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UNIVERSITY *of* MARYLAND BALTIMORE

February 15, 2024

Sanjay K. Rai, Ph.D., Acting Secretary of Higher Education
Maryland Higher Education Commission (MHEC)
6 N. Liberty Street, 10th Floor
Baltimore, MD 21201

Dear Dr. Rai:

The University of Maryland, Baltimore is seeking authorization to offer a **New Area of Concentration from an existing PBC in the M.S. in Global Health Area of Concentration: Social Entrepreneurship**. The PBC in Social Entrepreneurship provides the program's curriculum.

Please find attached a brief proposal that addresses COMAR's requirements. Thank you for your time and consideration of this request. Please contact Dr. Courtney Resnick at cresnick@umaryland.edu or 410-706-1527 if you have any questions.

Sincerely,

Roger J. Ward, EdD, JD, MSL, MPA
Provost and Executive Vice President

DENTISTRY • LAW • MEDICINE • NURSING • PHARMACY • SOCIAL WORK • GRADUATE STUDIES

Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	

*Each **action** below requires a separate proposal and cover sheet.*

New Academic Program	Substantial Change to a Degree Program
New Area of Concentration	Substantial Change to an Area of Concentration
New Degree Level Approval	Substantial Change to a Certificate Program
New Stand-Alone Certificate	Cooperative Degree Program
Off Campus Program	Offer Program at Regional Higher Education Center

Payment Submitted:	Yes No	Payment Type:	R*STARS # Check #	Payment Amount:	Date Submitted:

Department Proposing Program	
Degree Level and Degree Type	
Title of Proposed Program	
Total Number of Credits	
Suggested Codes	HEGIS: CIP:
Program Modality	On-campus Distance Education (fully online) Both
Program Resources	Using Existing Resources Requiring New Resources
Projected Implementation Date (must be 60 days from proposal submisison as per COMAR 13B.02.03.03)	Fall Spring Summer Year:
Provide Link to Most Recent Academic Catalog	URL:

Preferred Contact for this Proposal	Name:
	Title:
	Phone:
	Email:

President/Chief Executive	Type Name:
	Signature: Date:
	Date of Approval/Endorsement by Governing Board:

Revised 1/2021

THE UNIVERSITY OF MARYLAND, BALTIMORE GRADUATE SCHOOL
A PROPOSAL FOR A SUBSTANTIAL MODIFICATION TO AN EXISTING MASTER
OF SCIENCE IN GLOBAL HEALTH

TABLE OF CONTENTS

A. **Centrality to Institutional Mission and Planning Priorities:**

1. **Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.**

   The University of Maryland, Baltimore (UMB) Graduate School is pleased to submit a proposal to substantially modify the existing and previously endorsed Master of Science in Global Health.

   The proposed substantial modification to the MSGH will:

   - Create a new area of concentration composed of an existing PBC within the UMB Graduate School: Social Entrepreneurship.

   The M.S. in Global Health program is designed completely online and organized around a core curriculum (19 credits) and students complete additional credits to meet the requirements for the area of concentration. This proposal seeks to add an area of concentration as follows:

   Social Entrepreneurship (12 credits)
   A new area of concentration in Social Entrepreneurship will leverage the coursework of an existing PBC of the same name. The area of concentration in Social Entrepreneurship is a 12-credits and is comprised of 4 courses, and the goal of the program is to provide learners with advanced knowledge in best practices of innovation, entrepreneurship, and design-thinking to solve complex health and social challenges. Students will:

   - Use the principles of human-centered design to identify societal, community, and individual needs.
   - Apply concepts of innovation and entrepreneurship in new ventures and existing ventures.
   - Identify and apply tools, methods, and self-reflection techniques necessary to evaluate the market viability of new ideas.
   - Identify various social, health, and biomedical enterprise strategies and critically assess their effectiveness in economic development and social transformation.
   - Demonstrate the ability to develop and execute a work plan leading to a social, health, or biomedical innovation.
   - Build strong professional relationships with and draw upon the resources of faculty, community practitioners and entrepreneurs, student colleagues, and external advisors.
   - Explain basic principles of accounting, financing models, equity financing, investing and different types of funding including crowdfunding, angel investors, grants, and venture capital.
   - Develop a sustainable business and financing model to advance a health or social innovation concept, emphasizing principles of growth strategies and scaling.

- Conduct a market analysis and apply the marketing mix as it relates to health and social enterprises.
- Develop a marketing plan for a social, health, or biomedical venture.

UMB's mission is to improve the human condition, and we have long been engaged in global health to further this cause. In past years, more than 700 students, faculty, and staff made 1,537 visits to 62 countries. They worked on global health projects with impact including vital initiatives of health, well-being, and justice. UMB is home to the premier Center for Vaccine Development and Global Health, which has made profound advances in vaccinology over the past 40 years. Another of our global health successes is the Institute of Human Virology, an international pioneer in combating HIV/AIDS and other infectious diseases like Ebola. UMB employs approximately 1,200 program staff and community health workers at our international sites, along with 86 support staff. These UMB global health practitioners train, treat, and serve some of the most vulnerable people on the planet. Now we aim to augment our deep global health engagement by offering graduate-level training in the discipline.

