



(2019)

<p>1.0 Degree Title Please specify the two degrees for concurrent degree programs</p> <input type="text" value="MSc"/>	<p>2.0 Administering Faculty or GPS</p> <input type="text" value="Graduate Studies"/>
<p>1.1 Major (Subject/Discipline) (30-char. max.)</p> <input type="text" value="Experimental Medicine"/>	<p>Offering Faculty & Department</p> <input type="text" value="Faculty of Medicine and Health Sciences/Experimental Medicine"/>
<p>1.2 Concentration (Option) (30 char. max.)</p> <input type="text" value="Digital Health Innovation"/>	<p>3.0 Effective Term of Implementation (Ex. Sept. 2019 or 201909) Term</p> <input type="text" value="2021-01"/>
<p>1.3 Complete Program Title (info from boxes 1.0+1.1+1.2+5.2)</p> <input type="text" value="M.Sc., Experimental Medicine (Thesis); Digital Health Innovation"/>	

4.0 Rationale and Admission Requirements for New Program/Concentration

Intractable increases in health care costs and major advances in the digitization of health care have created new pressures and opportunities for service delivery innovation and new tools for research. Increasing volume of digitized health and social data has also created a demand for data scientists and informaticians who are skilled in both the use and generation of these data from specialized software. To capitalize on this paradigm shift, we need to train a new cadre of clinician and informatic scientists to partner in developing and ... **full rationale on last page.**

5.0 Program Information
Indicate an "x" as appropriate

5.1 Program Type	5.2 Category	5.3 Level
Bachelor's Program	Faculty Program (FP)	Undergraduate
<input checked="" type="checkbox"/> Master's	Major	Dentistry/Law/Medicine
M.Sc.(Applied) Program	Joint Major	Continuing Studies (Non-Credit)
Dual Degree/Concurrent Program	Major Concentration (CON)	Collegial
Certificate	Minor	<input checked="" type="checkbox"/> Masters & Grad Dips & Certs
Diploma	Minor Concentration (CON)	Doctorate
Graduate Certificate	Honours (HON)	Post-Graduate Medicine/Dentistry
Graduate Diploma	Joint Honours Component (HC)	Graduate Qualifying
Professional Development Cert	Internship/Co-op	
Ph.D. Program	X-Thesis (T)	5.4 Requires Centrally-Funded Resources
Doctorate Program (Other than Ph.D.)	Non-Thesis (N)	Yes ___ No <input checked="" type="checkbox"/>
Self-Funded/Private Program	Other	
Off-Campus Program	Please specify	
Distance Education Program	<input type="text"/>	
Other (Please specify)		

<p>6.0 Total Credits or CEUs (if latter, indicate "CEUs" in box)</p> <input type="text" value="45"/>	<p>7.0 Consultation with Related Units</p> <p>Financial Consult <input checked="" type="checkbox"/> Yes No</p> <p>Attach list of consultations.</p>
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8.0 Program Description (Maximum 150 words)

The M.Sc. in Experimental Medicine; Digital Health Innovation focuses on clinical investigation and innovation, data science, and informatics.

9.0 List of proposed new Program/Concentration

If new concentration (option) of existing program, a program layout (list of all courses) of existing program **must** be attached.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit Weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

Proposed Program:**Master of Science (M.Sc.) Experimental Medicine (Thesis): Digital Health Innovation (45 credits)****Required Courses (36 credits)**

EXMD 601 Real World Applications of Data Science and Informatics (3 credits)
 EXMD 634 Quantitative Research Methods (3 credits)
 EXMD 693 Masters Thesis Research 4 (12 credits)
 EXMD 694 Masters Thesis Research 5 (12 credits)
 EXSU 500 Artificial Intelligence in Medicine (3 credits)
 EXSU 620 Surgical Innovation 1 (3 credits)

Complementary Courses (3 credits)

3 credits from the following:

EPIB 600 Clinical Epidemiology (3 credits)
 EXMD 642 Experimental Medicine Topic 3 (3 credits)

Elective Courses (6 credits)

6 credits of courses at the 500-level or higher approved by the Director

Existing Programs:**Master of Science (M.Sc.) Experimental Medicine (Thesis) (45 credits)**

Thesis Courses (36 credits)

EXMD 690 Master's Thesis Research 1 (3 credits)
 EXMD 692 Master's Thesis Research 3 (9 credits)
 EXMD 693 Master's Thesis Research 4 (12 credits)
 EXMD 694 Master's Thesis Research 5 (12 credits)

Complementary Courses (9 credits)

9 credits at the 500 level or higher.

Course choices should be made in consultation with research supervisor(s). Courses may be taken outside the department at the 500 level or higher in medical and allied sciences*.

* Note that some seminar, current topics and readings, and conference courses may not count towards your degree. Thus, students must obtain prior approval from the Division's Student Affairs Coordinator for courses at the 500 level or higher from other Allied Health Sciences departments.

Master of Science (M.Sc.) Experimental Medicine (Thesis): Bioethics (45 credits)

Thesis Courses (24 credits)

BIOE 690 M.Sc. Thesis Literature Survey (3 credits)
 BIOE 691 M.Sc. Thesis Research Proposal (3 credits)
 BIOE 692 M.Sc. Thesis Research Progress Report (6 credits)
 BIOE 693 M.Sc. Thesis (12 credits)

Required Courses (6 credits)

BIOE 680 Bioethical Theory (3 credits)
 BIOE 681 Bioethics Practicum (3 credits)

Complementary Courses (15 credits)

3 credits, one of the following:

BIOE 682 Medical Basis of Bioethics (3 credits)
 CMPL 642 Law and Health Care (3 credits)
 PHIL 643 Seminar: Medical Ethics (3 credits)
 RELG 571 Ethics, Medicine and Religion (3 credits)

12 credits, four 3-credit BIOE or EXMD graduate courses (500, 600, or 700 level) chosen in consultation with the Supervisor.

Existing Programs continued:

Master of Science (M.Sc.) Experimental Medicine (Thesis): Environment (45 credits)

Thesis Courses (27 credits)

EXMD 690 Master's Thesis Research 1 (3 credits)

EXMD 693 Master's Thesis Research 4 (12 credits)

EXMD 694 Master's Thesis Research 5 (12 credits)

Required Course (3 credits)

ENVR 615 Interdisciplinary Approach Environment and Sustainability (3 credits)

Complementary Courses (15 credits)

3-6 credits from:

ENVR 610 Foundations of Environmental Policy (3 credits)

ENVR 614 Mobilizing Research for Sustainability (3 credits)

0-3 credits from:

ENVR 585 Readings in Environment 2 (3 credits)




ENVR 630 Civilization and Environment (3 credits)

ENVR 680 Topics in Environment 4 (3 credits)

or 3 credits at the 500 level or higher recommended by the Advisory Committee and approved by the Environment Option Committee.

9 credits of courses at the 500-level or higher. Course choices should be made in consultation with research supervisor(s). Courses may be taken outside the department at the 500 level or higher in medical and allied sciences*.

* Students must get approval of GPD for courses at the 500 level or higher from other Allied Health Sciences.

10.0 Approvals			
Routing Sequence	Name	Signature	Meeting Date
Department	Anne-Marie Lauzon (Division Director)	 Anne-Marie Lauzon 2020.05.18 15:09:03 -04'00'	
Curric/Acad Committee			
Faculty 1	MELISSA VOLLRATH- FCC Chair		26 MAY 2020
Faculty 2	AIMEE RYAN- Assoc. Dean	 Aimee Ryan 2020.07.09 09:08:23 -04'00'	19 JUNE 2020
Faculty 3			
CGPS			
SCTP			
APC			
Senate			
Submitted by			
Name	<input type="text"/>	To be completed by ES:	
Phone	<input type="text"/>	CIP Code	
Email	<input type="text"/>		
Submission Date	<input type="text"/>		

