



MEMORANDUM

To: Donna E. Shalala, President

From: Richard L. Williamson
Chair, Faculty Senate

A handwritten signature in blue ink, appearing to read 'Richard L. Williamson'.

Date: September 26, 2011

Subject: Faculty Senate Legislation #2011-13(B) – Establish a Bachelor of Science and Doctor of Philosophy Degree in Biochemistry and Molecular Biology Joint Degree Program

At its September 21, 2011 meeting, the Faculty Senate unanimously approved the establishment of a combined Bachelor of Science and Doctor of Philosophy Degree in Biochemistry and Molecular Biology joint degree program. This dual degree program will be comprised of existing courses from both programs and is intended for highly motivated students. It will be housed in the Miller School of Medicine.

The Senate's approval is subject to three requirements, which were accepted by the presenters as friendly amendments:

1. The advertising and recruitment materials will be carefully vetted to assure they fully disclose that the six-year possibility requires students to have AP credits for the prerequisites. The vetting should include the departments of Chemistry and Biology.
2. Minimum admissions standards must be established and published.
3. This degree program shall be reviewed by the Senate in the fall of the fourth year, i.e. 2015.

The supporting materials are enclosed for your reference.

This legislation is now forwarded to you for your action.

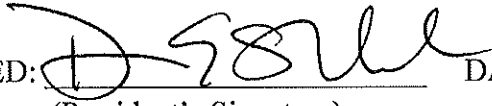
RW/rh

Enclosure

cc: Thomas LeBlanc, Executive Vice President and Provost
Pascal Goldschmidt, Senior Vice President and Dean, Miller School of Medicine
John Bixby, Chair, Department of Biochemistry and Molecular Biology
Zafar Nawaz, Presenter, Department of Biochemistry and Molecular Biology

CAPSULE: Faculty Senate #2011-13(B) – Establish a Bachelor of Science and Doctor of Philosophy Degree in Biochemistry and Molecular Biology Joint Degree Program

PRESIDENT'S RESPONSE

APPROVED:  DATE: 10/3/11
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: DEAN BIXBY

EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: _____

REMARKS (IF NOT APPROVED): _____

Request to the Graduate School and the Faculty Senate

August 08, 2011

Introduction

The Department of Biochemistry and Molecular Biology (BMB) is requesting approval of a new six year dual (BS/PhD) degree program that uses elements of existing programs.

The program will be named a combined B.S. and Ph.D. program. It is intended for exceptional, highly motivated, students who are eligible for the existing Privileged Studies Program.

The students will be selected from applying high school students by a B.S./Ph.D. program admission/operating committee comprising BMB undergraduate advisors and members of the BMB graduate program steering committee. Admission into the program will be highly selective, but selection will be based on a number of criteria (GPA, AP or college equivalent courses taken, SAT/ACT scores, interest and aptitude for research, etc.) rather than a strict SAT/ACT cutoff. We anticipate offering this program to less than a quarter of the students choosing BMB as a major.

Rationale

The University of Miami has, for more than 30 years, offered an Honors Program in Medical Education for exceptional, highly motivated, high school students. These students go through an accelerated undergraduate program in the Privileged Studies Program. If they maintain a sufficient grade point average and take the MCAT exam, they are given a place in the UM freshman medical student class before they graduate with a B.S. degree. This program attracts students to UM who might otherwise have chosen to go to a different school. In medical school, these students receive certain credits for the courses taken that also count towards their undergraduate degrees. They receive undergraduate degrees after their first year in medical school.

We propose to extend this program to similarly exceptional, highly motivated, high school students interested in combining their studies for a B.S. degree with those for a Ph.D. degree. The undergraduate program in biochemistry, combined with research courses (BMB 210 and 545), prepares the students well for graduate studies in any biomedical science. Our undergraduate 500-level courses can also count towards the requirements for a Ph.D. degree in Biochemistry and Molecular Biology. However, the students will take graduate level courses (600 levels) only after the completion of B. S. degree.