2. **Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.**

UMB has a long history of developing a qualified workforce in global health. The new areas of concentration will advance UMB's mission "to improve the human condition and serve the public good of Maryland and society at-large through education, research, clinical care, and service."

Additionally, the new area of concentration will contribute to the fulfillment of related strategic goals for UMB, in several significant ways:

- Alignment with several of the Strategic Plan Themes including Student Growth and Success as well as Innovation and Reimagination. Further, UMB has established a new institutional learning outcome (ILO) in Global Education and Learning. Graduates of each UMB program will demonstrate Global Engagement & Learning outcomes at the end of their degree programs. Graduates will be assessed on long term outcomes.
- The university has recognized the important role the Graduate School plays in creating accessible education for individuals already engaged in their professions and these programs are designed for adult learners deliberately with 8-week online courses and a within a quality matters framework

3. **Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation.**

The MS in Global Health has steadily grown since its launch in 2021. There is already existing faculty and coursework to support the proposed areas of concentration since it already exists as a standalone PBC. The UMB Graduate School has the capacity to offer the proposed degree program within existing resources and to ensure continued funding

to support the program into the foreseeable future even if enrollment should not meet our expectations, which we do not anticipate.

4. **Provide a description of the institution's a commitment to ongoing administrative, financial, and technical support of the proposed program and continuation of the program for a period sufficient to allow enrolled students to complete the program:**

The UMB Graduate School has an ongoing commitment to sustaining new degree programs it has developed. The Graduate School has committed significant resources in the realm of administrative support including a dean, associate dean, and program director who will provide leadership for the quality and sustainability of these new areas of concentration. Additionally, the Graduate School plans sufficiently to ensure the financial viability of all new degree programs including the provision of faculty instruction and advisement at a level to ensure a high touch learning experience for students. The Graduate School has also invested in technical assistance through our centralized Center for Information Technology Services and the Faculty Center for Teaching and Learning, which both assist our faculty and students in their success as teachers and learners, respectively. If for some unforeseeable reason the Graduate School discontinues the M.S. in Global Health, then we are committed to a teach-out plan for all enrolled students so they may complete the program and earn their degree.

B. **Critical and Compelling Regional or Statewide Need as Identified in the State Plan:**

When we originally designed this program, we were influenced by the former Secretary of Education, Dr. James Fielder's opening letter in the 2017-2021 Maryland State Plan which explained that Maryland's students are "entering an economy that is challenging, innovative, **global**, and diverse." The Secretary's sentiments are reflected in a growing interest in global education and in global health as an academic discipline.

The proposed area of concentration aligns well with the former State Plan when it was originally conceived, and continues to align with the new state plan, which emphasizes which emphasizes in its "Vision 2030 – from Excellence to Preeminence" that our impact must not only be local, but global.

Students at all levels – sometimes as early as high school – are participating in projects and programs related to addressing health disparities outside of their home countries. The best of these programs helps students use the transformative experience of international immersion to approach domestic social challenges with new ideas and enhanced problem-solving skills. These skills earned by Maryland students will undoubtedly benefit the state. More American students are entering undergraduate, graduate, professional school, and even residency programs having amassed international experiences and are seeking advanced training in the budding field of global health.

Relative to "Access," an online program also offers post-traditional learners a pathway to earning their M.S. in Global Health in a format that allows them to balance their educational objectives with competing demands of family and work. Finally, regarding

"Success," programs such as UMB's M.S. in Global Health has attracted students from diverse backgrounds originating both locally and internationally. UMB has a full-service student support model to ensure early identification of students who may be struggling academically and to intervene to improve the likelihood of graduate school completion.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

At UMB, we find that many applicants inquire about institutional global health opportunities during their interviews for nursing, pharmacy, social work, medical and dental school – a clear indication that global health offerings are an important factor in their school selection process. Enrolled in the current program is a cohort of adult learners in the fields of health administration, research, non-governmental organizations, multi-sectorial development agencies, and government.

In addition to understanding the grand health challenges that face populations across the world, success in the field of global health requires a body of skills that are tailored to the essential work of the field – engaging with communities, working with partners and stakeholders, implementing programs, and evaluating outcomes. Interdisciplinary in nature, the M.S. in Global Health seeks to address health issues that have global impact such as the spread of infectious disease, migrant health, child and maternal health, health equity, and nutrition. In addition, the degree teaches students how to practice global health with transferable program and evaluation skills that can be adapted to the multitude of settings where global health is carried out. As global health emerges as its own academic and clinical discipline, UMB is leading the way by offering both specialized curricular training and as well as co-curricular opportunities through the Center for Global Engagement. The University has been uniquely positioned to deliver this degree program by leveraging its existing global network, global centers of excellence, coursework, and extensive infrastructure that extends across the world.