Full Rationale:

Intractable increases in health care costs and major advances in the digitization of health care have created new pressures and opportunities for service delivery innovation and new tools for research. Increasing volume of digitized health and social data has also created a demand for data scientists and informaticians who are skilled in both the use and generation of these data from specialized software. To capitalize on this paradigm shift, we need to train a new cadre of clinician and informatic scientists to partner in developing and evaluating service innovations, and utilizing new high volume streams of clinical and health-related data from clinical systems, wearables and social media. An environmental scan of comparable graduate programs (attached) confirms that this new concentration would be a unique program both in Canada, and internationally. Moreover it capitalizes on CFI funded digital assets (e.g. clinical systems, research data warehouse) at the MUHC. These assets would be leveraged for graduate student projects.

The new program concentration would be open to those with health professional or informatics/ computer science/ data science/engineering/quantitative basic science undergraduate training. A minimum GPA of 3.2 is required to be admitted to the program as well as evidence of successful completion of a CEGEP or higher level course in calculus or advanced math.

Summary of proposed initiative

A Masters degree concentration in digital health innovation that will be offered by Experimental Surgery and Experimental Medicine. It will ground students in the basics of Clinical Epidemiology, Medical Artificial Intelligence, Clinical Innovation, and Applied Data Science to help trainees develop digital health solutions to unmet clinical needs.

Rationale

Intractable increases in health care costs and major advances in the digitization of health care have created new pressures and opportunities for service delivery innovation and new tools for research. Increasing volume of digitized health and social data has also created a demand for data scientists and informaticians who are skilled in both the use and generation of these data from specialized software. To capitalize on this paradigm shift, we need to train a new cadre of clinician and informatic scientists to partner in developing and evaluating service innovation, new products, and new digital technologies and utilizing new high volume streams of clinical and health-related data from clinical systems, wearables and social media.

Despite the wide availability of wearables such as Fitbit and Apple watch the impact on population health has been minimal. It is becoming understood that technology developed in isolation of and without integration into the health care system will not reach its full potential. (Jo et al. Am J Med. 2019 Is There a Benefit to Patients Using Wearable Devices Such as Fitbit or Health Apps on Mobiles? A Systematic Review).

Furthermore, the era of home-made solutions has passed, and digital tools are increasingly regulated as medical products. As big medical data become more and more readily accessible, the potential for students to capitalise on breakthroughs in computing tools and digital technologies grows. The Experimental Surgery program has spearheaded the application of ethnographical needs finding within the hospital environment for several years and developed its excellence. For example in 2020 half of the eight Dobson Cup medical stream finalists were students from this program, and in 2019 the first companies were founded from the program, they recently received an exemplary mid-term evaluation of their 6 year CREATE program in Clinical Innovation. The Surgical Innovation concentration was initially intended as a discipline where engineering would collide with medicine and business, however more and more solutions that we see are digital rather than physical in nature. Having run what was Canada's first AI in Medicine graduate program for three years we have become adept at teaching large classes of multi-background learners in this transformational new domain. Digital tools are no longer medical research tools, therefore by partnering of Experimental Surgery with Clinical Epidemiology complementary skills in innovation, technological aspects of digital and mobile health combined with informatics, big data and epidemiology supported by applying a business perspective to ensure that sustainability issues such as reimbursement, market demand, competition, redundancy through technological development etc have been considered.

The Surgical Innovation concentration is based upon the 17 year old Biodesign program at Stanford. Two years ago, seeing the same shift in potential of impact they launched Biodesign for Digital Health, <https://biodesign.stanford.edu/programs/stanford-courses/biodesign-for-digital-health.html> Rather than lagging by over a decade this concentration will offer a Canadian training focus for this contemporary and growing but poorly served training need.

