



School of Graduate Studies

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To : Members of Graduate Council
From : Christina Bryce
Assistant Graduate Secretary

The next meeting of Graduate Council will be held on **Tuesday June 13th at 9:30 am in Council Chambers (GH-111)**

Listed below are the agenda items for discussion.

Please email cbryce@mcmaster.ca if you are unable to attend the meeting.

A G E N D A

- I. Minutes of the meeting of May 16th, 2017**
- II. Business arising**
- III. Report from the Associate Vice-President and Dean of Graduate Studies**
- IV. Report from the Graduate Associate Deans**
- V. Report from the Associate Registrar and Graduate Secretary**
- VI. Report from the Assistant Dean, Graduate Student Life and Research Training**
- VII. New Program Proposal: Global Health Ph.D.**
- VIII. Faculty of Engineering Graduate Curriculum and Policy Committee Report**
- IX. Graduate Calendar Administrative Section Change – 2.6.3**
- X. Change to Scholarship Descriptions**



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Graduate Council
May 16th 1:30 pm
GH 111

Present: Dr. D. Welch, Ms. S. Baschiera, Ms. C. Bryce, Dr. A. Deza, Dr. B. Doble, Dr. E. Grodek, Dr. D. Pelinovsky, Dr. A. Sills, Dr. I Marwah, Dr. A. Fudge Schormans

Regrets: Dr. A Dean, Dr. T. Adams, Dr. A. Kitai, Dr. L. Thabane, Dr. S. O'Brien, Dr. G. McClelland, Dr. T. Porter, Dr. E. Badone, Ms. R. Estok, Ms. V. Lewis

A G E N D A

I. Minutes of the meeting of April 18th, 2017

The minutes of the meeting of April 18th, were approved with minor revisions on a motion by Dr. Sills, seconded by Dr. Hayward.

II. Business arising

There was no business arising.

III. Report from the Associate Vice-President and Dean of Graduate Studies

Dr. Welch reported that he had been confirmed in his role as Dean and is no longer 'acting'.

He noted that there had been a number of changes with respect to admissions, including the addition a new admissions officer. Two faculties were assigned to each admissions officer. They are now in the endgame of the graduate recruitment cycle and it has gone very well with 11000 applications submitted versus 9000 at this time last year. The addition of a third admissions officer and the review of allowable exceptions not requiring Associate Dean approval has greatly streamlined how quickly an offer is produced by SGS. The delay between a package being received at SGS and giving an offer is normally one day. The worst turnaround was five days, due to extenuating circumstances, and this was turned around very quickly.

Dr. Welch was pleased to point out that there are a lot of policy change discussions finally come home to roost contained within the graduate calendar changes in the package. This has been a multi-faceted approach with a lot of input from a lot of people and he hoped the changes would be seen as progress.

He noted that there had been a little bit of news from the province in terms of graduate funding but no news with respect to any final decisions. The province has said there will be some money for graduate growth,

including programs that are starting right now. He noted that application pressure is high in a number of programs, including a large number of domestic students in new programs. He expected that to assist with negotiations.

Dr. Welch noted that effective June 30th, SGS will be thanking and saying goodbye to Dr. Ibhawoh, Dr. Agarwal and Dr. Porter. He said that he was incredibly grateful for contributions. The Business and Social Science searches for a new Associate Dean are complete. Dr. Hassanein from Business and Dr. James Gillett from Social Science will be joining SGS. Those appointments were approved on April 20th. He said that the Faculty of Humanities search was well under way and will bring Graduate Council news of that when it's official. As a result of his appointment as AVP and Dean of Graduate Studies, the Associate Dean of science search is also underway and Dr. Gupta will continue in his acting position for the meantime.

Dr. Welch noted that it has been the case in the past that some of the June Graduate Council meetings have been cancelled. He was not certain whether or not it will happen as there is potentially at least one new program to come through.

He thanked departing graduate council members for their contributions over the previous academic year.

Dr. Welch reported that the Provost has decided that due to the fact that McMaster will probably be increasing the number of undergraduate international students that it is important to look at support for international graduate students. There are 6 working groups that have been formed to address issues in various areas and they'll be looking at the whole spectrum of supports needed. Graduate issues are on the radar.

IV. Report from the Graduate Associate Deans

Drs. Ibhawoh, Agarwal, Thompson and Gupta had nothing to report. Dr. Hayward report that the FHS Research Plenary was underway and invited Graduate Council members to attend the poster session on Thursday.

V. Report from the Associate Registrar and Graduate Secretary

There was no report.

VI. Report from the Assistant Dean, Graduate Student Life and Research Training

Ms. Baschiera reported on behalf of Mr. Self that the IUSRS program was underway. 16 students were moving in and an opening ceremony had been held. She also reported that 45 students attended the thesis writing boot camp and that there was a new student orientation being held on May 18th, with 23 students signed up.

VII. Faculty of Engineering Graduate Curriculum and Policy Committee Report

Dr. Thompson presented the items for approval. The first change proposed was to the Faculty-wide TOEFL requirement. The Faculty wanted to increase it to 88. The change would be beneficial for students in both their course work and in fulfilling their roles as TA.

The second change was a request from the School of Engineering Practice and Technology to change the list of courses accepted for advanced credit for the M.E.M.E and M.Eng.D. programs. New 600 level courses were introduced/approved and the School wants to add them to the list of course available for their already-existing advanced credit option. The third change was another from the M.Eng.D. program who requested a change to their course requirements, removing one required course and formalizing their project as a course rather than a milestone as it appears currently. The fourth change proposed was from Computing and Software. They have had four professional M.Eng. degrees. In the past they had been slightly different in theme, but there was a lot of overlap. The decision of the department was that they would be able to merge all four of them under a single M.Eng. program which would eliminate a number of issues and would be comparable to what was offered in the past. The fifth change proposed was from Engineering Physics who wanted to formalize their seminar series as a course where students would be required to present their research.

Dr. Gupta asked if there were changes to the specific sections contained within the TOEFL requirement. Dr. Thompson responded that they haven't proscribed anything different and have just moved the overall threshold up. Dr. Welch noted that the business of the foreign language exam was mentioned at the graduate deans' retreat. He expected that programs may have individual requirements for each section in the future but that is not the case yet.

