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Please specify the two degrees for col			ing racuity of GPS	
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.1 Major (Subject/Discipline) (30-char. m	ax.)	Offering Fa	aculty & Department	
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.2 Concentration (Option) (30 char. max.)		erm of Implementation 2019 or 201909)	
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.3 Complete Program Title (info from box	(es 1.0+1.1+1.2+5.2)			
Ph.D. in Cancer Sciences				
.0 Rationale and Admission Requiremen	ts for New Program/Conce	ntration		
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8.0 Program Description (Maximum 150 words)

The Ph.D in Cancer Sciences program focuses on cancer as a disease and the breadth of cancer research across disciplines. This program includes a solid foundation in fundamental aspects of cancer biology, "omics" analyses, treatments, and patient care.

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)

Ph.D. in Cancer Sciences (0 Credit)

Required Courses (4 credits) CANC 621D1/D2 Seminars in Cancer Sciences (4 credits) CANC 701 Ph.D. Comprehensive Exam (0 credits)

Complementary Courses (10 credits)

6 Credits from the following: EXMD 635D1 Experimental/Clinical Oncology (3 credits) EXMD 635D2 Experimental/Clinical Oncology (3 credits)

OR ONCO 610D1 Fundamentals of Oncology and Cancer Research (3 credits) ONCO 610D2 Fundamentals of Oncology and Cancer Research (3 credits)

4 credits to be taken from the following list. Students may select a 3-credit and 1-credit course or four 1-credit courses BIOC 600 Advanced Strategies in Genetics and Genomics (3 credits) BIOC 603 Genomics and Gene Expression (3 credits)

BIOC 605 Protein Biology and Proteomics (3 credits) BMDE 507 Formulation and Delivery of Biotherapeutics (3 credits) BMDE 653 Patents in Biomedical Engineering (3 credits) BMDE 655 Biomedical Clinical Trials-Medical Devices (3 credits) CANC 601 Patient Engagement in Cancer Research (1 credit) CANC 602 Epidemiology in Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Cancer Caregiving: Psychosocial Issues (1 credit) CANC 606 Tumour Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit) EPIB 507 Biostats for Health Sciences (3 credits) EPIB 521 Regression Analysis for Health Sciences (3 credits) EPIB 635 Clinical Trials (3 credits) EPIB 671 Cancer Epidemiology and Prevention (3 credits) EXMD 504 Biology of Cancer (3 credits) EXMD 504 Biology of Cancer (3 credits) EXMD 602 Techniques in Molecular Genetics (3 credits) EXMD 607 Molecular Control of Cell Growth (3 credits) EXMD 608 Molecular Embryology (3 credits) EXMD 614 Environmental Carcinogenesis (3 credits) EXMD 617 Workshop in Clinical Trials 1 (1 credit) EXMD 618 Workshop in Clinical Trials 2 (1 credit) EMMD 619 Workshop in Clinical Trials 3 (1 credits) EXMID 619 Workshop in Clinical Trails 3 (1 credits) EXMID 647 Epigenetics and Cancer (3 credits) EXSU 500 Artificial Intelligence in Medicine (3 credits) EXSU 505 Trends in Precision Oncology (3 credits) EXSU 506 Statistics for Surgical Research (3 credits) HGEN 676 Lab course in Genemics (3 credits) HGEN 677 Statistical Concepts in Genetic and Genomic Analysis (3 credits) HGEN 679 Cancer Genetics: Precision Oncology (3 credits) HGEN 690 Inherited Cancer Syndromes (3 credits) HGEN 690 Innerted Cancer Syndromes (3 credits) HGEN 693 Using Bioinformatics Resources (3 credits) NUR2 515 Applied Statistics for Nursing (3 credits) NUR2 783 Psychosocial Oncology Research (3 credits) ONCO 611 Proteomics for Precision Medicine (3 credits) ONCO 615 Principles and Practice of Clinical Trials (3 credits) ONCO 620 Best Practices in Biomedical Research (3 credits) ONCO 625 Quality Improvement Principles and Methods (3 credits) ONCO 635 Qualitative and Psychosocial Health Research (3 credits) ONCO 635 Qualitative and Psychosocial Health Research (3 credits) ONCO 645 Seminars in Global Oncology (3 credits) PATH 652 Molecular Biology of Disease (3 credits) PHAR 508 Drug Discovery and Development (3 credits) PHAR 508 Drug Discovery and Development (3 credits)

