September 15, 2017

TO: Members of the University Planning Committee

FROM: Tamara Bates
Governance Advisor and Assistant University Secretary

I am writing to inform you that the next meeting of the University Planning Committee will be held on **Wednesday, September 20, 2017 at 10:30 a.m. in the Council Chambers (Gilmour Hall, Room 111)**.

The purpose of this meeting is outlined on the attached agenda. Links to policies relevant to the agenda items are listed below:

- [Policy on Academic Program Development and Review](#)
- [Procedures for University Reviews of Academic Departments](#)

If you are unable to attend this meeting, please contact the University Secretariat at telephone 905-525-9140, ext. 24337 or e-mail [univsec@mcmaster.ca](mailto:univsec@mcmaster.ca).
UNIVERSITY PLANNING COMMITTEE

Wednesday, September 20, 2017 at 10:30 a.m.
Council Chambers, Gilmour Hall, Room 111

AGENDA

OPEN SESSION

I MINUTES of the Open Session Meeting of May 17, 2017 (attached – for approval)

II BUSINESS ARISING

III CHAIR’S COMMENTS AND UPDATES

IV BUDGET COMMITTEE MEMBERSHIP FOR 2016-2017

V 2016-2017 MEETING DATES AND MEMBERSHIP (attached – for information)

VI REPORT FROM GRADUATE COUNCIL – Establishment of a Doctor of Philosophy Program in Global Health (attached – for approval) Dr. D. Welch

VII DEPARTMENT OF RADIOLOGY - EXTERNAL REVIEW TEAM MEMBERS (attached – for information)

VIII OTHER BUSINESS

CLOSED SESSION

IX MINUTES of the Closed Session meeting of May 17, 2017 (attached – for approval)

X BUSINESS ARISING

XI PROJECT STATUS REPORT (attached – for information) Mr. E. Kamarah

XII OTHER BUSINESS
McMaster University

UNIVERSITY PLANNING COMMITTEE

Wednesday, May 17, 2017 at 10:30 a.m.
Council Room (Room 111), Gilmour Hall

PRESENT:  Dr. D. Wilkinson (Chair), Dr. R. Baker, Mr. R. Couldrey, Dr. J. Daniel,
Dr. W. D’Angelo, Dr. S. Hanna, Dr. J. Hurley, Dr. A. McQueen, Dr. T. Moffat,
Ms L. Serviss, Dr. D. Welch, Ms H. Ayre (University Secretary), Mr. M. Downard
(Senior Governance Advisor and Associate University Secretary)

OBSERVERS:  Dr. S. Searls Giroux, Mr. S. Van Koughnett, Ms M. Williams

CONSULTANTS:  Ms L. Coslovi

REGrets RECEIVED:  Dr. P. Deane, Dr. S. Denburg, Mr. P. Douglas, Mr. A. Jacob,
Dr. J. Lee, Ms J. Pike

I  MINUTES

On a motion duly moved and seconded, the minutes of the meeting held on April 19, 2017 were Approved as circulated.

II  BUSINESS ARISING

There was no business arising from the minutes of the previous meeting.

III  CHAIR’S COMMENTS AND UPDATES

Dr. Wilkinson provided an update on the current discussions related to McMaster’s second Strategic Mandate Agreement, currently being negotiated with the provincial government. It was noted that a lot of work remains to be done. The Provost explained to members what has been communicated to the University with regard to corridor model funding. The University Planning Committee was informed that it would be updated as work progresses.
UNIVERSITY PLANNING COMMITTEE

2017-2018 MEETING SCHEDULE

All meetings will be held in the Council Room (Gilmour Hall, Room 111) from 10:30 a.m. to 12:30 p.m. unless otherwise stated

Wednesday, September 20, 2017

Wednesday, October 18, 2017

Wednesday, November 15, 2017

Wednesday, December 20, 2017

Wednesday, January 17, 2018

Wednesday, February 28, 2018

Wednesday, March 21, 2018

Wednesday, April 18, 2018

Wednesday, May 16, 2018

Wednesday, June 20, 2018
UNIVERSITY PLANNING COMMITTEE

2017-2018 Membership List

Elected Members:
5 faculty members (no more than 2 from any one Faculty, for staggered 3-year terms)

<table>
<thead>
<tr>
<th>Name</th>
<th>Faculty/Department</th>
<th>Term End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juliet Daniel</td>
<td>Faculty of Science</td>
<td>June 30, 2018</td>
</tr>
<tr>
<td>Steve Hanna</td>
<td>Faculty of Health Sciences</td>
<td>June 30, 2019</td>
</tr>
<tr>
<td>Alison McQueen</td>
<td>Faculty of Humanities</td>
<td>June 30, 2019</td>
</tr>
<tr>
<td>Gillian Goward</td>
<td>Faculty of Science</td>
<td>June 30, 2020</td>
</tr>
<tr>
<td>Julie Richardson</td>
<td>Faculty of Health Sciences</td>
<td>June 30, 2020</td>
</tr>
</tbody>
</table>

1 Faculty Dean (elected annually by & from the 6 Deans)
Maureen MacDonald June 30, 2018

1 staff member (2-year term)
Lynne Serviss * June 30, 2018

1 graduate student (2-year term)
Arun Jacob * June 30, 2018

1 undergraduate student (2-year term)
Vacant * June 30, 2018

Ex Officio:

Chancellor
Suzanne Labarge

Chair of the Board of Governors
Paul Douglas or delegate

Vice-Chair of the Board of Governors
Brad Merkel or delegate

President & Vice-Chancellor
Patrick Deane *

Provost & Vice-President (Academic) - Chair
David Wilkinson *

Vice-President (Administration)
Roger Couldrey *

Vice-President (Research)
Rob Baker

Vice-Provost and Dean of Graduate Studies (Acting)
Doug Welch

* Budget Committee members – faculty representatives to be elected.

Observers:

Dean & Vice-President (Health Sciences)
Susan Denburg

or delegate, unless elected

Vice-President (University Advancement)
Mary Williams

Associate Vice-President (Students and Learning) and
Dean of Students
Sean Van Koughnett

Chair of Undergraduate Council
Susan Sears Giroux

Consultant:

Associate Vice-President (Institutional Research & Analysis)
Jacy Lee

Executive Director, Office of the Provost
Linda Coslovi

By Invitation:

Assistant Vice-President (Administration)
Deidre Henne

Budget Director
Lou Mitton
To : University Planning Committee

From : Christina Bryce
      Assistant Graduate Secretary

At its meeting on June 13th, Graduate Council approved the proposed Global Health Ph.D. Program.

The attached document, pertaining to the proposed program, is now forwarded for approval to the University Planning Committee for its meeting on September 20th, 2017.
McMASTER UNIVERSITY
GRADUATE PROGRAM PROPOSAL BRIEF
FOR THE PROGRAM
PhD in Global Health
Date: June 5th, 2017

Doctorate of Global Health Program Committee:
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1. PROGRAM

1.1. Program Description

Over the past decade, Global Health professionals have faced the prospect of an increasingly complex technical work environment as a result of globalization; new and emerging health and disease challenges; business innovation and technological change; increasing income disparities, and inequities in health outcomes between the world’s richest and poorest. This has created a demand for creative and innovative approaches to global health which combine the insights of various disciplines.

This document will ascribe to the Lancet Journal’s definition of global health, which considers it to be “any health issue that concerns many countries or is affected by transnational determinants, such as climate change or urbanization, or solutions, such as polio eradication”. In this definition, global can be applied at the local, national, or international level. The emerging field of global health is also broadening away from a reliance on physicians toward a more collaborative approach in which specialists with interdisciplinary training are needed to provide responses that move beyond the traditional biomedical solutions. Global health leaders are transcontinental and multidisciplinary; but also imbued with a basic understanding of other disciplines and are incisive researchers as well as teachers and practitioners. The proposed PhD in Global Health program, (hereafter referred to as ‘the proposed program’) intends to provide valued, in-depth academic preparation for this emerging discipline and position McMaster University at the cutting edge of the field.

The proposed program builds upon the ideas, concepts, and topics presented in the MSc. in Global Health program. Since its launch in 2010, the MSc. in Global Health program has been successful and is proudly highlighted as one of McMaster University’s premiere graduate programs. The program consistently receives one of the highest numbers of applications for graduate studies at McMaster, (approximately 500 in 2016). Enrolment in the program has more than doubled in the past five years, and in 2015/16, the enrolment is capped at 70 students.

The MSc. in Global Health program was developed in partnership with Maastricht University in the Netherlands and is a 12-month interdisciplinary program that prepares the next generation of professionals for the global workforce. The MSc. in Global Health program brings together faculties of social sciences, health sciences, and business from both universities, and is a blended learning program with real time lectures with partner universities in the Netherlands, Norway, India and Thailand for a truly international experience. The program has graduated six cohorts of students since its creation, and over fifty of these graduates have indicated that they would be interested in pursuing a PhD program in Global Health at McMaster University if one were available.

The MSc. in Global Health Program has built a strong partnership with Maastricht

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University and our associate partner Manipal University in India. There is therefore existing infrastructure in place to make arrangements available to students in the proposed doctoral program who choose to complete a Co-Tutelle with Maastricht University. Maastricht University would be a natural choice for students interested in pursuing a Co-Tutelle because Maastricht is currently establishing a Centre for Global Health, which will draw together its principal researchers who are researching global health issues. Five faculty members with strengths in the Social Sciences at Maastricht have expressed interest in co-supervising PhD in Global Health students from McMaster.

Maastricht’s strong reputation as a partner institution is further demonstrated in the Times Higher Education World University Ranking where Maastricht was ranked 88th; McMaster University was ranked 94th. Maastricht University’s Global Health masters’ program was also ranked the top Health Sciences Masters’ program in the Netherlands according to the 2016 national Keuzegids ranking, which is published by the Dutch Higher Education Information Centre.

The proposed program will emphasize global health research methods that the doctoral students will use to make original contributions to the academic field of Global Health. Graduates will be ideally placed to access academic and professional resources and networks on both sides of the Atlantic Ocean, and will be prepared for entry into the global health workforce. The program will be distinct from existing ones in the University and will attract net new students to McMaster from within Canada and around the globe.

1.2. Proposal Preparation and Consultation Process

In December, 2014, a survey was conducted of past graduates from the MSc. in Global Health Program. Over forty-five percent of the respondents answered affirmatively to the question of whether they would be interested in a PhD in Global Health at McMaster. In preparation for a program proposal, meetings were held between Directors and Chairs of various units to discuss both potential forms of collaboration resulting from the program and ensure minimal overlap or duplication. Chairs and directors of other academic units indicated their support for the program.

The MSc. in Global Health Program was designed to develop the following skill set:

- Collaboration in transcontinental teams
- Self-management in a virtual work culture
- Cross-cultural intuition in diverse group settings
- Incisive decision-making in complex working environments
- Analysis and evaluation of global health policies

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This skill set is not found in any other graduate program at McMaster. These skills will also be incorporated into the PhD program, setting it apart not only at McMaster but among global health graduate programs as well.

The doctoral program will build on existing synergies with Public Health, Health Policy, and Health Research Methodology. Collaboration with the Masters’ in Public Health Program, for example, has identified shared elective courses that will allow for cross-disciplinary learning. Public Health students will approach issues from a different perspective than Global Health students, so fostering collaboration between the two programs will be mutually beneficial for students. This collaboration has been ongoing throughout the development of the PhD in Global Health Program.

The following stakeholders were consulted during the proposal preparation and are in agreement with the current program proposal.

- Deans of Business, Health Sciences, and Social Sciences
- Associate Deans of Nursing and Rehabilitation Sciences
- Associate Deans of Graduate Studies
- Health Sciences Library
- McMaster Institute for Innovation and Excellence in Teaching and Learning (MIIETL)
- Program directors for Health Policy and Public Health
- Over fifty faculty members at McMaster
- Maastricht University’s faculty of Health, Medicine, and Life Sciences

The following proposal follows the New Program Proposal Guidelines in MIIETL’s Institutional Quality Assurance Process. The program will leverage these relationships to establish a high quality and sustainable academic research-based program, and to expose our future students to critical issues as they learn and engage with the community during their research.