Dr. Thompson moved and Dr. Gupta seconded, 'that Graduate Council approve the proposed changes as described in the documents.'

The motion was carried.

VIII. Faculty of Health Sciences Graduate Curriculum and Policy Committee Report

Dr. Hayward noted that the items in front of the committee were all fairly straightforward. Speech Language Pathology is a new program launching this year so they've submitted their program calendar copy. The BDC program is allowing students to take an additional business course, and proposed a change to their calendar copy accordingly. Physiotherapy evolved from an undergraduate to graduate program but didn't change their minimum grade requirement for admission so they now proposed to do so. She noted that in practice everyone accepted has been above their minimum requirement in any case. The final changes was from Occupational Therapy who proposed a change to their calendar copy around admissions, as they want to make clear that professionalism is taken into account in the applicant interview process. She noted that OT item still had to go to the Faculty of Health Sciences Executive for approval.

Dr. Hayward moved and Dr. Deza seconded, 'that Graduate Council approve the proposed changes as described in the documents.'

The motion was carried.

IX. Graduate Calendar Administrative Sections Changes and Sessional Dates

A council member noted there was a reference to graduate studies office rather than the School of Graduate Studies in 2.5.5 and there was a typo in 2.5.9.

Dr. Welch outlined the changes to each section of the calendar. In section 1.1 the list of programs was updated to include new programs starting in September. A minor correction to comma placement in the list was noted. In section 1.2.1 a reference to a position that no longer exists within SGS was deleted. In section 1.2.5 faculty advisor a statement was added to clarify that the in course-based/professional or clinical programs a program committee or the department chair acts as the faculty advisor. Section 1.3 was simplified a little bit with the removal of a statement that students were responsible for reporting a change in employment status, related to regulations for full and part time status. The section now also notes that students are responsible for responsible for seeking clarity when required on elements of academic and research progress. Dr. Welch noted that this statement was mirrored in a section highlighting the responsibilities of supervisors later in the document. Also in 1.3 the language around the requirement to be on campus full time was adjusted for clarity and a sentence regarding exceptions for programs delivered partially or fully online was added.

In Section 2.1.1 which concerns the admission requirements for Masters some clarifying text was added that the Bachelors degree needs to be from recognized university and that some programs consider professional experience within application process. Dr. Hayward asked about the language around programs accepting mid-B applicants and wondered if programs need to be consulted. Ms. Baschiera responded that the language was changed to show that programs operate within a zone of requirements and that there are varying requirements between different programs. Dr. Welch noted that as the document was previously written, any program below a B+ was dealt with as an exception in the admissions process and that this was an attempt to streamline. Dr. Agarwal noted that the B+ still appears in section 2.1.2. Dr. Welch said that the change is basically intending to reflect the fact that a number of Master program put forward students that have mid-B grades. Dr. Hayward suggested that programs that wanted to align to the graduate calendar requirements may want to consider a revision to their requirements accordingly. Dr. Welch responded that this was just a minimum requirement and that the programs need not make any changes.

In section 2.1.8 a statement was added to clarify the fact that post-degree students are not allowed to take courses for audit.

Section 2.1.12 was changed according to the change proposed by the Faculty of Engineering previously discussed around raising the minimum TOEFL requirement for Engineering.

Section 2.2. Application for Admission was updated with a new link to the School of Graduate Studies website and the specific amount charged for the application fee was also removed as this will change if approved by the Board of Governors. The section was also adjusted to note that programs may have additional admission requirements and allowed for the possibility of work experience being taken into account in the letters of recommendation.

2.3 Transfer/Advanced Credit was changed to separate out advanced credit and outline the practice for Engineering.

Ms. Baschiera noted that section 2.4 was changed due to a new ministry regulation about when they can accept the deposit from students. The exception is programs that are not ministry-funded – they can charge their deposit earlier if they wish. A council member asked how much the deposit was. Ms. Baschiera responded that it can be \$1000 but programs can only keep back \$500 if the student doesn't come. Unfunded programs can keep the total amount.

Section 2.5.1 - Continuity of Registration was changed to include clarifying statements around readmission for defence and what happens if a student needs more than one term to complete. Ms. Baschiera noted that students are required to maintain continuous enrollment unless there is a scheduled break in the program and they wanted to be very clear in this respect.

Section 2.5.2 includes an explanation of what constitutes a full-time graduate student. Dr. Welch noted there were some changes noting the distinction between research-based programs and those conducted fully online. The section also includes a reminder that a student has to apply to be full-time off-campus. Ms. Baschiera reiterated that this is not a change to policy.

Dr. Gupta asked for confirmation that a student who moves to part-time doesn't get more time to complete. Dr. Welch responded that this is for a student who has been admitted full-time originally. The supervisor expects them to complete their research within a particular time. Students accepted as full-time student have to pay full-time fees for the nominal duration of their degree. Dr. Gupta asked if this was true even if they change in middle of degree. Dr. Welch confirmed this was the case and that nothing about the process was changing.

Section 2.5.3 was adjusted to include agreed-upon text from the Ontario Graduate Deans 'Principles for Graduate Study in Ontario' document. Dr. Welch thought that this captures why the institution has a ten hour rule. It has never been the case that the institution could police a ten hour rule it is also the case that McMaster expects students to make reasonable academic and research progress and the McMaster is not going to give the student more than 10 hours of employment. This is a statement that was jointly adopted and uniform across all Ontario universities.

Dr. Hayward commented that including the word 'should' is nice and that it covers issues where students that are physicians that might be 24 hour on call on the weekend, but are still able to maintain progress in their studies.

A council member asked if this meant that graduate students can go and work full time while they're in graduate school. Dr. Welch responded that the university will not be asking them to produce evidence that they have no job outside of the university. The university will monitor academic and research progress and if those are found to be unacceptable they won't be able to continue. There was a permission to work form in the past but they're not pretending that the institution can police that any more. The section states expectations and principles, particularly in terms of campus employment.

