MEMORANDUM OF UNDERSTANDING

BETWEEN

MBARARA UNIVERSITY OF SCIENCE AND TECHNOLOGY (MUST)

AND

THE GENERAL HOSPITAL CORPORATION D/B/A MASSACHUSETTS GENERAL HOSPITAL (MGH)

This Memorandum of Understanding (MOU) is entered into on 28th January 2021 between Mbarara University of Science and Technology (MUST) and The General Hospital Corporation (d/b/a Massachusetts General Hospital) (MGH).

PREAMBLE

About MUST

The Mbarara University of Science and Technology (MUST) is a premier academic institute located in southwestern Uganda. MUST was founded in 1989 in response to the increasing demand for health professionals in Uganda. Operating under the Ministry of Education, MUST boasts an enrollment of over 3,627 undergraduates, 697 master students and 232 PhD candidates. It employs about 394 academic staff members across the Faculties of Medicine, Science, Business and Management Science, Computing and Informatics, Applied Sciences and Technology, Interdisciplinary Studies and Institutes of Tropical Forest Conservation and Maternal Newborn and Child Health. With its location, MUST is uniquely positioned to attract and nurture talented students and faculty. Its Community Based Education Research and Service philosophy is representative of, and critical to its mission. MUST collaborates with many academic institutions around the world, which frequently present opportunities to faculty and students to learn and teach internationally. The University enjoys an active and growing research community and runs several community programs as part of the medical and nursing training.



About MGH

MGH is an academic medical center committed to delivering high quality patient care, and training and mentoring the next generation of international leaders in science and medicine. The institution was established in 1811 to provide care to Boston's sick, regardless of socioeconomic status. It subsequently became the first teaching hospital for Harvard University's new medical school and has been redefining excellence in healthcare ever since. With almost 1,000 beds and 25,000 employees, MGH consistently ranks amongst the top US hospitals. Each year it admits around 50,000 in-patients, records nearly 1.5 million outpatients visits, handles more than 2,600 trauma patients, performs more than 34,000 operations and delivers more than 3,800 babies. At the core of its mission is MGH's belief that everyone, everywhere has a right to good health. The hospital maintains a culture of collaboration, pushing the boundaries of medical research, educating the brightest medical minds and maintaining an unwavering commitment to the patients it serves. MGH partners with diverse communities both close to home and around the globe to build, strengthen and sustain health care delivery and improve the health and well-being of those who live and work in these communities.

Mass General has the largest hospital-based research program in the United States. With an annual research budget well over \$900 million, its research program spans more than 30 clinical departments and centers across the hospital. Approximately 1,200 clinical trials are taking place at Mass General at any given time. MGH's research drives discoveries and breakthroughs in basic and clinical research, which translate into new and better treatments for our patients locally and globally.

About MGH Center for Global Health

The Center for Global Health was created by MGH to serve as a hub for the institute's global health community. The Center allows MGH to amplify its commitment to and advancements in research, innovation, and compassionate care in ways that impact the lives of the most underserved people – across the country and around the globe. Its strategic focus areas include:

- Facilitating **partnerships** with academia, governments, philanthropists and corporations to expand the footprint of global health initiatives.
- Supporting research and innovations to maximize breakthroughs to address some of global health's most pressing issues.
- Promoting nursing leadership and increasing quality of patient care in the most underserved communities.



- Expanding bi-directional **education** and learning of the next generation of global health scientists, researchers, and clinicians.
- Responding to **humanitarian emergencies** natural or man-made.

About MUST Global Health Collaborative

The MUST Global Health Collaborative (GHC) is a unifying entity created to foster scientific and development growth and leadership. Membership is voluntary and includes MUST, MGH, as well as other research institutes working with MUST. Members share core values of integrity and commitment, excellence, innovation, and collaboration. A resource to the entire MUST research and development community, the Collaborative promotes efficiency, accountability, and cooperation by sharing expertise, facilities, and equipment amongst all studies under their collective banner.