1.3. Consistency with McMaster’s Mission and Academic Plan

The proposed PhD program is consistent with the mission and academic plan outlined in McMaster University’s Strategic Mandate Agreement (2014-17). In accordance with this agreement, it will build upon established institutional strengths and priorities, which promote high quality and competitive educational outcomes, and further support McMaster University’s academic vision of achieving “international distinction for creativity, innovation, and excellence.” The proposed PhD program and McMaster will mutually benefit from specific institutional strengths including:

1. Medical Education and Research
2. Health and Society
3. Science and Discovery
4. Business and Economics
5. Policy and Ethics in a Globalized World
6. Human Behaviour, Culture, and Society
Furthermore, the proposed program will contribute to the following program areas for growth:

1. Health Sciences and the Broad Determinants of Health
2. Communications and Culture

McMaster President Deane’s *Forward with Integrity* statement identifies three priorities that must be considered in all University matters: “...developing a distinct, effective and sustainable undergraduate experience, enhancing the way we see and build connections between McMaster and the community, and supporting continuing excellence in research that informs and integrates with a reconceived educational mission.” In addition, internationalization is a key institutional objective that must be seen, “...not as a separate project, but as one aspect of those integrated three priorities.”

As an interdisciplinary field of study, Global Health demonstrates McMaster University’s strategic strength in interdisciplinary research and education. In harmony with this strategy, the proposed program intends to offer courses by researchers working in the field from a broad array of disciplinary backgrounds and to draw on this diversity of perspectives to foster critical thinking. These opportunities and invaluable networks provide the fertile academic environment that will promote the inception of research ideas borne out of the recognition of an interdependent and globalized world, as well as the production of comprehensive research that gives back to the global community - always with integrity.

1.4. Program Learning Outcomes

The goal of the proposed program is to offer students a high-quality research doctoral program that will develop and enhance their understanding of the current and the emerging principles and practices of global health. In doing so, it will prepare students to deal with the complex problems they will face in health systems, undertaking research in global health, and analyzing complex policy and regulatory issues that shape the field of global health. The degree learning outcomes for the program are consistent with the Graduate Degree Level Expectations for a Doctoral Degree outlined in Appendix A and are as follows:

- Apply a broad and in-depth understanding of the knowledge that examines the complex interrelationships between health and the global, national, regional, and local forces, processes, and conditions of globalization.
- Demonstrate an interdisciplinary, comparative, and critical approach to unpack major theoretical concepts and principles, and formulate novel questions and hypothesis as they relate to current issues in global health.
- Design and conduct an original research project grounded upon a robust knowledge of current research design and methodology, as well as a high degree of awareness, understanding, and appreciation for the significant ethical issues that arise in the study of Global Health.
- Establish capacity to publish research and scholarship output that meaningfully contributes to the understanding and resolution of current issues in global health, and engages with health-related policy-makers at global, national, regional, and local levels.
Program Proposal Draft for PhD Global Health

1. Demonstrate the skills necessary to develop and deliver educational course/lectures on the complex interrelationships between health and globalization at the undergraduate and graduate levels.

2. Demonstrate the ability to clearly and effectively communicate complex ideas, findings, and conclusions through oral presentation and written word, to both academic and non-academic audiences, utilizing new and innovative information and communication technologies when appropriate.

3. Cultivate a respectful and collegial community of Global Health scholars through participation in mentorship, supervisor roles, and community engagement.

1.5. Consistency with Degree Level Expectations

Graduates from the proposed program will meet or exceed the Degree Level Expectations for a Doctoral Degree outlined in Appendix A. The content of the program will meet Degree Level Expectations for a Doctoral Degree in the following ways:

- Coursework will broaden students’ depth and breadth of knowledge and develop a thorough understanding of a substantial body of knowledge in their research area. Flexibility in course selection allows students, in collaboration with the supervisor, to deepen their knowledge within their selected research area and expand their critical thinking by learning to investigate the effects of globalization through multiple lenses.

- Comprehensive exams will challenge students to further demonstrate their depth and breadth of understanding as they delve deeper into the literature of their selected research area.

- Annual professional development seminars will allow students to develop their professional capacity as they participate in professional development sessions focused on collaboration in global health. Students will learn to collaborate in both cross-disciplinary and cross-cultural contexts.

- Committee meetings will challenge students to become aware of limitations of their own knowledge. Annual Supervisory Committee Reports will help students identify gaps in their own understanding and continue honing their research and critical thinking skills.

- Dissertation
  - Write - As students prepare their dissertation, they will demonstrate their developing skills in research and scholarship. Collaborating with their supervisory committee, students will experience the challenges in conceptualizing, designing, and implementing an original research project related to global health. The dissertation will also allow students to demonstrate their level of applied knowledge as they undertake advanced-level research and contribute to the academic literature in their given field of study.
  - Defend - The oral dissertation defense will develop students’ level of communication skills through the ability to communicate complex ideas.
Program Proposal Draft for PhD Global Health

June 2017

about the interdisciplinary field of global health. They will learn to effectively translate knowledge between academic and non-academic sectors.

1.6. Demand for Program

1.6.1. Evidence of Societal/Labour Market Need

PhD students will be prepared for academic employment as well as research jobs, senior management and leadership positions in a range of global public, private, and non-profit organizations. Students will develop leadership and high-level skills in community-engaged research and critical theory, and be able to participate constructively in public policy debates. Graduates will be well equipped with an in-depth interdisciplinary knowledge and professional skill-set, which will allow them to succeed across various sectors and remain influential in a rapidly diversifying global health labour market.

In addition to being eligible for teaching and research jobs, graduates from the proposed program will be ideal candidates for interdisciplinary global development jobs. The Institute for Health Metrics and Evaluation reports that the funds allocated to development assistance for health has more than tripled since 1990. In 2015, development assistance for health amounted to $36.4 billion USD.\(^4\) Graduates from the proposed program will be well-positioned to work for global institutions such as the Global Fund, the Global Vaccine Alliance, the Global Alliance for Improved Nutrition, UN organizations, the International Development Research Centre, Global Affairs Canada, and foundations like the Bill & Melinda Gates Foundation. There are currently over 100,000 people currently working in the following six global development agencies alone, as shown in Table 1. Not only are the numbers of positions in these global institutions increasing, but these jobs are increasingly requiring doctoral degrees.

Table 1: Number of Staff Working in Global Development Agencies

<table>
<thead>
<tr>
<th>Global Development Agency</th>
<th>Number of Staff Members Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Committee of the Red Cross</td>
<td>15,000(^5)</td>
</tr>
<tr>
<td>United Nations</td>
<td>44,000(^6)</td>
</tr>
<tr>
<td>UN Refugee Agency</td>
<td>9,700(^7)</td>
</tr>
<tr>
<td>The World Bank</td>
<td>10,000(^8)</td>
</tr>
<tr>
<td>The World Food Programme</td>
<td>14,700(^9)</td>
</tr>
<tr>
<td>The World Health Organization</td>
<td>8,000(^10)</td>
</tr>
</tbody>
</table>

\(^5\) International Committee of the Red Cross. Who We are: Working for the ICRC. Retrieved August 19th, 2016 from https://www.icrc.org/en/who-we-are/jobs
Occupations related to Global Health, including Health Policy Researchers, Consultants and Program Officers, Post-Secondary Teaching and Research Assistants, and Government Managers in Health and Social Policy Development and Program Administration, are projected to maintain or exceed labour demand throughout the next decade. These projections are further supported by the Canadian Occupational Projection System 2013 Projections: Job Openings 2013-2022, which predicts high rates of job openings and job creation in high-skilled occupations or management positions in the health sector. Similarly, the Ontario Labour Market Statistics for July 2015 reports increased employment for adults with post-secondary education and those in occupations relating to Social Science, Education, Government, and Religion. These findings are favourable given the diverse and interdisciplinary nature of the global health field.

1.6.2. Evidence of Student Demand

The MSc. in Global Health program’s success in achieving its strategic annual matriculation target of 70 students at McMaster University and more than 100 at Maastricht University, as well as a high rate of graduation and increasing rate of students completing a thesis, indicates the presence of a growing network of highly skilled global health researchers. The MSc. in Global Health program consistently receives one of the highest numbers of applications for graduate studies at McMaster and over 200 students have completed the MSc. in Global Health program at McMaster. Since the MSc. in Global Health program’s inauguration in 2010, 19 students have successfully defended theses (Open Access Dissertations and Theses - Global Health Program). To date, there have been 14 student publications as well as a book highlighting students’ research. The breadth of research topics covered in students’ theses and scholarly papers highlights the interdisciplinary and transcontinental nature of global health. Many graduates have indicated that they would like to continue their research through a PhD program in Global Health at McMaster University, if one were available. Furthermore, the Global Health program staff receives numerous inquiries each year, from both international and domestic students, regarding the availability of a PhD program.

In addition, there are now ten universities offering PhD programs with a Global Health focus, some through Departments of Global Health with fees as high as $43,000 per annum; this suggests that the demand for individuals with doctoral education in Global Health is increasing. Student and labour market demands for a PhD program in Global Health are expected to grow as the field continues to establish an international community of academic leaders and network of influential professionals in various public and private sectors.

1.6.3. Justifiable Duplication

There are currently ten programs worldwide offering doctoral or collaborative degrees in Global Health or related fields (see Table 2). The proposed program’s innovative structure and student-centred curriculum will ensure that it is a unique PhD program institutionally, provincially, nationally, and worldwide. The students entering the
The proposed program will involve the Faculties of Business, Health Sciences, and Social Science at McMaster University with the faculty of Health Sciences as the “lead” faculty (mirroring the structure of the MSc. in Global Health program at McMaster University).

While the MSc. in Global Health program involves a true partnership with Maastricht, collaboration in the proposed doctoral program will be through the Co-Tutelle policy (Appendix B). Both McMaster University and Maastricht University are renowned for having an interdisciplinary professoriate, allowing students to investigate the intersections of social sciences, business, and health sciences.

The proposed program will become the second Global Health doctoral program in Canada, with the other being nested within the Dalla Lana School of Public Health at the University of Toronto and the office of Global Public Health education. There are also several global health offices within the Toronto hospital system, including St. Michael’s Hospital and SickKids Hospital. In its first year in 2016-2017, the number of applicants to the PhD in Global Health program at the University of Toronto exceeded the available seats in the program. The faculty members in the collaborative Global Health program at the University of Toronto are particularly strong in health policy. The proposed program at McMaster will encourage students to adopt a broader perspective and investigate the impacts of globalization, development, and global health.

It is the goal of this program to collaborate with existing global health offices to capitalize on the strengths of the global health experts across the province. Several students in the MSc. in Global Health Program have completed practica at SickKids, so there is collaboration between the Global Health Program and the Toronto hospitals. The Co-Tutelle option with Maastricht University in the Netherlands will capitalize on activities within an existing memorandum of understanding.

The breadth of research areas covered in the list of core faculty members in section 6.6 is unlike any other doctoral program in Ontario, with world-renowned faculty in emerging fields of study.

Furthermore, the proposed program will be the first to explore its subject-matter through an interdisciplinary and transcontinental Global Health paradigm. Since global health is interdisciplinary in nature, applicants could come from a number of thesis-based graduate programs across Canada. In addition to global health graduate programs, applicants could come from programs across the health sciences, social sciences, or business, depending on their research interests.

Infectious disease modeling is one emerging field that has become increasingly important as a result of globalization; increasing levels of urbanization; and, increased population density. Infectious diseases remain one of the leading causes of morbidity and mortality worldwide, with over 2 billion cases of upper respiratory infections and diarrheal disease.
in 2013.\textsuperscript{11} As population densities increase and international travel becomes easier and more affordable, infectious disease modeling will be crucial to predict the impact of infectious disease and develop strategies to prevent their spread. One student approached the Global Health Office seeking to pursue a PhD in infectious disease modeling but felt that no programs existed either at McMaster or in Ontario to meet her research needs.

Infectious disease modeling is one example of an emerging research area within Global Health. Another cross-disciplinary area of study within the field of global health which warrants further research is the intersection between climate change and health, and the disproportionate burden of climate change on indigenous people in the circumpolar north. One student in the MSc. in Global Health program completed a thesis on offshore drilling and its impacts on food security in the Canadian arctic, highlighting the threats of offshore drilling to not only health and food security but also to cultural identity. A third research area which global health doctoral students could pursue is refugee health and access to health services for refugee populations, both in Canada and around the world. In 2016, two students in the MSc. in Global Health program conducted theses on the topic of health and social services for refugees and newcomers to Canada.