In the United States private companies like pharmaceutical producers, hospital systems, non-governmental agencies, and the U.S. government have increased their global investments, and global health spending is expected to continue to increase. To realize these investments, a health workforce is needed that is familiar with the discipline of global health and who can support the development of other nation's health workforces. A relatively recent (2014) Deloitte report states that, "workforce shortages are a major contributor to health care access problems around the world." The World Health Organization (WHO) estimates a shortage of approximately 9 million global health 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.) Global Health training and education are essential for managerial and health services practice positions in the developing world.

The U.S. 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. The M.S. in Global Health has enabled 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 a 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, several foundations, such as The Gates Foundation, and pharmaceutical companies have offices in this area.

Enrollment for the proposed M.S. in Global Health has originated from:

- 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.
- And current students from UMB interested in working globally.

To enroll in the M.S. in Global Health individuals must have an existing Bachelors' degree from an accredited institution. Graduates with a M.S. in Global Health may volunteer for global assignments through their current 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 M.S. in Global Health with these new additional concentrations 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.

D. Reasonableness of Program Duplication

Master's Degrees in Global Health Offered in the Region

We are aware of only two other M.S. in Global Health in our region, which are offered by Georgetown University in Washington D.C as well as Johns Hopkins University. Georgetown's program is like the one proposed by UMB as it also aligns with the Consortium of Universities for Global Health (CUGH) competencies for global health education. However, we propose an online pedagogical approach to increase access for post-traditional students who are already in their professional careers. Additionally, UMB added a M.S. in Global Health to its academic portfolio to continue to be competitive with Georgetown University as well as Johns Hopkins in proposals for federal extramural funding related to global health work, particularly in the African continent.

We are also aware that Johns Hopkins University offers a Masters of Health Sciences in Global Health Economics in which students study issues related to health care cost and quality and economic evaluations of health programs both domestically and in developed nations. The focus of Johns Hopkins' program in the realm of economics is vastly different than the proposed M.S. in Global Health at UMB.

We are also aware of the MSPH in International Health offered by Johns Hopkins University. This program differs from both proposed areas of concentration in Social Entrepreneurship and Global Research Ethics. The MSPH program at Johns Hopkins focuses on four program areas: Global Disease Epidemiology and Control, Health Systems, Human Nutrition, or Social and Behavioral Interventions, and does not align with our proposed concentrations. Additionally, the parent program for these AoCs, UMB's MS in Global Health is a master of science program with broad applications, including public health, but it is not entirely focused on public health.

PBCs Offered by Maryland Universities

The existing PBCs addressing global health offered by Maryland schools focus on public health or specific areas of global health such as tobacco control and nutrition. The majority of existing PBCs in this space are at UMB, and the crux of this proposal is to integrate these options more seamlessly to "stack" into the MS in Global Health.

1. **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. 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.

2. **The University of Maryland College Park** (UMCP) 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. It is not an online program. The global health certificate program is also an area of concentration in the Masters of Public Health program at UMCP.

   UMB has been involved in global health education for many years, which is part of the impetus to offer an M.S. in Global Health. For instance, the **School of Medicine** offers an area of concentration (4 courses) in Global Health in its Masters of Public Health program. The **School of Nursing** offers a global health certificate in 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 who are enrolled in other programs at UMB. Ten of its 12 hours of credit are classroom-based, and two credits are a field practicum. The **Graduate School** at UMB also offers four related PBCs: 1) Implementation and Dissemination Science, 2) Global Health Monitoring and Evaluation, 3) Global Health Systems, and 4) Global Research Ethics.

PBCs Offered by Washington, D.C. Area Universities

1. **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.

2. **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 Graduate 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.

3. **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.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

The proposed AoC within the MS in Global Health does not have relevance to the uniqueness of academic programs in Maryland HBIs.

F. Relevance to the identity of Historically Black Institutions (HBIs)

The proposed AoC within the MS in Global Health does not have relevance to the uniqueness and/or institutional identities and missions of HBIs.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

1. **Describe how the proposed program was established, and also describe the faculty who will oversee the program.**

   The M.S. in Global Health was proposed by the UMB faculty and approved by the faculty shared-governance body, the Graduate Council, in recognition of the compelling need for specific education and training in global health. UMB's global health enterprise is vast with a presence in over 60 countries in which prevention work is carried out, clinical care is delivered, and research is conducted to improve population health.

   The faculty realized that the bulk of the coursework required to offer a M.S. in Global Health already exists at UMB and that there was considerable expertise to create a world-class educational experience for students. All courses in this proposal are already existing since this is a modification of a degree, and instead we are creating additional opportunities for students to "stack" global health PBCs into the MS in Global Health and have them exist as areas of concentration.

   The faculty overseeing the program are listed with their credentials in Section I, subsection 1: Adequacy of Faculty Resources.