We believe that, like the BS-MD program, this training route will draw students who will be attracted by the added rigors and challenges of an accelerated program and who see the financial and career advantages of a track that gives them 2 extra years of

independent professional life. These are students who might not otherwise study at the UM.

We anticipate that students who are admitted to this program will, approximately in two and a half to three years, including research, accumulate enough credits to graduate with a B.S. in biochemistry. There will be no change in the existing undergraduate curriculum and students will complete all the required courses. However, students can obtain credits for AP or college equivalent courses towards their undergraduate degree. The remaining three to three and a half years of the program, the student will move to the Medical Campus to attend the PhD level courses and perform their dissertation research. We expect that students will receive B.S. degree in approximately three years. The students will be admitted to the PhD program only when they have completed all the requirements of the B. S. degree. The tuition waivers will be issued after the end of third year when the student becomes a graduate student. The B.S./Ph.D. program's admission/operating committee will encourage and advise these students to take a variety of courses, in the same way that our undergraduate advisors encourage all students in biochemistry to seriously consider a non-science minor.

The students will be guaranteed admission to our Ph.D. program if they perform well in their courses (cumulative GPA \geq 3.5) and must obtain an acceptable score on GRE exam. The 500-level science courses that these students take will also count towards their Ph.D. course requirements. They will take additional courses at the 600 level. They will not be required to do research rotations because their research experience in BMB 210 and 545.

Cost of the program

There will be no additional costs incurred by this program. The students will take existing undergraduate and graduate courses. They will be advised by the regular biochemistry advisors during the undergraduate section of their study and they will do research with faculty members in the Biochemistry & Molecular Biology PhD Program. It is expected that these students will be excellent candidates for predoctoral NIH or NSF fellowships during their graduate training. If they do not receive such a scholarship, they can be supported by research grants, training grants or funds from the mentor's department as is customary for all our graduate students.

A sample curriculum for the undergraduate portion of the study is shown below.

Suggested undergraduate curriculum

We plan to invite these students to arrive early during the summer before their freshman year and place them in a lab as observers and learners of simple techniques. We will also give them a quick introduction to bio-organic chemistry in tutorial sessions. For these sessions the students should read a chapter of the text that we use in our biochemistry courses and the instructor will discuss the underlying organic chemistry with them. The students would then be ready to study organic chemistry (Honors, for PRISM students in their first fall semester).

Fall semester 1

CHM 201 Organic Chemistry 1+ lab (honors)

BMB 210 Introduction to Biochemistry & Molecular Biology and Nutrition Research

BIL 255 Cell and Molecular Biology

any other courses up to 15 credits

Spring semester 1

CHM 202 Organic Chemistry 2 + lab

BIL 250 + lab, genetics, honors lab if possible.

BMB 260 Introduction to Biochemistry and Nutrition

other courses, including, possibly, MIC 301 Introduction to Microbiology and immunology.

Summer 1

BMB 545 Research problems in Biochemistry and Molecular Biology

Fall semester 2

BMB 506 Principles of Biochemistry & Molecular Biology

Calculus based physics with a biological slant PHY 201

other courses

Spring semester 2

BMB 507 Proteins & Enzymes

Physics 2

BIL 355 Developmental Biology

other courses

Summer 2

BMB 545 Research problems in Biochemistry and Molecular Biology

Fall semester 3

BMB 509, Molecular Biology of the Gene

other courses

The students would now have fulfilled the requirements for the BMB major and the 500 level courses should also count towards their graduate course requirements. They will now start to take 600-level courses and select research mentors and projects.

We expect that this will be a small program that will not admit more than about two students per year and reach a steady state of eight to ten students.

The students in the program will have a choice of all the graduate courses offered by the Department of Biochemistry and Molecular Biology, as well as any of the courses offered by the PIBS program after they have taken the required 500-level courses.