MUST and MGH agree to collaborate as follows:

A. PURPOSE OF MOU

This MOU is intended to describe the general terms of the parties' relationship and outline the basis upon which MUST and MGH desire to collaborate. It is within this framework that the priorities in the collaboration are defined, in keeping with a shared commitment to an equitable partnership and common values.

Detailed terms and conditions for specific efforts and projects shall be set forth in separate engagement mechanisms such as subcontracts, statements of work, departmental memoranda and other mechanisms for mutually defined undertakings. These agreements and contracts shall be executed by and between MUST and MGH, through the specific clinical and administrative departments that will be carrying out such efforts or projects.

B. AREAS OF COLLABORATION

This MOU between MUST and MGH builds on more than a decade of relationships formed in Uganda based on trust and commitment to a long-term partnership to build research capacity and to transform health care delivery. A seminal study on adherence to HIV treatment in Uganda in the early 2000's was a major step towards what has become a robust research and health program. Highlights of success are evidenced in the exponential growth of MUST's research portfolio including prime awards from NIH, creation of a Masters in Nursing Program, strengthening its cancer program,

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expansion of community health initiatives, as well as MUST's own administrative capacity to manage its programs.

It is with this deep and shared history, that MUST and MGH will continue collaborating as follows:

- Equitable partnerships Partnerships provide the core infrastructure for more effective and sustainable global health initiatives. We recognize the reciprocal benefits of our relationship and are committed to maintaining our institutional collaboration. We will jointly ensure that our strategic partnership reflects our shared values and priorities in all collaborative initiatives.
- 2. Research and Innovation Together we will work to improve health through innovative, interdisciplinary, clinical, and translational research in ways that ultimately influence health systems and policy. This includes, for example, (a) exploring opportunities and ideas for joint and collaborative research projects that are consistent with both institutions' missions and priorities; (b) creating and testing new innovations; (c) increasing the efficiency of our efforts through streamlined administration; (d) engaging talented scientists and researchers to experience global health as a career option; and (e) better elevating the impact of results through dissemination and advocacy.
- 3. Education and Training Our collaboration serves as a mechanism to train the next generation of global health scientists, researchers, and clinicians. We will facilitate reciprocal learning and bi-lateral exchange of knowledge through a variety of ways such as (a) fellowships; (b) scholarships; (c) observerships; (d) faculty and staff exchanges and discourse in clinical and research didactics; (e) leadership development; (f) curriculum development; and (g) the development of faculty supervisory and mentorship skills. Learning exchanges may be conducted through classes, online modules, simulation and peer learning.
- 4. Nursing We recognize the value of nurses and their critical role in improving quality of patient care, particularly in underserved communities. We support greater nursing education and promoting nursing leadership to increase the capacity of nurses and midwives to improve clinical outcomes for the populations they serve.



C. MECHANISMS of ENGAGEMENT

The detailed terms and conditions for specific efforts and projects shall be set forth in separate subcontracts, statements of work, and departmental memoranda. These mechanisms of engagement shall address matters including, but not limited to: (a) the respective rights of the institutions to disclose findings of the collaborative project; (b) confidentiality; (c) the respective authorship rights of the collaborators; (d) ownership of any intellectual property derived from the project; (e) the leadership and administration of the project; (f) any financial arrangements, including with any third parties, such as United States federal agencies and other public and private grant awarding institutions and donors; (g) whether any patient care will be delivered and the required licenses to deliver such care; (h) the parties' respective responsibilities and liabilities; (i) use of name / representation; (j) conflict resolution; (k) law applicable; and (l) force majeure.

In the event parties agree to enter into a collaborative research project, they shall identify suitable co-investigators within their respective institutions and propose funding sources for the project. The investigators shall ensure that the research proposal has clearance from their respective institutional review boards (IRBs) or ethics committees. A study agreement should be drafted and approved by all parties involved, and should include, but is not limited to, the following: (a) financial responsibilities of the involved parties; (b) proposed research product(s) (number of papers, number of grants, etc.); (c) authorship order; and (d) storage and destruction of study documents and samples, if applicable.

