X New Instructional Program Substantial Expansion/Major Modification Cooperative Degree Program **University of Maryland, Baltimore (UMB)** Institution Submitting Proposal Post-Baccalaureate Certificate in Global Health Systems and Services Title of Proposed Program PBC in Global Health Systems and Services Spring 2017 Projected Implementation Date Degree to be Awarded <u>51.2210</u> Proposed CIP Code Proposed HEGIS Code Flavius Lilly, Ph.D., M.A., M.P.H. **Assistant Vice President, Academic Affairs UMB Graduate School** Senior Associate Dean, Graduate School Department Contact Department in which program will be located (410) 706-7767 flilly@umaryland.edu Contact Phone Number Contact E-Mail Address Bruce & Soull **December 23, 2015** Signature of President or Designee Date

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

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Proposal for

UNIVERSITY OF MARYLAND, BALTIMORE (UMB) Post-Baccalaureate (Graduate) Online Certificate in Global Health Systems and Services

This proposal is for a new online Post-Baccalaureate graduate Certificate in Global Health Systems and Services (PBC in Global Health Systems and Services or PBC in GHSS) in a partnership between UMB and UMUC.

This proposed new twelve credit online PBC in GHSS will draw its students primarily from UMB alumni and other already practicing health care professionals. It will be taught online. Its focus is to introduce basic global health systems and services to current health professionals interested in short or medium term consultation/projects overseas and subsequent opportunities. The students will most likely be already trained/licensed experienced practitioners.

This online certificate will be offered in partnership with a new UMUC proposed Online Post-Baccalaureate Certificate Global Health Management (PBC Global Management), being submitted separately to MHEC. Both online certificates will share two common core courses. UMUC and UMB have drafted a Memorandum of Understanding (MOU) to articulate shared delivery of the first two courses, including hosting of courses, faculty, student enrollment in each program, and confidentiality of student information.

This UMB/UMUC partnership takes advantage of UMB's extensive graduate health professional, clinical, practice, and global expertise and UMUC's extensive online and health management expertise. It offers UMB and UMUC graduates and students interested in global health management and global health systems and services options unavailable through their home institutions.

A. Centrality to institutional mission statement and planning priorities:

Online PBC in GHSS link to UMB Mission and Strategic Plan

Purpose:

The purpose is to give expertise in global health to post baccalaureate individuals employed or seeking employment in positions requiring this knowledge. The PBC in GHSS is particularly focused toward practicing professionals with a health background.

Link to UMB's mission:

"The University of Maryland, Baltimore, is the state's public health, law, and human services university devoted to excellence in professional and graduate education, research, patient care, and public service. ... We educate leaders in health care delivery, biomedical science, **global** health, social work and the law. We emphasize interdisciplinary education and research in an

atmosphere that explicitly values civility, diversity, collaboration, teamwork and accountability.

Our proposed certificate directly responds to several elements of the mission statement, particularly those related to global health and interdisciplinary education, training, and care delivery.

Link to three of UMB's Strategic Planning Themes:

Four years ago, the university embarked on a strategic planning process that has energized the campus community. Teams remain very active to achieving the five-year goals laid out in the themes. The proposed certificate expansion supports three of these eight themes.

- Theme 2: Promote Diversity and a Culture of Inclusion
 - Goal 3: Cultivate the idea that cultural competency is the right thing to do and promote it as a competitive advantage to be attained and valued by faculty, staff, and students.
 - Offer a training program that prepares faculty and staff to be influential leaders, advocates, and spokespeople for cultural competency initiatives
- Theme 4: Excel at Interdisciplinary Research and Interprofessional Education, Clinical Care and Practice, and Public Service
 - Goal 2: Develop and sustain an infrastructure that supports interdisciplinary research, interprofessional education, clinical care and practice, and public service and is integrated with all the schools on this campus
- Theme 5: Develop Local and Global Initiatives that Address Critical Issues
 - O Goal 3: Prepare faculty, staff, students, and community partners to be leaders and active civic participants in local and global engagement

The proposed online certificate is directly tied to these three themes. It promotes cultural competency and diversity for health related work both at home within Maryland's growing multi-ethnic populations and throughout the world. It promotes interprofessional health care training because all the courses are open to all health professionals in the certificate programs and course material is designed to foster cross discipline discussion and problem solving.

UMB has committed significant resources to expand global education opportunities including establishing a Center for Global Education Initiatives which sponsors the interprofessional global health faculty and student grant programs. The director of the center is the co-author of this PBC in GHSS proposal.

B. Adequacy of curriculum design and delivery to related learning outcomes

Description Outline of Partnership between UMB and UMUC

In Fall, 2013 and Spring 2014 UMB and UMUC piloted a joint graduate course in Global Challenges in Women's and Children's Health. The Course was offered online to graduate students in both institutions and team taught by faculty from both institutions. Seventeen students completed the first pilot class and 34 students completed the second class. The second course had a waiting list. Backgrounds of the enrolled students included first generation

Americans, recent immigrants, and students representing the rich diversity of the greater Baltimore/Washington area. Students commented that the course had helped them work in inner city Baltimore and areas of Maryland with significant immigrant communities.

Student evaluations were very positive, with students noting how the course had broadened their health care expertise and exposed them to faculty with global experience. All of the students who participated in the pilot were current students at either UMUC or UMB and commented about appreciating the online structure and getting "a better understanding" of the differences in country health care delivery systems.