The students will be required to take all the introductory orientation courses that are required for all PIBS graduate students such as survival skills, literature searching, lab safety, and research ethics. The students will also participate in PIBS 602 discussion groups. Additionally, students will attend the mentoring group which will be modeled after the PIBS mentoring program, but tailored to the demands of the BMB program.

Recruitment

We plan to make high school counselors aware of the program. We will ask the Office of Admissions to notify us of exceptional candidates who are being attracted to the University of Miami with Foote Scholarships. We will contact these students and make them aware of the program.

Foote Scholars and other students in the Privileged Studies Program who are already at the University of Miami will be made aware of the program. At their request, they will be considered for the program by its admission committee.

Appendices:

1. A list of all graduate courses offered by the Department of Biochemistry & Molecular Biology.
2. A list of all graduate courses offered by the PIBS program.
3. A list of the Biochemistry & Molecular Biology Graduate Faculty.

1. LIST OF GRADUATE COURSES OFFERED BY THE BMB DEPARTMENT

BMB 601 – Journal Club
BMB 609 – Advanced Topics in Biochemistry & Molecular Biology
BMB 610 – Advanced Topics in Biochemistry & Molecular Biology
BMB 614 – Molecular Genetics
BMB 615 – Structural Biology and Applications to Drug Discovery
BMB 616 – Macromolecules: Physical Biochemistry
BMB 631 – Special Work
BMB 645 – Research Problems
BMB 730 – Doctoral Dissertation
BMB 750 – Research in Residence

1. BMB 601- 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 finding in an open form.

2. BMB 609- Advanced Topics in Biochemistry & Molecular Biology

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

3. BMB 610- Advanced Topics in Biochemistry & Molecular Biology

This course comprised of lectures and student-led literature discussion. The intended of this course is to provide students broad-based instruction on the modern research in the area of biochemistry and molecular biology.

4. BMB 614- Molecular Genetics

This course deals with fundamental genetic concepts and their application to biomedical research. The objective is to provide students with the tools of molecular genetics and an understanding of how genetic principles apply to organisms at various levels of complexity. The course is divided into two parts with an exam following each module. The first module is devoted to fundamental genetic mechanisms including complementation, recombination, suppression and gene regulation as established by experiments with bacteria and bacteriophages. The second module deals with genetic mechanisms in eukaryotic systems including yeast, mice and humans. Problem solving is emphasized in homework and exams. Since the focus is on understanding the biological consequences of underlying genetic mechanisms, this course will provide valuable insights for students interested in molecular mechanisms encountered in diverse areas of biomedical research including molecular biology, microbiology, cell biology, cancer biology, pharmacology, and human genomics.

5. BMB 615- Structural Biology and Applications to Drug Discovery

This course focuses on the relationships between structure and function in biological macromolecules, and how this knowledge has led to the discovery of new drugs. The topics discussed fall into 4 general areas: nucleic acid-protein interactions; membrane proteins, components of the immune system and ion channels. For each of these systems, the availability of information on structure and mechanism has resulted in new drugs to combat a variety of diseases including; cancer, arthritis, and Aids. The most recent research on ion channel structure and function promises to be particularly significant for the design of a large variety of new drugs to treat many diseases from cancer to stroke.

6. BMB 616- Macromolecules: Physical Biochemistry

The Physical Biochemistry course is designed to introduce essential theoretical concepts associated with a variety of physical methods and to illustrate how these techniques can be used to explore macromolecular structure and function. The course material is composed of 4 main topics: X-ray crystallography, spectroscopic methods, hydrodynamic methods and mechanisms of catalysis.

7. BMB 631- Special Work

This course covers special work, lecture, or laboratory or a combination of these, as determined by advisor in accord with student's individual interest. Prerequisite: Approval of Operating Committee.

8. BMB 645- Research Problems

This course covers laboratory research problems in various areas of biochemistry and molecular biology, including literature search, experimental design, data gathering and evaluation of results. This course is the mechanism by which graduate laboratory rotations will be done in preparation for selection of Ph.D. mentor.