2. **Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.**

   By the completion of the proposed M.S. in Global Health and consistent with the Consortium of Universities for Global Health (CUGH) competencies, students will be able to:

   - **Understand the Global Burden of Disease, and**

a) Describe the major cause of morbidity and mortality around the world, and how the risk of disease varies with regions

b) Describe major public health efforts to reduce disparities in global health (such as Sustainable Development Goals and Global Fund to Fight AIDS, TB, and Malaria).

c) Validate the health status of populations using available data (e.g., public health surveillance data, vital statistics, registries, surveys, electronic health records and health plan claims data).

- **Understand Globalization of Health and Health Care, and**

  a) Describe different national models or health systems for provision of healthcare and their respective effects on health and healthcare expenditure.

  b) Describe how global trends in healthcare practice, commerce and culture, multinational agreements and multinational organizations contribute to the quality and availability of health and healthcare locally and internationally.

  c) Describe how travel and trade contribute to the spread of communicable and chronic disease.

  d) Describe the general trends and influences in the global availability and movement of health care workers.

- **Understand Social and Environmental Determinants of Health, and**

  a) Describe how cultural context influences perceptions of health and disease.

  b) List major social and economic determinants of health and their impacts on the access to and quality of health services and on differences in morbidity and mortality between and within countries.

  c) Describe the relationship between access to and quality of water, sanitation, food and air on individual and population health.

- **Understand Capacity Strengthening, and**

  a) Collaborate with a host or partner organization to assess the organization's operational capacity.

  b) Co-create strategies with the community to strengthen community capabilities and contribute to reduction in health disparities and improvement of community health.

  c) Integrate community assets and resources to improve the health of individuals and populations.

- **Understand Collaboration, Partnering and Communication, and**

  a) Include representatives of diverse constituencies in community partnerships and foster interactive learning with these partners.

  b) Demonstrate diplomacy and build trust with community partners.

  c) Communicate joint lessons learned to community partners and global constituencies.

  d) Exhibit interprofessional values and communication skills that demonstrate respect for, and awareness of, the unique cultures, values, roles/responsibilities and expertise represented by other professionals and groups that work in global health.

  e) Acknowledge one's limitations in skills, knowledge, and abilities.

  f) Apply leadership practices that support collaborative practice and team effectiveness.

- **Understand Global Health Ethics, and**

  a) Demonstrate an understand of and an ability to resolve common ethical issues and challenges that arise in working within diverse economic, political and cultural contests as well as working with vulnerable populations and in low resource settings to address global health issues.

  b) Demonstrate an awareness of local and national codes of ethics relevant to one's working environment.

  c) Apply the fundamental principles of international standards for the protection of human subjects in diverse cultural settings.

- **Understand Professional Practice, and**

  a) Demonstrate integrity, regard and respect for others in all aspects of professional practice.

  b) Articulate barriers to health and healthcare in low-resource settings locally and internationally.

  c) Demonstrate the ability to adapt clinical or discipline-specific skills and practice in a resource-constrained setting.

- **Understand Health Equity and Social Justice, and**

  a) Apply social justice and human rights principles in addressing global health problems.

  b) Implement strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

c) Demonstrate a basic understanding of the relationship between health, human rights, and global inequities.

d) Describe the role of WHO in linking health and human rights, the Universal Declaration of Human Rights, International Ethical Guidelines for Biomedical Research involving human subjects.

e) Demonstrate a commitment to social responsibility.

f) Develop understanding and awareness of the health care workforce crisis in the developing world, the factors that contribute to this, and strategies to address this problem.

- **Understand Program Management, and**

a) Plan, implement, and evaluate an evidence-based program.

b) Apply project management techniques throughout program planning, implementation, and evaluation.

- **Understand Sociocultural and Political Awareness, and**

a) Describe the roles and relationships of the major entities influencing global health and development.

- **Understand Strategic Analysis, and**

a) Identify how demographic and other major factors can influence patterns of morbidity, mortality, and disability in a define population.

b) Conduct a community needs assessment.

c) Conduct a situational analysis across a range of cultural, economic, and health contexts.

d) Design context-specific health interventions based upon situational analysis.

Further learning outcomes associated with the proposed area of concentration is included in Section A of this proposal.

3. **Explain how the institution will provide for assessment of student achievement of learning outcomes in the program and document student achievement of learning outcomes in the program.**

Faculty assess student achievement and mastery of learning outcomes in their courses using a variety of assessments including meaningful and substantive contributions to online course discussions, satisfactory completion of assignments and reflections, scores on quizzes and examinations, scores on team collaboration, scores on written essays and term papers, and evaluation of research and capstone project contribution to the field of Global Health.

Students also 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. Our approach includes ensuring that student learning is in alignment with 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.