Attach extra page(s) as needed

POTH 637 Cancer Rehabilitation

10.0 Approvals			
Routing Sequence	Name	Signature	Meeting Date
Department	Goodman Cancer Institute : Dr. Moraq Park	Martark	Jan 9, 2023
Curric/Acad Committee	Dr. Melissa Vollrath	Minin A Jethot	Jan 23rd, 2023
Faculty 1			
Faculty 2			
Faculty 3			
CGPS			
SCTP			
APC			
Senate			
Submitted by			
Name	Rosanne Sequin	To be completed by ES:	
Phone		CIP Code	
Email	Rosanne.seauin@mcaill.ca		
Submission Date	November 21 2022		
L			

REMINDERS:

*Box 5.4 – Must be completed; see section 6.5.4 within the New Program Guidelines at: <u>https://www.mcgill.ca/sctp/guidelines</u>. **All new program proposals must be accompanied by a 2-3 page support document.

Proposal for Ph.D. in Cancer Sciences Program

1. Introduction: Program Identification:				
Program Title:	Interdisciplinary Cancer Sciences (CANC)			
Degree Title:	Ph.D. (with thesis, 0 credit)			
Faculty:	FMHS/GPS			

We propose an innovative interdepartmental and interdisciplinary Ph.D. program in Cancer Sciences, designed to train the next generation of leading cancer scientists across all pillars of cancer research. Historically, training in the biomedical and fundamental sciences, informatics, engineering, medicine, epidemiology, and patient care occurred mainly in silos, with little opportunity for integration. Now, these disciplines are rapidly evolving and converging, and it is accepted that incorporating approaches from these diverse fields of study is necessary to advance cancer research. This program will foster strong scientific and social ties among the student cohort and the wider cancer research community through interdisciplinary training and research activities, providing a solid foundation in fundamental aspects of cancer biology, "omics" analysis, treatment, and patient care. Students will gain a variety of cancer research competencies, selecting from cancer-centric interdisciplinary courses featuring active engagement and collaborative approaches. By consulting with stakeholders across the Faculty of Medicine and Health Sciences (FMHS), we have designed the program to provide students with a comprehensive understanding of cancer, including the breadth of cancer research and how integration of disciplines can advance the field.

2. Rationale for the Program

2.1. Academic significance:

Cancer is a group of complex diseases. The future of cancer care will focus on four pillars: Prevention through better understanding of the causes of cancer, improved early detection, precision medicine, and alleviating physical and psychosocial symptoms. Students from diverse fields and backgrounds will enter the program, necessitating a shared foundation in cancer sciences through cornerstone courses (EXMD635 or ONCO610) covering the cellular, molecular and genetic mechanisms of cancer, animal- and patient-derived cancer models, "-omics" approaches to studying cancer, cancer therapeutics, cancer epidemiology, cancer prevention, improving patient care and psychosocial health. The Seminars in Cancer Sciences course (CANC621) will feature faculty-guided discussions of high-impact research articles and seminars from internationally renowned scientists, initially focused on individual disciplines, but progressing to cover interdisciplinary approaches and discoveries. At the end of the second year, the students will take a gualifying exam where they will present and answer guestions on their proposed thesis research as well as an interdisciplinary topic in cancer science outside their thesis research specialization, under the tutelage of a faculty mentor who is not their supervisor. The remainder of the curriculum will provide the flexibility to create individualized programs, selecting from complementary courses, including specialized 1-credit courses (each 15 hours including lectures and a hands-on or project component), beginning in the second year. This will provide time for students to gain experience and understanding of their thesis research material.

Cancer research is pursued widely across and beyond the McGill campus, making it challenging for trainees to support each other. The program's non-credit mandatory activities will build a cohort identity among graduate students, facilitating cohesion and teamwork and fostering a feeling of unity and belonging. They will include Cohort Training Days, 3-day events in September and January each year with two days dedicated primarily to first year trainees and the third to a writing practicum open to all trainees (details in Appendix A). These events will expose trainees to all aspects of cancer through interactions with clinicians, basic and clinician-scientists, patient care professionals and patients, providing perspective on how research impacts on patients and giving the current view of the frontiers and major challenges. Another non-credit activity, the

annual Interdisciplinary Cancer Research Day, will provide opportunities for trainees to present their research to their peers and the wider cancer research community.