From this pilot test, UMB and UMUC created a partnership to offer two certificates, one in GHSS (UMB) and one in Global Health Management (GHM) (UMUC). The schools would jointly teach the first two courses that provide the general skills needed to then specialize in one of the certificate areas. Later courses would be taken at the respective campus. When enrolling, individuals would enroll as UMUC students if they want a PBC in Global Health Management or as UMB students if they chose a PBC in GHSS.

This certificate proposal is based on the positive results of a joint interprofessional pilot course offered Fall and Spring semesters, 2013-2014, for both UMB and UMUC students. The proposed online certificate significantly broadens and refocuses the base of potential students by reaching out to practicing health professionals. Many of these health professionals will be UMB alumni, a marketing priority.

List of eligibility requirements and courses within this UMB/UMUC partnership

- Four course, 12 course credit program for an online PBC in global health
 - o Systems and Services (UMB)
 - o Management (UMUC)
- Eligible students for both programs include those:
 - o Having at least a baccalaureate degree and meeting other administrative requirements established by the respective graduate schools.
 - Systems and Services (UMB):
 - Practicing health professionals with a terminal health degree and interest in global health
 - UMUC students with terminal health degree,
 - Management (UMUC):
 - Professionals with a bachelor's degree from an accredited institution plus three to five years of health care experience,
 - Current UMUC graduate students,
 - Current UMB graduate students
- UMB Courses
 - Two core courses offered jointly by both universities and required of certificate seeking students at either university,
 - Two subsequent systems and services courses offered by UMB for those interested in the systems and services certificate
 - Shared Core Courses:

- Perspectives on Global Health (taught by both UMB and UMUC faculty)
- "National and International Approaches to Health Care Delivery" (taught by both UMB and UMUC faculty)
- UMB Systems and Services Courses: Students select two courses, based on health care delivery interests from among the following (see attached course descriptions):
 - Critical issues in Global Women's and Children's Health
 - Global Health Law and Ethics
 - Infectious Disease Epidemiology: A Global Perspective
 - Health responses to Mass Violence and Disaster.
- UMUC Courses
 - o Two core courses listed above
 - One subsequent management six credit course focused courses offered through UMUC for those interested in a management certificate
 - Strategic Management of Global Health Services
- Joint UMB/UMUC courses use UMB Blackboard platform. Subsequent UMB courses will also use the UMB Blackboard.
- Campus grading protocols and registration will adhere to respective graduate school requirements, depending on whether CGHSS or CGHM is selected.
- Students for CGHM will register through UMUC.

Description of Proposed PBC in GHSS

Goal: apply skills to improve delivery of global health systems, policies, and services

PBC in GHSS Objectives:

- Formulate global health systems and services
- Improve systems for quality of care and service delivery within different national health systems
- Plan health programs within diverse cultures that may have differing ethical values
- Produce global health policy and systems practitioners with understanding of global health ethics, women's and children's health, health implications of mass violence and disaster and/or infectious disease epidemiology.

Learning Outcomes

- Understand the different international health organizations and their roles in promulgating global health systems, policies, and procedures and organizing health services
- Assess and design global health programs within different national contexts
- Implement and evaluate global health programs to maximize contributions to effective policy, enhanced practice, and improved and sustainable health outcomes
- Work effectively within diverse cultural settings and across national, and international political landscapes to maximize contributions to effective policy and enhanced practice.
- Build interdisciplinary teams and communicate with clinical providers, administrators, and patients using appropriate cultural practices.

• Use a systems approach to health services management including strategic planning, budgeting, and resource allocation.

Evaluation and assessment for the program will take place in the required courses, including regular course evaluations, review of grade distributions, and faculty review of student performance on embedded course assessments. Additional review includes tracking student completion rates.

Description of Two Core Courses required for all students for the PBC in Global Health Systems and Services and the PBC in Global Health Management. Both courses are three credits each.

Perspectives on Global Health

- Course curriculum designers: Jody K. Olsen, PhD. MSW and Kathy Marconi, PhD, MPH (UMUC)
- Course overview
 - The course provides an overview to the field of global health. It introduces students to major global health challenges, programs, the determinants of health and disease, current and emerging global health priorities, policies, evidence-based interventions, disaster relief, key legal issues, ethics, and models of reform. In addition, particular attention is given to building key student competencies in analyzing national and trans-national public health trends including major communicable and non-communicable disease burdens, key organizations supporting public health, and professional opportunities in global health. Student skills are developed in analysis, leadership, teamwork and communication in a global context.

• National and International Approaches to Health Care Delivery

- Course curriculum designers: Jody K. Olsen, PhD. MSW (UMB) and Kathy Marconi, PhD, MPH (UMUC)
- Course overview
 - This course applies the concepts, theories, and principles of the field of global health presented in the first course to the practical challenges facing global health professionals. Each student will select a specific global health priority for a given national or geo-politically defined population to examine over the duration of the course. The student's selected case will then be their primary focus for applying needs assessment methodologies, including epidemiological methods, mapping local, national, and global policy processes, identifying strategies for building infrastructure and workforce capacity, analyzing financial opportunities and limitations, and assessing the impact of macro changes in the global economy, political environment, and human rights and legal systems. Each student will complete a final summary project report that will summarize findings regarding scope, options, outcomes, and a recommended action plan for improving the health status of the population group they have studied.