9. BMB 710- Master Thesis

The requirements are 30 credits at the graduate level; a thesis showing results obtained during work on a research problem, for which six credits will be earned; a written comprehensive examination covering the entire field of biochemistry; an oral defense of the thesis. Credit is not awarded until the thesis has been accepted.

10. BMB 720- Research in Residence

This course covers research in residence for the master's degree after the student has enrolled for the permissible cumulative total in BMB 710 (usually six credits). Credit not granted. May be regarded as full time residence.

11. BMB 730- 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. Not more than six in the summer. 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.

12. BMB 750- 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 not granted. May be regarded as a full-time residence as determined by the Dean of the Graduate School.

Qualifying Examination

At the end of the spring semester of their third academic year before May 01, 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.

In addition to the student *dissertation committee* members selected by the student, the *dissertation proposal exam committee* will comprise two other BMB Graduate Faculty members. The Operating Committee will select the two additional committee members. The two additional members will not further participate on the dissertation committee. The Qualifying Examination Committee will consist of up to five members.

The Qualifying Examination comprises two parts:

1. Oral presentation of the proposal
2. Oral defense of the proposal

2. LIST OF GRADUATE COURSES OFFERED BY THE PIBS

1. PIBS 601- Introduction to Biomedical Sciences

This course is a comprehensive overview of proteins, DNA and RNA, through molecular signaling and cell biology, to genomics and organism biology.

2. PIBS 602- Scientific Reasoning

Students are taught with a combination of lectures, scientific reasoning and methods classes, and small group sessions devoted to primary literature.

3. PIBS 680- Research Ethics

The NIH Guide for Grants and Contracts stipulates that Institutions receiving support for National Research Service Award Training Grants are required to develop a program in the principles of Scientific Integrity. This program should be an integral part of the proposed training effort. The University of Miami Miller School of Medicine has chosen to respond to this requirement with this course.

4. EPH 501 Medical Biostatistics I

This course introduces students to the fundamentals of statistical thinking from the standpoint of modeling data. The focus is on inference, primarily parameter estimation in the context of a given parametric family. Issues of experimental design, confidence, correct interpretations of results, and conditions for validity of methods are discussed. Nonparametrics is included as a contrasting collection of methods. Hypothesis testing is also introduced, focusing on correct interpretation, design issues, and conditions for validity of the techniques. Computing is an essential component of this course.

5. Advanced Literature Searching and Management

The Calder library staff gives a hands-on tutorial covering advanced PubMed, QUOSA, and Scopus searches to PIBS students.

6. Bioinformatics Workshop

All students will be enrolled in Bioinformatics in either Spring A or Spring B. There will be 5 sessions per half semester.

3. BMB RESEARCH PROGRAMS

The BMB graduate faculty consists of 19 primary faculty members and 16 secondary faculty members. Some of the BMB faculty is affiliated with other departments in the University, with the VA hospital, the Sylvester Comprehensive Cancer Research Center, the Braman Family Breast Cancer Institute. Thus, research facilities for a large variety of specialties are available to our students. The BMB department has established a record of scientific contributions and collaborative activities in the following 6 areas.