In 2014, an alumni survey was distributed to graduates from the MSc. in Global Health program and 45% of respondents indicated an interest in pursuing a PhD in Global Health at McMaster. The doubling of enrolment in the MSc. in Global Health program at McMaster over the past five years has created a large pool of potential doctoral candidates. Cooperation similar to that which currently exists at the Masters’ level will ensure mutual academic benefits across departments and schools and promote a cohesive academic community. There has been agreement for the cross-listing of elective courses with both the Health Management stream of the Business PhD program as well as the Public Health program. Both groups are excited by the prospect of collaborating with the doctoral in Global Health Program.

Table 2: Existing PhD in Global Health Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree</th>
<th>Duration</th>
<th>Tuition per year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) University of Washington</td>
<td>PhD in Global Health Metrics</td>
<td>4 years</td>
<td>$30,240</td>
</tr>
<tr>
<td>2) Arizona State University</td>
<td>PhD in Global Health</td>
<td>4 years</td>
<td>$20,800</td>
</tr>
<tr>
<td>3) Brandeis University</td>
<td>PhD in Global Development &amp; Sustainability</td>
<td>4 years</td>
<td>$43,756</td>
</tr>
<tr>
<td>4) Erasmus Mundus</td>
<td>PhD in TransGlobal Health</td>
<td>4 years</td>
<td>$430 - 860 **</td>
</tr>
<tr>
<td>5) San Diego State University/University of California San Diego</td>
<td>PhD in Global Health</td>
<td>4 years</td>
<td>$8,585</td>
</tr>
<tr>
<td>6) Trinity College Dublin</td>
<td>PhD in Global Health</td>
<td>4 years</td>
<td>$21,800</td>
</tr>
</tbody>
</table>

7) University of Edinburgh  
PhD in Global Health  
3 years  $ 28,800

8) University of Florida  
PhD in Environmental & Global Health  
4 years  $ 30,270

9) University of Toronto Dalla Lana School  
Collaborative PhD in Global Health  
4 years  $ 8,460

10) University College London  
MPhil/PhD in Global Health  
3 years  $ 37,613

* Tuition Fees are for Foreign Students with the exception of U. of Toronto.  
** Per month, dependent upon participating institution  
***Note that Maastricht University is not listed. Maastricht follows a European model for doctoral studies where students do not enter a specific program. Rather, they enter into doctoral studies under a specific supervisor.

1.7. Degree Nomenclature

Students who complete the proposed program will be awarded a PhD degree with ‘Global Health’ as the program title. Global Health has become an increasingly well-recognized field of study, with related undergraduate and graduate programs in universities across Canada.

The proposed program is intended to prepare graduates for careers in research and academia; specialists capable of working with a broad range of institutions, organizations, and enterprises that currently populate the landscape of Global Health. Extensive financial resources have been spent on global health initiatives over the course of the last decade. In 2015, approximately $36 billion USD was spent on global health initiatives alone.  

The quality of decision-making of how that money is spent rests, to some degree, upon having properly trained professionals making these decisions. In an increasingly complex and competitive market, an interdisciplinary approach, which we have discussed above, is critical to making informed decisions that recognize the complexity of decision making in the field. A multidisciplinary approach provides the intellectual nous to our students, which will allow them to transcend the traditional boundaries that have dominated the field until recently. Our students will develop the capacity to undertake multidisciplinary research that is grounded in the latest advances in global health research.

2. ADMISSION & ENROLMENT

2.1. Admission Requirements

Admission requirements for academic references, grades, and English language proficiency will meet or exceed School of Graduate Studies requirements at McMaster.

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As part of the application package, applicants will be expected to submit a Letter of Intent, in which they will identify a research area of interest as well as a potential supervisor.

The proposed program seeks candidates who show high scholarly promise, and who have a strong graduate background in global health or a related field. Applicants to the proposed program are required to have any thesis-based Masters’ degree. Applicants with course-based Masters’ will be reviewed by the admissions committee on a case-by-case basis, where course-based Masters’ graduates with additional research experience may be considered. The pool of applicants will therefore not be limited to graduates from the MSc Global Health Program; they will represent net new applicants from a wide range of academic backgrounds.

The PhD in Global Health Program seeks to attract candidates who have already demonstrated a prior commitment to global health and would like to strengthen their ability to carry out intensive research that will be an original contribution to advancing the state of knowledge in the field. Similar to the way in which ‘demonstrated interest in global health’ is evaluated for applicants to the MSc. program, this commitment to global health should be shown through an applicant’s entire admissions package, which should show an interest in global health issues.

The program is receptive to students in the thesis-based MSc Global Health program transferring to the proposed PhD program.

When offered admission to the program, applicants will be matched with a specific supervisor.

2.2. Enrolment Planning and Allocations

Enrollment is proposed to begin in the 2018-19 academic session, with the admission of eight graduate students each year. The proposed program will then reach maturity in the 2021-22 academic year with a total enrollment of 32 students, as shown in Table 3 below.

<table>
<thead>
<tr>
<th>Program Year</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
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<td>8</td>
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<td>Year 4</td>
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</tr>
<tr>
<td>Total Enrolment</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>32</td>
</tr>
</tbody>
</table>
3. STRUCTURE

3.1. Administrative, Governance, and Communication

The proposed program will be structured like the MSc. in Global Health program – a multi-faculty, interdisciplinary program with the faculty of Health Sciences as the proposed lead faculty. Graduate admission, enrolment, and program administration will be managed in cooperation with the School of Graduate Studies and supporting faculties at McMaster University. The program will be a standard (i.e. not Professional) program with revenues based upon student fees and BIU funding from the province. Tuition fees will align with standard tuition fees for research programs at McMaster. In 2016-17, these fees were $7,008.00 per year for domestic students and $16,761.00 per year for international students. In addition to an interdisciplinary governance structure, faculty members across the three Faculties will engage in supervision of doctoral students and participation in supervisory committees. A revenue sharing model has been built to allocate resources across the Faculties of Business, Health Sciences, and Social Sciences. This revenue sharing model will ensure proper compensation for participation in the proposed program, and will allow for the development of cross-disciplinary supervisory committees. Maastricht University will be compensated by the Dutch government through their doctoral compensation program.

The Letter of Intent, submitted as part of the application package, will help ensure a good fit between students and supervisor. Supervisors should have sufficient time and resources in order to effectively support the student’s work. The supervisor is primarily responsible for helping the student develop the dissertation proposal and support and supervise their research work. Decisions surrounding coursework and comprehensive exams should also be approved by the supervisor, as well as the supervisory committee and the Director of the Global Health Graduate Program. A full supervisory committee, of at least three faculty members, will be established in consultation with the student’s supervisor, by the end of the first term in the program.

The Co-Tutelle policy is a university policy open to all McMaster students, allowing students to complete a PhD and have it jointly awarded by two institutions. Doctoral students can complete a Co-Tutelle at any eligible institution (see Appendix B for Co-Tutelle Policy) but Maastricht would be a natural choice; Maastricht is a full-service university with Global Health housed in the Faculty of Health, Medicine and Life Sciences. Maastricht University is currently developing a Centre for Global Health.

Building on the relationship established in the MSc. in Global Health program, resources are already in place to support students choosing to complete a Co-Tutelle with Maastricht. Additionally, Maastricht is a leading institution in global health research and there is written support for collaboration with the proposed program from the Faculty of Health, Medicine, and Life Sciences at Maastricht. Doctoral students at Maastricht

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University follow a European model, where they do not enter as external PhD candidates. Rather, they enter into doctoral studies under a specific supervisor in the faculty of Health, Medicine, and Life Sciences. Students completing the Co-Tutelle with Maastricht would be enrolled as doctoral students in the PhD in Global Health program at McMaster, and as external PhD students in the faculty of Health, Medicine, and Life Sciences at Maastricht University.

Students who choose to do the Co-Tutelle with Maastricht will have members of their committee from both McMaster and Maastricht, with a primary supervisor at each of the Universities. Students will be required to submit a Co-Tutelle Letter of Intent to the School of Graduate Studies for approval within the first twelve months of the proposed program, and will be assigned a supervisor at Maastricht University. The Maastricht PhD supervisor will provide academic support for the duration of the program in conjunction with the supervisor at McMaster. In order to comply with the Co-Tutelle requirements, students will first defend their thesis in Maastricht and then hold a second defense at McMaster.

Primary responsibility for the administration, governance, and communication of the proposed program will reside with the Associate Vice President, Global Health and the Director of the PhD in Global Health Program at McMaster University.

3.2. Structure and Regulation

In keeping with McMaster University’s Strategic Mandate Agreement (2014-17) and President Deane’s Forward with Integrity, the proposed program is structured to promote experiential learning and engagement with the international community, while maintaining a high standard of educational quality and sustainability. It will follow a conventional sequence for PhD programs: coursework (See Section 4.1), comprehensive area exam (See section 4.1), development of a dissertation research proposal with appropriate ethical approvals, and establishment of a supervisory committee in the first year; gathering, processing, and analysis of data for dissertation research project; interpretation of findings, writing, and defense of the dissertation in the fourth year; followed by any necessary revisions.

Students will have four years to complete the program and defend their thesis as an in-time student, or they may choose to extend into overtime as per Graduate Studies policies.

This format provides students with the analytical and research tools necessary to undertake rigorous, innovative, original research; and the intellectual and professional depth necessary to be an insightful global health practitioner. Graduates will build a diverse and thorough understanding of various fields of study and establish intellectual independence that promotes insight and innovation between sectors. With the capacity to evaluate broad implications and provide informed judgment on issues relating to Global Health, graduates will be able to engage in policy development at all levels of government and global health programming (i.e. research concept, design, implementation; contribution to the field; intellectual autonomy, ethical behaviour, evaluation of broad implications; communication; and awareness of limitations).
3.3. Program Length and Progression

The program will follow a standard PhD timeline, typically taking four years or 12 terms to complete. In consultation with their supervisor, and with the proposed thesis area in mind, students will be required to do their coursework with a strong emphasis on research methods, followed by the submission of their finished thesis proposal by the end of the third term in the program. Terms three to seven will typically be the data collection phase. During the remaining five terms students will interpret the findings and prepare the dissertation.

4. CURRICULUM AND TEACHING

4.1. Program Content

The proposed curriculum for the PhD Global Health program reflects the innovative, globalized and interdisciplinary constitution of the global health field. These elements are reflected in each of the program components; coursework, comprehensive exams, dissertation proposal, and defense.

a) Coursework: All students will be required to take two courses for a total of 6.0 units.
   i. GLOBHTH – Innovative Research Methods for Low-Resource Settings* (3.0 units)
   ii. One approved graduate elective (3.0 units)

The new Research Methods for Low-Resource settings will be a required course, which will provide a strong understanding and knowledge of theoretical and methodological frameworks related to global health. Students will also be required to take one approved graduate elective.

Students may choose to take additional electives. The following courses are offered through Global Health faculty and will be available as elective courses to students in the proposed program. Other elective choices are possible but must be approved by the program.

i. GLOBHTH 707 – Global Burden of Disease
   ii. GLOBHTH 708 – Global Health Equity
   iii. GLOBHTH 709 – Refugee Health Policies and Practice
*Innovative Research Methods for Low-Resource Settings course is currently being developed and will be run by Global Health faculty.

Corresponding to the diverse academic background and career goals of global health graduate students, the proposed program offers students flexibility when determining an individualized curricular track. Students, in collaboration with their supervisory committee, can also choose to take additional graduate courses related to their thesis in order to support their research and career goals. Electives aside from those listed above may be taken with special permission. Students may also undertake additional graduate-level independent study with faculty members within the global health program.