4. **Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements**

Students must complete all the following core courses (19-credits, online)

- *MHS 600 Introduction to Scholarly Writing and Library Resources (1-credit)*
  This course is designed to provide graduate-level learners the opportunity to develop skills in both accessing relevant online library resources and engage in scholarly writing. The portion of the course focusing on library resources teach and strengthen lifelong research and information competency skills by introducing student to the nature of research and the role of library in the research process. Students learn the core concepts of information retrieval and essential techniques for finding, evaluating, analyzing, organizing, and presenting information. The topics covered include using online catalogs to locate books and other library resources; developing research strategies; exercising critical thinking to evaluate information; applying critical and search techniques to electronic databases; understanding citation formats and using the internet as a research tool. The scholarly writing of the course will place emphasis on organization, effective conveyance of thoughts through written words, and writing for multiple types of audiences. Students will have the opportunity to improve both their academic writing and their research skills as they write a literature review or a proposal. Emphasis is placed on conventions of scholarly writing and organizational strategies as well as grammar, editing, and usage.

- *MHS 605 Perspectives on Global Health (3-credits)*
  The course provides an overview to the field of global health, it introduces students to major global health challenges, programs the determinants of health hand disease, current and emerging global health priorities, policies, evidence base intervention, disaster relief, key legal issues, ethics and models of reform. In addition, particular attention is given to building key student competencies in analyzing 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, team work and communication in a global context.

- *CIPP 960 Critical Issues in Global Women's and Children's Health (3-credits)*
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 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 chronic disease, and the relationship of environmental and social issues to chronic disease. Analysis also covers current national, regional and global trends; program and policy responses to these trends; and prospects for the future.

- *GLBH 652 Global Health Management and Leadership (3-credits)*
Students learn effective management and communication skills through case study-analysis, reading, class discussion and role-playing. The course covers topics such as effective listening, setting expectations, delegation, coaching, performance, evaluations, conflict management, negotiation with senior management and managing with integrity.

- *ETHC 638 Issues in International Research Ethics (3-credits)*
This course will examine the ethical and philosophical issues raised by research involving human subjects that is conducted in international settings and examine issues involved with the standard of care, informed consent, exploitation, post-trial benefits, and a developmental and organizational model of ethics review systems. By the end of the course, students will be able to construct and support valid arguments in the analysis of exploitative research; analyze ethical questions regarding international collaborations in research, describe methods to achieve a culturally valid informed consent; describe the issues involved with tissue sample research performed between international partners, and assess an ethical review an international protocol.

- *MHS 608: Research Seminar (3-credits)*
This is a 3-credit seminar course designed to give students the basic information regarding health sciences research discoveries. It also provides students with the tools to approach translational research in their present and future work. The course covers the core competencies in clinical and translational research, and each session addresses a core thematic area. Students log-in once a week during the semester. Faculty members give a lecture, followed by a student-led presentation. The presentation is followed by a discussion in which all students are evaluated based on participation.

Students are given a short essay assignment based on each lecture. The student presentations and short essays count toward the final grade. A research paper also is assigned. This coursework is entirely online.

- *GLBH 700 Capstone Project (3-credits)*
  The capstone is designed to demonstrate the substantive application of the knowledge and skills that have been acquired in the courses taken as part of the M.S. in Global Health Program. The capstone functions as the culminating experience for the program. Through the capstone, students will develop a capstone proposal; present their work; and prepare a capstone portfolio. To meet the needs of diverse learners, students can either complete their capstone online or participate in an international exchange opportunity.

Master of Science in Global Health Areas of Concentration

In the modified proposal(s), students will choose an area of concentration including the proposed Social Entrepreneurship. (12 credits, online)

NEW* - Social Entrepreneurship (12 credits

- *INNO 600 Foundations in Health and Social Innovation (3-credits)*
  This course introduces students to social and health entrepreneurship through case studies, key readings, and primary information resources. Students will become familiar with the social determinants of health, systems of public health, the science of team-based innovation, basic business fundamentals, and the essentials of social and health improvement through the lens of entrepreneurship. Students will begin to develop skills demonstrated by successful social entrepreneurs, including team building and leadership, negotiation, and working in complex social and cultural environments. They will explore the sources of funding for social enterprises, including philanthropy, governmental funding, and income generating, self-sustaining social enterprises.

- *INNO 602 Methods in Innovation (3-credits)*
  This course provides an overview of the entrepreneurial process, while examining entrepreneurship from a range of several scholarly contexts, including the social, health and behavioral sciences. The course introduces the student to the language of entrepreneurship and covers the initial stages of idea formation and initial development of entrepreneurial opportunities. Emphasis is given in this course to developing theoretical frameworks for enhancing entrepreneurial success. Students will learn to engage with their ideas in early-stage market and rapid prototyping. Students will engage in both qualitative and quantitative approaches to understanding innovation. Students will learn the tools, methods, and self-reflection techniques

necessary to bring new ideas to reality while also providing them with ways to learn about how to test the viability of and response to their ideas in the market. Learning through iteration is a key component of this course as it is expected that the first version of any idea is not likely the last. Human-centered design methodologies will be front-and-center in this course from the perspective of how to innovate based not on the ideas of the innovator but based first on the needs of the customer. This course will provide practical, real-world knowledge about the lean approach, human centered design, how to design a minimum viable product, when to pivot, and other aspects of entrepreneurial strategy. At the end of the course students will be able to develop a strategy to launch their ideas.