A council member commented that he kept hearing about disparity in stipends between STEM fields and Social Sciences and Humanities and noted that some students might be disadvantaged by the 10 hour rule on campus, when they might be able to make up a shortfall in stipend with additional on-campus work that would still allow them to complete their requirements in a timely fashion. Dr. Welch responded that he recognized that there is a range of challenges financially on campus. The process as it currently stands is the best that can be done right now but it doesn't mean the university can't work on improving the levels of support

The section also includes a note that there are some award-related restrictions on employment and that students are responsible for recognizing that and limiting employment accordingly.

Section 2.5.5 was changed in response to some citizenship and immigration requirements changing. Some language was added to section 2.5.9 referencing the revised academic accommodation policy. In section 2.6.1 a sentence was added to note that final grades are normally converted to letter grade is determined, which is just a clarification of the normal order of operations. The changes to section 2.6.2 have to do with being able to establish what the requirements of a degree are at McMaster. The section now notes that graduate students are normally required to complete their requirements by taking courses from within their program. Section 2.6.4 was changed to clarify the process around incomplete grade and to identify when it will turn into an F. Section 2.6.5 was updated to mention that SGS 101 and 201 are required for all students, including visiting and exchange. In section 2.6.6 clarification was added about who can audit courses. Graduate students cannot audit undergraduate courses. Section 2.6.9 was adjusted to highlight placeholder courses and the process around dropping those, if necessary. This is in recognition of the reality of having to register in Mosaic and having to have one course on record.

Section 2.7 was adjusted to note that a supervisor must be declared within the first five months of study. This information is necessary to track both by the province and inside the university with respect to load on faculty members. In this section a change was also proposed with respect to the date when supervisory committee meeting reports are due: it will now be November 30th. Dr. Welch explained that August 31st used to be the due date and it was an awful time of year for it. Supervisory committee meetings happening in late August, competed with thesis defences happening in late August. By changing the timing he thought it would work better for students and supervisors. A council member asked if it would apply to students currently in the program. Dr. Welch responded that SGS would be issuing a memo that basically says what the change means for someone who enters at a particular time of year. Students entering this September would not be required to submit a report by November 30th. While SGS would encourage them to have meetings as often as needed this one year, a student could go from September to following November without one.

In section 2.8.1 a correction was noted to the spelling of defence. Dr. Ibhawoh asked if the date for the edition of the thesis manual could be removed.

In section 3.2 Program Requirements a reference was added to program handbooks and information contained therein.

Dr. Welch noted that the changes to section 4.2 Program Expectations and Requirements were the result of the work of the working group who met to talk about alternatives to comprehensive exam. He said this had been discussed in length at previous meeting of Graduate Council. The new calendar copy states that a program is allowed to have some means of assessing comprehensive knowledge other than an exam and that if they change that it needs to be approved and it must answer certain questions about procedure and a second attempt.

In section 4.4 Dr. Hayward noted a missing comma in the 6th line from the top. Dr. Welch explained that the changes to this section are to deal with a change in practice of what happens when a student receives a negative external report appears and how it gets considered. Our past practice was that a negative external review was like a veto on the defence procedure. The change will bring the process in line with other universities. The substance of an external review will be looked at carefully by supervisory committee and associate deans and a decision will be made about how to proceed. Dr. Gupta asked about the process around a new external, should a negative report be submitted. Dr. Welch responded that as it's written it says it needs to go back to same examiner. The intention was to say that one of the outcomes of that review a different external might be chosen and he said they would look at rewording this paragraph for those changes. Dr.

Hayward noted that they have often had students do point by point rebuttal of major criticism and suggested including a step about consulting with associate to ensure major criticisms can be reported to student.

A council member asked if it was necessary to include the specific academic year where it referenced the fee schedule in section 5.1. Ms. Bryce responded that she thought this mirrored text in the undergraduate calendar.

A council member commented about the General Information section noting that there were some titles and links that might need updating.

With respect to Section 8 Ms. Baschiera noted that a lot of these change were made to reflect the new awards policy and undergraduate calendar. So students moving through careers can see consistent information

A council member asked if there were any practices where a Ph.D. student with two negative external reports could change to a Masters degree. Dr. Welch responded that there hadn't been any discussion around that but that there was opportunity to do that prior to the defence. Dr. Hayward noted that in the years she'd been Associate Dean there had been student issues with progress and in some cases the solution was to allow them to do the equivalent of a Masters. She thought McMaster had mechanisms for dealing with that even though it was difficult to spell all of them out in the Graduate Calendar.

Dr. Ibhawoh commented that there are situations where a student feels they're being held back from defending and asked what mechanism protects the student, noting they should have some recourse in cases like this. Dr. Welch acknowledged that this was a good suggestion.

Dr. Hayward said that there was an issue that had come up with respect to students with disabilities struggling with a full time load and want to switch to part time. She said this was a situation where continuing to charge full time fees might not be appropriate. She asked how that would be dealt with and wondered if it would be through a petition or the accommodation. Dr. Welch agreed to take that note as something to follow up on. Dr. Agarwal noted that this had come up in MBA and it was included as part of the accommodation plan.

A council member asked if it is a university policy that students have to have minimum funding. Dr. Welch responded that Ph.D. students are guaranteed a minimum 17,500 in support. The council member asked what happened if they were self-funded. Dr. Welch said normally they were not self-funded at the Ph.D. level. Dr. Hayward noted that many Masters program handbooks describe minimum funding in program.

Dr. Welch noted there would be an e-ballot to review graduands and the graduate calendar administrative sections once changes were made based on the discussion.

X. Spring 2017 Graduands

There was no vote on this item due to lack of quorum.



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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Appendix E: Support for the Proposed Program 41**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".¹ 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

¹ Koplan, J. P., Bond, T.C., Merson, M. H., Reddy, K. S., Rodriguez, M. H., Sewankambo, N. K. Wasserheit, J. N. (2009). Towards a common definition of global health. *The Lancet*. 373, 1993-1995.

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.² 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.³

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

² Times Higher Education. (2016). World University Rankings. Retrieved from https://www.timeshighereducation.com/world-university-rankings/2016/world-ranking#!/page/0/length/25/name/mcmaster/sort_by/rank_label/sort_order/asc/cols/rank_only

³ Maastricht University. (2016). Global Health Rankings & Recognition. Retrieved from <https://www.maastrichtuniversity.nl/education/master/master-global-health/ranking-recognition#Global-Health-is-1st-in-its-category-in-the-national-Keuzegids-ranking>

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 (MIETL)
- 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 MIETL'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.