Description of four PBC in GHSS courses from which students can select two. All four courses are three credits each.

Once students have completed the core introductory courses, they can choose to specialize further in health outcomes related to women and children in low resourced environments, infectious diseases, mass violence and disasters, or health delivery ethics and law.

Note: Faculty listed for each course will be the course curriculum designer. Depending on the semester, either the named faculty member or an adjunct faculty drawn from the UMB faculty will teach the course. In addition:

- Faculty members developing the course must work with a curriculum designer assigned by the Graduate School and adhere to Graduate School course structure requirements;
- The course must meet Graduate School quality standards criteria which includes adherence to the Quality Matters Program and other federal and state compliance requirements;
- Faculty members must agree to actively participate and complete training and tutorials for developing and delivering courses in the Graduate School online learning management system; and engage in ongoing course improvement to achieve and maintain QM distinction in a timely manner.
- The course content must be uploaded, delivered and managed through the Graduate School online learning management system.

• Critical issues in Global Women's and Children's Health

- Course curriculum designers: Jody K. Olsen, PhD, MSW, Katherine Marconi, PhD, MS. In addition, individual faculty lectures drawn from UMUC and UMB schools.
- Course overview
 - A comprehensive multidisciplinary examination of the complex issues related to women and children's health across the globe, based on the World Health Organization's 2007 Framework for Action for strengthening health systems and the United Nation's Millennium Development Goals and Universal Declaration of Human Rights. Topics include biological and medical issues, reproductive health, violence against women and children and its impact on health, infectious and chronic disease, and the relationship of environmental and social issues to health. Analysis also covers current national, regional, and global trends; program and policy responses to these trends; and prospects for the future.

• Health Implications of Mass Violence and Disaster.

- o Course curriculum designers: Jodi Frey PhD, LCSW-C, Tanya Sharpe, PhD, MSW, and individual faculty lectures drawn from UMB schools and departments.
- Course overview
 - This course increases students' knowledge of how to apply different theories and intervention strategies to the health assessment and response to mass violence and disaster. Crisis theory, used to guide crisis

intervention and response to traumatic events, in addition to prevention and preparedness among diverse groups and communities, will be studied. Multiple conceptualizations of exposure to human-made and natural disaster will be discussed, ranging from acute to chronic, complex and long-term health and trauma reactions. The class will explore evidence-based interventions, controversies and emerging areas of practice with various populations who experience trauma across multiple settings. Larger social, cultural, and political forces will be considered with regard to how they influence exposure, response and recovery from traumatic events.

Global Health Law and Ethics

- o Course curriculum designer: Virginia Rowthorn, JD, LLM and individual faculty lectures drawn from UMB schools and departments.
- Course overview
 - This course will be divided into two parts. The first part will consider the legal frameworks and global governance systems that have a regulatory and normative role in global health, with an emphasis on human rights tools and the World Health Organization. The course will also consider the strengths and limitations of international law as a tool for improving the health of the world's population. The second part of the course will examine the ethical framework for global health practice from two perspectives: ethical practice during short-term training experiences and ethical research involving human subjects that is conducted in international settings. The ability to recognize and navigate complicated ethical issues is critical for avoiding harm to communities as well as facilitating a long-term, productive collaboration in global health. With regard to human subjects research, the course will cover the bioethical framework undergirding human research regulations, applicable law and regulations, and cover specific issues such as institutional review boards (IRBs), informed consent; and duties owed to research participants, communities, and countries before, during and after research is conducted.

• Infectious Disease Epidemiology: A Global Perspective

- o Course curriculum designer: Samer El-Kamary, MBChB, MS, MPH and individual faculty lectures drawn from UMB schools and departments.
- Course Overview
 - Following an introduction to basic principles of infectious disease epidemiology, the topics will be covered according to mechanisms of transmission: contact air-, vehicle- and vector- borne. There will be sessions on outbreak investigations, nosocomial infections, hospital infection control and preventive vaccines. The students will prepare paper reports on an infectious disease of their choosing, answer questions about an unknown infectious disease outbreak, and take a short multiple-choice exam. The students are encouraged to attend other conferences and seminars with infectious disease epidemiology topics during the semester

PBC in GHSS requirements: 12 Credits

Required core course (both PBC systems and services and management): Perspectives	3
Required core course (both PBC systems and services and management): Approaches	$\begin{vmatrix} 3 \end{vmatrix}$
PBC and Systems and Services (take two of four elective courses listed below)	
Women's and Children's Health	3
Mass Violence and Disaster	3
Law and Ethics	3
Infectious Disease Epidemiology	3
Total (2 core courses and two of four elective courses)	12

Implementation and Management of CGHSS

The proposed PBC in Global Health / Practice will be coordinated and administered through the Graduate School by a certificate coordinator directly affiliated with the Graduate School. It will adopt the Graduate School academic, administrative, and financial structure recently added for the growing number of online degree and certificate programs. Faculty curriculum designers and those teaching the course will be reimbursed directly by the Graduate School as agreed to in MOUs between the Graduate School and individual School Deans.

Tuition will be paid directly to the Graduate School and for any student taking other course(s) at UMB, this tuition payment is in addition to tuition payment to any individual professional school at UMB.