- *INNO 640 Business and Finance (3-credits)*
  This course is designed to provide students with an understanding of the essential elements of successful business strategy and financing. Students will create a business canvas and will gain an understanding of basic principles in accounting, financing models, equity financing, and investing. In addition, students will be exposed to different types of funding including crowdfunding, angel investors, grants, and venture capital. At the end of the course, students will be able to develop a sustainable business and financing model to advance their health or social innovation concepts. Emphasis will be placed on principles of growth strategies and scaling growth opportunities.

- *INNO 642 Marketing Strategies (3-credits)*
  Students will learn how to conduct a market analysis and apply the marketing mix as it relates to health and social enterprises. Students will employ techniques to market their ideas effectively using best practices in digital marketing, SEO, social media, and public relations. Emphasis will be placed on customer discovery, determining segments and positioning, the importance of branding, consumer behavior, and strategic marketing management. By the end of the course students will be able to develop a marketing plan for their health and social venture and examining marketing needs in the context of their goals and business strategy.

4. **Discuss how general education requirements will be met, if applicable.**

   Not applicable.

5. **Identify any specialized accreditation or graduate certification requirements for this program and its students.**

   There are no specialized accreditation or graduate certification requirements for the proposed M.S. in Global Health. Students who have already completed the PBC in Social Entrepreneurship can apply relevant coursework towards the MS in Global Health.

6. **If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

   Not applicable.

7. **Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

   The Graduate School maintains up-to-date information of its degree programs on the program explorer web site (https://www.graduate.umaryland.edu/Program-Explorer/). The web site has information on the curriculum, course descriptions, degree requirements, and cost of education. The website has links to information about the learning management system, support services, and financial aid. We affirm that the same information will be available for prospective and existing students in the proposed M.S. in Global Health.

8. **Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.**

   The Graduate School at UMB affirms that all advertising, recruiting and admissions materials will accurately represent the M.S. in Global Health, as do all materials produced by UMB's Graduate School for programs it offers.

H. Adequacy of Articulation

   Not applicable

I. Adequacy of Faculty Resources

1. **Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, <u>terminal degree title and field</u>, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faulty member will teach in the proposed program.**

Name	Terminal Degree and Discipline	Rank and FT/PT Status	Course
Isabell May	Ph.D. American Studies	Associate Professor, FT	MHS 600: Introduction to Scholarly Writing and Library Resources

Carlos A. Faerron Guzman	M.D Medicine	Associate Professor, FT	MHS 605: Perspectives on Global Health
Carlos A. Faerron Guzman	M.D Medicine	Associate Professor, FT	CIPP 960: Critical Issues in Global Women's and Children's Health
Carlos A. Faerron Guzman	M.D Medicine	Associate Professor, FT	GLBH 652.: Global Health Management and Leadership
Henry Silverman	M.D. Medicine	Professor, FT	ETHC 638: Issues in International Research Ethics
Niya Werts	PhD, Information Systems	Associate Professor, FT	MHS 608: Research Seminar
Carlos A. Faerron Guzman	M.D Medicine	Associate Professor	GLBH 700: Capstone Project
Jim Kucher	DPA	Associate Professor, FT	INNO 600: Foundations in Health and Social Innovation
Jim Kucher	DPA	Associate Professor, FT	INNO 602: Methods in Innovation
Jim Kucher	DPA	Associate Professor, FT	INNO 640: Business and Finance
Jim Kucher	DPA	Associate Professor, FT	INNO 642: Marketing Strategies

2. **Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:**

UMB has a robust process for training faculty and ensuring effective instruction. Based on Quality Matters standards, UMB developed a rubric which details the best practices for distance education; this rubric helps faculty and instructional designers create the courses; assesses the readiness of the course and ensures 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

The Learning Management Platform UMB utilizes and provides IT support for is 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. Additionally, the Faculty Center for Teaching and Learning which houses expert Instructional and Educational Medial Specialists, uses of a video camera to record lectures, integrate webcams, and an interactive smart board. We also use the Camtasia software for screen lecture capture.

J. Adequacy of Library Resources

The University of Maryland, Baltimore's Health Sciences and Humans Services Library (HS/HSL) collection contains more than 30,000 electronic journals, 162 current print journals, approximately 170,000 books, and 6,000 electronic books. Students can access the electronic resources offered on the library web site by logging in with their University ID number. The library serves as the regional medical library for ten southeastern states as part of the national Library of Medicines National network of Libraries of medicine. In addition to the library services and collections, the building also houses the computing services. Faculty librarians are dedicated to providing direct service to students.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment

UMB's 71-acre research and technology complex encompasses 67 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 any distance learning needs of the master's 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.