In addition to coursework, all students will be required to participate in a research and professional development seminar. The seminars will be considered milestones in the program and will therefore not be graded but will be required for students to progress. The seminar will normally be scheduled at the beginning of the second year. Students will be invited to discuss the knowledge and skills relevant to their research project, including scholarship, proposal, grant and report writing, research reviewing, presentation of conference papers and articles for publication in scholarly journals, research networking, and the preparation of application letters and curriculum vitae.

b) Comprehensive exam

Following the completion of coursework, students will complete a comprehensive exam in their specific area of curricular concentration. The comprehensive exam will comprise of an independent study reviewing the body of published literature, summarizing the findings, and presenting them in an oral examination. Students will be able to compare and synthesize different perspectives and interpretations, and clearly communicate these ideas to both academic and lay-people in a creative and stimulating way. Comprehensive exams will strengthen students’ confidence in their understanding, and will be used to assess their ability to derive and develop a viable research project from critical engagement with the scholarship in their area of study. The comprehensive exam will require students to integrate the major theoretical writings and the substantive research pertinent to their selected research focus. The timeline for completion of comprehensive exams will align with school of School Graduate Studies policies. The exam will be assessed by the supervisory committee on a pass/fail basis and will include an oral defense, and the outcome will be reported to the School of Graduate Studies. Students will demonstrate an in-depth and broad understanding of the current scholarly literature in their relevant field of study in global health. Through the cross-disciplinary and cross-cultural nature of the program, students will be able to analyze topics through various lenses and critically think, reason, and communicate their knowledge in diverse and innovative ways.

c) Dissertation Proposal

The dissertation proposal will identify a viable project of research, which is grounded in a developed body of scholarly literature. The proposal will outline the project’s theoretical perspective and relevance, key research questions, hypothesis and arguments, and the appropriate methodology for examining these. The dissertation proposal will be presented and defended by the student and assessed by the supervisory committee. The dissertation
program will be submitted by the end of the 12th month of the program. By the end of the 12th month of the program, students will therefore have completed coursework, submitted their dissertation proposal and held their first committee meeting.

d) Dissertation

All students will produce an original piece of empirical research, situated in relevant scholarly literature, which will become the reference point for conceptualizing and justifying a central research question and interpreting the significance of the principal findings. The program will then culminate with the defense of the student’s thesis. The oral defense will follow standard University procedures.

4.2. Program Innovation

The proposed program incorporates a number of innovations with respect to coursework, comprehensive exams, and opportunities for students to participate in global health research initiatives and networks. When compared with other PhD programs in Global Health worldwide, the proposed program differs in significantly in two key respects:

First, most existing PhDs in global health are confined to one faculty in one University. In the twenty-first century, the velocity of innovation in global health requires interdisciplinary practitioners to have not only transnational but transcontinental access to a community of global health academics and practitioners. The proposed program at McMaster will incorporate key faculty members from the faculties of Business, Health Sciences, and Social Sciences. In addition, students completing the Co-Tutelle can include committee members and a supervisor from the faculty of Health, Medicine, and Life Sciences at Maastricht University. The faculty members involved in the proposed program will therefore represent a diverse group of academics whose knowledge and expertise have a truly global reach.

Second, the proposed Co-Tutelle option will offer students the opportunity of having supervisors at both McMaster University and Maastricht University. These supervisors will further increase the breadth of research areas available to prospective students and will also allow for cross-cultural learning. Students will work in close consultation with an established supervisor at each University, who will also attend the dissertation defense at the other University (either in person or via teleconference). At Maastricht, the McMaster students will be registered as external PhD candidates and they will have to defend their thesis first at Maastricht and then at McMaster to have their doctoral degree jointly awarded by both universities. This curriculum structure reflects the professional demands and global domain of the global health field, while also promoting global research collaborations and providing students with access to a broader transcontinental range of research supervision and coursework.

4.3. Mode(s) of Delivery

The primary modes of delivery will be coursework, comprehensive exams, and individual student supervision for dissertation research. Courses will be primarily delivered as
seminars, which will require students to complete weekly reading assignments and engage in focused discussions on issues related to the readings. Instructors will be required to provide students with a course outline that specifies the material and topics to be covered, specific learning objectives and outcomes, expectations regarding student and instructor contributions, and the methods of evaluation. Supplementary teaching and learning methods, such as online information distribution and discussion forums, will be encouraged by the Global Health program.

Comprehensive exams will be administered by the Global Health Program and assessed by the supervisory committee. Students will identify an area of interest related to their field of study in global health and familiarize themselves with the body of published literature. With supervisor guidance, students will perform an independent study reviewing the body of published literature, summarize their findings in a written literature review and then present their findings in an oral examination.

Dissertation proposals will be submitted by the student to the supervisor and supervisory committee. Once the student’s dissertation proposal has been approved and they have obtained the appropriate Research Ethics Board approval, they can begin conducting their research. Annual meetings with the supervisory committee will provide guidance and support for the student as they write their dissertation and prepare for defense. Meetings between the student and the supervisor may require communication technologies, especially when the supervisor is based in Maastricht. Online communication tools may therefore be used to facilitate supervisory committee meetings as required. The program will then culminate in the final written and oral defense of the thesis.

4.4. Experiential Learning

The natural structure of a PhD program is such that experiential learning is a major component as students will acquire the knowledge and skills necessary to formulate a novel research question and protocol, demonstrate this knowledge and skill in practice, and draw critical conclusions that contribute to the academic and public community. The proposed program’s structure aims to enrich graduate education by further fostering a multidisciplinary approach to learning. Each stage of the program will integrate the principles of experiential learning, including scholarship and career exploration.

Equal emphasis will be given to establishing a broad and in-depth knowledge, as well as professional skills, both of which are necessary for graduates to become influential members of academia and the private and public sector. The proposed program will encourage supervisors to view their role not only as the primary directors of a student’s scholarship and research, but also as a personal and professional mentor. Students who decide to complete a Co-Tutelle degree at Maastricht University will benefit from a global academic network; however, they will also be tasked with the challenge of utilizing various technologies to maintain continuous communication with supervisors and supervisory committees in multiple continents.
4.5. Accessibility

The proposed program will aim to maintain the highest standard of accessibility for its students and staff by complying with the objectives set-out by the Accessibility for Ontarians with Disabilities Act (AODA) and the McMaster University Accessibility Plan 2011-2025. Accessibility efforts will be made specifically in areas related to customer service, built environment, information and communication systems, transportation, and employment. Active steps will be taken at all stages to identify and remove any program-related or environmental barriers that will prevent persons with disabilities from accessing any element of the proposed program. Program staff and faculty will consult with the McMaster Accessibility Council (MAC) on all related matters, and will work to accommodate students and staff whenever possible. All program staff and faculty involved in the provision of educational and non-educational services to members of the public will complete mandatory training provided by McMaster University regarding accessibility policies and practices.

4.6. Research Requirements

The proposed program will culminate in a research dissertation, which will comprise of an original research protocol and scholarly contribution. This dissertation should be of the calibre expected of a doctoral level outlined in Appendix A. The research question should be novel and related to current issues in Global Health. The dissertation proposal should demonstrate students’ appreciation for the complex ethical considerations implicit in conducting global health research and the implications of conducting research in a cross-cultural context. The dissertation will demonstrate students’ ability to design and conduct high quality empirical research which is grounded in strong research methodology, which will have been developed throughout the program.

These skills will be reinforced throughout the coursework and comprehensive exam, which are structured to provide students with the necessary capacity to design and conduct an original and innovative research project that expands upon existing knowledge and meets the rigorous criteria for peer reviewed scholarly publication. The core research methodology course will address the challenges in designing and conducting research in the field of global health, affording students the opportunity to design a research study in their field of interest and have it critiqued by experts in the field of research methodology.

5. ASSESSMENT OF LEARNING

5.1. Methods for Assessing Students

Students will be evaluated throughout the proposed program using a variety of methods. Courses may be evaluated using written assignments, final essays, or exams. A minimum grade of B- is required in each course to meet requirements of the program.

The students’ performance on the comprehensive exam will be assessed by the supervisory committee as Pass with Distinction, Pass, or Fail. Students who fail the first attempt will have a second opportunity to complete the comprehensive exam.
Progress on the dissertation will be assessed and monitored through the annual completion of the PhD Supervisory Committee Report, which must be submitted to the School of Graduate Studies within two weeks of the end of the academic year. In this report, supervisors will evaluate progress based on a scale ranging from Excellent-Good-Satisfactory-Marginal- Unsatisfactory. Supervisors will also discuss specific goals as well as areas for improvement and additional direction, using the standard SGS Committee Report.

Dissertation research, culminating in a defense at the end of the program, is the primary assessment of the student’s ability to undertake novel research and make an original contribution to knowledge. Students will be required to complete a written and oral defense of their thesis, in accordance with the University requirements.

5.2. Curriculum Map

All decisions regarding coursework will be made by the supervisor in conjunction with the student and the supervisory committee. The course requirements are intended to provide students a strong base in research methods, while providing the flexibility necessary to create a personalized track in line with their research. The curriculum map (see Appendix C), is designed to translate degree level expectations into program learning outcomes. During the first three terms of the program, students will complete the following coursework:

Two courses totaling 6.0 units

i. GLOBHTH – Innovative Research Methods for Low-Resource Settings

ii. One approved graduate elective

5.3. Demonstrating Student Achievement

Ability to compete for scholarships, publications, and other achievements will all be used as benchmarks for student achievement.

6. RESOURCES

6.1. Administrative, Physical and Financial Resources

The proposed doctoral program will build upon existing infrastructure developed in the Masters’ program, which has been augmented by the addition of faculty members and potential supervisors with active grant funding. Additional administrative support has been incorporated into the Global Health Program’s budget. While the Co-Tutelle partnership with Maastricht University eases physical and academic resource demands of the proposed program, distance education requires substantial administrative coordination. To partially relieve these resource demands, the proposed program will draw on staff currently appointed to the MSc. in Global Health program. At least two additional days of administrative support per week will be provided to administer the proposed program in an effective and appropriate way.
6.2. Library, Technology, and Laboratory Resources

Library and technology resource demands will be satisfied by drawing on the partnerships and resources established by the MSc. in Global Health program. The Health Sciences Library and the Global Health Library Liaison have agreed to this collaboration. As members of the faculty of Health Science, students will have access to all resources available at faculty of Health Science Library at McMaster University, as well as the assistance of the currently appointed Global Health library-liaison. Students that opt to complete a Co-Tutelle degree will have the added benefit of being able to access a global selection of library and technology resources at Maastricht University. Financial allocation for these support services are included in the proposed program budget. Requirements for further new resources have not been identified in this area.

6.3. Faculty

The MSc. in Global Health program has the active support of 28 associate members and 9 adjunct appointments at McMaster; many sit on various committees and participate in the global health seminar series as well as provide academic counseling for students. Five faculty members from Maastricht University with strong social science backgrounds actively participate in the MSc. in Global Health program and have agreed to supervise students choosing to complete a Co-Tutelle with Maastricht. Maastricht University will be compensated by the Dutch government through their doctoral compensation program. In order to enroll 8 students in 2018, 20 faculty members have been identified as potential primary supervisors (see section 6.6.) Written support has been received from the Deans of Business, Social Sciences, and Health Sciences, as well as Department Chairs and Heads of Schools within the faculty of Health Sciences.

All faculty members at McMaster in Section 6.6 meet the criteria to supervise PhD students within the University and their respective faculties. The interdisciplinary nature of global health is highlighted in the breadth of faculties, departments, and specialty areas represented in the list of faculty members found in Section 6.6. These cross disciplinary academics come from a wide range of academic and research backgrounds and will ensure that the proposed program meets the supervisory needs of doctoral students and sustains a high standard of scholarly excellence. Revenue sharing across faculties will follow a costing formula which will take into account the varying level of commitment required for committee work, teaching, and supervision. This formula estimates the number of hours allocated by faculty members and the associated financial distribution and is based on the formula successfully adopted by McMaster’s interdisciplinary Health Policy PhD program.

In 2018, two existing faculty members from within the Global Health Program will begin teaching in the doctoral program.

6.4. Student Financial Support

Consistent with standard funding practices for doctoral studies at McMaster University, each incoming student will receive an annual minimum of $23,269 from a combination of
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*June 2017*

graduate scholarship, teaching assistantship and research assistant positions, and research scholarship. This funding base for domestic students will be broken down as follows:

- $7,000 Graduate Scholarship
- $8,769 for .75 TA
- $7,500 Faculty funding
- TOTAL $23,269

Funding for international (visa) students will come primarily from faculty grants, since there will not be basic income units (BIUs) for international students.