2.2. Strategic position of the program at McGill:

Cancer research on the McGill campus and at affiliated institutes is geographically dispersed, with major sites including the Goodman Cancer Institute (GCI), the Lady Davis Institute (LDI)/Segal Cancer Centre and the Research Institute of the McGill University Health Centre (RI-MUHC). While the Gerald Bronfman Department of Oncology offers a graduate diploma in oncology, there is currently no thesis-based MSc or PhD program specifically dedicated to cancer sciences at McGill. Instead, students enroll in departments and divisions with their own specialized training paths, including Biochemistry, Anatomy and Cell Biology, Biology, Physiology, Pathology, Pharmacology and Therapeutics, Human Genetics, Microbiology and Immunology, Biological and Biomedical Engineering, Experimental Medicine, Experimental Surgery, Epidemiology, Biostatistics, Occupational Health, and the Ingram School of Nursing. This new program will create a dedicated community of cancer research trainees from across these units, with training focused on cancer sciences, and provide opportunities to collaborate and explore common interests.

The program will align extremely well with the FMHS Education Strategic Plan (2018). Rather than focusing solely on technology, themes or mechanisms, it is designed to be disease- and patient-centric, reflecting the expressed desire of students for graduate training in cancer research that reflects the human component of the disease. The program will encourage the integration of clinical knowledge with fundamental and curiosity-driven research, fostering a flow of ideas and knowledge, with the goal of improving cancer treatment and patient care. These initiatives will contribute to realizing the FMHS strategic goals of advancing evidence-based, learner-centred approaches (*Goal 1: Teach*), including through extensive consultation with trainees. The program will also be vital to supporting the development of a collaborative, interdisciplinary and interprofessional educational environment at McGill (*Goal 2: Learn*).

2.3. Strategic position of the program within Quebec/Canada/International contexts:

In Quebec, Université Laval, Université de Sherbrooke, Université de Montréal and McGill University have thriving cancer research centers linked with their respective medical schools. However, none have a Ph.D. program in cancer science research. Examples of cancer science and cancer biology graduate programs offered in Canada, the U.S., and Europe are shown below.

University	Program/Degree (s) offered	Description		
CANADA				
University of British	Interdisciplinary Oncology Program	2 core courses/electives specific to thesis		
Columbia	(M.Sc./ Ph.D)	research		
Western University	Interdisciplinary Medicine	Lab rotations, clinical, basic science and		
	(M.Sc. no thesis)	community engaged learning		
Queen's University	Multidisciplinary Graduate Program in	Student research thesis is cancer		
	Cancer Research (M.Sc. / Ph.D.)	focused, but not a centralized program.		
University of Alberta	Cancer Sciences Specialization	Not interdisciplinary		
	(M.Sc./ Ph.D.)	Cancer biology focus		
University of Calgary	Medical Sciences	Not interdisciplinary		
	(M.Sc./ Ph.D.)	Specialization in cancer biology		
Memorial University of	Cancer Development and Research	Training in cancer research or		
Newfoundland	(M.Sc. / Ph.D.)	developmental biology		
USA				
Memorial Sloan Kettering	Cancer Biology (Ph.D.)	Interdisciplinary cancer biology with		
Cancer Center (NY)		elective clinical apprenticeship		
Stanford University (CA)	Cancer Biology (Ph.D.)	Not interdisciplinary		
Cold Spring Harbor (NY)	Cancer Biology (Ph.D.)	Not interdisciplinary		
EUROPE				
Karolinska Institute	Tumor Biology and Oncology	Clinical and translational cancer research		
(Sweden)	(doctorate)	(starting Spring 2024)		

University of Glasgow (Scotland)	Cancer Sciences (Ph.D.)	Cancer biology, translational and clinical research
German Research Center Heidelberg (DKFZ)	Interdisciplinary Program (Ph.D.)	Basic, computational, epidemiological, and translational cancer research

Given the overall paucity of thesis-based graduate programs in interdisciplinary cancer sciences, the high demand, and the growth of interdisciplinary cancer research, the proposed program will position Quebec and Canada at the forefront of training future leaders in cancer science.

2.4. Market study for the initiative:

Many students are interested in developing their understanding of the total scope of cancer research, but the breadth of interdisciplinary research can be challenging and overwhelming. The program is designed to overcome these challenges by covering different discipline foundations, supporting curiosity-driven exploration of cancer research and leveraging students' diverse research backgrounds as a source of strength, encouraging them to collaborate and share ideas. Trainees completing the program will have acquired competencies allowing them to pursue careers in academic teaching and research, policy and administration in government, healthcare, and non-profit organizations, as well as positions in the pharmaceutical and biotechnology industries. The global cancer market is expected to grow to \$500 billion by 2030, with accompanying demand for graduates with interdisciplinary training. Our program will position trainees to take advantage of these opportunities.