L. Adequacy of Financial Resources with Documentation

No new general funds will be required for implementation of the proposed changes in the MS in Global Health, which will be coordinated and administered fully through the Graduate School.

M. 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. Our approach includes ensuring that student learning is in alignment with 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.

N. Consistency with the State's Minority Student Achievement Goals

UMB is strongly committed to cultural diversity and the recruitment and retention of underrepresented minority students. Recruitment efforts for the M.S. in Global Health includes specific outreach to Historically Black Institutions. Further, UMB has established the Tiri Scholarship, which provides 10 full scholarships to students working with UMB and located on the African continent. Tiri scholars can either enroll in the M.S. in Global Health or the M.S. in Health Science.

O. Relationship to Low Productivity Programs Identified by the Commission

The proposed MS is not directly related to an identified low productivity program identified by the Maryland Higher Education Commission.

P. Adequacy of Distance Education Programs

Context of Online Education at UMB

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. UMB expects to achieve its mission in education excellence and to be competitive; the Graduate School has designed and offered online degree programs that respond to the following changes occurring in higher education (Allen, 2010).

1. Education Pipeline. The education pipeline includes a highly diverse prospective applicant pool. Prospective students are typically working adults who pursue part-time and non-residential educational opportunities, but who wish to remain in their regional geographic area, while pursuing advanced education. According to the National Center for Education Statistics, National Postsecondary Graduate Student Aid Study (NCES, NPSAS: GR; 2017), between the period of 2008 and 2017, there was a slight increase (3%) in the number of graduate students reporting full-time (FT) enrollment at a single institution. We suspect this may be partially influenced by availability of new online educational programs, where one can work, be considered enrolled FT, yet negotiate academic studies as one's lifestyle permits.

2. Changing Demographics. Data indicate a shift from the traditional student (the 18-22-year-old, full-time resident) to older students studying part-time. In 2015-2016, the National Center for education Statistics (NCES, 2017) reported that 37.58% of graduate students were married and the average graduate student was 32 years old (*SD*= 9.66). Nearly 9% of

single/unmarried/divorced graduate students reported dependents, and nearly 60% of graduate students were female.

3. Technology Shift. Educational research suggests that online education achieves the same as, or better student learning outcomes, than traditional face-to-face delivery models (Tallent-Runnels, et al., 2006; Means et al., 2009. Online delivery is far outpacing traditional forms of educational delivery. Between 2002 to 2008, online enrollments grew at an annual rate of 19% vs. 1.5% versus all of Higher Education. By the fall of 2008, 25% (4.6 million) of all students took at least one online course. In 2019, the top five highest reported college enrollments nationally four were online universities, offering at least some graduate programs (NCES).

4. 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 revolutionized the delivery space and to provide anywhere, anytime learning.

5. 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, opening up accessibility for variety of learners, for a variety of reasons and expanding access to global education opportunities and expertise, beyond the walls of the campus. Major determinants of successful online programs include 1) course design that incorporates best practices (e.g. course alignment, integration of technology and content), 2) quality faculty who can engage students in the material (e.g. provide feedback and relevant expertise), and 3) provide responsible academic oversight. All three of these determinants are present in this proposal.

Instructional Design Team

The following individuals from the Faculty Center for Teaching and Learning have been assigned to direct the distance education strategy for the four additional certificate programs:

- **Sol Roberts-Leib, EdD | Director, Faculty Center for Teaching and Learning**
  Dr. Roberts-Lieb holds a doctorate in Education Policy, Organization, and Leadership. He approaches faculty development with a "competency-based" mindset, recognizing the potential for fostering ongoing, relational initiatives aimed at nurturing and enhancing faculty members' educational knowledge and skills. Dr. Roberts-Lieb led initiatives to integrate educational technology in pedagogically appropriate ways, as well as supported the College's integration of the Problem-Based Learning instructional strategy and also

teaches in our Health Professions Education MS and PhD.|

- **Kevin Engler, MA | Instructional and Curriculum Designer**
  Mr. Engler holds a Masters of Arts degree in Instructional Design. Mr. Engler provides 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.

- **Erin Hagar, MA/MFA | Instructional and Curriculum Designer**
  Ms. Hagar taught Spanish at the college level and has worked in instructional and curriculum design for colleges and universities since 2000. She previously worked at Montgomery Community College and Johns Hopkins University, helping faculty incorporate new pedagogical practices and technologies into their face-to-face and online courses. Her areas of expertise include faculty development and training, online course design using the Quality Matters standards, and authentic activities and assessments. She is responsible for the overall pedagogy, planning and designing of course content and assessments for distance education courses in the program.

- **Sharon Gillooly | Senior Media Production Specialist**
  Ms. Gillooly leads media production for the AIDE team. Her main focus is to produce videos that support academic instruction. After a long career in documentary television, she completed a Master's Certificate in Online Instructional Development from Florida State University where her work focused on instructional design and emerging technologies. Ms. Gillooly is especially interested in the use of media to enhance learning.