This base level of funding will be guaranteed for all incoming doctoral students, although many may obtain external scholarships. In this case, the student would receive more than the minimum amount of funding. Students will also be hired on as teaching assistants (TAs), or in the absence of TA positions, research assistants up to a maximum of 505 hours per year, as per the School of Graduate Studies guidelines for employment of graduate students.

### 6.5. Faculty Research Funding

The proposed faculty supervisors have a strong record of scholarly research output and applied activity, funded by major external bodies, and published in leading journals and highly reputable academic presses. This includes research done on an individual basis and work done collectively with other university researchers and with researchers in unions, non-profit research units and community agencies. Much of this research is funded by external granting sources, including the Social Sciences and Humanities Research Council (SSHRC) and Global Affairs Canada (GAC). Funding for research in the Global Health program is currently being used to attract and train graduate students in various fields of study, and will continue to be used this way in the proposed program. Table 4 presents the total amount of active funding from 2010-2017 for the supervisors listed in Section 6.6. The sum of the funding listed in the proposed faculty members’ curriculum vitae’s over the past seven years totals over $100 million CAD.

<table>
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<tr>
<th>Year</th>
<th>Granting Councils</th>
<th>Other Peer Adjudicated</th>
<th>Contracts</th>
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*June 2017*

<table>
<thead>
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</table>

* ISLAND-ACS, QUEST fund, World Heart Federation Funding Competition, PHRI Internal Funding Competition, KT Canada Research Stipend, EJ Moran Campbell AFP Internal Career Research Award, New Investigator Fund

6.6 Supervision

Students will meet with faculty members who have funding about opportunities. Prior to the program start date, students should therefore have an idea for a research topic which aligns with what the supervisor has funding to explore. This information should be submitted in the application package as part of the Letter of Intent. The principal supervisor will be a full-time faculty member that has approved privileges for supervising doctoral students in this interdisciplinary program. The composition of the supervisory committee will be made during the course of the first year of studies.

Once the program is underway, the Graduate Committee will take account of the current distribution of supervisory loads as well as faculty members' areas of research expertise and interest when making decisions about offers of admission for the upcoming academic year. The Committee will strive to keep supervisory loads as evenly balanced as possible, and ensure that students' research interests are matched to faculty expertise.

The proposed faculty have extensive experience supervising Master's students in the MSc. in Global Health program and those that are proposed as Global Health doctoral student supervisors have either supervised PhD students in their home departments and faculties, served on PhD supervisory committees at McMaster, served on PhD supervisory committees at other universities, or served as external examiners for PhD exams and other universities. Offers to incoming students will require a commitment from the proposed supervisor to cover the supervisor’s portion of the student’s financial support.
## Table 5: Core Faculty Members by Field

<table>
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<th>Faculty Name &amp; Rank</th>
<th>M/F</th>
<th>Home Unit ¹</th>
<th>Supervisory Privileges ²</th>
<th>¹</th>
<th>²</th>
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<tbody>
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Program Proposal Draft for PhD Global Health

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<th>Name</th>
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<th>Supervisory Privileges</th>
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1. This is the budget unit paying the salary: department, school, research centre or institute, or other.
2. Indicate the level of supervisory privileges held by each faculty member: e.g., full, master’s only, co-supervision only, etc.,
3. Either give the field name or a footnote reference to it.
4. List faculty members under the categories suggested, as applicable.

Fields: 1 – Global Health Management; 2 – Globalization and Development; 3 – Global Diseases

X indicates major activity and x indicates minor activity

Category 1: tenured or tenure-track core faculty members whose graduate involvement is exclusively in the graduate program under review. For this purpose the master’s and doctoral streams of a program are considered as a single program. Membership in the graduate program, not the home unit, is the defining issue.

Category 2: non-tenure-track core faculty members whose graduate involvement is exclusively in the graduate program under review.

Category 3: tenured or tenure-track core faculty members who are involved in teaching and/or supervision in other graduate program(s) in addition to being a core member of the graduate program under review.

Category 4: non-tenure track core faculty members who are involved in teaching and/or supervision in other graduate program(s) in addition to being a core member of the graduate program under review.

Category 5: other core faculty: this category may include emeritus professors with supervisory privileges and persons appointed from government laboratories or industry as adjunct professors. Please explain who would fall into this category at your institution.

Category 6: non-core faculty who participate in the teaching of graduate courses.
Table 6: Completed and Current Number of Thesis Supervisions by Faculty Member

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<th>Member</th>
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</table>
7. QUALITY AND OTHER INDICATORS

7.1. Academic Quality of the Program

Academic quality of the proposed program will be determined with equal emphasis given to the delivery of a high quality and sustainable academic program and the expectation of a high degree of scholarly performance by students. With a wide range of opportunities to direct individual learning objectives, financial and academic support from both internal and external sources, and supervisory mentorship, graduate students will be expected to engage in-depth with their field of study and produce original academic contributions within an acceptable timeframe. Students who excel in their studies will be encouraged to apply for awards and scholarships, and will be provided employment or research opportunities within the Global Health program when possible.

Annual discussions at faculty meetings, as well as annual progress reports from students, will allow the proposed program to implement program changes to improve educational quality when necessary and remain reflexive to faculty and student needs.

7.2. Intellectual Quality of the Student Experience

The structure of the proposed program is designed so that graduate students have the provisions and resources to pursue their own research interests in conjunction with the research interest of faculty members in the department. Each student will be encouraged to develop a comprehensive program for their coursework, research, data analysis and dissertation that can be discussed and approved by their supervisory committee. Individual supervisors will involve students in their own research programs to the extent possible and thereby ensure the intellectual quality of the student experience. The exceptional character and experience of faculty members discussed in detail in Section 6.6 will ensure the intellectual quality of the students’ experience.
## Appendix A: Relationship of PhD in Global Health to Degree Level Expectations

<table>
<thead>
<tr>
<th>Graduate Degree Level Expectations</th>
<th>PhD in Global Health Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Depth and Breadth of Knowledge</strong></td>
<td><strong>Students will have a broad and in-depth understanding of the burgeoning body of knowledge that examines the complex interrelationships between health and the forces, processes, and conditions of globalization. They will apply an interdisciplinary approach when thinking and reasoning critically about the experience of health in a globalized world, and will be able to think creatively and innovatively when reflecting and engaging in these complex issues.</strong></td>
</tr>
<tr>
<td>A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice;</td>
<td><strong>Students will implement an interdisciplinary, comparative, and critical approach to unpack major theoretical concepts and principles, and formulate novel questions and hypothesis as they relate to current issues in global health. They will design and conduct an original research project, which expands upon existing knowledge and meets the rigorous criteria for peer reviewed scholarly publication. Students will develop a theoretical framework and methodological approach for their research project, grounded upon a robust knowledge of current research design and methodology, as well as an understanding of the interrelationship between health and other social factors, such as distribution of resources, which form the broader social context in which research problems are situated. Students will develop a high degree of awareness, understanding, and appreciation for the significant ethical issues that arise in the study of health, illness, and well-being, as well as their impact on social processes and research outcomes, and will be able to make adjustments to research protocols when necessary. Students will collaborate with international partners and key local stakeholders in the community. It is expected that all research and scholarship output will contribute to addressing current issues in global health.</strong></td>
</tr>
<tr>
<td><strong>2. Research and Scholarship</strong></td>
<td><strong>Students will contribute to the practical relevance of research in the study of social dimensions of health, illness, and well being, as well as the challenges of disseminating scholarly knowledge in academic settings, social advocacy, policy formation, and service management and delivery. Students will contribute to the academic community through participation in mentorship and supervisory roles related to both undergraduate and graduate research.</strong></td>
</tr>
<tr>
<td>a. The ability to conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems;</td>
<td><strong>b. The ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and</strong></td>
</tr>
<tr>
<td>b. The ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and</td>
<td><strong>c. The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication;</strong></td>
</tr>
<tr>
<td>c. The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication;</td>
<td><strong>Students will contribute to the practical relevance of research in the study of social dimensions of health, illness, and well being, as well as the challenges of disseminating scholarly knowledge in academic settings, social advocacy, policy formation, and service management and delivery. Students will contribute to the academic community through participation in mentorship and supervisory roles related to both undergraduate and graduate research.</strong></td>
</tr>
<tr>
<td>a. Undertake pure and/or applied research at an advanced level; and</td>
<td><strong>b. Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials;</strong></td>
</tr>
<tr>
<td>b. Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials;</td>
<td><strong>Students will contribute to the practical relevance of research in the study of social dimensions of health, illness, and well being, as well as the challenges of disseminating scholarly knowledge in academic settings, social advocacy, policy formation, and service management and delivery. Students will contribute to the academic community through participation in mentorship and supervisory roles related to both undergraduate and graduate research.</strong></td>
</tr>
<tr>
<td>a. The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex situations;</td>
<td><strong>b. The intellectual independence to be academically and professionally engaged and current;</strong></td>
</tr>
<tr>
<td>b. The intellectual independence to be academically and professionally engaged and current;</td>
<td><strong>c. The ethical behavior consistent with</strong></td>
</tr>
<tr>
<td>c. The ethical behavior consistent with</td>
<td><strong>Students will demonstrate the professional capacity necessary to design, implement, manage, and evaluate large-scale scholarly/scientific research initiatives on an individual and collaborative basis, while continuously remaining vigilant to the ethical and social implications of health research. They will demonstrate intellectual leadership and autonomy in the evaluation and critique of existing research paradigms, and present unique and innovative ways of addressing research problems and knowledge development. Students will contribute to the broad academic and</strong></td>
</tr>
</tbody>
</table>
5. Level of Communication Skills

<table>
<thead>
<tr>
<th>academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d. The ability to evaluate the broader implications of applying knowledge to particular contexts.</th>
<th>research community, through participation in mentorship and supervisory roles, and will promote international collaboration through Global North/South research and education partnerships.</th>
</tr>
</thead>
</table>

Students will be able to clearly and effectively communicate complex ideas, findings, and conclusions through oral presentation and written word, to both academic and non-academic audiences. They will demonstrate a high degree of competence in cross-cultural and collaborative communication, and will be able to translate knowledge between academic disciplines and non-academic sectors in an effective and professional manner. Students will utilize new and innovative information and communication technologies.

6. Awareness of Limits of Knowledge

<table>
<thead>
<tr>
<th>An appreciation of the limitations of one’s own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.</th>
<th>Students will have the ability to recognize and consider the assumptions that underlie all forms of knowledge, as well as the origins and perspectives on which that knowledge is based. Students will recognize the limitations of their perspective and knowledge, as well as the gaps in their understanding of the complex interrelationships between health and the forces, processes, and conditions of globalization.</th>
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</table>

Students will have the ability to recognize and consider the assumptions that underlie all forms of knowledge, as well as the origins and perspectives on which that knowledge is based. Students will recognize the limitations of their perspective and knowledge, as well as the gaps in their understanding of the complex interrelationships between health and the forces, processes, and conditions of globalization.
Appendix B: McMaster University Co-Tutelle Policy

1. Introduction:
A cotutelle is a single PhD jointly awarded by two post-secondary institutions, typically from different countries. A cotutelle degree is a unique way to promote and structure research collaborations, and allows students access to a broader range of research supervision than would be available at a single institution.

2. Requirements:
   a) The student must meet McMaster’s admission requirements.
   b) The student must apply to be in a cotutelle program within the first 12 months of their PhD study.
   c) The student is required to be registered full-time at both institutions.
   d) The student must meet the degree requirements at both institutions.
   e) Each institution must have a qualified supervisor for the student.
   f) A cotutelle Memorandum of Understanding (MOU) must be created between both institutions. At a minimum, the MOU will outline:
      - which institution is the “Home Institution” and which is the “Host Institution”.