C. Critical and compelling regional or statewide need as identified in the State Plan:

Rationale for certificate program:

Demand by UMB health related professional career students for global and international education experience is increasing as demonstrated by:

- results of the campus 2013 student survey (see attachment C)
- expansion of campus sponsored global health training and research
- international funding opportunities for meeting these needs.

Campus faculty are taking advantage of these opportunities to expand their interest in and capacity for developing and delivering appropriate content lectures in an expanded certificate program.

A new joint university online certificate (CGHSS and CGHM) in global health offers a flexible way to meet professional health care provider demand as well as faculty interest without interfering with their significant day-time work and professional school responsibilities.

This certificate expansion recommendation is based on the positive results of a joint pilot course offered Fall and Spring semesters of the 2013-2014 academic year for both UMB and UMUC

students. The proposed certificate significantly broadens number of potential students by focusing on practicing health professionals. Many of these health care professionals will be UMB alumni to whom marketing is targeted.

UMUC offers many years of online course experience, an asset to UMB. It has a well-established master's degree in health management bringing a cadre of students who can add policy and systems perspective to the more clinically focused UMB students and practicing professionals in the two jointly offered first two courses of the certificate. UMUC then takes the lead for the final six credit course for the certification in global health / management.

UMB offers UMUC a strong pool of clinical global health faculty and clinically trained students and professionals to add this clinical, policy, and practice perspective to the two jointly offered first two courses. UMB then takes the lead for the final two courses for the certificate in global health systems and services.

All students take the first two courses together, learning from each other and gaining a common grounding in global health issues, and then specialize in management (UMUC) or systems and services (UMB).

An asynchronous online course offers flexibility for students, most of whom will be practicing health practitioners juggling classroom and clinic schedules. It also brings together students from different campuses and professions who otherwise have little opportunity to study or work together.

The recent online joint UMUC/UMB course "Critical Issues in Global Women's and Children's Health" is an example of bringing together different disciplines and professions successfully. This pilot course illustrated the 'equalization' of all students as many did not know the discipline backgrounds of the others, and spoke up and engaged freely. Perspectives offered were significantly broader and deeper than what would be achieved in more discipline-limited settings.

For UMB, an online certificate in global health systems and services and expands the university's emerging leadership in building interprofessional global health education. The university has sponsored four interprofessional programs to Malawi over four years, and then each of the most recent two summers, about ten different interprofessional programs in seven different countries and including a dozen faculty and three dozen students. The university's global interprofessional team is now working actively with health science professional associations (AAMC, IOM, CUGH, and IAPPH for example) building competencies for interprofessional training and had have a special Journal of Law, Medicine, and Ethics edition published on the topic in December, 2014, based on UMB's interprofessional competency Roundtable in October 2013. This interprofessional online certificate program will further UMB's reputation in the field.

Demand Globally and Locally: Global health spending is expected to increase by an annual average of 5.3% through 2017 (World Healthcare Outlook, Economist Intelligence Unit, August 14, 2013). Both United States private health companies, ranging from pharmaceutical companies to large hospital systems and non-governmental agencies, and the U.S. government

have increased their global investments. To realize these investments, a health workforce is needed that is familiar with global health systems and who can support the development of other nation's health workforces. A recent Deloitte report states that, "Workforce shortages are a major contributor to health care access problems around the world" (Deloitte, 2014 Global Health Care Outlook). The World Health Organization (WHO) estimates that today there is a shortage of 7.2 million workers and that this shortage will grow to 12.9 million workers by 2035.

WHO and other international reports specifically cite the need for clinical practitioners who are familiar with global and country health systems and their challenges and who have managerial skills. They state that the health clinical workforce must be sensitive to country cultures, health regulations, and health delivery structures. (A Universal Truth: No Health without a Workforce, 2014. A 2013 international report states: "Key to global health care is organization, financing, and management of health service systems. Global health experts help developing countries to establish an effective and efficient health care system and infrastructure" (UNA, Global Health Careers. Global Health training and education are essential for managerial and health services practice positions in the developing world.

The US plays a leadership role in training and supporting a global health workforce and that leadership role begins with educating our domestic health workforce on global education. UMB graduates professional students in many health disciplines. Its partner in this effort, UMUC graduates Baccalaureate and Master's Degree students trained in domestic health care management. This certificate in Global Health/Practice and the partner certificate in Global Health/Management will enable students and other health workers to contribute to global health services, either through short term projects or through longer term employment.

The Washington DC / Maryland corridor is the center for agencies and organizations involved in Global Health, being the home to the largest concentration of different global health related institutions and funding sources in the world. These include:

- bi-lateral and multi-lateral government supported agencies,
- philanthropic foundations and organizations,
- legislative bodies formulating health services priorities,
- policy and research think tanks,
- and most importantly, a significant number of NGOs and consulting firms working in collaboration with funders and with national governments.

These companies work throughout the world to strengthen health care systems and their own delivery of health services. Some of the best known of these organizations include Family Health International (FHI), Population Services International (PSI), and John Snow International. Non-profit associations such as Catholic Relief Services (CRS), Save the Children, and World Learning, as well as health care organizations such as The University of Maryland School of Medicine and Johns Hopkins University work globally. In addition a number of foundations, such as The Gates Foundation, and pharmaceutical companies have offices in this area.