- **Eric Belt, MS | Instructional and Curriculum Designer**
  Dr. Belt holds a PhD in Educational Technology, a M.A., Distance Education & E-Learning from UMUC and a B.S., Business Administration from Towson University. Prior to joining UMB, Eric was the Director of Learning Technology at the College of Southern Maryland and, formerly, the Assistant Director of eLearning at Howard Community College. Eric has served as an Instructional Designer both virtually and on-campus for various community colleges across the U.S. and is active in the Maryland Online community. Eric brings a skills and interest in advancing the scholarship of teaching and learning through course design, instructional communication, and faculty professional development.

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

- Guided tutorials on the online course development process, with open questions and answer session.

- Written instructions accompanied by training videos to guide faculty on 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.

Supporting Students in Distance Education

The M.S. in Global Health is an online program, and in our experience we recognize that the key to the success of the online courses 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. All our advertising, recruiting, and admissions materials shall clearly and accurately represent the program and the services available.

- Ensure that enrolled students 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"
3. Obtainment of feedback from the faculty and students and instructional designers.

4. Analysis of feedback as performed by the Distance Learning Committee.
5. Institute course revisions based on comments by the Distance Learning Committee.

Finally, to ensure the sustainability of the distance learning program, the Academic Affairs Office at UMB affirms the following:

- UMB Policies for faculty evaluation include 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 their degrees.

Appendix A: Sample 2.5 Year Plan of Study

Fall – Year 1

Course	Name	Credits
MHS 600	Introduction to Library Resources and Scholarly Writing	1
MHS 605	Perspectives on Global Health	3
INNO 600	Foundations in Health and Social Innovation	3
	Sub-total Credits	7

Spring – Year 1

Course	Name	Credits
ETHC 638	Issues in International Research Ethics	3
CIPP 960	Critical Issues in Global Women's and Children's Health	3
	Sub-total Credits	6

Fall – Year 2

Course	Name	Credits
GLBH 652	Global Health Management and Leadership	3
INNO 602	Methods in Innovation	3
	Sub-total Credits	6

Spring – Year 2

Course	Name	Credits
INNO 640	Business and Finance	3
INNO 642	Market Strategies	3
	Sub-total Credits	6

Fall – Year 3

Course	Name	Credits
MHS 608	Research Seminar	3
GLBH 700	Capstone	3
		6

		Total Credits	30

Appendix B: Budget

Budget Narrative: The budget we included is based on the revenues and expenditures for the existing MS Global Health. It includes the salaries of full and part-time faculty as well as current and anticipated revenue from the program.

TABLE 1: PROGRAM RESOURCES					
Resource Categories	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
1. Reallocated Funds	$0	$0	$0	$0	$0
2. Tuition/Fee Revenue (c +g below)	$420,438	$498,000	$540,330	$599,850	$620,775
a. Number of F/T Students*	0	0	0	0	0
b. Annual Tuition/Fee Rate	$0	$0	$0	$0	$0
c. Total F/T Revenue (a x b)	$0	$0	$0	$0	$0
d. Number of P/T Students	14	24	28	28	28
e. Credit Hour Rate	$775	$800	$830	$860	$890
f. Annual Credit Hour Rate	15.5	15.5	15.5	15.5	15.5
g. Total P/T Revenue (d x e x f)	$168,175	$297,600	$360,220	$373,240	$386,260
3. Grants, Contracts & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$138,352	$15,057	$0	$0	$0
TOTAL (Add 1 – 4)	$306,527	$312,657	$360,220	$373,240	$386,260

TABLE 2: PROGRAM EXPENDITURES:					
Expenditure Categories	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
1. Faculty (b + c below)	$118,590	$120,962	$123,381	$125,849	$128,366

a. Number of FTE	0.80	0.80	0.80	0.80	0.80
b. Total Salary	$92,073	$93,914	$95,793	$97,709	$99,663
c. Total Benefits	$26,517	$27,047	$27,588	$28,140	$28,703
2. Admin. Staff (b + c below)	$185,600	$189,312	$193,098	$196,960	$200,899
a. Number of FTE	1.24	1.24	1.24	1.24	1.24
b. Total Salary	$133,333	$136,000	$138,720	$141,494	$144,324
c. Total Benefits	$52,267	$53,312	$54,378	$55,466	$56,575
3. Support Staff (b + c below)	$2,337	$2,384	$2,432	$2,480	$2,530
a. Number of FTE	0.03	0.03	0.03	0.03	0.03
b. Total Salary	$1,679	$1,713	$1,747	$1,782	$1,817
c. Total Benefits	$658	$671	$685	$698	$712
4. Technical Support and Equipment	$0	$0	$10,000	$10,000	$10,000
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses	$0	$0	$0	$0	$0
TOTAL (Add 1 – 7)	$306,527	$312,657	$328,910	$335,289	$341,794