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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: November 21, 2013

Subject: Faculty Senate Legislation #2013-15(B) – Establish a Master of Science in Health Informatics, School of Nursing and Health Studies

The Faculty Senate, at its November 20, 2013 meeting, voted unanimously to approve the proposal to establish a Master of Science in Health Informatics in the School of Nursing and Health Studies.

The proposed program in Health Informatics consists of 33 credits, completed in 12 months of full-time study or 24 months of part-time study. Successful implementation and utilization of health care technology has been recognized as a national priority, and there is a critical shortage of qualified individuals in the field. The program will provide educational opportunities to prepare Health Studies professionals with the ability to address the growing need for health care informaticists.

The proposal of the School of Nursing and Health Studies is enclosed for your reference.

This legislation is now forwarded to you for your action.

RLW/rh

Enclosure

cc: Thomas LeBlanc, Executive Vice President and Provost
Nilda Peragallo, Dean, School of Nursing and Health Studies
Todd Ambrosia, Associate Dean, School of Nursing and Health Studies
Martin Zdanowicz, Associate Dean, School of Nursing and Health Studies

CAPSULE: Faculty Senate Legislation #2013-15(B) – Establish a Master of Science in Health Informatics, School of Nursing and Health Studies

APPROVED:  DATE: 12/9/13
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: DEAN PERAGALLO

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

NOT APPROVED AND REFERRED TO: _____

REMARKS (IF NOT APPROVED): _____

UNIVERSITY OF MIAMI
SCHOOL of NURSING
& HEALTH STUDIES



Nilda (Nena) P. Peragallo, DrPH, RN, FAAN
Dean and Professor

MEMORANDUM

Date: October 11, 2013

To: Dr. Richard Williamson, Chair
Faculty Senate

From: Dean Nilda (Nena) Peragallo Montano
School of Nursing and Health Studies

RE: Master of Science in Health Informatics

A handwritten signature in black ink, appearing to read 'Nilda Peragallo', written over a horizontal line.

Dear Professor Williamson,

The School of Nursing and Health Studies (SONHS) is pleased to submit a program proposal to the Faculty Senate for a Master of Science in Health Informatics.

On Sunday, June 30th, the SONHS School Council voted unanimously to approve this proposal. On September 17th, 2013, the Graduate Council notified the SONHS of its approval as well.

The program description, plans of study, course descriptions, proposed budgets, feasibility survey results, letters of support from our clinical and community partners, and feasibility study results are included for your review. If you could add this new program announcement to the agenda for your next meeting, it would be greatly appreciated.

Faculty responsible for representing the School of Nursing and Health Studies regarding the informatics programs are Dr. Todd Ambrosia, Associate Dean for Master's Programs; and Dr. Martin Zdanowicz, Associate Dean for Health Studies.

Thank you for your consideration in this matter.

University of Miami
Master of Science in Health Informatics (MS-HI) Program Proposal
School of Nursing and Health Studies

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Program Description

Health Informatics (MS)

According to the Bureau of Labor Statistics, the demand for Health Informatics/Health Information management will grow 22% by 2020 (1). Job postings for health informatics positions increased by 36% from 2007-2011 (2). With the federal government advocating the use of electronic medical records by all health care providers, a degree in Health Informatics will be of great value. The MS in Health Informatics program is designed to prepare students for rewarding careers with health care-systems, hospitals, government, health insurance providers, medical vendors, pharmaceutical/biotechnology companies and consulting firms. Graduates from the program may seek employment as health information managers, clinical data managers, chief information officers, healthcare project managers, auditing/coding specialists and health informatics consultants. While salaries vary by region and position, the American Health Information Management Association (AHIMA) reports the mid-range salary range for Health Informatics graduates with master's degree to be in the \$80,000 range. For Health Informatics Directors who hold a master's degree, salaries can exceed \$100,000 per year (3).

The proposed program in Health Informatics consists of a total of 33 credits including 27 required credits, a 3 credit elective and a 3 credit capstone course. The program may be completed in 12 months of full-time study or 24 months of part-time study. Students applying to the program must have completed a Bachelor's degree from a regionally accredited institution and have a cumulative undergraduate GPA of at least a 3.0/4.0. Students with cumulative undergraduate GPA's below a 3.0 will be strongly encouraged to submit recent (within 5 years) GRE scores as an additional factor for consideration with their application. Students must also submit a written statement of purpose and career goals along with two letters of recommendation. Relevant work experience will also be considered when reviewing a student's application for graduate admission. Graduate certificates in Health Informatics and Public Health Informatics will also be offered. Future options for the MS in Health Informatics and Graduate Certificates may include both blended/online and fully online programs of study.

Program Objectives

The Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) requires that academic programs in health informatics include the following three facets:

1. Information systems – concerned with such issues as information systems analysis, design, implementation and management.
2. Informatics – concerned with such issues as the structure, function, and transfer of information, socio-technical aspects of health computing and human-computer interaction.
3. Information Technology – concerned with issues such as computer networks, database and systems administration, security and programming.

