Daunert, Sylvia	Primary
Deo, Sapna K.	Primary
Deutscher, Murray Paul	Primary
Dhar, Shanta	Primary
Eum, Sung Yong	Primary
Faghihi, Mohammad	Secondary
Farooq, Amjad	Primary
Fontanesi, Flavia	Primary
Fornoni, Alessia	Nephrology/Hypertension/DRI
Gong, Feng	Primary
Harbour, William	Secondary
Harris, Thomas K	Primary
Howard, Guy A	Secondary
Jain, Chaitanya	Primary
Jimenez, Joaquin J	Secondary
Jope, Richard Scott	Primary
Lam, Byron	Ophthalmology
Landgraf, Ralf	Primary
Lee, Stephen	Primary
Liu, Fan	Primary
Liu, Xue Zhong	Otolaryngology
Malhotra, Arun	Primary
Myers, Richard S	Primary
Nawaz, Zafar	Primary
Nemeroff, Charles	Psychiatry & Behavioral Sciences
Nimer, Stephen	Secondary
Park, Min Seon	Primary
Robbins, David	Secondary
Rotundo, Richard L.	Secondary
Rudd, Kenneth E	Primary
Slingerland, Joyce Marie	Secondary
Toborek, Michal J	Primary
Wahlestedt, Claes	Secondary
Velazquez, Omaid	Secondary

Whelan, William J.	Primary
Xu, Mingjiang	Primary
Yang, Feng-Chun	Primary
Zhang, Yanbin	Primary

To view BMB Graduate Faculty Members and their areas of research please click on the link below.

<http://bm.med.miami.edu/faculty/facultybmb>

## **IMPORTANT NUMBERS**

### **Graduate Program Director**

Dr. Sapna Deo- (305) 243-4421

### **Graduate Program Coordinator**

Diane Dames- (305) 243-2468

### **Graduate School**

Dissertation Editor, Doreen Yamamoto (305) 284-4154

### **Student Accounts Services**

The Office of Student Account Services processes all financial information of a student's account during their enrollment at the University of Miami. Staff members are available to assist and answer inquiries by phone (305) 284-6430 Option 5, email ([saccounts@miami.edu](mailto:saccounts@miami.edu)), or in person.

**Hours:** 8:30 am – 5:00 pm