DISCLAIMER: If there is a Discrepancy between this electronic policy and the written copy held by the policy owner, the written copy prevails.
a listing of degree requirements for each institution,
who the supervisors are,
the residency, class, exam, and research schedule for the student,
financial/tuition/funding details,
insurance coverage and visa requirements,
intellectual property and publication details,
a schedule for progress reports and committee meetings,
the language of the thesis and defence (normally English), and details of the examination procedure,
options for completion if the supervisory relationship with either supervisor breaks down,
options for completion if the student fails to meet degree requirements,
agreement that both institutions will award a doctoral degree designated as having been completed “in cotutelle” with the other institution.

g) The student must comply with regulations at both institutions (e.g., research ethics, etc.). The student can be processed under either university’s regulations.

h) Generally, the student spends the majority of time at the Home Institution, with a minimum of 12 months and maximum of 24 months at the Host Institution.

i) Students enrolled in a cotutelle program will pay tuition only to one institution at a time, normally to the Home Institution; additional administrative or ancillary fees may be required. All tuition and fee requirements should be in the Cotutelle MOU.

j) The student will include an additional chapter in his/her thesis discussing the value added from the cotutelle work.

k) As dictated by McMaster’s policies, there must be a formal thesis defence. The thesis defence normally will use the procedures of the Home Institution and be defended at the Home Institution with both thesis supervisors attending the defence (in person or by teleconference). The examining committee must be equally appointed by both institutions (generally 2 professors from each institution), and must include an external examiner independent of both institutions.

l) Upon successful completion of the defence, an English language version of the final thesis will be submitted to McMaster for dissemination through the eThesis program.

m) Wording on transcripts and degrees from both institutions must specify the degree was awarded as having been completed “in cotutelle” with the other institution.
3. Procedures:

a) The student will fill out the Cotutelle Letter of Intent with the School of Graduate Studies (SGS). This letter must be signed by the student and both supervisors.

b) The Cotutelle Letter of Intent then will be reviewed and approved by the appropriate Associate Dean from SGS.

c) The Cotutelle Letter of Intent is forwarded to the Office of International Affairs for the creation of a Cotutelle MOU, in collaboration with the School of Graduate Studies. The Cotutelle MOU must be approved and signed by the Associate Vice-President and Dean of Graduate Studies from McMaster University, and an authorized representative of the other institution, as well as by both supervisors and the student. Other signatories may be added as appropriate.

d) The Cotutelle MOU must be completed and signed before the student attends the Host Institute.
# Appendix C: Curriculum Map for New Graduate Programs

<table>
<thead>
<tr>
<th>Program Learning Outcomes (PLOs)</th>
<th>PhD Degree Level Expectations (DLEs)</th>
<th>Program Requirements</th>
<th>Assessments &amp; Evidence</th>
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<tbody>
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<td><strong>By the end of the program, students graduating with a PhD will...</strong></td>
<td><strong>A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice.</strong></td>
<td><strong>Teaching Activities &amp; Learning Opportunities</strong></td>
<td><strong>Written Assignments</strong></td>
</tr>
</tbody>
</table>
| Apply a broad and in-depth understanding of the knowledge that examines the complex interrelationships between health and the global, national, regional, and local forces, processes, and conditions of globalization. | ● Dissertation Proposal  
● Coursework  
● Dissertation Research  
● Teaching/Research Assistantship | ● Comprehensive Exams  
● Dissertation and Defense |
| Demonstrate an interdisciplinary, comparative, and critical approach to unpack major theoretical concepts and principles, and formulate novel questions and hypothesis as they relate to current issues in global health. | **The ability to conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems.** | ● Dissertation Proposal  
● Coursework  
● Dissertation Research  
● Professional Development Seminar | ● Written Assignments  
● Comprehensive Exams  
● Dissertation and Defense |
| Design and conduct an original research project grounded upon a robust knowledge of current research design and methodology, as well as a high degree of awareness, understanding, and appreciation for the significant ethical issues that arise in the study of Global Health. | **The capacity to:**  
 i) Undertake pure and/or applied research at an advanced level; and  
 ii) Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials.  
 The intellectual independence to be academically and professionally engaged and current.  
 The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research. | ● Dissertation Proposal  
● Coursework  
● Dissertation Research  
● Professional Development Seminar | ● Written Assignments  
● Comprehensive Exams  
● Dissertation and Defense |
| Establish capacity to publish research and scholarship output that meaningfully contributes to the understanding and resolution of current issues in global health, and engages with health-related policy-makers at global, national, regional, and local levels. | **The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication.**  
 **The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.** | ● Dissertation Proposal  
● Dissertation Research  
● Professional Development Seminar | ● Dissertation and Defense |
| Demonstrate the skills necessary to develop and deliver educational | **A thorough understanding of a substantial body of knowledge that is at the forefront of** | ● Coursework  
● Teaching/Research | ● Written Assignments |

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*Program Proposal Draft for PhD Global Health*  
*June 2017*
## Program Proposal Draft for PhD Global Health

**June 2017**

<table>
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<th>Course/lectures on the complex interrelationships between health and globalization at the undergraduate and graduate levels.</th>
<th>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.</th>
<th>An appreciation of the limitations of one’s own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.</th>
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<tr>
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<td>Comprehensive Exams</td>
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<th>Demonstrate the ability to clearly and effectively communicate complex ideas, findings, and conclusions through oral presentation and written word, to both academic and non-academic audiences, utilizing new and innovative information and communication technologies when appropriate.</th>
<th>A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice.</th>
<th>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.</th>
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<tr>
<td></td>
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<tr>
<th>Cultivate a respectful and collegial community of Global Health scholars through participation in mentorship, supervisor roles, and community engagement.</th>
<th>The capacity to: i) Undertake pure and/or applied research at an advanced level; and ii) Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials.</th>
<th>An appreciation of the limitations of one’s own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.</th>
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Appendix D: Memorandum of Understanding with Maastricht University

Memorandum of Understanding on Academic Co-operation for the continuation and creation of Programmes in Global Health

Between

McMaster University
Hamilton, Ontario, Canada

And

Maastricht University
Maastricht, Netherlands

Concerning the development of international academic and potential research linkages between McMaster University and Maastricht University.

McMaster University and Maastricht University (Founding Members) desire to collaborate and strengthen academic and potential research cooperation between their respective institutions based on the principles of mutual benefit.

This agreement is based on the principle of reciprocity and expresses the interest of both parties in the development of programmes in Global Health in the belief that the education and research process at both institutions will be enhanced.

ARTICLE 1

The objective of the collaboration between McMaster University and Maastricht University is to continue to develop Programmes in Global Health.

ARTICLE 2

Cooperation and collaboration in strategic areas leading to Programmes in Global Health will continue to be examined, developed, and implemented. Both institutions shall work together to ensure that all appropriate policies and procedures are followed including acquiring all necessary permission from accreditation bodies. The Universities agree to the activities as follows:
a. continue to jointly offer graduate education, leading to a Master Programme in Global Health;
b. continue to develop academic relationships that will exchange students between the two institutions under this programme;
c. continue to develop possibilities of joint instruction and supervision of graduate students;
d. jointly develop the development of community-based training programmes as needed;
e. explore the development of joint research projects;
f. continue the development of an exchange of relevant academic and scientific information;
g. continue the exchange of faculty, researchers and students;
h. continue to develop international curricula for global health programmes;
i. continue the development of a Partnership model for higher education and research in global health.

ARTICLE 3

Each collaborative initiative will be the subject of a specific agreement describing the activities, structure, courses, fees and other information as well as experience to be exchanged and setting forth details related to administration, operation and funding. Appropriate institutional approval will be sought for programme development and implementation. All policies and procedures within each institution, including any Ministerial and accreditation approval will be sought and followed. Appendix One is attached for the purpose of providing background information on the direction of the collaboration.

The parties intend that any agreement for academic cooperation in relation to specific programme activities will be documented in a separate and formal agreement executed by the parties in accordance with the policies and procedures of the respective parties. Except for the obligations under Article 7, this Memorandum of Understanding does not give rise to any contractual relationship between the parties itself, or create any legal obligations on either party, including an obligation to enter into a formal and separate agreement at any time.

ARTICLE 4

As more educational institutions seek to join this emerging global health education and research network, the two universities seek the development of a Partnership Model for higher education and research in global health. This partnership will be strategic, drawing together a select group of institutions that share similar values, namely, a global vision and a commitment to global health. Central to these values is the importance of academic diversity and international collaboration.

Founding Partners of the Partnership are McMaster University, Hamilton, Canada and Maastricht University, Maastricht, The Netherlands. They are the original partners that started, and are the core of, the partnership.

In addition to the Founding partners, new institutions may join the partnership and become Associate Partners. Each Associate Partner may have additional partners; affiliates. Affiliate Members from other Universities can be invited to become Associate Partners by consensus of the Founding (and other Associate) Partners. The Founding Partners continue to develop the procedures and quality requirements that guide the Partnership model, including provisions relating to the ownership and use of intellectual property generated by the parties.

An Advisory Board, consisting of eminent experts in Global Health, will provide advice to and and advocate for the collaborative Global Health programmes in the respective institutions. They will meet regularly, normally on an annual basis.

ARTICLE 5

This Memorandum of Understanding will be implemented within the framework of the legal and administrative conditions to which the respective Institutions are subject.

Maastricht University
McMaster University
ARTICLE 6

To administer and facilitate this cooperation, each party continues to designate an appropriate office to coordinate activities resulting from this cooperation.

FOR MAASTRICHT UNIVERSITY

Anja Kruimelich, Ph.D.
Associate Professor
Dept. of Health, Ethics and Society
Faculty of Health, Medicine and Life Sciences
Maastricht University
P.O. Box 616
6200 MD Maastricht
The Netherlands
+31 43 388 1122
A.Kruimelich@maastrichtuniversity.nl

FOR McMaster UNIVERSITY, CANADA

Andres Bauman, Ph.D.
Associate Vice-President
McMaster Health Sciences International Health
Room 3500 Michael G. DeGroote Centre for Learning
McMaster University
1280 Main St. West
Hamilton, Ontario L8S 4L8
Canada
905-525-8140 Ext. 22581
bauman@mos.mcmaster.ca

ARTICLE 7

1. Any Intellectual Property Right brought by one of the Parties for the implementation of the cooperation activities under this MOU shall remain the property of that Party. However, that Party shall identify that the intellectual property right has not resulted from the infringement of any third party’s legitimate rights. Further, that Party shall be liable for any claim made by any third party on the ownership and legality of the use of the intellectual property right which is brought in by the aforementioned Party for the implementation of the cooperation activities under this MOU.

2. Any Intellectual Property Right, data and information resulting from research activities conducted under this MOU shall be jointly owned by the two Parties, and both Parties shall be allowed to use such property for non-commercial purposes free of royalty. Should the intellectual property right, data and information resulting from the cooperation activities under this MOU be used for commercial purpose by one Party, the other Party shall be entitled to the royalties obtained from the exploitation of such property on the basis of the principle of equitable contribution. In such a case, the object of the research activities conducted shall constitute a part of the contribution of the Party from which the object derives.

3. If either of the Parties wishes to disclose confidential data and/or information resulting from the cooperation activities under this MOU to any third party, the disclosing Party must obtain prior consent from the other Party before any disclosure can be made.
**ARTICLE 8**

Differences arising out of the interpretation or the implementation of the MOU shall be settled amicably by consultation or negotiation between the Parties.

**ARTICLE 9**

Either party shall be entitled to obtain such publicity as it considers necessary relating to the subject matter provided that any press releases and other material (including electronic) shall be approved as to form and content by both parties in writing. At McMaster University the Office of International Affairs will seek this approval according to policy and procedures of McMaster University. McMaster University’s name and logo may not be used without the written permission of McMaster University. Similarly, Maastricht University’s name and logo may not be used without their written permission.

**ARTICLE 10**

This MOU will remain in force for five (5) years and will become effective upon the date of signature by duly authorized representatives of both parties. The terms of the MOU can be reviewed, modified and extended at any time by mutual agreement communicated in writing.