The program objectives for the MS in Health Informatics are in alignment with the areas emphasized by CAHIIM. After completion of the MS in Health Informatics graduates will be able to:

1. Apply the knowledge they have gained to organizing, retrieving, managing and developing health information data and knowledge.
2. Demonstrate a comprehensive understanding of computer information systems (Meditech, Epic, Cerner, etc), health care databases, systems administration and project management.
3. Describe important legal, ethical and regulatory factors that impact the utilization and exchange of health information.
4. Apply various strategies for maintaining information security and regulating data access.
5. Critically evaluate the quality of information and its sources.
6. Work collaboratively across various disciplines and with different stakeholders to facilitate the effective exchange of health information.
7. Analyze the various ways which health informatics may be applied to public health, health care delivery, and biomedical research.

MS HEALTH INFORMATICS COURSE LISTING

Required Courses: 9 total

HCS/NUR 6XX - Structure and Processes in Health Care Organization and Health Care Policy (3 credits)

CIS 685 - Introduction to Health Informatics (3 Credits)

HCS/NUR 6XX – Healthcare Databases: Design, Development and Clinical Application (3 credits)

HCS 6XX – Public Health Informatics (3 credits)

HCS 6XX- Legal, Ethical and Regulatory Issues in Health Informatics

HCS/NUR 6XX – System Life Cycle/Project Management (3 credits)

HCS 6XX – Information Security (3 credits)

HCS 6XX - Research Methods and Applications for Health Informatics (3 Credits)

HCS/NUR6XXX – Health Information Exchange (3 credits)

Course in italics are those cross-listed with the Nursing Informatics and Leadership Track

Capstone Course (3 credits):

HCS 6XX – Capstone in Health Informatics

Elective Courses – Choose 1:

CIS – Computer Information Systems Elective

CSC – Computer Science Elective

MGT – Management Elective

HCS – Health Studies Elective

Graduate Certificate in Health Informatics:

CIS 685 – Introduction to Health Informatics (3 credits)

HCS/NUR 6XX – Healthcare Databases: Design, Development and Clinical Application (3 credits)

HCS/NUR - 6XX – System Life Cycle/Project Management (3 credits)

HCS/NUR - 6XX – Health Information Exchange (3 credits)

HCS 6XX – Information Security (3 credits)

Total = 15 credits

Graduate Certificate in Public Health Informatics:

CIS 685 – Introduction to Health Informatics (3 credits)

HCS 6XX – Public Health Informatics (3 credits)

HCS 6XX - Research Methods and Applications for Health Informatics (3 Credits)

HCS 6XX - Public Health Statistics and Data Management (3 credits)

HCS 6XX – Introduction to Epidemiology (3 credits)

Total = 15 credits

MS HEALTH INFORMATICS COURSE DESCRIPTIONS

HCS/NUR 658 Structure and Processes in Health Care Organization and Health Care Policy (3 Credits)

An exploration of health care organizations and health care policy, and how change is affected in both. Health care policy and planning to address health care disparities at the local, state, and federal levels will be explored. Organizational diagnosis, organizational change, and ethical dimension of public policy formulations and implementation will be highlighted.

CIS 685 Introduction to Health Informatics (3 Credits)

The course develops an understanding of the role of information systems and technology within a healthcare organization. It examines the business and technical issues associated with the selection, deployment and use of health informatics, both in the clinical and back office areas. Health informatics, for the purpose of the course, is defined as the convergence of information technology, information management, and health care, at various levels, ranging from simple data gathering, to the design and implementation of new health care information systems.

HCS/NUR 6XX – Healthcare Databases: Design, Development and Clinical Application (3 credits)

This course focuses database systems, development, design, and implementation within the context of health care. Special emphasis is placed on the role of database applications for continuous quality improvement and regulatory compliance. Students will design a relational database applicable to informatics leadership responsibilities.

HCS 6XX – Public Health Informatics (3 credits)

This course will provide an overview of important health issues as they relate to public health and epidemiology. Principles and methods of public health surveillance and epidemiology will also be presented. Through hands-on assignments students will learn how patient databases and computer information systems and technologies may be utilized to address important issues in public health.

HCS 6XX – Legal, Ethical and Regulatory Issues in Health Informatics (3 credits)

This course will address the legal, social, ethical and regulatory issues that impact the use health information systems and computerized technology for health care delivery. In addition to an in-depth examination of the legal and regulatory standards that govern health informatics, emphasis will be placed on ethical decision-making and the importance of mitigating liability through the application of various risk-management strategies. Case studies will be used extensively to afford students an opportunity to apply the information they have learned in the course.

HCS/NUR 6XX – System Life Cycle/Project Management (3 credits)

This course covers the identification and development of information technology plans for projects supporting the health care organization's business objectives and all activities required in the initiating, planning, executing, controlling, and closing phases of the project's lifecycle. This course is intended to provide the body of knowledge and best practices necessary for a new Consultant, Business Analyst or Project Manager to successfully perform his/her responsibilities on an IT enterprise project.

HCS 6XX – Information Security (3 credits)

This course will emphasize the importance of information security and discuss strategies and legal requirements for restricting data access and ensuring privacy. Such strategies will include discussion of industry standards for physical security, as well as hardware and software safeguards. The challenges that new and emerging technologies will present with regards to data integrity and security will also be emphasized.