An online certificate in global health is also relevant for work in Maryland as the state becomes more ethnically, linguistically, and culturally diverse as its immigrant population grows in relationship to the overall state population. In 2010 in Maryland, almost 804,000 (13.9 percent

of its population) foreign-born individuals lived in the state (The Impact of Immigrants in Maryland, Commission to Study the Impact of Immigrants in Maryland February 8, 2012). In 2006, 21% of health care practitioners were foreign-born (The Integration of Immigrants in Maryland's Growing Economy, Randy Capps, Karina Fortuny, The Urban Institute, March 2008, http://www.urban.org/UploadedPDF/411624_immigrants_in_MD.pdf#page=2).

Enrollment for the proposed online UMB certificate and its partner UMUC certificate should come from four sources, some of which overlap:

- Those working in health care policies, systems, practices who are interested in furthering their global health skills.
- Staff working for companies with a global health presence,
- Clinicians and health administrators interested in increasing their knowledge and skills in the global arena.
- Current students from UMUC and UMB interested in working globally.

This PBC in GHSS meets the job definitions codes 29-1000 Health Diagnosing and Treating Practitioners and 21-1000 Counselors, Social Workers, and Other Community and Social Service Specialists.

Student Audience and Potential Careers

To enroll for this Post-Baccalaureate Certificate individuals must (1) have a Bachelors' Degree or Master's Degree in health or (2) three to five years health care experience and a Bachelor's Degree or (3) be a current UMUC or UMB graduate student.

Graduates with post-baccalaureate certificates in global health systems and services may volunteer for global assignments through their current health workplace or go to work for:

- In-country field consultants
- Disaster relief organizations
- Immigrant/refugee health organizations
- Research and academic institutions
- International agencies
- Other non-governmental agencies (NGOs)
- Lending agencies that do work in developing countries
- Multi-lateral agencies (such as WHO)
- Governmental agencies (USAID, in-country ministry of health, etc.)

Given increasing investments in global health, demand for trained staff is expected to remain high. The proposed Post-Baccalaureate Certificate in Global Health and Systems and Services will build upon participants domestic health skills and provide courses in the different health managerial skills and national health delivery systems needed to operate in the global arena.

E. Reasonableness of program duplication:

There are three post-baccalaureate certificates addressing global health areas offered by Maryland schools and an additional three offered by Washington D.C. based schools. None

target global health management and practice. Most focus on public health or specific areas of global health such as tobacco control and nutrition.

Johns Hopkins University offers a post baccalaureate certificate in Global Health and a Global Tobacco Control Certificate in the Bloomberg School of Public Health. The focus of the Global Health 18 credit certificate is on population health, behavioral health and disease control, rather than on the delivery or management of health services. It is offered through online and face-to-face classes. The focus of the Global Tobacco Control Certificate is on one specific area of Global Health; tobacco control.

The University of Maryland (UMD) offers an onsite 12 credit Global Health Certificate through their School of Public Health. Its focus is on population and behavioral health, including epidemiology and health promotion and the courses do not include global health management or delivering health treatment or care services. It is not a completely online program. Talks were held this summer with Dr. Jane Clark, the Dean of the School of Public Health at UMD and her staff. In an August 20 email, Dr. Clark wrote,

"After numerous discussions involving both our faculty and administrators, we have determined that UMD SPH will not join you at this time in your joint certificate plans. The entire university, and thus the SPH, is currently engaged in revisiting, re-visioning, and revising our strategic plans. This process, combined with changes in SPH leadership and a growing contingent of global public health faculty interested and engaged across the SPH, have ultimately compelled us to take a step back and postpone any new or collaborative initiatives such as your proposal until we can clearly map our longer-term direction and goals in the framework of our new strategic plan."

Current UMB Graduate School/SON Certificate in Global Health

A global health certificate is administered through the School of Nursing, and includes ten course credits (three three-credit hour courses, one one-credit course) and two course credits in an international health setting of at least one-month duration. Its primary audience is practicing professional nurses or interprofessionals who are enrolled in other programs at UMB. Ten of its 12 hours of credit are class-room based, and two credits are a field practicum.

Its mode of teaching, objectives, primary student audience, and outcome training objectives are substantially different from that of the PBC in Global Health Systems and Services. Its director, Yolanda Ogbolu has reviewed this document. She has offered an opportunity for students who have already <u>completed</u> the PBC in Global Health Systems and Services and then want a field practicum to be able to enroll in the School of Nursing one-credit field preparatory course and then the two credits of field practicum.

Academic Global Graduate Certificates: Washington, D.C.

American University offers a Graduate Certificate in Global Environmental Policy that is open to graduate level students in special contract programs who have completed the special prerequisites program of English, mathematics/statistics, computers and economics. The certificate program requires 15 hours of approved graduate level course work. Up to 12 of the certificate credits are transferable to a master's degree program. Students must have at least a 3.0 GPA in certificate courses in order to be awarded a certificate. Their program thus focuses on current students and one area of global health: environmental health.

American University, Education, Teaching & Health offers a Graduate Certificate in Nutrition Education with a focus on nutrition for health promotion. To qualify for program applicants have to have received a GPA of 3.00 in previous degree programs. This Certificate program requires 18 credit hours of approved course work with at least 6 credit hours at the 600-level or above with grades of C or better. The program does not target the general public or global health management and practice.