- 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.
- 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.
- 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

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

Global Development Agency	Number of Staff Members Employed
International Committee of the Red Cross	15,000 ⁵
United Nations	44,000 ⁶
UN Refugee Agency	9,700 ⁷
The World Bank	10,000 ⁸
The World Food Programme	14,700 ⁹
The World Health Organization	8,000 ¹⁰

⁴ Institute for Health Metrics and Evaluation (IHME). *Financing Global Health 2015: Development assistance steady on the path to new Global Goals*. Seattle, WA: IHME, 2016

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>

⁶ United Nations. *Careers: Where we are*. Retrieved August 19th, 2016 from <https://careers.un.org/lbw/home.aspx?viewtype=VD>

⁷ UNHCR. *About Us: Figures at a glance*. Retrieved August 19th, 2016 from <http://www.unhcr.org/figures-at-a-glance.html>.

⁸ The World Bank. *What we do*. Retrieved August 19th, 2016 from <http://www.worldbank.org/en/about/what-we-do>

⁹ World Food Programme. *World Food Programme: FAQs*. Retrieved August 19th, 2016 from <https://www.wfp.org/faqs>

¹⁰ World Health Organization. *About WHO: WHO people and offices*. Retrieved August 19th, 2016 from <http://www.who.int/about/structure/en/>

Total	101,400
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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

proposed program will therefore be **net new students** who would otherwise not pursue doctoral studies at McMaster.

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 2013.¹¹ 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

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

¹¹ Global Burden of Disease Study 2013 Collaborators. (2015). Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*. Vol. 386, No. 9995, p743-800

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
<p>* 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.</p>			

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.¹²

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.

¹² Institute for Health Metrics and Evaluation (IHME). Financing Global Health 2015: Development assistance steady on the path to new Global Goals. Seattle, WA: IHME, 2016

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 3: Enrolment Planning and Allocation

Program Year	2018-19	2019-20	2020-21	Maturity
Year 1	8	8	8	8
Year 2	0	8	8	8
Year 3	0	0	8	8
Year 4	0	0	0	8
Total Enrolment	8	16	24	32

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.¹³

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

¹³ McMaster Financial Affairs. Retrieved from https://www.mcmaster.ca/bms/student/pdf/fees_grad.pdf.

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).

Global Health faculty members overseeing the PhD program will attend an annual meeting to discuss and assess the progress of every graduate student in the doctoral program, and to share information regarding the learning objectives, contents and pedagogical methods. This meeting will serve as a source of collective information and advice sharing between faculty members and program staff, and will promote cohesion of thoughts and ideas within the proposed program and between the MSc. and PhD programs. Graduate students will be required to have formal supervisory committees, with reports on their progress, at least annually and by the end of each spring/summer semester.

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

proposal 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

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 4: Operating Research Funding by Source and Year

Year	Source			
	Granting Councils	Other Peer Adjudicated	Contracts	Others ⁴
2010-11	\$23,222,581	\$0	\$55,000	\$522,639
2011-12	\$25,984,394	\$0	\$0	\$11,145
2012-13	\$15,482,121	\$0	\$750,000	\$7,597
2013-14	\$9,599,154	\$0	\$750,000	\$0
2014-15	\$10,461,935	\$0	\$0	\$0
2015-16	\$9,483,785	\$0	\$0	\$30,000

2016-17	\$11,386,830	\$0	\$0	\$43,496
Totals	\$105,620,800	\$0	\$1,555,000	\$614,877

⁴ 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

				Fields		
Faculty Name & Rank	M/F	Home Unit ¹	Supervisory Privileges ²	1 ³	2	3
Category 1						
Baumann, Andrea (Prof.)	F	Nursing	Full	X	X	
Category 3						
Anand, Sonia (Prof.)	F	Medicine	Full			X
Bhandari, Mohit (Prof.)	M	Surgery	Full	X		
Cook, Deborah (Prof.)	F	Medicine	Full		X	
Crowther, Mark (Prof.)	M	Pathology and Molecular Medicine	Full			X
Devereaux, Philip J. (Prof.)	M	Health Research Methods, Evidence and Impact	Full			X
Gerstein, Hertzell (Prof.)	M	Medicine	Full			X
Holbrook, Anne (Prof.)	F	Medicine	Full	X		
Kapiriri, Lydia (Assoc.)	F	Health, Aging, and Society	Full		x	X
Leong, Darryl (Assoc.)	M	Medicine	Full			X
Longo, Chris (Assoc.)	M	DeGroote School of Business	Full	X	x	
Mente, Andrew (Assoc.)	M	Health Research Methods, Evidence and Impact	Full			X
Moffat, Tina (Assoc.)	F	Anthropology	Full		x	X
Pare, Guillaume (Assoc.)	M	Pathology and Molecular Medicine				X
Rosenthal, Kenneth (Prof.)	M	Pathology and Molecular Medicine	Full			X
Schwartz, Lisa (Assoc.)	F	Health Research Methods, Evidence and Impact	Full	X		x

Solomon, Patty (Prof.)	F	Rehabilitation Sciences	Full	X		x
Teo, Koon (Prof.)	M	Medicine	Full			X
Yusuf, Salim (Prof.)	M	Medicine	Full			X
Xing, Zhou (Prof.)	M	Pathology and Molecular Medicine	Full			X

- ^{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

Member	Completed				Current		
	Master's	PhD	PDF	Major Papers at Masters' Level	Master's	PhD	PDF
Anand, Sonia	7	4	7	0	1	3	2
Baumann, Andrea	20	10	0	0	1	0	0
Bhandari, Mohit	38	30	28	0	2	2	0
Cook, Deborah	5	3	0	0	0	0	0
Crowther, Mark	0	0	16	0	0	0	2
Devereaux, Philip J.	10	2	0	0	2	3	1
Gerstein, Hertzal	2	1	1	0	0	1	0
Holbrooke, Anne	25	5	8	0	0	0	0
Kapiriri, Lydia	6	1	1	6	0	0	0
Leong, Darryl	2	0	0	2	0	1	0
Longo, Chris	0	3	0	5	0	0	0
Mente, Andrew	2	0	0	0	0	1	0
Moffat, Tina	8	2	0	4	1	2	0
Pare, Guillaume	6	2	8	0	2	2	2
Rosenthal, Kenneth	16	12	12	0	0	0	0
Schwartz, Lisa	3	2	1	0	2	2	1
Solomon, Patty	2	0	3	4	1	6	0
Teo, Koon	3	1	7	0	0	0	2
Yusuf, Salim	21	7	10	0	1	0	0
Xing, Zhou	8	7	15	0	0	4	2