HCS 6XX - Research Methods and Applications for Health Informatics (3 Credits)

In this course students will be introduced to basic research methodology and design for health sciences and medicine as well as role informatics can play in research related to medicine, public health and biomedical sciences. Students will also be exposed to bioinformatics, a discipline of informatics concerned with the acquisition, storage, and application of use of information for biomedical research. The course will include research seminars given by guest speakers who are conducting research using health informatics.

HCS/NUR 6XX - Health Information Exchange (3 Credits)

This course is designed to introduce the informatics professional to the basic principles of Health Information Exchange. The focus will be on interoperability between ambulatory clinics, acute care facilities and long-term care; electronic health records; electronic prescribing systems and consumer health care informatics. Special emphasis is placed on the role of HIE in the American Recovery and Reinvestment Act.

HCS 6XX – Capstone in Health Informatics (3 credits)

In the capstone course students will assimilate and apply the knowledge and skills they have acquired from their course work in the program. Students will complete a non-thesis capstone project that requires them to critically analyze and solve a problem they might realistically encounter in health informatics using their skills in data acquisition, project management, data presentation, and risk management. Students will also develop and submit an electronic portfolio that contains key examples of work they have generated during their time in the program along with a self-reflection of that work.

MS Health Informatics – Full-Time Plan of Study:

Semester I (Spring)

Course#	Title	Class Credit
HCS6XX	Information Security	3
HCS6XX	Legal, Ethical and Regulatory Issues in Health Informatics	3
HCS/NUR658	Structure and Processes in Health Care Organization and Health Care Policy	3
CIS685	Introduction to Health Informatics	3
Total for Semester = 12		

Semester II (Summer)

Course#	Title	Class Credit
HCS6XX	Public Health Informatics	3
HCS6XX	Research Methods and Applications for Health Informatics	3
HCS/NUR 6XX	Health Information Exchange	3
HCS, CIS, MGT	Elective	3
Total for Semester = 12		

Semester III (Fall)

Course#	Title	Class Credit
HCS/NUR6XX	System Life Cycle/Project Management	3
HCS/NUR6XX	Healthcare Databases: Design, Development and Clinical Application	3
NUR6XX	Capstone in Health Informatics	3
Total for Semester = 9		

HCS/NUR658, CIS685, Elective = Existing UM Courses
 Newly developed courses for the MS-Health Informatics degree

MS Health Informatics – Part-Time Plan of Study:

Semester I (Spring)

Course#	Title	Class Credit
HCS6XX	Information Security	3
CIS685	Introduction to Health Informatics	3
	Total for Semester = 6	6

Semester V (Summer)

Course#	Title	Class Credit
HCS/NUR6XX	Health Information Exchange	3
HCS, CIS, MGT	Elective	3
	Total for Semester = 6	6

Semester II (Summer)

Course#	Title	Class Credit
HCS6XX	Research Methods and Applications for Health Informatics	3
HCS6XX	Public Health Informatics	3
	Total for Semester = 6	6

Semester VI (Fall)

Course#	Title	Class Credit
HCS6XX	Capstone in Health Informatics	3
	Total for Semester = 3	3

HCS/NUR658, CIS685, Elective = Existing UM Courses
 Newly developed courses for the MS-Health Informatics degree

Semester III (Fall)

Course#	Title	Class Credit
HCS6XX	System Life Cycle/Project Management	3
HCS/NUR6XX	Healthcare Databases: Design, Development and Clinical Application	3
	Total for Semester = 6	6

Semester IV (Spring)

Course#	Title	Class Credit
HCS6XX	Legal, Ethical and Regulatory Issues in Health Informatics	3
HCS/NUR658	Structure and Processes in Health Care Organization and Health Care Policy	3
	Total for Semester = 6	6



Web version – redacted

For more information please contact the Senate Office.

MS – Health Informatics

PERSONNEL	FTE	Responsibilities	Teaching Responsibilities
Full Time Faculty/Program Director	1.0	<ol style="list-style-type: none"> 1. Implementation and Development of Program. 2. Teach up to 12 credits/semester 3. Program Administration 4. Committee hours and faculty responsibility 	<ol style="list-style-type: none"> 1. System Lifecycle/Project Mgmt 2. Health Information Exchange 3. Health Care Databases 4. Legal, Ethical and Regulatory Issues in Health Informatics 5. Research Methods and Applications for Health Informatics 6. Capstone Course
Part Time Faculty	1.0	<ol style="list-style-type: none"> 1. Assist with Program Development and Implementation 2. Teach up to 6 credits/semester 3. Committee hours and faculty responsibility 	<ol style="list-style-type: none"> 1. System Lifecycle/Project Mgmt 2. Health Information Exchange 3. Health Care Databases 4. Legal, Ethical and Regulatory Issues in Health Informatics 5. Research Methods and Applications for Health Informatics 6. Capstone Course
Current UM Faculty	1.0	Four 3-credit courses at \$7500 per course	<ol style="list-style-type: none"> 1. Introduction to Health Informatics 2. Public Health Informatics 3. Information Security 4. Structure and Process in Health Care
Consultant	N/A.	Subject Matter Expert	N/A
Additional Personnel	1	Administrative Support	N/A