- 1. RNA structure and metabolism:** The BMB department has been at the forefront in understanding the enzymology of RNA modification and RNA degradation. Crystal structures of several RNA modifying enzymes and exoribonucleases have been determined. The recent discovery of regulatory functions of small RNAs in both prokaryotes and eukaryotes has highlighted the importance of basic research on RNA structure and stability for future progress in both the basic and clinical sciences. At the University of Miami, expertise in RNA metabolism is uniquely situated in the department of BMB.
- 2. DNA replication, repair, recombination, and eukaryotic chromosome maintenance:** The BMB department has established a strong contingent of investigators in DNA repair and recombination and the related areas of chromatin structure and function. A central theme of this program involves research that covers repair of DNA damage and characterization of the multicomponent nucleoprotein complexes involved in DNA repair, recombination and chromatin structure. DNA cross-link repair is of special interest because it plays a major role in the activity of many cancer chemotherapeutic agents.
- 3. Molecular biophysics and structure of protein-ligand interactions:** The BMB Department has recognized the importance of obtaining fundamental information about enzyme catalysis and small molecule interaction with proteins that are involved in basic cellular signaling including DNA replication and repair, RNA biology, translation and cell cycle regulation. The faculties involved in this program characterize protein-ligand interactions at the atomic level using kinetic and thermodynamic methods as well as crystallization and characterization of protein-ligand conformation.
- 4. Molecular mechanisms of development, differentiation and signal transduction:** The faculties of the BMB department have also directed their

research efforts at elucidating mechanisms of cellular response to extracellular stimuli and regulation of cell function during development and differentiation. The objectives of this program are to understand regulatory mechanisms at a molecular level using cultured human cells, genetically modified mice lines and yeast systems.

5. **Molecular mechanisms involved in genetic disease and cancer:** The BMB Department has a critical mass of investigators who study molecular mechanisms in the development of cancer. This range from biophysical and functional analysis of proteins involved in signal transduction and includes the study of single gene perturbation of evolutionarily conserved metabolic pathways that produce human disease.
6. **Biomolecules and bionanotechnology:** The BMB department has recently established a new research program in the area of biomolecules and biotechnology. The focus of this program is to design and develop new natural and semi-synthetic biomolecules, as well as molecular-based devices that can be employed in translational medicine and other bionanotechnology applications.



UNIVERSITY OF MIAMI
MILLER SCHOOL
of MEDICINE

Pascal J. Goldschmidt, M.D.
Senior Vice President for Medical Affairs and Dean
Chief Executive Officer, University of Miami Health System

July 15, 2011

Richard L. Williamson, Jr., J.D.
Professor of Law and Chair of Faculty Senate
University of Miami
Ashe Administration Building, Room 325
Coral Gables, FL 33146

Dear Dr. Williamson:

It is with great enthusiasm that I provide this letter in support of the proposed combined B.S./Ph.D. Program in Biochemistry and Molecular Biology. As part of its educational mission, the Department of Biochemistry and Molecular Biology strives to provide innovative and timely curriculum opportunities to students while delivering high-quality teaching and service. I believe that the B.S./Ph.D. Program is unique and timely and that it will provide numerous benefits. For instance, it will target a population of students who are academically advanced with respect to their peers when entering the University, providing them with the option of pursuing an accelerated career path. Also, the proposed B.S./Ph.D. Program, by attracting an additional class of exceptional students, will contribute to enriching the quality of our undergraduate and graduate programs. Thus, the B.S./Ph.D. Program will not only benefit the Biochemistry and Molecular Biology Department, but also the University of Miami Miller School of Medicine as a whole by potentially attracting high-caliber students seeking to pursue a research career. Furthermore, because the proposed Program will use existing course work and elements of our undergraduate and graduate programs, there is no need for investment of funds.

I am strongly in favor of the establishment of the B.S./Ph.D. Program in Biochemistry and Molecular Biology and believe it will be an asset to the Miller School of Medicine. Thank you for considering the petition for its creation.

With best regards,

Pascal J. Goldschmidt, M.D.
Senior Vice President for Medical Affairs and Dean
Chief Executive Officer, University of Miami Health System

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UNIVERSITY OF MIAMI
MILLER SCHOOL
of MEDICINE



6. April 2011

Dr. Richard Williamson
Chair, Faculty Senate
325 Ashe Building
Coral Gables, Florida 33146

Dear Richard,

I am pleased to present to the Faculty Senate a proposal to create a new combined BS/PhD degree program in Biochemistry & Molecular Biology. In my role as Sr. Associate Dean for Graduate & Postdoctoral Studies, I strongly support this proposal.