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

	Graduate Degree Level Expectations	PhD in Global Health Outcomes
1. Depth and Breadth of Knowledge	A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice;	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.
2. Research and Scholarship	<p>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;</p> <p>b. The ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and</p> <p>c. The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication;</p>	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.
3. Level of Application of Knowledge	<p>a. Undertake pure and/or applied research at an advanced level; and</p> <p>b. Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials;</p>	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.
4. Professional Capacity/Autonomy	<p>a. The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex situations;</p> <p>b. The intellectual independence to be academically and professionally engaged and current;</p> <p>c. The ethical behavior consistent with</p>	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

	<p>academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and</p> <p>d. The ability to evaluate the broader implications of applying knowledge to particular contexts.</p>	<p>research community, through participation in mentorship and supervisory roles, and will promote international collaboration through Global North/South research and education partnerships.</p>
<p>5. Level of Communication Skills</p>	<p>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively;</p>	<p>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.</p>
<p>6. Awareness of Limits of Knowledge</p>	<p>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.</p>	<p>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</p>

Appendix B: McMaster University Co-Tutelle Policy

	Policies, Procedures and Guidelines
Complete Policy Title: Cotutelle Policy	Policy Number (if applicable):
Approved by: Senate	Date of Most Recent Approval: April 10, 2013
Date of Original Approval(s):	Supersedes/Amends Policy dated:
Responsible Executive: Associate Vice-President and Dean of Graduate Studies	Enquiries: University Secretariat

DISCLAIMER: If there is a Discrepancy between this electronic policy and the written copy held by the policy owner, the written copy prevails

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:

- The student must meet McMaster's admission requirements.
- The student must apply to be in a cotutelle program within the first 12 months of their PhD study.
- The student is required to be registered full-time at both institutions.
- The student must meet the degree requirements at both institutions.
- Each institution must have a qualified supervisor for the student.
- 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",

-
- 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

Program Learning Outcomes (PLOs)		Program Requirements	
By the end of the program, students graduating with a PhD will...	PhD Degree Level Expectations (DLEs)	Teaching Activities & Learning Opportunities	Assessments & Evidence
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.	A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice.	<ul style="list-style-type: none"> ● Dissertation Proposal ● Coursework ● Dissertation Research ● Teaching/Research Assistantship 	<ul style="list-style-type: none"> ● Written Assignments ● 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.	<ul style="list-style-type: none"> ● Dissertation Proposal ● Coursework ● Dissertation Research ● Professional Development Seminar 	<ul style="list-style-type: none"> ● 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: <ol style="list-style-type: none"> 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.	<ul style="list-style-type: none"> ● Dissertation Proposal ● Coursework ● Dissertation Research ● Professional Development Seminar 	<ul style="list-style-type: none"> ● 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.	<ul style="list-style-type: none"> ● Dissertation Proposal ● Dissertation Research ● Professional Development Seminar 	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● Coursework ● Teaching/Research 	<ul style="list-style-type: none"> ● Written Assignments

<p>course/lectures on the complex interrelationships between health and globalization at the undergraduate and graduate levels.</p>	<p>their academic discipline or area of professional practice.</p> <p>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.</p> <p>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.</p>	<ul style="list-style-type: none"> • Assistantship • Professional Development Seminar 	<ul style="list-style-type: none"> • Comprehensive Exams
<p>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.</p>	<p>A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice.</p> <p>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.</p>	<ul style="list-style-type: none"> • Coursework • Teaching/Research Assistantship • Seminar Presentation • Professional Development Seminar 	<ul style="list-style-type: none"> • Written Assignments • Comprehensive Exams • Dissertation Defense
<p>Cultivate a respectful and collegial community of Global Health scholars through participation in mentorship, supervisor roles, and community engagement.</p>	<p>The capacity to:</p> <ul style="list-style-type: none"> 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. <p>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.</p>	<ul style="list-style-type: none"> • Coursework • Teaching/Research Assistantship • Professional Development Seminar 	<ul style="list-style-type: none"> • Written Assignments • Comprehensive Exams

Appendix D: Memorandum of Understanding with Maastricht University

Memorandum of Understanding



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:



Maastricht University



- 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 continue the development of community based training programmes as needed;
- e. explore the development of joint research projects;
- f. continue to develop the 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 developed by the parties.

An Advisory Board, consisting of eminent experts in Global Health, will provide advice to and will 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.

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

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905-525-9140 Ext. 22581
baumanna@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.



Maastricht University



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.

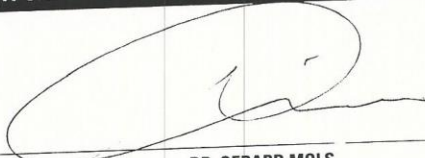
ARTICLE 10

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.



FOR MAASTRICHT UNIVERSITY, MAASTRICHT, THE NETHERLANDS



November 15, 2012

DATE

DR. GERARD MOLS

On behalf of Executive Board, Former Rector Magnificus

FOR McMASTER UNIVERSITY, HAMILTON, ONTARIO, CANADA



November 15, 2012

DATE

DR. PATRICK DEANE

President and Vice-Chancellor, McMaster University



Maastricht University



FOR MAASTRICHT UNIVERSITY, MAASTRICHT, THE NETHERLANDS



DR. ROB DE BIE
On behalf of FHML, Director of Education for Health
November 15, 2012
DATE




DR. ANJA KRUMEICH
Director, MSc. Global Health Program
November 15, 2012
DATE

FOR McMASTER UNIVERSITY, HAMILTON, ONTARIO, CANADA



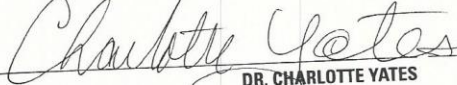
DR. DAVID WILKINSON
Provost and Vice-President (Academic)
November 15, 2012
DATE