Competing Programs in South Florida (as of June 1, 2013):

Florida International University

Master of Science in Health Informatics and Management Systems

<http://business.fiu.edu/chapman/mshims/index.cfm>

Keiser University

Master of Science in Information Technology Leadership

<http://www.keiseruniversity.edu/programs.php#grad>

University of Central Florida

Health Care Informatics MS, Professional Science Masters

<http://www.graduatecatalog.ucf.edu/programs/program.aspx?id=5852&program=Health Care>

[Informatics MS, Professional Science Masters Program](#)

University of South Florida

Master of Science in Bioinformatics & Computational Biology

Master of Science in Public Health, Bioinformatics

http://www.grad.usf.edu/programs/search_all.php

References:

1. Occupational Outlook Handbook. U.S. Department of labor. (2013). Accessed at: <http://www.bls.gov/ooht/>. June 2013
2. A Growing Job Sector: Health Informatics. Jobs for the Future. (2012). Accessed at: <http://www.jff.org/publications/education/growing-jobs-sector-health-informatics/1432>.
3. American Health Information Management Association. (2013). Accessed at: <http://www.ahima.org/>.

July 16, 2013

Drs. Todd Ambrosia and Martin Zdanowicz
Associate Deans for Master's Programs and Health Science
University of Miami School of Nursing and Health Studies
5030 Brunson Drive
Coral Gables, Florida 33146

RE: Master of Science in Nursing – Nursing Leadership in Informatics and Master of Science in
Health Informatics

Dear Drs. Ambrosia and Zdanowicz:

I am pleased to endorse the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing – Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority, and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,



Donna F. Stetler

DfS:mlg

cc: Nilda Peragallo Montano

Office of the Chancellor
PO Box 240000
Coral Gables, Florida 33124-0000

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Fax: 305.284.5720
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UNIVERSITY OF MIAMI
SCHOOL OF BUSINESS ADMINISTRATION
CENTER for HEALTH SECTOR
MANAGEMENT & POLICY



Steven G. Ullmann, Ph.D.
Director

P.O. Box 248223
Coral Gables, Florida 33124

Ph: 305-284-9746
Fax: 305-284-3762
chsmp@miami.edu

August 14, 2013

Dear Drs. Ambrosia and Zdanowicz:

I am pleased to partner with the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing – Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as a national priority, and there is a critical shortage of qualified individuals in this field. We envision cooperating and collaborating in this venture as well.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,

A handwritten signature in black ink, appearing to be 'S. Ullmann'.

Steven G. Ullmann, PhD, Professor and Director
Programs in and Center for Health Sector Management and Policy
and Special Assistant to the Provost
University of Miami

UNIVERSITY OF MIAMI
COLLEGE of ENGINEERING



James M. Tien, Ph.D., DEng (h.c.), NAE
Distinguished Professor and Dean

1251 Memorial Drive
MEB Room 255
Coral Gables, FL 33146

Ph: 305-284-6035
Fax: 305-284-2885
jmtien@miami.edu

October 18, 2013

Dear Dean Peragallo:

I am pleased to support the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals in addressing the growing need for health care informaticists. The School of Engineering has no objections to the SONHS' proposal for two graduate degrees: a Master of Science in Nursing – Nursing Leadership in Informatics and a Master of Science in Health Informatics.

Offering both Health and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurse and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,

James M. Tien

UNIVERSITY OF MIAMI
COLLEGE OF
ARTS & SCIENCES



Office of the Dean 1252 Memorial Drive Ph: 305-284-4117
Ashe Building, Suite 227 www.usmiami.edu
Coral Gables, Florida 33146

October 18, 2013

Dear Dean Peragallo:

I am pleased to support the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals in addressing the growing need for health care informaticists. The College of Arts and Sciences has no objections to the SONIIS' proposal for two graduate degrees: a Master of Science in Nursing -- Nursing Leadership in Informatics and a Master of Science in Health Informatics.

Offering both Health and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurse and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Leonidas Bachas'.

Leonidas Bachas
Dean



Changing Health Care for Good

Louis E. Penrod, MD
Chief Medical Information Officer

Clinical Informatics
841 Prudential Drive
Suite 650
Jacksonville, FL 32207
904.202.4266
baptistjax.com

August 19, 2013

Dear Dr. Ambrosia:

This letter is written in support of the University of Miami School of Nursing and Health Studies (UMSONHS) effort to establish training programs in Informatics. It is my understanding that the school proposed two graduate degrees: a MSN Nursing Leadership in Informatics Degree; and a Master of Science in Health Informatics.

The United States is on the path to rapid implementation of healthcare information technology (HIT), but there is a critical shortage of appropriately trained individuals. Having both of the proposed options would be valuable to UMSONHS, as well as the Informatics community. Implementation of HIT involves significant process changes for all involved, but perhaps most significantly for nursing.

For this reason, a specific MSN option will bring talented individuals with nursing education and experience to the forefront in this effort. As for the second degree option, I would like to cite my personal experience.