D. PRINCIPLES for COLLABORATION

This collaboration will be coordinated through the office of the Dean, Faculty of Medicine, MUST in Mbarara, Uganda and the Program Director, Global Health Collaborative at MUST. The latter represents the Executive Director of the MGH Center for Global Health in Boston, Massachusetts, USA. Working within a framework of mutual respect, open communication, and cultural humility, we will:

- 1. Work in good faith in the stated areas of collaboration.
- 2. Respond to communications in a timely manner.
- 3. Instruct faculty and staff who will be on site at MGH and MUST to observe visitor management guidelines, which include visitor coordination, setting up meetings, access to facilities, etc.
- 4. Adhere to standards of patient privacy.



E. FUNDING

The institutions under this MOU shall jointly seek funding to implement the activities of their collaboration. Potential donors and funding agencies shall be sought through common efforts to achieve the goals and objectives of this MOU. The parties agree that, unless otherwise provided for in this MOU, the financial arrangement for any project undertaken under this MOU (whether it be for research, education or otherwise) will be set forth in the applicable engagement mechanism.

F. COMMENCEMENT, REVIEW, TERMINATION

This MOU is valid for a period of five (5) years, commencing on the date this MOU is fully executed by the parties.

This MOU may be reviewed and amended as deemed necessary by mutual agreement and with written consent of both parties.

Either party can terminate this MOU for any reason, without liability, by giving a written notice to the other party of not less than six (6) months prior to termination. Notwithstanding the foregoing, either party may terminate this MOU at any time upon written notice to the other party if the other party: (i) materially breaches this MOU, (ii) ceases to do business in the normal course; or (iii) becomes or is declared insolvent or bankrupt. Also, MGH may terminate this MOU at any time upon written notice to MUST if there are any changes in the regulatory, licensure or accreditation requirements or standards that, in the reasonable judgment of MGH, materially affect its ability to fulfill its obligations under this MOU, or if MGH's non-profit mission is jeopardized.

Termination should not in any way affect the already ongoing programs supported through subcontracts or other contractual mechanisms.

G. OTHER

The parties will contribute to the collaboration to support ongoing operations. This includes:

- Research Dissemination Conference: MGH will contribute towards the annual MUST Research
 Dissemination Conference that showcases select scientific papers authored by MUST PIs.
- ii. Infrastructure: There will be joint management of shared costs related to space and support needed by studies/projects (e.g., rent, utilities, maintenance, etc. for TASO space, IT, IRB support, etc.).

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- iii. Office space: MUST's will allow full use of Lower Office by collaborative researchers. MGH, through Infrastructure, will support its maintenance and upkeep. MUST will also reserve for MGH use the "container" refurbished by MGH outside of the Grants Office
- iv. Interview space: MUST will continue to allow use of the land for a container that has been set up for interviews as well as using the five interview rooms in the Maternal Health Child Building on the first floor near the Surgical Skills Lab

H. ADDRESSESS OF PARTIES

Massachusetts General Hospital
55 Fruit Street
Boston, MA 02114 USA
Website: https://www.massgeneral.org/

MUST Mbarara University of Science & Technology
Faculty of Medicine
Plot 8-18 Kabale Road, Mbarara Municipality
P.O. Box 1410
Mbarara, Uganda
Website: http://www.must.ac.ug

[Signature page to follow]

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Dated this 28th day of January, 2021.

Signed of behalf of:

Mbarara University of Science and Technology

Professor Celestino Obua

VICE CHANCELLOR

Assoc. Prof. Gertrude Kiwanuka

DEAN FACULTY OF MEDICINE

Mr. Melchoir Byaruhanga

UNIVERSITY SECRETARY

Mr. Timothy Ndiana Mugumya

LEGAL OFFICER

Signed of behalf of:

The General Hospital Corporation

Louise Ivers, MD

DIRECTOR, CENTER FOR GLOBAL HEALTH