The Provost's Strategic Plan calls for continued strengthening of our undergraduate student credentials, increased growth in the STEM fields, and the growth and strengthening of our university's PhD programs (prominently including the programs at the Miller School). Innovative programs such as the combined BS/PhD offer the promise of attracting a small cadre of unusually strong science-oriented candidates to UM. This proposed program is therefore fully aligned with each of the above goals.

The new PhD program has obtained the explicit support of the Dean, the Miller School Graduate Program Directors, the Graduate Council, and myself. Please let me know if the Senate requires any additional information. Dr. Nawaz and I look forward to meeting with the Senate to discuss any suggestions or concerns that might arise.

Yours Sincerely,

John L. Bixby, Ph.D.
Professor and Sr. Associate Dean

SYLVIA DAUNERT
PROFESSOR AND LUCILLE P. MARKEY CHAIR



UNIVERSITY OF MIAMI
MILLER SCHOOL
of MEDICINE

Department of Biochemistry and Molecular Biology ♦ R. Bunn Gautier Bldg. ♦ 1011 NW 15th Street
Miller School of Medicine ♦ University of Miami ♦ Miami, FL 33136 ♦ (305) 243-4005 ♦

July 10, 2011

Dr. Richard Williamson
Chair, Faculty Senate
325 Ashe Building
Coral Gables, Florida 33146

Dear Dr. Williamson:

This letter is in support of the petition for approval of the proposed combined BS/PhD Program in Biochemistry and Molecular Biology. As part of the educational mission of our Department, we strive to provide innovative and timely curriculum opportunities to students while delivering high quality of teaching and service. The BS/PhD Program is unique and timely since it will target a population of students who are academically advanced with respect to their peers when entering the University, and provide them with the option of pursuing an accelerated career path. An additional benefit of the proposed program is that, by attracting an additional class of exceptional students, the BS/PhD Program will contribute to enriching the quality of our undergraduate and graduate programs. In that regard, I believe that the BS/PhD Program will not only benefit our Department, but also the University of Miami as a whole by potentially attracting high caliber students who know from early on that they want to pursue a research career. The program will use existing course work and elements of our undergraduate and graduate programs and, therefore, there is no need for investment of funds. Given all of the above, I am strongly in favor of the creation of the BS/PhD Program in Biochemistry and Molecular Biology and urge you to support it as well.

Best wishes,

Sylvia Daunert
Professor and Lucille P. Markey Chair
Editor, Analytical and Bioanalytical Chemistry
Executive Editor, Analytical Biochemistry

UNIVERSITY OF MIAMI
GRADUATE SCHOOL



Terri A. Scandura, Ph.D.
Dean of the Graduate School

Graduate School
P.O. Box 248125
Coral Gables, FL 33124-3220

Phone: 305-284-4154
Fax: 305-284-5441
graduateschool@miami.edu

MEMORANDUM

DATE: March 31, 2011

TO: Richard Williamson
Chair, Faculty Senate

FROM: Terri A. Scandura
Dean, The Graduate School

SUBJECT: New Dual Degree Program – B.S. and Ph.D. in BMB

Terri A. Scandura

At the March 24, 2011, meeting of the Graduate Council, the new dual degree program (B.S. and Ph.D.) in Biochemistry and Molecular Biology was approved unanimously by those present. The second reading was waived.

cc: Dr. John Bixby
Dr. Zafar Nawaz
Dr. Frans Huijing
Office of Planning, Institutional Research and Assessment

UNIVERSITY OF MIAMI
COLLEGE of
ARTS & SCIENCES



Office of the Dean 1252 Memorial Drive Ph: 305.284.4117
Ashe Building, Suite 227 Fax: 305.284.5637
Coral Gables, Florida 33146 as.miami.edu

August 2, 2011

Dr. Richard Williamson
Chair, Faculty Senate
325 Ashe Building
Coral Gables, Florida 33146

Dear Dr. Williamson:

I have reviewed the proposed combined BS/PhD Program in Biochemistry and Molecular Biology. With this letter, I would like to indicate my support toward the establishment of the Program.