After more than a decade of "on the job" training and experience in informatics, I decided it was important to pursue formal training, obtaining a MS in Healthcare Informatics from the University of Missouri. One of the most valuable aspects of that training to me was being in a program that included individuals from a variety of backgrounds. This broadened the perspective of the training, and also mirrored the real world where the team implementing HIT is not composed of individuals from a single background. My expectation is that your MS in Health Informatics will serve a similar need.

Best of luck as UMSONHS pursues approval of these programs and initiates training. Informatics has been an exciting and fulfilling field for me, and I'm sure it will prove to be so for your future students.

Sincerely,

Louis E. Penrod, MD



Changing Health Care for Good

Amy M. Rosa, MSMI, RN
Director, Clinical Informatics

Clinical Informatics
841 Prudential Drive
Suite 650
Jacksonville, FL 32207
904.202.4738

August 19, 2013

Dear Dr. Ambrosia:

I am pleased to partner with the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing – Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority, and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy M. Rosa".

Amy M. Rosa



University of Miami Hospital

June 28, 2013

Dear Dr. Ambrosia:

I am pleased to partner with the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing -- Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority, and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,

David Zambrana, PhD, DNP, MBA, RN
Chief Operating Officer

1400 NW 12th Avenue
Miami, FL 33136


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FOUNDED AS MARY ANN CHILDREN'S HOSPITAL



Jackie Gonzalez, ARNP, MSN, NEA-BC, FAAN
Sr. Vice President & Chief Nursing Officer

June 26, 2013


Dear Dr. Ambrosia:

I am pleased to partner with the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing -- Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority, and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,



Jackie Gonzalez, MSN, MBA, ARNP, NEA-BC, FAAN
Sr. Vice President, Chief Nursing Officer &
Patient Safety Officer

3100 S.W. 62nd Avenue • Miami, Florida 33155-3009
305-663 6860 • Fax 305-665-1576 • E-mail: jackie.gonzalez@mch.com
Visit us online at www.mch.com



Dear Dr. Ambrosia:

I am pleased to partner with the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing – Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree; thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority, and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mary Stein-Ferrer', written over a horizontal line.

Mary Stein-Ferrer, RN, B.Ed., Director Clinical Informatics

UMHC Sylvester Comprehensive Cancer Center

1475 NW 12th Ave, Miami, FL 33136

Office: (305)-243-1721 | Cell: (305) 299 7515

Email: m.steinferrer1@med.miami.edu



Joyce Chavarrin, DNP, MBA, RN, OCN
Director, Nursing Education/Professional Practice
1475 NW 12th Ave
Miami, FL 33136

June 27, 2013

Dear Dr. Ambrosia:

I am pleased to partner with the University of Miami School of Nursing and Health Studies (UMSONHS) in its effort to provide educational opportunities to prepare Nursing and Health Studies professionals to address the growing need for health care informaticists. It is with great enthusiasm that I write this letter in support of the school's proposal for two graduate degrees: a Master of Science in Nursing -- Nursing Leadership in Informatics, and a Master of Science in Health Informatics.

Offering both Health Informatics and Nursing Informatics programs will enable your students to pursue the course of study that is most aligned with their professional experience and objectives. Offering the choice of part-time or full-time study will also provide many students the flexibility to complete their degree, thus increasing the number of Masters-prepared Nurses and Health Studies informaticists. Successful implementation and utilization of health care technology has been recognized as national priority, and there is a critical shortage of qualified individuals in this field.

Thank you for the opportunity to collaborate with the School of Nursing and Health Studies in this vitally important program. I share your interest in providing educational opportunities to prepare Nursing and Health Studies professionals in the innovative area of health care informatics.

Sincerely,



Joyce Chavarrin

Responses to Feasibility Questions by Clinical Partners

A feasibility questionnaire was sent to some of the University of Miami's clinical partners' leadership to assess the level of interest in a **MSN – NLI** or **MS – HI**. The nine individuals who responded are presently in the following positions:

- Chief Operating Officer – University of Miami Hospital
- Chief Nursing Officer – University of Miami Hospital
- Executive Director of Pharmacy Services for UHealth - University of Miami Hospital
- Chief Nursing Officer – Miami Children's Hospital
- Chief Nursing Officer – University of Miami Hospital & Clinics/SCCC (UMHC/SCCC)
- *Director of Clinical Informatics - UMHC/SCCC (Responded to both **MSN** & **MS** surveys)
- Director of Nursing Education/Professional Practice - UMHC/SCCC
- Director, Clinical Informatics – Baptist Health
- Manger, Clinical Informatics – Miller School of Medicine

Question (MSN-NLI Responses) (MS-HI Responses)					
“What is your level of interest in having your employees pursue a MSN in Nursing Leadership in Informatics?”	Very Interested 4	Interested 1	Somewhat Interested	Not Interested	Did Not Answer 1
“What is your level of interest in having your employees pursue a MS Health Informatics?”	Very Interested 4	Interested	Somewhat Interested	Not Interested	
“What is your level of interest in having your employees pursue a Graduate Certificate (15 credits) in Nursing Leadership in Informatics?”	Very Interested 5	Interested 1	Somewhat Interested	Not Interested	