3. Program Overview

3.1. Structure and Admission:

Students will pursue cancer research theses in a broad range of disciplines but will come together in the fundamental (EXMD635 or ONCO610) and cornerstone (CANC621) courses. They will perform original scholarly research, write and orally defend a thesis, and complete pre-defined competencies in methodology, academic knowledge of their research fields and professional skills. Students are encouraged to continue to learn throughout their degree and will have access to complementary courses in years 2-4.

Calendar Years	Year 1	Year 2	Year 3	Year 4	Year 5
(Ph.D. Yr based on students entering with Master's.)	(Ph.D. Yr 2)	(Ph.D. Yr 3)	(Ph.D. Yr 4)	(Ph.D. Yr 5)	(Ph.D. Yr 6)
Fundamental Course:					
EXMD635D1/D2 or ONCO610D1/D2					
CANC621D1/D2: Seminars in Cancer Sciences					
CANC 701 Comprehensive Exam (by end Year 2)					
Complementary 3 credit course selection					
Complementary 1 credit course(s) selection					
Thesis Research					
Interdepartmental Cancer Seminars (non credit)					
Cohort Training Days (Sept and Jan) (non credit)					
Interdisciplinary Cancer Sciences Research Day					
(non credit)					

Proposed Timetable of Courses for each Year in Program:

<u>Admission</u>: Applicants are required to have a Master's degree in fields related to biomedical science with a minimum cumulative GPA of 3.5/4.0 on the McGill scale. Exceptional candidates may be considered for direct Ph.D. entry with B.Sc. GPA of 3.7/4.0 and a strong research experience with publication record and/or highly competitive awards.

Application Documents:

Applicants will provide their most recent curriculum vitae, a 1000-word personal statement describing their educational and professional background, and their motivation for applying, as well as two letters of reference from individuals with whom they interacted on an academic or professional level, and all transcripts from their post-secondary education. If the applicant has identified a potential thesis supervisor, they must also include a letter from them.

Appendix A: Mandatory Academic Activities (non-credit)

1. Cohort Training Days

The Training Days will provide a structured platform to introduce basic, yet critical, skills that are important across all streams of cancer sciences. Training Days will take place twice per year, in September and January, each spread over 3 days (Monday-Wednesday). Two days will be dedicated primarily to first year trainees, while the third day will be an open *Writing Practicum* where trainees from all years are encouraged to participate.

The two Training Days will be built as combinations of 5 types of blocks:

1- Introductory short courses on key cancer topics: interdisciplinary scientific engagement, highlights of recent scientific advances

2- Research management: experimental design, planning with timelines, milestones and contingencies, ethics, basic statistics

3- Communication skillsets: poster presentations, scientific communication to lay audiences

4- Clinicians, researcher, patient and patient family testimonies.

5- Team building and networking: team-based problem solving, EDI, leadership skills, engagement with committees and community, career management including cv preparation

The Writing Practicum will cover topics including how to write:

- a research scholarship application
- a scientific abstract for congress/conference
- a scientific paper
- a thesis proposal
- a thesis

2. Interdisciplinary Cancer Sciences Research Days

Interdisciplinary Cancer Sciences Research Day (to take place in May) will be a required activity for all students enrolled in the Cancer Sciences Program. The objectives are to:

- 1- Reinforce the inter-disciplinary nature of cancer research/cancer care through presentations and group activities.
- 2- Provide an opportunity for new students to connect with and learn from students in the second year and beyond.
- 3- Provide second- and third-year students the opportunity to organize speaker sessions, and plan and lead a discussion group.
- 4- Provide an opportunity for students in the program to present their work either as a poster presentation or as a 10-minute oral presentation. *

*Students in the second year and above will submit an abstract to the Curriculum Committee. Members of the Curriculum Committee will review the abstracts and decide if the student will be invited to give an oral presentation or a poster presentation. The oral presentations should include different cancer research disciplines. The Fellowships and Awards committee members will vote on the best poster presentation and the best oral presentation.

Hosting of the Research Days will rotate annually between the Goodman Cancer Institute (GCI), the Research Institute of the McGill University Health Centre (RI-MUHC) and the Lady Davis Institute (LDI)/Segal Cancer Centre which will also support students in the programs to know the different sites involved in the program.