DONE in Hamilton, Canada on November 15, 2012 in two originals in the English language, both texts being equally authentic.
Appendix E: Support for the Proposed Program

June 28, 2015

To whom it may concern,

This will verify that I strongly support the proposed interdisciplinary PhD in Global Health program. The program will be a valuable and complementary addition to McMaster’s current interdisciplinary graduate programs. I also support the inclusion of the following three faculty members from within the DeGroote School of Business to be involved with relevant thesis in the proposed program:

Dr. Vishwanath Baba
Dr. Chris Longo
Dr. Norman Archer

In addition, I expect that faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Sincerely,

Glen Randall PhD
Associate Professor
Chair, Health Policy and Management

DeGroote SCHOOL OF BUSINESS
September 26, 2016

To whom it may concern:

I support the proposed interdisciplinary PhD in Global Health program, as per my previous email. In principle, I support the participation of faculty members within my Department and/or School, who in future may become involved with relevant theses in the proposed program.

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Sincerely,

[Signature]

David Price, MD, CCFP, FCFP
June 6, 2017

To whom it may concern,

I support the proposed interdisciplinary PhD in Global Health program. I also support the inclusion of the following four faculty members within my Department and/or School who may be involved with relevant theses in the proposed program:

   Dr. Philip J. Devereaux  
   Dr. Hertzel Gerstein  
   Dr. Andrew Mente  
   Dr. Lisa Schwartz

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

With kind regards,

[Signature]

Holger Schüenemann, M.D., Ph.D. (Epi), M.Sc., FRCP(C)  
Chair, Department of Health Research Methods, Evidence, and Impact  
Michael Gent Chair in Healthcare Research  
Professor, Departments of Health Research Methods, Evidence, and Impact and of Medicine
To whom it may concern,

I support the proposed interdisciplinary PhD in Global Health program. I also support the inclusion of the following eight faculty members within my Department and/or School who will be involved with relevant theses in the proposed program:

- Dr. Sania Anand
- Dr. Deborah Cook
- Dr. Philip J. Devereaux
- Dr. Herzl Gerstein
- Dr. Anne Holbrook
- Dr. Barry Leong
- Dr. Koon Teo
- Dr. Salim Yusuf

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

With kind regards,

Akhbar Panju MB ChB FRCP FRCP(Edin) FRCP(Glasg) FACP
Boris Family Chair in Medicine
Professor and Acting Chair, Department of Medicine
Division Director, General Internal Medicine
Department of Medicine
McMaster University

May 31, 2017
September 22, 2016

To whom it may concern,

I support the proposed interdisciplinary PhD in Global Health program, as per my previous email. I also support the inclusion of the following two faculty members within my Department and/or School who will be involved with relevant theses in the proposed program.

Dr. Andrea Baumann
Dr. Sandra Isaac

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Sincerely,

Carolyn Byrne, RN, PhD
Associate Dean, Health Sciences
Director, School of Nursing
McMaster University
May 31, 2017

To whom it may concern,

I support the proposed interdisciplinary PhD in Global Health program, as per my previous email. I also support the inclusion of the following three faculty members within my Department and/or School who will be involved with relevant theses in the proposed program:

Dr. Guillaume Pare  
Dr. Kenneth Rosenthal  
Dr. Zhou Xing

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Mark Crowther, Chair  
Pathology and Molecular Medicine
September 22, 2016

To Whom It May Concern,

RE: Department of Pediatrics Letter of Support for PhD in Global Health Program

I support the proposed interdisciplinary PhD in Global Health program, as per my previous email. In principle, I support the participation of faculty members within my Department and/or School, who in future may become involved with relevant theses in the proposed program.

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Sincerely,

[Signature]

Sheri Findlay, MD, FRCP(C)
Associate Professor and Acting Chair
Department of Pediatrics, McMaster University
Interim Chief of Pediatrics, McMaster Children’s Hospital
& St. Joseph’s Healthcare Hamilton

SF/dh
October 6, 2016

Dr. Andrea Baumann
Associate Vice-President, Global Health
McMaster University
1280 Main Street West, MDCL 3500
Hamilton, Ontario L8S 4K1

Dear Dr. Baumann:

I am supportive of the proposed interdisciplinary PhD in Global Health. There is a focus on Global Health at the Population Health Research Institute (PHRI). There are two fellowships that perspective students would be eligible to apply for, and thus work within our multidisciplinary team. I look forward to working closely together with the program to develop further synergies in the evolving paradigm of global health.

In conclusion, I support the new doctoral program and look forward to working with the global health team.

Yours truly,

Salim Yusuf, MBBS, DPhil,
FRCP(UK), FRCP, FACC, FRSC, O.C.
Telephone: (905) 527-7327
Fax: (905) 297-3781

Salim Yusuf, DPhil, FRCP, FRSC, O.C.
Distinguished University Professor of Medicine, McMaster University
Executive Director, Population Health Research Institute
McMaster University, Hamilton Health Sciences
Chief Scientist, Hamilton Health Sciences
Heart & Stroke Foundation/Marion W. Burke Chair in Cardiovascular Diseases
President, World Heart Federation
SY:jl
To whom it may concern,

I support the proposed interdisciplinary PhD in Global Health program, as per my previous email. In principle, I support the participation of faculty members within my Department and/or School, who in future may become involved with relevant theses in the proposed program.

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees include:

a) Nick Kates  
b) Sheila Harms  
c) Lindsey George

Nick Kates, MB, BS, FRCP(C), MCFP(hon)  
Professor and Chair,  
Department of Psychiatry & Behavioural Neurosciences,  
Michael G. DeGroote School of Medicine,  
McMaster University
September 21, 2016

To whom it may concern,

I am writing in strong support of the proposed interdisciplinary PhD in Global Health Program.

The proposed Program builds upon the significant strengths and innovations of the Master of Global Health. It is a timely and much desired program in this increasingly global world. In principle, I support the future involvement of faculty members within the School of Rehabilitation Science. Faculty members whose research interests align with those of incoming doctoral students may participate in supervisory committees or supervisors of relevant theses.

Yours sincerely,

Patricia Solomon, PhD
Associate Dean (Health Sciences) and
Director, School of Rehabilitation Science
McMaster University
June 8, 2017

To whom it may concern.

I support the proposed interdisciplinary PhD in Global Health program. I also support the inclusion of the following two faculty members within my Department and/or School who will be involved with relevant theses in the proposed program:

    Dr. Lydia Kapiriri
    Dr. Tina Moffat

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Jeremiah Hurley, Dean
Faculty of Social Sciences
September 27, 2016

To Whom It May Concern,

I support the proposed interdisciplinary PhD in Global Health program, as per my previous email. I also support the involvement of the following 17 faculty members within my Department and/or School, who may be involved with relevant theses in the proposed program.

1. Brian Cameron
2. Brad Petchar
3. Jay Moro
4. Desmond Kwok
5. Carolyn Levis
6. Dan Poenaru
7. Stephen Foster
8. Karen Bailey
9. Luis Braga
10. Margherita Cadeddu
11. John Harvey
12. Gloria Isazu
13. Nasimul Huq
14. Manoj Sayal
15. Anil Kapoor
16. Samir Faldli
17. Achilles Thomas
18. Mohit Bhandari

Faculty members whose research interests align with those of incoming doctoral students may also wish to participate in supervisory committees.

Yours sincerely,

[Signature]

Susan E. Reid, MD, FRCS(C)
Professor and Chair
Department of Surgery
Faculty of Health Sciences
McMaster University
John A. Bauer Chair in Surgery

SER/bp
Details of Resource Implications and Financial Viability

Program Name: PhD in Global Health

**A. FINANCIAL SUSTAINABILITY OF PROGRAM**

Complete New Graduate Program Budget template (appendix A1) which will populate table below:

In the case of Interdisciplinary programs, also append the Draft MOU between faculties. (Appendix A2)
In the case of Collaborative programs, also append the Draft MOU between institutions. (Appendix A3)

<table>
<thead>
<tr>
<th>REVENUE</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Generated Gross Graduate Revenue</td>
<td>$255,684</td>
<td>$516,985</td>
<td>$1,057,831</td>
<td>$1,073,440</td>
<td></td>
</tr>
<tr>
<td>Other Revenue (Specify)</td>
<td>$130,152</td>
<td>$257,104</td>
<td>$385,656</td>
<td>$514,208</td>
<td>$514,208</td>
</tr>
<tr>
<td><strong>Total Gross Revenue</strong></td>
<td><strong>$385,836</strong></td>
<td><strong>$744,089</strong></td>
<td><strong>$1,443,487</strong></td>
<td><strong>$1,587,648</strong></td>
<td></td>
</tr>
<tr>
<td>University Fund / Research Infrastructure Contribution</td>
<td>-$17,701</td>
<td>-$35,791</td>
<td>-$54,293</td>
<td>-$73,234</td>
<td>-$74,314</td>
</tr>
<tr>
<td>Total Support Unit Allocations (Indirect Costs)</td>
<td>-$114,559</td>
<td>-$183,546</td>
<td>-$256,986</td>
<td>-$320,985</td>
<td>-$320,817</td>
</tr>
<tr>
<td><strong>NET REVENUE</strong></td>
<td><strong>$253,576</strong></td>
<td><strong>$554,752</strong></td>
<td><strong>$858,622</strong></td>
<td><strong>$1,177,820</strong></td>
<td><strong>$1,192,516</strong></td>
</tr>
</tbody>
</table>

| Total Teaching Costs              | -$108,160 | -$177,248 | -$310,590 | -$351,400 | -$368,650 |
| Total Admin Salaries & Benefits   | -$52,650 | -$55,283 | -$58,047 | -$60,949 | -$63,996 |
| Total Student Support (From operating) | -$130,152 | -$257,104 | -$385,656 | -$514,208 | -$514,208 |
| Total Capital/Equipment Costs     | -$6,500 | $0 | $0 | $0 | $0 |
| Total Other Direct Expenses - Supplies/Services/Travel etc | -$11,600 | -$13,245 | -$13,907 | -$18,964 | -$15,513 |
| Total Share of Faculty's Central Expenses | -$25,358 | -$55,475 | -$85,862 | -$117,782 | -$119,252 |
| **PROGRAM EXPENSES**              | **-$334,420** | **-$558,355** | **-$854,062** | **-$1,068,304** | **-$1,081,619** |

**IN-YEAR (Surplus/ Deficit)**

- $80,843  
- $3,603  
$4,560  
$109,517  
$110,897

**Total Grad support per FT student (Scholarship, Taship) excluding RA**

- $23,269  
- $23,269  
- $23,269  
- $23,269  
- $23,269

If the program is showing an ongoing going deficit please indicate whether it is truly incremental to the current faculty financial position. Provide a rationale for proceeding with ongoing negative returns.

**B. NUMBER OF STUDENTS**

<table>
<thead>
<tr>
<th>FT</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>0</td>
</tr>
</tbody>
</table>

Year achieved: 2018  
Year achieved: 2021

Number of International Students included in steady state

- 3.2
- 0

Proposed number of additional students to University at steady state: (i.e. Are the program students additional (net new) or redistributed from other existing programs within the Faculty or in other Faculties.)

- 32

Will there be an impact to enrollments in Programs in other Faculties?

- No

If yes, Please Describe:
### C. FORMAT OF INSTRUCTION

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Summer (May-June)</th>
<th>Summer (July-August)</th>
<th>Annual program units?</th>
</tr>
</thead>
<tbody>
<tr>
<td>During which terms will the program run?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>30</td>
</tr>
<tr>
<td>Is there a co-op or internship as part of the program?</td>
<td>No</td>
<td>Describe:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What percentage of instruction will be online?</td>
<td>25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If either is greater than zero please provide information:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Blended learning methods will be used. The ability to work in an online virtual work culture is important for global health graduates.

### D1. PROPOSED TUITION FEE

<table>
<thead>
<tr>
<th>Proposed Tuition Fee:</th>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Year</td>
<td>$7,500</td>
<td>$16,800</td>
</tr>
<tr>
<td>Per Term (if applicable):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Course (if applicable):</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rational for proposed fees (describe or append results of market assessment) and describe how they adhere to MTCU policy if seeking ministry funding:

Standard tuition fee for research-based, government funded doctoral program

### D2. SUPPLEMENTARY FEES

<table>
<thead>
<tr>
<th>Will regular Mandatory Supplementary Fees apply?</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Modified only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

If no, please contact Dean of Grad Studies for guidance and provide resulting proposed applicable fees and rationale:

Are there other mandatory costs for students? (Coop/Internship fees, supplies, books, uniform, equipment, field trips, professional exam fees, etc?)

| No | Describe & Approximate amounts: | |

### E. EXTERNAL RESOURCES: donations, special grants, research overhead, endowment funds, Space, etc.

Please provide information about any external funds or resources that will be available to the program.
F. FACULTY RESOURCES - Please append evidence of endorsement from other faculties affected if necessary.