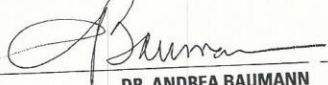
DR. ROBERT MCNUTT
Acting Dean, DeGroote School of Business
November 15, 2012
DATE



DR. JOHN KELTON
Dean, Faculty of Health Sciences
November 15, 2012
DATE



DR. CHARLOTTE YATES
Dean, Faculty of Social Sciences
November 15, 2012
DATE



DR. ANDREA BAUMANN
Associate Vice President & Director, MSc Global Health
November 15, 2012
DATE



Appendix E: Support for the Proposed Program



DeGroote School of Business
Health Policy and
Management Area

1280 Main Street W.
Hamilton, Ontario,
Canada L8S 4M4

Phone 905.525.9140 x26191
Fax 905.521.8995
www.degroote.mcmaster.ca

June 28, 2016

To whom it may concern,

This will verify that I strongly support I support the proposed interdisciplinary PhD in Global Health program. The program will be a valuable and complimentary 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,

A handwritten signature in cursive script that reads "Glen Randall".

Glen Randall PhD
Associate Professor
Chair, Health Policy and Management

DeGroote
SCHOOL OF BUSINESS



DAVID J. PRICE, BSc, MD, CCFP, FCFP
Professor and Chair
Department of Family Medicine
Faculty of Health Sciences
Chief, Department of Family Medicine
Hamilton Health Sciences

Mailing Address:
Department of Family Medicine
D9HSC, 6th Floor
1280 Main Street West
Hamilton ON Canada L8S 4K1

Physical Address:
David Braley Health Sciences Centre
100 Main Street West, 6th Floor
Hamilton ON Canada L8P 1H6

Tel: 905.525.9140 Ext. 21253
Fax: 905.521.5564
Email: fmchair@mcmaster.ca
www.fhs.mcmaster.ca/fam.med

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,

A handwritten signature in black ink, appearing to be "D. Price", written over a horizontal line.

David Price, MD, CCFP, FCFP

:das

June 2017



Department of Health Research Methods,
Evidence, and Impact
Faculty of Health Sciences
McMaster University, H5C-2C16
1280 Main Street West
Hamilton, ON, Canada L8N 3Z5
Phone +1 (905) 525-9140 x 24931

June 6, 2017

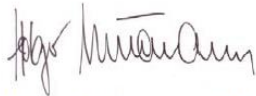
To whom it may concern,

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,



Holger Schünemann, 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



Akbar A. Panju
MB ChB FRCPC FRCPEd Edin FRCP(Glasg) FACP
Boris Family Chair in Medicine
Professor and Acting Chair
Department of Medicine

Health Sciences Centre, Room 3N110
1280 Main Street West
Hamilton ON Canada L8S 4K1

Tel: 905.521.2100 Ext. 76395
Tel: 905.521.2100 Ext. 76373
Email: panjuaa@mcmaster.ca

May 31, 2017

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. Sonia Anand
Dr. Deborah Cook
Dr. Philip J. Devereaux
Dr. Hertzel Gerstein
Dr. Anne Holbrook
Dr. Darryl 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,

Akbar Panju MB ChB FRCPC FRCPEd 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





Faculty of Health Sciences
School of Nursing

1280 Main Street West
Hamilton, Ontario, Canada
L8S 4K1

Phone 905.525.9140
Fax 905.524.5228
<http://www.fhs.mcmaster.ca/nursing>

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 thesis in the proposed program:

Dr. Andrea Baumann
Dr. Sandra Isaacs

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

Sincerely,

A handwritten signature in cursive script that reads "Carolyn Byrne".

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.

A handwritten signature in black ink, appearing to read "Mark Crowther".

Mark Crowther, Chair
Pathology and Molecular Medicine



Sheri Findlay, MD, FRCPC
Acting Chair & Associate Professor
Department of Pediatrics, McMaster University
Interim Chief of Pediatrics, McMaster Children's Hospital
& St. Joseph's Healthcare Hamilton
3A-1 Health Sciences Centre, Department of Pediatrics
1280 Main Street West, Hamilton, ON L8S 4K1
T: 905.521.2100 Ext. 73141 • F: 905.570.8967 • findls@mcmaster.ca



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,

A handwritten signature in black ink, appearing to read "Sheri Findlay".

Sheri Findlay, MD, FRCPC
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



Population Health Research Institute

McMaster University/Hamilton Health Sciences
David Braley Cardiac, Vascular and Stroke Research Institute
237 Barton Street East
Hamilton, Ontario
Canada L8L 2X2
www.phri.ca

October 6, 2016

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

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, DPhil, FRCPC, 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

Director: Salim Yusuf D.Phil.
Deputy Director: Hertzell Gerstein MD,
Associate Directors: Koon Teo MD, Sonia Anand MD, Stuart Connolly MD
Chief Operating Officer: Janette Panhuis, MBA
Heather M. Arthur PhD, Jackie Bosch MSc, Beena Cracknell, Catherine Demers MD, P.J. Devereaux MD, Hisham Dokainish MD, John Elkelboom MBBS, Jane Gaviller-Fortune IQAP-GCP, Robert Hart MD, Jeff Healey MD, Sanjit Jolly MD, Andre Lamy MD, Eva Lonn MD, Tara McCready PhD, Robert McKelvie MD, Matthew McQueen MD, Shamiir Mehta MD, Andrew Mente PhD, Carlos Morillo MD, Katherine Morrison MD, Madhu Natarajan MD, Robby Nieuwlaet PhD, Guillaume Pare MD, Janice Pogue PhD, Zubin Punthakee MD, Parminder Raina PhD, Sumathy Rangarajan MSc, Andrew Renner JD Schwalm MD, Mike Sharma MD, Tej Sheth MD, Harlette Van Spaill MD, Richard Whitlock MD



Department of Psychiatry & Behavioural Neurosciences
Faculty of Health Sciences

St. Joseph's Healthcare Hamilton
West 5th Campus, 100 West 5th
B3 Administration
Hamilton ON Canada L8N 3K7

Tel: 905.522.1155
Fax: 905.575.6085
www.fhs.mcmaster.ca/psychiatryneuroscience/

September 27, 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 include:

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

A handwritten signature in blue ink, appearing to read "Nick Kates".