Comparison to programs at McGill and elsewhere

An environmental scan of comparable graduate programs (attached) confirms the availability of a number of health informatics and clinical epidemiology graduate programs in North America. However, no such programs appear to be offered in Quebec and, with the exception of the Biodesign courses offered by Stanford University, none seem to address the growing need to train individuals concurrently in (1) the science of innovating and developing digital health technologies, (2) accessing and utilizing rich clinical and health-related data from digital health technologies and clinical information systems, and (3) evaluating digital health technologies for success in improving health outcomes. This suggests that the proposed concentration would be a unique program both in Canada, and unique internationally aside from the Stanford program. Moreover, it capitalizes on the following:

- 1) Expertise in Clinical Innovation Training at the graduate level, with proven growing demand for more support for Digital Innovations.
- 2) CFI funded digital assets (e.g. clinical systems, research data warehouse) at the MUHC.
- 3) Delivering teaching on AI in Medicine since 2018.
- 4) SIF funded Clinical Innovation Platform housing the Surgical Computing Centre.
- 5) Wealth of reinforcing complementary skills to deliver content.

Consultation with Computer Science confirms that lack of overlap and duplication. Currently while certain aspects of this program are covered elsewhere, the combination of training provides a unique foundation and there there is no such program designed to train students how to develop ideas into digital health tools.

Clientele

The new program concentration would be aimed at existing and future health professionals, data scientists, clinicians, medical clinical sciences researchers. Training in innovation is highly relevant to these groups since medicine has always historically and currently been a hotbed of invention and development of medical tools. Giving our trainees the skills they need to assemble teams to help turn their ideas into digital tools is not only highly pertinent but fills a gap in the graduate training opportunities we currently offer. The aim of the concentration is to attract more clinicians and scientists into digital health research by offering training that is likely to be more relevant to them going forwards.

Admission requirements:

GPA 3.2 or higher in undergraduate degree from Faculty of Medicine, Bioengineering, Biomedical Sciences, Computer Sciences, BComm. Engineering on case by case basis subject to approval of oversight committee. Successful completion of Advanced Mathematics, Statistics, Calculus or equivalent at CGEP level or higher.

We expect that the first cohort will have 10-20 students.

Rationale for Concentration content

This is a joint concentration between Clinical Epidemiology and Experimental Surgery in which Biostatistics is strongly recommended or is required, respectively. As such then one of two biostatistics courses are required given the predominantly numerical and mathematical nature of this concentration. These courses already serve these Masters programs.

Similarly understanding the interpretation of big data sets is required knowledge and as such one of the two available courses introducing techniques of clinical epidemiology are required.

EXSU 620 introduces key concepts in innovation, such as bias, projection, needs finding, IP, building value, validating needs and the innovation process. This is a lecture-based program and so can accommodate up to 50 more students.

EXMD601 – Real World applications of Data Science and Informatics, provides hands on training in practical applications of big data manipulation and translation.

EXSU 500 – AI in Medicine introduce algorithmic approaches to developing predictive and self-taught digital tools, illustrated by a variety of ongoing medical AI projects. The issue of ethics and confidentiality is also covered in this course.

EXMD 634- Quantitative Research Methods provides: 1) An overview of common research designs based on real examples 2) Knowledge as to types of data arising from these designs; 3) Basic methods for data analysis; and 4) Application of these methods to practical solutions of clinical problems.

Capacity of the Departments

These departments run the largest graduate programs in the Faculty of Medicine and provide the academic home to many professors in the domain of innovation, clinical epidemiology and data science. All of the courses are pre-existing with a large student cohorts but have the capacity to expand seating and teaching. The Clinical Innovation program is increasingly developing mobile health and digital health solutions and Clinical Epidemiology is increasingly requiring more sophisticated digital tools with which to harness big data. Combined with the large and growing student and employer interest in training in this domain, this dual department offering harnesses complementary teaching skills and provides a unique and required contemporary offering.