George Washington University School of Public Health offers an onsite Global Health Certificate with a focus on public health: population and behavioral health. This program requires 12 credits for current students; 18 credits for non-enrolled students. It does not focus on global health management or delivery.

F. Relevance to Historically Black Institutions (HBIs)

There are no post-baccalaureate certificates offered by an Maryland Historically Black Institutions.

G. If proposing a distance education program, please provide evidence of the principles of Good Practice

Distance learning program is consistent with the institution's mission

As the State's public health, law, and human services university, the mission of UMB is to excel at professional and graduate education, research, patient care, and public service, and to educate leaders in health care delivery, biomedical science, global health, social work and the law. Also, UMB emphasizes interdisciplinary education in an atmosphere that explicitly values civility, diversity, collaboration, and accountability. If UMB expects to achieve its mission in education excellence and to be competitive, it must design and offer online degree programs that respond to the following changes occurring in higher education (Allen, 2010).

Education pipeline

- Inputs at every level
- Lifelong
- Highly diverse
- Oriented to part-time, non-residential, working adults
- Results must become outcomes-based

Changing demographics: Data indicate a shift from the traditional student (the 18-22 year old, full-time resident) to older students studying part-time.

Technology shift: Online delivery is far outpacing traditional forms of delivery. From 2002 to 2008, online enrollments grew at an annual compound rate of 19% vs. 1.5% for all of Higher Education. By the fall of 2008, 25% (4.6 million) of all students took at least one online course. There is a growing acceptance that online education as being as good as or better than traditional face-to-face delivery models. It is estimated that by 2020, half of all learning may be online.

Growth of Mobile Technologies: Mobile technologies and miniaturization are changing the computing environment and the educational delivery paradigm. Technologies like netbooks, e-Readers, iPhones and iPads have the potential to revolutionize the delivery space and to provide anywhere, anytime learning.

Web 2.0 Revolution: Other technologies that are already figuring widely into the future of education are part of the Web 2.0 revolution. The use of a variety of technologies is disaggregating the educational experience into 'the cloud'. Many of the technologies for the future, like blogs, wikis, podcasts, video, social networking and social media, virtual worlds, mobile learning, and Personal Learning environments, will have profound effects on the future learning landscape

Essentially, online education represents a strategy that can address the restrictions of traditional onsite college courses. Online learning seeks to expand knowledge beyond the walls of the campus and can reach millions of new learners who could never put their lives on hold to attend college in a traditional manner. Online programs also have the ability to respond to individual student learning needs and styles in ways that cannot be duplicated in the face-to-face classroom. Major determinants of successful online programs include 1) course design that incorporates best practices, 2) quality faculty who can engage students in the material, and 3) responsible academic oversight. All three of these determinants are present in this proposal. For detailed information on Distance Learning Pedagogy and Methods in the Proposed Program, see *Appendix X*.

Distance Learning Best Practices

Based on Quality Matters standards, we have deployed a rubric which details the best practices for distance education; This rubric helps faculty and instructional designers develop the courses; assess the readiness of the course, and ensure that the online courses are instructionally and pedagogically sound. The best practices are a synthesis of strategies, activities, design techniques, and organizational items that have been successful in higher education. The specific domains of this checklist are as follows:

- Course overview and introduction to the students
- Course organization and design
- Learning Objectives (competencies)
- Instructional Materials
- Learner Communication, Interaction and Collaboration
- Assessment and Evaluation (measurement)
- Course Technology
- Learner Support

Distance Learning Technology to be used in the Certificate Program

Learning Management Platform UMB utilizes and provides IT support for the Blackboard Learning Management System for online course delivery. Within Blackboard, is the Collaborate conferencing software that we will use for our synchronous live activities, i.e., orientation and presentation face-to-face class sessions and recurring webinars.

Audio/Visual Equipment: The Distance Learning Team has available to them the use of a video cam recorder to tape lectures, webcams, and an interactive smart board. We also use the Camtasia software for screen lecture capture.

Distance Learning Team:

The following individual from the Instructional Design team has been assigned to direct the distance education strategy for the Certificate in Global Health Systems program:

Kevin Engler, MA: Instructional and Curriculum Designer. Mr. Engler holds a Masters of Arts degree in Instructional Design. Mr. Engler will be the primary support for the Certificate in Applied Thanatology by providing instructional design, audio-visual support, and faculty training in the use of instructional technologies. He is responsible for the overall pedagogy, planning and designing of course content and assessments for distance education courses in the program. Mr. Engler is knowledgeable in adult learning theory, distance education pedagogical techniques, course development planning and process management. Mr. Engler is trained and certified in the Quality Matters methodology and the ADDIE approach to course design. He has experience and background in writing instructional objectives that utilize Bloom's Taxonomy.

Training and Support of Faculty in Distance Learning Techniques

The distance learning team will provide the following services to ensure that best pedagogical practices are used to train and support the most of effective presentation of their course content.

- Written instructions accompanied by training videos will be developed to teach the faculty how to use the learning management system.
- A manual for the faculty regarding principles of good practice and the pedagogy of distance education.
- Provide timely support to the faculty in the use of the technology and trouble shoot any problems that might arise during the course of instruction.
- Work with faculty to design and develop courses, monitor the delivery of the course, and assess and revise the course for future offerings.