Question (MSN-NLI Responses) (MS-HI Responses)					
"What is your level of interest in having your employees pursue a Graduate Certificate in Health Informatics?"	Very Interested 4	Interested	Somewhat Interested	Not Interested	
"What is your level of interest in having your employees pursue a Graduate Certificate in Public Health Informatics?"	Very Interested 3	Interested	Somewhat Interested	Not Interested 1	
Would you be willing to pay some or all of the tuition costs for your employees if they were to enroll in a MSN - Nursing Leadership in Informatics program?	Pay all tuition costs 3 "Tuition reimbursement at UMHC"	Pay >50% of tuition costs	Pay <50% of tuition costs 2	Depends on the employee's position 2*	
Would you be willing to pay some or all of the tuition costs for your employees if they were to enroll in a MS in Health Informatics program?	"We already have tuition reimbursement program here, I am sure we could expand to cover this program as well." 1	"Yes" 1	"This degree should be eligible for Tuition Remission for all University of Miami employees" 1	"UM offers 100% tuition forgiveness for their employees" 1	

*One respondent checked both "<50%" and "Pay all", with "Pay all" dependent on employee's position

Responses to Feasibility Questions by Clinical Partners cont.

Are there any particular subjects you would like to see your employees study within **nursing informatics**?

- Outcomes leadership
- Leveraging reports
- Does IT drive strategy or does strategy drive IT?
- Healthcare financing
- ROI for technology
- Budgeting
- Change management
- Leadership
- How to change organizational culture

Are there any particular subjects you would like to see your employees study within **health informatics**?

- The use of informatics to achieve patient safety initiatives
- Medication safety and informatics
- Business Process Optimization-Key components to a successful BPO team
- Reimbursement variables based on health services delivery type (clinic vs. hospital vs. physician practice)
- Concept of relational databases uses for data mining and reports building
- Definitely some business courses such as Finance and Operations Management (giving students insight on project management)
- Biostatistics
- Database management systems
- Clinical decision support systems
- Healthcare operations
- HIT integration
- HIT leadership
- Legal and ethical considerations with HIT
- Medical technology and acquisition
- Networking and telecommunications
- Workflow analyses

September 12, 2013

Dr. Brian Blake
Vice Provost for Academic Affairs
Dean of the Graduate School
University of Miami

Dear Dean Blake,

We would like to thank the Graduate Council for taking the time to review this proposal and we very much appreciate their comments and suggestions. This letter of response is written to provide the additional information the Graduate Council requested at the meeting of August 27th, 2013 regarding the proposal for a new M.S. in Health Informatics from the School of Nursing and Health Studies.

In response to comment 1 regarding the availability of faculty for the Capstone course, the proposed budget for the MS-HI program currently includes salaries for the hiring of one fulltime faculty member and one half-time faculty member. With the hiring of additional adjunct faculty that are currently budgeted for, we believe there will be sufficient faculty to manage the expected student enrollments with regards to regular and capstone courses. Should student enrollment or faculty workloads exceed our projections, we will certainly hire additional faculty on a full-time or part-time basis as needed.

In response to comment 2, the proposed MS-HI degree is designed to provide graduates with the knowledge, skills and tools they would need to manage, collect and share information necessary for effective health care delivery. The MS-HI does not fit the classic definition of a "professional" degree program in that it does not require students to complete a post-graduate residency or certification in order to work in the field.

In response to comment 3 regarding the proposed GRE waiver, we recognize that there are a number of factors that might be considered when evaluating a prospective student for admission to a graduate program. Paragraph 2 on page 4 of the proposal has been expanded to better detail the admissions requirements of the proposed MS-HI program (attached, additions highlighted in red italics). Students seeking admission to the program will be expected to have a cumulative undergraduate GPA of a 3.0 or above, submit two letters of recommendation as well as a statement of purpose and career goals. The latter will be useful in assessing a student's writing abilities. While GRE scores have been reported to be useful predictors of graduate student success in programs such as biology, chemistry and psychology (Burton & Wang, 2005, GRE Board Report No. 99-14R), their validity as predictors of student success in health informatics has not been defined. A number of high quality Health Informatics graduate programs (U. Ill.-Chicago, Rutgers, Northeastern, UAB and USF, etc.) do not require students to submit GRE scores as part of their admissions packet. Other programs (UMass, Drexel, RIT, Colorado, etc.) waive the GRE requirement for students with

undergraduate GPA's above a certain level. We have decided to adapt this latter policy as part our admissions requirements for the MS-HI program and will strongly recommend that students with cumulative undergraduate GPA's < 3.0 submit recent GRE scores as an additional factor for consideration in their admissions packet. Relevant work experience will also be considered when reviewing a student's application for graduate admissions.

We appreciate the comments of the Graduate Council and hope these responses have provided the information that was requested. Please let us know if you require any additional information or clarification.