Oversight

While two separate concentrations in Experimental Surgery and Experimental Medicine the content is the same and the concentration will be overseen by a joint direction consisting of Jake Barralet and Thomas Fevens (Surgery) and Robyn Tamblyn and Louise Pilote (Medicine). This group will oversee the content provision and ensure that materials are delivered appropriately and handle student enquiries as required.

ENVIRONMENTAL SCAN

University	Program	Field	Thesis/Non-thesis	Length of program	Online	Tuition residents	Tuition international
University of Toronto	MSc Clinical Epidemiology and Health Care Research	Clinical Epi	Both	12-24 months		\$6,900	\$22,640
University of Toronto	Master of Health Informatics	Informatics	Non-thesis, practicum	16 months		\$11,190	\$31,230
McMaster University	MSc eHealth	Informatics	Both, internship	24 months		\$8,215	\$18,997
McMaster University	Graduate Diploma in Clinical Epidemiology	Clinical Epi	N/A	16 months	yes	\$14,804	\$14,804
McMaster University	MSc Health Research Methodology (specialize in Clinical Epidemiology)	Clinical Epi	Both	24 months		\$7,008	\$17,096
University of Ottawa	-	-	-	-	-	-	-
University of Alberta	Msc Clinical Epidemiology	Clinical Epi	Thesis	24 months		\$3,662	\$7,481
University of Victoria	MSc Health Informatics	Informatics	Thesis or research project		optional	\$6,888	\$8,700
University of British Columbia	Master of Health Science	Clinical Epi	Major essay	16 months		\$4,996	\$20,548
University of Waterloo	Master of Health Informatics	Informatics	Non-thesis	16 months	yes	\$14,799	\$23,682
University of Western Ontario	-	-	-	-	-	-	-
Dalhousie University	Master of Health Informatics	Informatics	Both	24 months		\$11,537	\$21,751
University of Guelph	-	-	-	-	-	-	-
University of Montreal	-	-	-	-	-	-	-
UQAM	-	-	-	-	-	-	-
Harvard University	MPH with Concentration in Clinical Effectiveness	Clinical Epi	Non-thesis	3 summers or 1 year		\$60,400	\$60,400
Harvard University	Master of Biomedical Informatics	Informatics	Non-thesis	16 months		\$51,250	\$51,250
Stanford University	Academic MS in Biomedical Informatics	Informatics	Research project	24 months			
Stanford University	Master of Science in Epidemiology and Clinical Research	Clinical Epi	Thesis	24 months		\$32,970	\$32,970
Stanford University	Biodesign for digital health	Innovation	COURSES ONLY	12 months			

UC Berkeley	Professional Program in Health Informatics	Informatics	Non-thesis	3-12 months	yes	\$7,900	\$7,900
UC San Francisco	Master's Degree in Clinical Research	Clinical Epi	Systematic review + poster/presentation + Peer-reviewed manuscript	24 months		\$27,270	\$27,270
UC San Francisco	Clinical Informatics Fellowship	Informatics		24 months			
Yale University	MS in Health Informatics	Informatics	Capstone project	24 months		\$43,300	\$43,300
Yale University	MS in Chronic Disease Epidemiology	Clinical Epi	Non-thesis	12 months		\$43,300	\$43,300
Princeton University	-	-	-	-	-	-	-
University of Michigan	Master of Health Informatics	Informatics	Non-thesis, internship	24 months		\$14,389	\$23,771
University of Michigan	Master of Science in Clinical Research	Clinical Epi	Non-thesis, research practicum	12 months		\$14,389	\$23,771
University of Michigan	Master's in Clinical Research Design and Statistical Analysis	Clinical Epi	Non-thesis	19 months		\$21,150	\$34,618
Columbia University	MA in Biomedical Informatics	Informatics	Master's essay	24 months		\$56,460	\$56,460
Columbia University	Master of Science in Biostatistics - Clinical Research Methods Track	Clinical Epi	Master's essay	12 months		\$51,660	\$51,660
Brown University	Master of Science in Clinical and Translational Research	Clinical Epi	Abstract to conference + first author paper + submittable grant proposal OR abstract + 2 papers	24 months		\$32,126	\$32,126
Dartmouth University	Master of Science in Healthcare Research	Clinical Epi	Non-thesis	12 months		\$74,140	\$74,140
University of Pennsylvania	Master of Science in Clinical Epidemiology	Clinical Epi	Thesis	24 months		\$46,000	\$46,000
University of Pennsylvania	Master of Biomedical Informatics	Informatics	Non-thesis, capstone projects	24 months		\$24,305	\$24,305
Cornell University	Master of Science in Clinical Epidemiology & Health Services Research	Clinical Epi	Thesis	24 months			
Cornell University	Master of Science in Healthcare Policy and Research - Health Informatics Track	Informatics	Capstone project	12 months		\$51,680	\$51,680
Mount Sinai Icahn School of Medicine	MS in Clinical Research	Clinical Epi	Thesis	12 months			