Support of Students in Distance Learning

We realize that the key to the success of an online program is dependent on a) students knowing upfront the assumptions, requirements and responsibilities of taking an online course, 2) the ability of students to have the background, knowledge, and technical skills to undertake an online program; and 3) their having access to academic and technical support services to support their online activities. Accordingly, we will provide the following services to support the students in accessing distance learning technology:

• Communicate to students the nature of online learning, including their requirements, roles and responsibilities, and access to support services. We have also prepared a short questionnaire for students that will help them decide whether online learning is right for them (See *Appendix 10*, "Is online learning right for you?"). All of our advertising, recruiting, and admissions materials shall clearly and accurately represent the program and the services available.

- Ensure that enrolled students shall have reasonable and adequate access to the range of student services to support their learning.
- Ensure that accepted students will have the background, knowledge, and technical skills needed to undertake the program.
- Make available the library Services to students so that they can have access to research
 databases, online catalog of books and media, chat with or e-mail a Librarian, electronic
 interlibrary loan, and more.

Evaluation and Assessment of Online Courses

We will adhere to a quality improvement model for assuring the continuous quality of the online courses. The process will involve the following steps:

- 1. Assessment of course readiness as measured by our quality indicators of best practices (including assessment of faculty readiness)
- 2. Monitoring of course delivery as assessed by the instructional designers with use of our "course evaluation' rubric (see *Appendix 11*) Obtainment of feedback from the faculty and students and instructional designers.
- 3. Analysis of feedback as performed by the Distance Learning Committee.
- 4. Institute course revisions based on comments by the Distance Learning Committee.

UMB Commitment to Support.

To ensure the sustainability of the distance learning program, the Academic Affairs Office affirms the following:

- UMB Policies for faculty evaluation includes appropriate consideration of teaching and scholarly activities related to programs offered through distance learning.
- Commitment to ongoing support, both financial and technical, and to a continuation of the program for a period sufficient to enable students to complete a degree/certificate.

H. Adequacy of faculty resources Curriculum and Instruction

UMB is committed to providing the best online teaching and learning possible and to excellence in all of its courses. Every effort is made to insure that coherence, cohesiveness, and academic rigor between programs offered in traditional instructional formats and those offered online are equivalent. Courses are designed to result in learning outcomes appropriate to the rigor and breadth of the course and all courses assess student achievement of defined learning outcomes through regular and formal assessment planning. Proposed online courses within this certificate are fully aligned around the same learning outcomes and principles, overseen and taught by the same faculty, and held to the same standards as classroom courses.

The joint introduction courses within this certificate and the subsequent Practice online courses (PBCGHSS) are been designed by faculty members in appropriate disciplines and will be further developed for online learning in collaboration with instructional designers and other experts in the field both at UMB and UMUC. Course learning outcomes and course descriptions are the same for every section of the course. The learning outcomes for each course are the foundation of the course; the learning activities, assessments and content of the course are in alignment with the outcomes and provide a clear pathway for mastery of the outcomes.

See attachment for biographies of participating course curriculum designer faculty. All are current full-time UMB faculty.

I. Adequacy of library resources

All of the classes required or optional in this CGHSS are based on courses already being taught in the Schools of Medicine, Law, Nursing, and Social Work and are already supported by the UMB library. Because the courses within PBCGHSS are currently available in classroom format, institutional library resources are adequate to meet the PBCGHSS needs.

J. Adequacy of physical facilities, infrastructure and instructional equipment

UMB's 61-acre research and technology complex encompasses 62 buildings in west Baltimore near the Inner Harbor. Faculty have offices provided within their respective departments and the Graduate School has identified office space to house the Program Manager Specialist and instructional technology personnel. UMB has adequate facilities, infrastructure and equipment to support the distance learning needs of the Certificate Program. Students will have full access to the computing facilities at UMB. Students will be provided with UMB e-mail and library accounts and will have complete journal searching ability via PubMed. UMB possesses computing facilities that includes a networked computing environment for support of a broad range of information technology functions, including basic research, clinical research, patient information and general office management.

K. Adequacy of financial resources with documentation

No new general funds will be required for implementation of the proposed PBCGHSS. As shown in the following table, the certificate is expected to be self-supporting.

As noted earlier, the proposed PBCGHSS will be coordinated and administered fully through the Graduate School including identifying a PBCGHSS coordinator who is directly affiliated with the Graduate School. Tuition will be administered through the Graduate School and student tuition payment is in addition to that required of any individual professional school at UMB.

L. Adequacy of provisions for evaluation of program

Students will have the opportunity to evaluate courses and faculty through a standard evaluation of every course. Formal assessment planning is already in place throughout UMB Schools including the Graduate School and will be adapted to this online format. UMUC experience in integrating evaluation to university mission will help inform UMB's certificate. It includes ensuring that student learning is in alignment with certificate and course learning outcomes, alignment of mission at institutional and program levels, alignment of mission with learning outcomes, then program outcomes with curriculum, flowing down to course outcomes and assignments. Assessment activities emphasize analysis of results and feedback loops for continuous improvement.

Additional evaluation includes tracking of student retention, grade distributions, and cost-effectiveness, and regular academic program reviews consider these factors.

M. Consistency with State's minority student achievement goals

A key feature of UMB's mission and strategic planning involves respecting, valuing and achieving diversity. The Strategic Plan states: diversity represents a core value, which is defined as being "committed to a culture that is enriched by diversity, in the broadest sense, in its thoughts, actions, and leadership." UMB realizes that it must embrace and celebrate diversity and become culturally competent. The State also has a goal of expanding educational opportunities for minority and educationally disadvantaged students.