Sincerely,

Leonidas G. Bachas
Dean, College of Arts and Sciences



SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS
COMMISSION ON COLLEGES

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www.sacscoc.org

June 27, 2011

Received on:

JUN 30 2011

OFFICE OF ACCREDITATION
AND ASSESSMENT

Dr. Andy S. Gomez
Assistant Provost for Planning,
Institutional Research, and Assessment
University of Miami
1320 South Dixie Highway, Suite 260
Coral Gables, FL 33146

Dear Dr. Gomez:

Thank you for your letter of May 9, 2011, providing notification that, effective fall 2011, a dual degree program, Bachelor of Science and Doctor of Philosophy in Biochemistry and Molecular Biology, will be offered.

The University currently offers both approved programs. The combined program, housed in the School of Medicine, will be comprised of existing courses from both programs and is intended for exceptional, highly motivated students who are eligible for the existing Privileged Studies Program. Methods of selection were described. Undergraduate 500-level courses will count towards the requirements for the Ph.D. degree but students will take 600 level graduate courses only after completion of the B.S. degree. The goal is to attract students to the programs. No new faculty members or other resources will be required.

Because the dual degree program involves no new courses or resources, it is not considered to be a substantive change. **We acknowledge the information, will add it to our files, and request no further information.**

Best regards,

A handwritten signature in cursive script that reads "Belle S. Wheelan".

Belle S. Wheelan, Ph.D.
President

BSW/ABC:efk

cc: Dr. Donna E. Shalala, President
Dr. Barry D. Goldstein

MEMORANDUM

TO: Faculty Senate

FROM: Norman Altman, V.M.D.
Speaker, Medical School Faculty Council

DATE: September 20, 2011

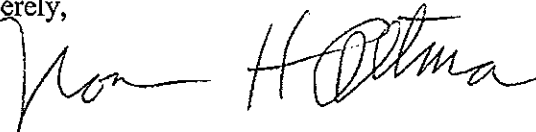
RE: BS/PhD Degree Program in Biochemistry

This memorandum is in support of establishing the BS/PhD Degree program in Biochemistry.

On September 13, 2011, the Miller School of Medicine's Faculty Council met and reviewed the proposal to establish the BS/PhD Degree program in Biochemistry. The proposal was presented by Dr. Zafar Nawaz, Professor in Department of Biochemistry. The Medical School Faculty Council is in support of establishing this program.

Should you have any questions or concerns, please contact me at 305-243-1635 or naltman@med.miami.edu.

Sincerely,



Norman H. Altman, V.M.D.
Speaker, Medical School Faculty Council

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ARTS & SCIENCES



Office of the Dean

1252 Memorial Drive
Ashe Building, Suite 227
Coral Gables, Florida 33146

Ph: 305-284-4117
Fax: 305-284-5637
as.miami.edu

revised

TO: Richard Williamson, Chair
Faculty Senate

FROM: Leonidas G. Bachas, Dean
College of Arts & Sciences

DATE: September ~~14~~, 20, 2011

SUBJECT: Proposal for a BS/PhD Program in Biochemistry & Molecular Biology

I write to report to the Senate the outcome of action at the meeting of the College of Arts and Sciences Council in which action occurred on the proposal for a BS/PhD Program in Biochemistry & Molecular Biology. At that meeting of September 12, 2011, the Council voted in favor of the proposal with recommendations to make modifications to some language to the proposal. These recommendations have been addressed by the department and I am now, on behalf of the Council, moving the proposal forward to the Senate for its action. I should also note that the College Council approved the motion that follows: "Given that there are no changes to the undergraduate curriculum, the proposal does not need to go to the College Curriculum Committee as well as not require the approval of the full College faculty."

If I may be of further assistance, please do not hesitate to contact me.

Attachment: modified proposal