Respectfully submitted,

Nilda Peragallo Montano, DrPH, RN, FAAN
Dean and Professor
School of Nursing and Health Studies

Martin M. Zdanowicz, PhD., MA, MEd
Professor of Clinical and Associate Dean for Health Studies
School of Nursing and Health Studies

Date: October 1, 2013

To:

From: Nilda (Nena) Peragallo Montano,
Dean of the School of Nursing and Health Studies
University of Miami

RE: New Graduate Program and Graduate Certificate Proposals

We would like to thank PIRA-SACS for taking the time to proactively review the proposals for the Master of Science in Nursing – Nursing Leadership in Informatics (MSN-NLI), Master of Science – Health Informatics (MS-HI), Graduate Certificate in Informatics Nursing, Graduate Certificate in Health Informatics, and Graduate Certificate in Public Health Informatics. This letter of response is written to provide the additional information requested regarding the proposed programs and certificates.

Responses to the question “Will any new courses be developed for any of the new degree programs?”

The MSN-NLI will have four new courses specifically developed for this degree: NUR6XX Innovation in Nursing Informatics, HCS/NUR6XX Health Information Exchange, HCS/NUR6XX System Life Cycle/Project Management, and HCS/NUR6XX Health Care Databases: Design, Development, and Clinical Application. A Nursing Informatics Internship and a separate Capstone Practicum in Nursing Leadership in Informatics will also be created for the MSN-NLI program. The MS-HI degree will have seven new courses developed, plus one Capstone experience. Three of seven new courses for the MS-HI program are shared with the MSN-NLI program: HCS/NUR6XX Health Information Exchange, HCS/NUR6XX System Life Cycle/Project Management, and HCS/NUR6XX Health Care Databases: Design, Development, and Clinical Application, resulting in three unique courses and one Capstone experience that will be developed for the MS-HI program: HCS6XX Information Security, Legal, Ethical and Regulatory Issues in Health Informatics; HCS6XX Public Health Informatics; HCS6XX Research Methods and Applications for Health Informatics; and a Capstone in Health Informatics.

Responses to the questions “Will new faculty be hired to teach any courses in these programs? If so, how many? If more than one new hire, you will also need to provide copies of their CVs.”

The budget for the MSN-NLI program was designed to support a Program Director and an Associate Program Director, both of whom would serve as faculty members as well. The majority of the faculty members that the MSN-NLI program will require have already been identified within the University of Miami and a potential external faculty resource/Program Director outside of the university have also been identified. Kindly see the attached curriculum vitae for Dr. Anne Feltau.

The full-time and part-time plans of study were designed to utilize these resources most efficiently by scheduling much of the coursework during the same semester for multiple cohorts. For example, NUR6XXX Innovation in Nursing Informatics and NUR6XX Leadership and Professional

Development Strategies for Nursing Informatics would be taken concurrently by both the full-time and the part-time students.

The recruitment of Capstone advisors will be based on the number of students enrolled in the program, and, will adhere to the SONHS' Doctor of Nursing (DNP) Capstone student to faculty ratio of 6:1. A cohort of 30 students would require five faculty members who are licensed registered nurses (RNs) in good standing with the Florida Board of Nursing, are prepared at the graduate level, and who have a mastery of the Capstone rubric. The proposed MSN-NLI program will also leverage adjunct faculty, many of whom will be nursing informatics professionals at our clinical partner sites, and who will also function as internship preceptors.

The proposed budget for the MS-HI program currently includes salaries for the hiring of one fulltime faculty member and one half-time faculty member. With the hiring of additional adjunct faculty that are currently budgeted for, we believe there will be sufficient faculty to manage the expected student enrollments with regards to regular and capstone courses. Should student enrollment or faculty workloads exceed our projections, we will certainly hire additional faculty on a full-time or part-time basis as needed.

Responses to the questions "Will any portion of the degree programs be offered online or off-site our main UM, Medical, or RSMAS campuses (i.e. at an outside leased or rented facility)? If so, approximately how many credits will be offered in this manner?"

At this time, both the MSN-NLI and the MS-HI programs are being proposed in a traditional classroom-delivery format that would not require the use of any leased or rented facilities. In the future, both programs would be highly amenable to a hybrid delivery approach that incorporated both face-to-face and online coursework. We anticipate offering approximately 15 credits online in future semesters, based on the needs and preferences of the students.

Response to the question "Will you require additional resources or administrative personnel to run these programs?"

Both the MSN-NLI and the MS-HI programs initially allocated for one full-time equivalent support personnel within their budgets. Due to the considerable overlap in the objectives, content, and resources, we anticipate that the two programs could utilize the same individual in an administrative capacity.

Responses to the questions "Will the certificates be offered for credit, or as non-credit options? If they will be offered for credit, approximately how many credits will be required for completion of each of these credits?"

The Graduate Certificate in Nursing Informatics will be offered as a 15-credit certificate, in accordance with the Commission for Collegiate Nursing Education's Essentials. There are five, three-credit courses required: CIS685 Introduction to Health Informatics, NUR6XX Innovation in Nursing Informatics, HCS/NUR6XX Health Information Exchange, HCS/NUR6XX System Life Cycle/Project Management, and HCS/NUR6XX Health Care Databases: Design, Development, and Clinical Application.