The proposed certificate program in Global Health Systems aims to address both UMB's and the State's cultural diversity goals. First, the delivery of the certificate program by the use of distance learning technology will enhance minority student access, as it expands access and success for learners from diversity communities. Essentially, distance learning is quickly become the educational opportunity for those student who may not or would not be able to participate in a traditional college education. The emergence of the so-called "virtual universities" has had more success in attracting diverse populations compared to traditional colleges. Universities and their missions and Internet-based degree programs embracing core values emphasizing social change and community engagement have been highly attractive to historically underrepresented groups (Ibarra,1999). For rural and isolated communities, distance learning can be the vehicle that conquers geography and space between teachers and students.

The second manner in which the certificate program addresses diversity goals is that distance learning not only achieves "access," but can also help ensure "success," as the technology of distance learning meets the needs of various learners and allows for differentiated instruction. Increasingly, culture, language, and social factors are being recognized as having an impact on learning styles (Iyer, 2002). To be sure to avoid any chare of stereotyping, we recognize that individuals within a particular culture display the traditional traits and cultural markers of that group to varying degrees and hence, while on one hand, all behaviors are found in all cultural groups, some behaviors are demonstrated more so in some cultures than in others. These variations can be due to ethnic group differences within the larger culture, socio-economic status, degree of acculturation to the mainstream society, gender, religion, and myriad other factors. Essentially, with the proper use of its varied technology, distance learning can address the needs of all populations, and especially underrepresented groups that can not only attract but can help thrive as well. Also, with its varied types of interactions, distance learning embraces a shift from passive to active learning and from competition to collaboration. Different learning styles and cultures can be accommodated more easily because effective collaborative learning values diversity (Palloff & Pratt, 2005 and Brindley, Walti, and Blaschke, 2009). This contrasts with the traditional university's predominance of a particular and preferred learning environment grounded on outmoded ideas about one-size fits all educational pipelines tends to exclude all the others.

N. Budget

TABLE 1: RESOURCES					
Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	\$ -	\$ -	\$ -	\$ -	\$ -
2. Tuition/Fee Revenue					- 17 a a a
(c+g below)					
a. Number of F/T Students	-	-	-		
b. Annual Tuition/Fee Rate	\$ -	\$ -	\$ -	\$ -	\$ -
c. Total F/T Revenue (a x b)	\$ -	\$ -	\$ -	\$ -	\$ -
d. Number of P/T Students	15	22	25	28	28
e. Credit Hour Rate	\$ 498.00	\$ 508.00	\$ 518.00	\$ 528.00	\$ 539.00
f. Annual credit hours per P/T student	8	12	12	12	12
g. Total P/T Revenue (d x e x f)	\$ 59,760	\$134,112	\$155,400	\$177,408	\$181,104
3. Grants, Contracts & Other					
External Sources	\$ -	\$ -	\$ -	\$ -	\$ -
4. Other Sources (Academic Innovation Supp)	\$ 86,018	\$ 1,506	\$ -	\$ -	\$ -
TOTAL (ADD 1 - 4)	\$145,778	\$135,618	\$155,400	\$177,408	\$181,104

TABLE 2: EXPENDITURES				The state of the s	
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b +c below)	\$ 72,278	\$ 97,418	\$ 103,703	\$110,616	\$113,759
Faculty Program Director	\$ 7,500	\$ 7,500	\$ 7,500	\$ 8,000	\$ 8,000
Instructional Faculty	\$ 50,000	\$ 70,000	\$ 75,000	\$ 80,000	\$ 82,500
Total Faculty Salaries	\$ 57,500	\$ 77,500	\$ 82,500	\$ 88,000	\$ 90,500
c. Total Benefits	\$ 14,778	\$ 19,918	\$ 21,203	\$ 22,616	\$ 23,259
2. Administrative (b + c below)	\$ 70,500	\$ 28,200	\$ 31,020	\$ 31,725	\$ 32,430
a.#FTE	0.75	0.20	0.20	0.20	0.20
b. Total Salary	\$ 50,000	\$ 20,000	\$ 22,000	\$ 22,500	\$ 23,000
c. Total Benefits	\$ 20,500	\$ 8,200	\$ 9,020	\$ 9,225	\$ 9,430
3. Support Staff (b + c below)	\$ -	\$ -	\$ 7,050	\$ 7,755	\$ 8,460
a. # FTE	0.00	0.00	0.10	0.10	0.10
b. Total Salary	\$ -	\$ -	\$ 5,000	\$ 5,500	\$ 6,000
c. Total Benefits	\$ -	\$ -	\$ 2,050	\$ 2,255	\$ 2,460
4. Equipment	\$ -	\$ -	\$ -	\$ 5,000	\$ 5,000
5. Library	\$ -	\$ -	\$ -	\$ -	\$ -
6. New or Renovated Space	\$ -	\$ -	\$ -	\$ -	\$ -
7. Other Expenses	\$ 3,000	\$ 10,000	\$ 10,000	\$ 20,000	\$ 20,000
8. Contingency Funding	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL (ADD 1 - 8)	\$145,778	\$135,618	\$151,773	\$175,096	\$179,649