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



Affiliated with: Hamilton Health Sciences, St. Joseph's Healthcare Hamilton,
Homewood Health Centre Guelph, Waypoint Centre for Mental Health Care





School of Rehabilitation Science
1400 Main Street West
IAHS-403/H
Hamilton, ON L8S 1C7
T: (905) 525-9140, ext 27820
E: solomon@mcmaster.ca
www.srs-mcmaster.ca



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,

A handwritten signature in black ink, appearing to be "PS" followed by a flourish.

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 Kipiriri
Dr. Tina Moffat

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

A handwritten signature in blue ink, appearing to read "Jeremiah Hurley".

Jeremiah Hurley, Dean

Faculty of Social Sciences



Faculty of Health Sciences
Department of Surgery

Juravinski Hospital and Cancer Centre
711 Concession Street
Hamilton, Ontario L8V 1C3

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 Petrisor**
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 Isaza**
13. **Nasimul Huq**
14. **Manoj Sayal**
15. **Anil Kapoor**
16. **Samir Faidi**
17. **Achilleas Thoma**
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,

A handwritten signature in black ink, appearing to read "S Reid".

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



School of Graduate Studies 1280 Main Street West Phone 905.525.9140
Hamilton, Ontario, Canada Ext. 23679
L8S 4L8 <http://graduate.mcmaster.ca>

To : Graduate Council

From : Christina Bryce
Assistant Graduate Secretary

At its meetings on February 9th and April 20th the Faculty of Engineering Graduate Curriculum and Policy Committee approved the below-noted course for both the School of Engineering Practice and Technology and Mechanical Engineering.

FOR INFORMATION OF GRADUATE COUNCIL:

- **School of Engineering Practice and Technology**
 - **New Cross-Listed Course**
 - 757 Hardware Prototyping Tools and Methods



SCHOOL OF GRADUATE STUDIES

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S)
INVOLVING COURSES & MILESTONES

IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for ALL course changes. Sections of this form pertaining to your requested change must be completed.
2. An electronic version of this form (must be MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).
3. A representative from the department/program is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT		SEPT		
COURSE TITLE		Hardware Prototyping Tools and Methods		
COURSE NUMBER	SEP	COURSE CREDIT		
	757	6 Unit Course ()	3 Unit Course (X)	1.5 Unit Course ()
INSTRUCTOR(S)	Staff			
REQUISITE(S) (Pre/Co/Anti or program enrollment requirement)	None			
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)				
Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
NEW	<input checked="" type="checkbox"/>	DATE TO BE OFFERED (FOR <u>NEW</u> COURSES	WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? No	

WILL THE COURSE BE CROSS-LISTED (COMBINED SECTIONS) WITH ANOTHER DEPARTMENT? NO IF YES, PLEASE NOTE WHICH DEPARTMENT:

ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). **NOTE:** CROSS-LISTING OF COURSES REQUIRES WRITTEN APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED. IF YOU WOULD LIKE TO REMOVE A CROSS-LISTING YOU MUST INCLUDE A WRITTEN EXPLANATION AGREED UPON BY BOTH DEPARTMENTS AFFECTED.

*FOR ALL NEW CROSS-LISTINGS PLEASE NOTE WHICH DEPARTMENT OWNS THE COURSE: THIS COURSE IS OWNED BY THE DEPARTMENT OF MECHANICAL ENGINEERING AND WILL BE CROSS LISTED IN THE W BOOTH SCHOOL OF ENGINEERING PRACTICE AND TECHNOLOGY – M.ENG. DESIGN PROGRAM

CHANGE IN COURSE TITLE	PROVIDE THE <u>NEW</u> COURSE TITLE:
CHANGE IN COURSE	600-LEVEL COURSE (<i>Undergraduate course for graduate credit</i>) Please
COURSE CANCELLATION	<p>PROVIDE THE REASON FOR COURSE CANCELLATION:</p> <p>PLEASE NOTE: CROSS-LISTED (COMBINED SECTIONS) COURSES CAN ONLY BE CANCELLED BY THE DEPARTMENT WHO OWNS</p>
OTHER CHANGES	EXPLAIN:

BRIEF COURSE DESCRIPTION FOR CALENDAR — Provide a brief description (*maximum 6 lines*) to be included in the Graduate Calendar.

This course will enhance the hardware prototyping capabilities of students. Students will be expected to develop basic hands-on competency in hardware prototyping and demonstrate their ability and knowledge through a lab project that contributes to their degree-required project.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

Topics:

1. Principles of Prototypes
2. Hardware Prototyping
 - a. 3D CAD Modelling and Analysis
 - b. Rapid Prototyping
 - c. Electronics Prototyping

Texts:

1. Karl T. Ulrich and Steven D. Eppinger, "Product Design and Development", sixth edition, McGraw-Hill, 2016.

2. Andreas Gebhardt, "Understanding Additive Manufacturing: Rapid Prototyping, Rapid Tooling, Rapid Manufacturing", first edition, Hanser, 2012.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review (if applicable)?)

2. EXPECTED ENROLMENT:

Up to 30 students.

3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):

The material will be presented to in two parts:

1. Three lectures covering the principles of prototypes. Students' knowledge from the lectures and readings will be assessed through assignments. The content will cover a material common to all forms of prototyping.
2. The remaining ten classes will be dedicated to hands-on lab work. Students will be exposed to the topics through a series of hands on exercises and labs intended to develop a level of competence in the area and evaluated using lab assignments. In addition, each student will be expected to execute a small project using the tools and methods taught for part of their degree-required project.

4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc. Please also note if a lab or tutorial will be included.)

<i>Component</i>	<i>Weight</i>
Assignments	20%
Lab Assignments	20%
Lab Project	60%

5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

No.

6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE

SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?

The course is primarily intended for Master of Engineering Design students.

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Eu-Gene Ng Email: nge@mcmaster.ca Extension: 27916 Date submitted: April 4, 2017

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca.