If courses are also being taught in other faculties, please list

<table>
<thead>
<tr>
<th>Faculty:</th>
<th>N/A</th>
<th>Faculty:</th>
<th>N/A</th>
<th>Faculty:</th>
<th>N/A</th>
</tr>
</thead>
</table>

Incremental FTEs required:

<table>
<thead>
<tr>
<th>Health Sciences</th>
<th>N/A</th>
<th>N/A</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
</table>

- Faculty - Tenure Track
- Faculty - Sessional and CLAs
- Staff
- Teaching Assistants

Additional Non-salary costs in other Faculties

Increases in FT faculty are for modeling purposes only and does not imply approval to hire. Normal approval processes apply.

G. OTHER RESOURCE IMPLICATIONS:

Unless otherwise defined in the categories below, please use these descriptions to define impact:

- **No Impact:** Can be dealt with as part of normal, daily operations. No budgetary or resource impact.
- **Minor:** Can be dealt with in a mutually agreed timeframe using existing personnel. Resources pre-approved or readily available. No disruption to other approved work priorities.
- **Major:** Must be scheduled as a project (not able to deal with as part of regular operations). Budget not approved or readily available; source of funding to be determined. May require external resources. May require reprioritization of previously approved tasks.

1. PHYSICAL FACILITIES - Please contact Coordinator, Design and Space Management x23898 for assistance in determining additional resource costs if needed.

<table>
<thead>
<tr>
<th>Please indicate the likely space resource implications of the proposal</th>
<th>Impact</th>
<th>New Sq Ft Required</th>
<th>Approx Existing Sq Ft required</th>
<th>Comments (include location and for new space, plans to fund and acquire space)</th>
<th>If major new central budget req’d, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty space- Offices, Labs, seminar rooms, student space, etc</td>
<td>Minor</td>
<td>120.0</td>
<td>-</td>
<td>Office space has been allocated in the Global Health Office</td>
<td>Facilities</td>
</tr>
<tr>
<td>Other space (excluding registrar controlled classrooms)</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td>Facilities</td>
</tr>
</tbody>
</table>

2. TECHNOLOGY RESOURCES - Please contact UTS Director, Technology x21888 for assistance in determining impact if needed.

<table>
<thead>
<tr>
<th>Please indicate the likely impact on central technology resources for the proposal</th>
<th>Impact</th>
<th>Are additional resources required to support this program? If so, please list.</th>
<th>If Major, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTS Computer Labs and Software</td>
<td>Minor</td>
<td></td>
<td>UTS</td>
</tr>
<tr>
<td>Network/Internet/Cloud services access &amp; usage</td>
<td>Minor</td>
<td></td>
<td>UTS</td>
</tr>
<tr>
<td>Audio-Visual / Telecommunications</td>
<td>None</td>
<td></td>
<td>UTS</td>
</tr>
<tr>
<td>Wireless Connectivity</td>
<td>None</td>
<td></td>
<td>UTS</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>Minor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. LIBRARY SERVICES - Please contact Associate University Librarian, Collections x26557 for assistance in determining impact if needed.

<table>
<thead>
<tr>
<th>Please indicate the likely Library resource implications of the proposal</th>
<th>Impact</th>
<th>Are additional resources required to support this program? If so, please list.</th>
<th>If Major, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing (Add'l service desk staff, add'l librarians, new staff with skills/knowledge not currently present)</td>
<td>Minor</td>
<td></td>
<td>Libraries</td>
</tr>
<tr>
<td>Collections, One Time Purchases (books, ebooks, purchased online resources)</td>
<td>Minor</td>
<td></td>
<td>Libraries</td>
</tr>
<tr>
<td>Collections, Ongoing Subscriptions/licenses (print or online journals)</td>
<td>Minor</td>
<td></td>
<td>Libraries</td>
</tr>
<tr>
<td>Technology and Computing (new or add'l hardware/software, increased digital storage capacity)</td>
<td>Minor</td>
<td></td>
<td>Libraries</td>
</tr>
<tr>
<td>Library Spaces (study space, new or specialized user or collection spaces)</td>
<td>Minor</td>
<td></td>
<td>Libraries</td>
</tr>
</tbody>
</table>
### 4. OFFICE OF THE UNIVERSITY REGISTRAR - Please contact the Registrar for assistance in determining impact if needed.

<table>
<thead>
<tr>
<th>Please indicate the likely resource implications of the proposal</th>
<th>Impact</th>
<th>Support required</th>
<th>Area Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions/Recruitment</td>
<td>Minor</td>
<td>Recruiting and Admissions aligned with current 101 processes</td>
<td>SGS</td>
</tr>
<tr>
<td>Student Record Support (maintaining records, transcripts, grades, student card, etc)</td>
<td>Minor</td>
<td>Standard services for graduate program</td>
<td>Student Affairs</td>
</tr>
<tr>
<td>Class Scheduling Services</td>
<td>Minor</td>
<td>Follows existing timelines/processes</td>
<td>Student Affairs</td>
</tr>
<tr>
<td>Classrooms</td>
<td>None</td>
<td>Scheduled into Faculty controlled classrooms or only summer term or off campus</td>
<td>Student Affairs</td>
</tr>
</tbody>
</table>

Please indicate any other possible resource impacts

<table>
<thead>
<tr>
<th>Please indicate any other possible resource impacts</th>
<th>Impact</th>
<th>Please Describe any impacts on the support areas</th>
<th>If Major, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Services - International Student support</td>
<td>Minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Services - Athletics &amp; Rec, Health/Counselling, Career</td>
<td>Minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residences</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grad Scholarships/Bursaries*</td>
<td>Minor</td>
<td>$ 187,200 Avg. Annual Draw on Scholarship pool</td>
<td>$ -</td>
</tr>
</tbody>
</table>

*If you are anticipating OSAP funding for these students please contact SFAS to provide additional information to activate approval from MTCU

### 5. STUDENT SUPPORT - Please contact Assistant Dean, Student Services for assistance in determining impact if needed.

<table>
<thead>
<tr>
<th>Please indicate any other possible resource impacts</th>
<th>Impact</th>
<th>Please Describe any impacts on the support areas</th>
<th>If Major, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re/Development of blended or online courses</td>
<td>Minor</td>
<td></td>
<td>MIETL</td>
</tr>
<tr>
<td>Learning Management System (Avenue to Learn)</td>
<td>Minor</td>
<td></td>
<td>MIETL</td>
</tr>
<tr>
<td>Training and development for TAs or faculty</td>
<td>Minor</td>
<td></td>
<td>MIETL</td>
</tr>
<tr>
<td>Research on teaching and learning initiatives</td>
<td>Minor</td>
<td></td>
<td>MIETL</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>Minor</td>
<td></td>
<td>MIETL</td>
</tr>
</tbody>
</table>

### 6. MIETL- Please contact Educational Consultant for assistance in determining impact if needed.

<table>
<thead>
<tr>
<th>Please indicate any other possible resource impacts</th>
<th>Impact</th>
<th>Please Describe any impacts on the support areas</th>
<th>If Major, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services</td>
<td>Minor</td>
<td></td>
<td>Financial Affairs</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Minor</td>
<td></td>
<td>HR</td>
</tr>
<tr>
<td>Advancement</td>
<td>Minor</td>
<td></td>
<td>UA</td>
</tr>
<tr>
<td>Research Services Office</td>
<td>None</td>
<td></td>
<td>Research Support</td>
</tr>
</tbody>
</table>

### 7. OTHER

<table>
<thead>
<tr>
<th>Please indicate any other possible resource impacts</th>
<th>Impact</th>
<th>Please Describe any impacts on the support areas</th>
<th>If Major, estimate $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Chair/ Area Director</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director, Education Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Director, Finance &amp; Planning (Academic)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please provide names below and check box to verify that approval has been obtained by each:

- Department Chair/Area Director: Dr. Andrea Baumann [✓]
- Director, Education Services: Susan Birnie [✓]
- Executive Director, Finance & Planning (Academic): Linda Coslovi [✓]
- Submitter: Dr. Andrea Baumann
September 5, 2017

University Planning Committee
c/o Tamara Bates
Gilmour Hall, Room 210

For Information – External Review – Department of Radiology

In accordance with the Procedures for University Reviews of Academic Departments (2005), the Faculty of Health Sciences will be conducting an external review of the Department of Radiology. The review team will consist of the following individuals:

External Reviewer & Chair
Dr. James Fraser, Professor, Department of Diagnostic Imaging, Division of Cardiology
Dalhousie University

Department Reviewer
Dr. Julian Dobranowski, Professor, Department of Radiology, McMaster University

External to Department Reviewer
Dr. Tom Farrell, Professor, School of Interdisciplinary Science, McMaster University

For your information, I have enclosed a copy of the letters sent to the reviewers.

Yours sincerely,

[Signature]

Paul M. O'Byrne, MB, FRCPC, FRSC
Dean and Vice-President
September 5, 2017

Dr. James Fraser  
QEII Health Sciences Centre  
1796 Summer Street, Halifax Infirmary Site  
Diagnostic Imaging, 3rd Floor, Room 3509  
PO BOX 9000  
Halifax NS, B3H 3A7

Dear Dr. Fraser

The Department of Radiology, McMaster University, is subject to review in the academic year 2017/2018, in accordance with the policy on Procedures for University Reviews of Academic Departments (copy enclosed).

Thank you for agreeing to act as the external reviewer to the Department of Radiology. Your participation will provide guidance to the internal members in their capacity as disciplinary experts. These reviews are important to the dean and guide the faculty in the selection of the heads of departments.

The review is scheduled over a two-day period, on October 3-4, 2017; and will include interviews with members of the deanery, the chair of the department, faculty and staff members, students, and other such individuals as may be deemed appropriate by the review team.

An honorarium will be paid upon receipt of the group’s report. In addition, you will be reimbursed for transportation, accommodation and meals.

Enclosed please find a copy of the most recent Department Status Report for the review of the Department of Radiology at McMaster and a list of the members of the review team.

Once again, thank you for your willingness to assist us in this very important task and I look forward to meeting you in October.

Yours sincerely,

Paul M. O’Byrne, MB, FRCPC, FRSC
Dean and Vice President

POB/ja
September 5, 2017

Julian Dobranowski
Niagara Health System
1200 Fourth Ave
St Catharines ON L2S0A9

Dear Dr. Dobranowski,

The Department of Radiology, McMaster University is subject to review in the academic year 2017/2018, in accordance with the policy on Procedures for University Reviews of Academic Departments (copy enclosed).

Thank you for agreeing to act as a member of the Review Team. The review is scheduled for October 3-4, 2017 and will include interviews with the Dean, the Chair, department members, support staff, students and other individuals as may be deemed appropriate by the review team.

An honorarium will be paid upon receipt of the group's report.

Enclosed please find a copy of the most recent Department Status Report for the review of the Department of Radiology at McMaster and a list of the members of the review team.

Thank you once again for willingness to assist us with this review.

Yours sincerely,

Paul M. O'Byrne, MB, FRCPC, FRSC
Dean and Vice President

POB/ja
September 5, 2017

Dr. Tom Farrell
School of Interdisciplinary Science
Juravinski Cancer Centre
699 Concession St.
Hamilton ON, L8V 5C2

Dear Dr. Farrell,

The Department of Radiology, McMaster University is subject to review in the academic year 2017/2018, in accordance with the policy on Procedures for University Reviews of Academic Departments (copy enclosed).

Thank you for agreeing to act as a member of the Review Team. The review is scheduled for October 3-4, 2017 and will include interviews with the Dean, the Chair, department members, support staff, students and other individuals as may be deemed appropriate by the review team.

An honorarium will be paid upon receipt of the group’s report.

Enclosed please find a copy of the most recent Department Status Report for the review of the Department of Radiology at McMaster and a list of the members of the review team.

Thank you once again for willingness to assist us with this review.

Yours sincerely,

[Signature]

Paul M. O’Byrne, MB, FRCPC, FRSC
Dean and Vice President

POB/ja