As a 15-credit certificate, this meets the American Nurses Credentialing Center's (ANCC) fourth criteria for eligibility to apply to take to initial certification exam. Eligibility criteria number four stipulates that the candidate must have completed 30 hours of continuing education in nursing informatics within the past three years. For experienced Informatics Nurses who lack formal training and who wish to sit for the ANCC certification exam, the third option of criteria number five stipulates that if a candidate has practiced a minimum of 1,000 hours in the last 3 years, they need to complete 12 academic credit hours in nursing informatics at the graduate level. Since the Nursing Informatics certificate leverages the same core informatics courses as the MSN-NLI degree, this criteria has been met.

The screenshot shows the ANCC website interface. At the top, there is a search bar and navigation links for Home, About ANCC, About ANA, Contact Us, FAQs, Join/Mailing List, and Login. Below this is a menu with categories: CERTIFICATION, MAGNET, PATHWAY TO EXCELLENCE, ACCREDITATION, and KNOWLEDGE CENTER. The main content area is titled 'Informatics Nursing Certification Eligibility Criteria' and specifies the 'Credential Awarded: RN-BC'. The 'Eligibility Criteria' section includes a list of requirements: holding a current RN license, a bachelor's degree, 30 hours of continuing education, and meeting one of three practice hour requirements. A link for international applicants is provided at the bottom of the criteria list.

Retrieved from <http://www.nursecredentialing.org/Informatics-Eligibility.aspx>

The Graduate Certificate in Health Informatics will be offered as a 15-credit certificate, in accordance with the University of Miami's graduate policy. There are five, three-credit courses required: CIS685 Introduction to Health Informatics, HCS6XX Information Security, and HCS/NUR6XX Health Information Exchange, HCS/NUR6XX System Life Cycle/Project Management, and HCS/NUR6XX Health Care Databases: Design, Development, and Clinical Application.

The Graduate Certificate in Public Health Informatics will be offered at a 15-credit certificate, in accordance with the University of Miami's graduate policy. There are five, three-credit courses required: CIS685 Introduction to Health Informatics, HCS6XX Public Health Informatics, HCS6XX Research Methods and Applications for Health Informatics, HCS6XX Public Health Statistics and Data Management; and HCS6XX Introduction to Epidemiology.

Response to the question "Will credits earned in these certificate programs be transferrable to other graduate degree programs at the School of Nursing?"

Yes, the credits earned in all of the certificate programs will be transferrable to other graduate degrees within the School of Nursing and Health Studies. All of the Certificate in Nursing Informatics credits could be applied to the MSN-NLI degree.

The credits from the Graduate Certificate in Health Informatics and the Graduate Certificate in Public Health Informatics will be transferrable to other graduate degrees within the School of Nursing and Health Studies. All of the Certificate in Health Informatics credits could be applied to the MS-Health Informatics degree.

Response to the question "There is mention that the certificate programs may include both blended/online and fully online. Have the details of how many credits will be blended/online, fully online, or in a traditional format been established?"

The specific credits that will be offered in blended/online, fully and traditional formats are currently being evaluated, and this component of the programs is still in the development stage.

UNIVERSITY OF MIAMI
GRADUATE SCHOOL



M. Brian Blake, Ph.D.
Vice Provost for Academic Affairs
& 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: September 19, 2013
TO: Richard Williamson
Chair, Faculty Senate
FROM: M. Brian Blake *M. B. Blake*
Dean, The Graduate School
SUBJECT: New Degree Program: MS in Health Informatics

At the September 17, 2013, meeting of the Graduate Council, the new Master of Science in Health Informatics was approved by those present, after the second reading.

cc: Nilda Peragallo-Montano, Dean
Todd Ambrosia, Associate Dean for Master's Programs
Martin Zdanowicz, Associate Dean for Health Studies
Office of Planning, Institutional Research and Assessment

UNIVERSITY
OF MIAMI



Office of Planning,
Institutional Research,
and Assessment

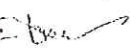
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1320 S. Dixie Hwy., Coral Gables, FL 33146
Fax: 305-284-4081 o plra@umiami.edu

MEMORANDUM

DATE: October 18, 2013

TO: Dr. Todd Ambrosia, Associate Dean
School of Nursing and Health Studies

FROM: David E. Wiles, Executive Director 
Assessment and Accreditation

SUBJECT: MS in Health Informatics and Graduate Certificate Programs in Health
Informatics and Public Health Informatics

On September 23, 2013, the School of Nursing and Health Studies submitted a proposal notifying our office of its intent to launch a Master of Science in Health Informatics and two Graduate Certificate Programs in Health Informatics and Public Health Informatics that will be offered on the main UM campus effective the fall of 2014. Based on the details of the proposal, the 33-credit graduate degree program and two 15-credit graduate certificate programs will not require additional resources or the hiring of new faculty. Although a letter of notification will be submitted, the degree program and graduate certificate offerings are not considered substantive and will not require formal approval from the Southern Association of Colleges and Schools (SACS) in order to proceed with their implementation.

Please feel free to contact our office should you have any further questions (305) 284-9431.

cc: Faculty Senate
Dr. Brian Blake, Vice Provost and Graduate School Dean
Dr. Peragallo-Montano, Dean, School of Nursing and Health Studies
Dr. Martin Zdanowicz, Professor and Associate Dean, Health Studies