Jake E. Barralet
BEng(Hons) Ph.D.
E-mail : jake.barralet@mcgill.ca
Tel: (514) 398-3908
Fax: (514) 398-8900

Montreal General Hospital
C9, Surgical Research
1650 Cedar Av, Montreal,
Quebec Canada
H3G1A4

Oct 16th 2020

**Re: Consultations EXSU 500 Artificial Intelligence in Medicine
&EXSU 620 Surgical Innovation 1**

Dear Prof Tamblyn,

As director of the above courses I confirm we are willing to take up to 30 additional students per year as part of your proposed MSc Experimental Medicine Digital Health Innovation concentration program.

I look forward to this exciting collaboration.

Kind regards,

A handwritten signature in black ink, appearing to read "Jake Barralet".

Jake Barralet

Vice Chair Surgery (Research),
Alan Thompson Chair in Surgical Research,
Department of Surgery,
Faculty of Medicine

CONSULTATIONS

EPIB 600 Clinical Epidemiology

From: "Maida Sewitch, Dr." <maida.sewitch@mcgill.ca>
Date: Wednesday, March 18, 2020 at 3:58 PM
To: HOME <robyn.tamblyn@mcgill.ca>
Subject: Re: Need your approval

Dear Robyn,

I am excited to offer one of the required foundational courses in the new concentration, Digital Health Innovation in Clinical Epidemiology.

Please consider this letter as my approval for the graduate students enrolled in this concentration to take my course, Clinical Epidemiology, which is part of the summer institute. I understand this would include a maximum of 10 students in the first year, and possibly 20 students in the next year.

Sincerely,

Maida

Maida J. Sewitch PhD CAGF

Associate Professor, Department of Medicine, McGill University and Centre for Outcomes Research and Evaluation (CORE),
Research Institute of the McGill University Health Centre

Director of Population Health Research, Division of Gastroenterology, McGill University Health Centre

Associate Member, Departments of Epidemiology, Biostatistics and Occupational Health and Otolaryngology-Head and Neck
Surgery, McGill University

Centre for Outcomes Research & Evaluation, Research Institute-McGill University Health Centre

5252 boul de Maisonneuve O, Office 2B.44

Montreal, QC H4A 3S5

Tel: 514-934-1934 ext 44736; Fax: 514-484-6287



From: Jake Barralet <jake.barralet@mcgill.ca>
Subject: Fwd: consultation with Computer Science
Date: April 9, 2020 at 12:17 PM
To:

Begin forwarded message:

From: Michael Langer <langer@cim.mcgill.ca>
Subject: Re: consultation with Computer Science
Date: March 26, 2020 at 1:25:04 PM EDT
To: "Jake E. Barralet, Dr." <jake.barralet@mcgill.ca>
Cc: Bettina Kemme <kemme@cs.mcgill.ca>

Hi Jake,

That's correct -- no duplications and no objections.