SGS /2015

2.6.3 Requirement Designations

The enrollment process will automatically assign a course towards the primary academic program that a student is enrolled in for a particular term. This process does not determine whether the course will exceed the requirements outlined the curriculum. Where a student wishes to designate a particular course towards a program other than their primary academic program a special request is required during the normal add period outlined in the sessional dates. The requirement designation form is available on the School of Graduate Studies website.

Courses can be designated as being in one of the five categories:

Masters (Count towards primary academic program requirements of a the Master's degree requirements)

This category identifies the courses that are to count towards the Master's degree requirements (including any additional graduate requirements or undergraduate courses specified by the supervisory committee or Department Chair). The passing grades for a Masters course are A+, A, A-, B+, B, and B-.

Doctoral (Count towards primary academic program requirements of a the Doctoral degree requirements)

This category identifies the courses that are to count towards the Doctoral degree requirements (including any additional graduate requirements or undergraduate courses specified by the supervisory committee or Department Chair). The passing grades for a Doctoral course are A+, A, A-, B+, B, and B-.

Extra Courses (Extra Course)

This category identifies courses that the student is taking with the approval of the supervisor but that are not necessary to the student's current degree program. In order to designate a course as extra, a student will have to submit a course designation request during the normal add period of enrollment in a particular term. The form is submitted to the program office and once approved will have the designation added to the enrollment record for that course only. If a failing grade (i.e. less than B-) is received in a course taken as Extra, the courses (and grade) will not appear on the student's transcript unless because of academic dishonesty. Students may petition to change the designation of an Extra Course to a Masters or Doctoral course prior to the deadline to drop a course provided that this change is supported by the supervisor and program. Changes of designation after the drop date will not be approved. Courses designated as Extra Course may subsequently be counted towards graduate degree requirements and the course designation changed to Masters or Doctoral, if approved by the Faculty Admissions and Study Committee or the Associate Dean acting on its behalf. The passing grades for an Extra Course are A+, A, A-, B+, B, and B-.

Courses that are required by the supervisory committee or the Department Chair as additional requirements in excess of the stated minimum for the program must be designated as Masters or Doctoral.

Diploma Course

This category identifies courses that are to count towards the requirements for a diploma. The passing grades for a Diploma course are A+, A, A-, B+, B, and B-.

Certificate Course

This category identifies courses that the student is taking as individual courses not counting towards the requirements for a diploma. The passing grades for a Certificate course are A+, A, A-, B+, B, and B-.

McMaster students enrolled in a program wishing to take a course at another institution need to apply online in the Student Centre (see section 6.10 - [Inter-University Cooperation - Ontario Visiting Graduate Student](#)).

Award names changes

In an effort to reflect the true intent of some gift agreements, SGS is changing the names of the awards listed below from bursary to scholarship. Attached is confirmation from Advancement that the names should be changed.

Current Award Name	New Award Name
E.G. Brooman Bursary in Chemistry	E.G. Brooman Scholarship in Chemistry
The Marion Northcott Schweitzer Travel Bursary	The Marion Northcott Schweitzer Travel Scholarship
Raynsford-Eatock Bursary (Travel)	Raynsford-Eatock Scholarship (Travel)
The Walter Gibbons Memorial Travel Bursary	The Walter Gibbons Memorial Travel Scholarship
The H. Vincent Elliott Memorial Travel Bursary	The H. Vincent Elliott Memorial Travel Scholarship

Potvin, Diane

From: Russell, Claudia
Sent: Monday, April 24, 2017 3:52 PM
To: Potvin, Diane
Subject: RE: Questionable bursaries

Yes go ahead and change it to S – just double check that the recipient does not received other major or travel awards as per terms

Thanks
Claudia

From: Potvin, Diane
Sent: April-24-17 2:18 PM
To: Russell, Claudia
Cc: Stewardship Intern; Masciantonio, Antonella; Petryk, Samantha
Subject: RE: Questionable bursaries

Hi Claudia,

Thanks for this information it is most helpful.

With regard to the Vincent Elliott I am just looking for clarification like the others. Do we change it to reflect a scholarship?

Thanks,

Diane

From: Russell, Claudia
Sent: Friday, April 21, 2017 3:20 PM
To: Potvin, Diane <potvind@mcmaster.ca>
Cc: Stewardship Intern <sdintern@mcmaster.ca>; Masciantonio, Antonella <masciana@mcmaster.ca>; Petryk, Samantha <petrykss@mcmaster.ca>
Subject: RE: Questionable bursaries

Recommendations in red

From: Potvin, Diane
Sent: April-20-17 11:34 AM
To: Russell, Claudia
Cc: Stewardship Intern; Masciantonio, Antonella
Subject: Questionable bursaries

Hi Claudia,

As discussed, here is a list of the bursaries for which we are looking to align the name with the terms of reference (which do not seem to indicate financial need).

E.G. Brooman Bursary in Chemistry

No living donor and no indication that financial need was a requirement for the award – in fact the will makes reference to “scholarship funds”

Change name of bursary to scholarship – take to Grad Council for OK and send documentation of change to Sam P for her files

Go ahead and change item type from B to S

The Marion Northcott Schweitzer Travel Bursary

No living donor and no indication that financial need was a requirement for the award

Change name of bursary to scholarship – and reference in the terms – take to Grad Council for OK and send documentation of change to Sam P for her files

Go ahead and change item type from B to S

Raynsford-Eatock Bursary (Travel)

No living donor and no indication that financial need was a requirement for the award – in fact will makes reference to “scholarship funds”

Change name of bursary to scholarship – take to Grad Council for OK and send documentation of change to Sam P for her files

Go ahead and change item type from B to S

The Walter Gibbons Memorial Travel Bursary

No living donor and no indication that financial need was a requirement for the award

Change name of bursary to scholarship – take to Grad Council for OK and send documentation of change to Sam P for her files

Go ahead and change item type from B to S

The H. Vincent Elliott Memorial Travel Bursary

My emails indicate that there was some discussion about financial need but it was determined that although this was not a requirement - the donor was insistent that as per the terms that students are not “recipients of other major scholarships or travel awards”. So hopefully this can be considered, Also I notice that there is just short of @2k for this award – could you award \$2k this year and the donor has one more payment of \$2k and then the award will be over

Please let us know if these are correctly named as bursaries or should the names be change to scholarship.

Thank you,

Diane Potvin

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