Normally we keep a copy of formal proposals that we are asked to consult on. So if you could send the formal proposal at some point, that would be great.

Thanks,

Mike

On 2020-03-26 1:14 p.m., Jake E. Barralet, Dr. wrote:

Dear Mike

Thanks for your time just now.

I understood you agree there is no overlap and we are not duplicating any effort in this concentration and as such the results of this consultation are that you have no objections..Many Thanks

We went on to discuss the Diploma, we will of course consult with you about any certificate or diploma if and when we prepare them, this particular consultation relates only to the **concentration** in Digital health Innovation in Faculty of Medicine Masters.

However for a potential Diploma, you highlighted the potential value of COMP 204 programming for life sciences, and we would certainly be open to making this course an option in the diploma if we are permitted to offer 2-level course, perhaps as a complimentary. I don't think the level means much in an interdisciplinary program.

Thanks for your quick assistance, if I misunderstood anything please let me know, otherwise good luck with resolving the current challenges your department faces.

Jake

On Mar 26, 2020, at 12:27 PM, Michael Langer <langer@cim.mcgill.ca> wrote:

Dear Jake,

Bettina forwarded me your request for a consultation. As I'm sure you can imagine, she is inundated right now. I have been involved in many consultations about academic programs the past few years and so maybe I can answer any questions you have.

I am available until about 1:45 PM today. Or we could speak another day.

Please let me know and we set up a time. My cell phone number is 514-647-9757.

Best,

Mike Langer

From: Robyn Tamblyn, Dr. robyn.tamblyn@mcgill.ca
Subject: FW: Need your approval
Date: April 9, 2020 at 12:25 PM
To: Jake E. Barralet, Dr. jake.barralet@mcgill.ca

From: "Maida Sewitch, Dr." <maida.sewitch@mcgill.ca>
Date: Wednesday, March 18, 2020 at 3:58 PM
To: HOME <robyn.tamblyn@mcgill.ca>
Subject: Re: Need your approval

Dear Robyn,

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Sincerely,

Maida

Maida J. Sewitch PhD CAGF

Associate Professor, Department of Medicine, McGill University and Centre for Outcomes Research and Evaluation (CORE),
Research Institute of the McGill University Health Centre

Director of Population Health Research, Division of Gastroenterology, McGill University Health Centre

Associate Member, Departments of Epidemiology, Biostatistics and Occupational Health and Otolaryngology-Head and Neck
Surgery, McGill University

Centre for Outcomes Research & Evaluation, Research Institute-McGill University Health Centre

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Montreal, QC H4A 3S5

Tel: 514-934-1934 ext 44736; Fax: 514-484-6287

From: Robyn Tamblyn, Dr. <robyn.tamblyn@mcgill.ca>
Sent: Wednesday, March 18, 2020 9:58 AM
To: Maida Sewitch, Dr. <maida.sewitch@mcgill.ca>; Nitika Pai, Dr <nitika.pai@mcgill.ca>
Subject: Need your approval

Hi Maida and Nikki

We are putting together the new concentration for clinical innovation data science and

informatics (renamed digital health innovation) and we propose that one of the two required foundational courses is clinical epidemiology. So we will need your approval for graduate students who enroll in this concentration to take your summer institute course. I estimate it might be a maximum of 10 students in the first year, increasing to possibly 20 in the next year. I will need evidence of your approval, by email, to submit to graduate studies. Thanks in advance

All the best
Robyn

Robyn Tamblyn BScN, MSc, PhD, CM
James McGill Chair
Professor Departments of Medicine, and Epidemiology & Biostatistics
Director, Division of Clinical Epidemiology
McGill University
Fellow, Canadian Academy of Health Sciences
Member, Order of Canada
Fellow, Royal Society of Canada