Morag Park, Ph.D., C.Q., FRSC, FCAHS **Rosalind and Morris Goodman Cancer Institute** Cancer Pavilion, McGill University 1160 des Pins West, Room 514 Montreal, Québec, Canada H3A 1A3 T: (514) 398-5749 F: (514) 398-6769

Institut du cancer Rosalind & Morris Goodman Cancer Institute

Institut du cancer Rosalind et Morris Goodman Pavillon du Cancer, Université McGill 1160 des Pins Ouest, bureau 514 Montréal, Québec H3A 1A3 Canada T : (514) 398-5749 F: (514) 398-6769

DATE: November 21, 2022

From: Dr. Morag Park, Director, Rosalind and Morris Goodman Cancer Institute

To: Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

This letter is to state that I have read, revised and fully endorse the proposal for the new *PhD Interdisciplinary Program in Cancer Sciences*.

Cancer sciences have changed significantly over the past decade and have progressively transitioned integrating interdisciplinary and patient-centric disciplines and now must encompass the full axis of biomedical, clinical and patient care discplines.

In close collaboration with its many partners at McGill, the Rosalind and Morris Goodman Cancer Institute has engaged as a key partner in developing the vision and scope of this exciting new paradigm of training in cancer sciences. In my view, the Interdisciplinary Program in Cancer Sciences is both timely and necessary to prepare the next generation of learners supporting the broad range of learning expertise and career goals fulfilling future needs of Québec and Canadian societies.

Sincerely yours,

Morag Park, Ph.D., C.Q., FRSC, FCAHS Director, Goodman Cancer Institute Diane and Sal Guerrera Chair in Cancer Genetics Distinguished James McGill Professor, Depts. of Oncology, Biochemistry and Medicine

DATE: Monday November 30, 2022

TO: Dr. Anne-Marie Lauzon Division of Experimental Medicine Glen Site - McGill University Health Centre 1001 Décarie Boulevard, Montreal, Quebec, Canada, H4A 3J1

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division: EXMD 635D1/D2 Experimental and Clinical Oncology (6 credits) EXMD 602 Techniques in Molecular Genetics (3 credits) EXMD 602 Techniques in Molecular Genetics (3 credits) EXMD 607 Control of Cell Growth (3 credits) EXMD 608 Molecular Embryology (3 credits) EXMD 614 Environmental Carcinogenesis (3 credits) EXMD 614 Environmental Carcinogenesis (3 credits) EXMD 634 Quantitative Research Methods (3 credits) EXMD 634 Quantitative Research Methods (3 credits) EXMD 647 Epigenetics and Cancer (3 credits) EXMD 504 Biology of Cancer (3 credits) EXMD 617 Workshop in Clinical Trials 1 (1 credit) EXMD 618 Workshop in Clinical Trials 2 (1 credit) EXMD 619 Workshop in Clinical Trials 3 (1 credit)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Division of Experimental Medicine, if they so wish to attend. CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

X*

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

This is an excellent initiative that will promote cancer studies at McGill University. Experimental Medicine supports this new program.

*However, we do have some concerns with regards to some of the EXMD courses proposed as required or complementary courses for this program. Please see details on the next page.

Signature:

me Marie Jung

Date: December 12, 2022

EXMD 635D1/D2 Experimental and Clinical Oncology. This course is listed as one of two options for the required courses for this program. Currently this course has a capacity of 30 students, and it is usually full. To set aside the requested 5-8 seats in the course, we would need to increase the capacity so as not to limit registration by ExMed students. This would therefore require the CANC program to secure additional funding to support a TA to help the course coordinator.

The following courses have been listed as "complementary courses" for this program. Setting aside 1-3 seats should not be a problem, however if the CANC program continues to grow and additional seats are requested, then this may present an issue as the courses generally fill up each year:

EXMD 602 Techniques in Molecular Genetics, capacity 16
EXMD 607 Control of Cell Growth – capacity 27
EXMD 608 Molecular Embryology – only offered every other year
EXMD 614 Environmental Carcinogenesis – capacity 14
EXMD 647 Epigenetics and Cancer, capacity 18
EXMD 617 Workshop in Clinical Trials 1, EXMD 618 Workshop in Clinical Trials 2, and EXMD 619
Workshop in Clinical Trials 3

We do have concerns about reserving seats in the following courses:

EXMD 504 Biology of Cancer. This course has a capacity of 85 students and is always oversubscribed. If there is significant interest from students to take this course, then we would need to increase the course capacity and have the CANC program secure funding for additional TA hours.

EXMD 634 Quantitative Research Methods. This course has a capacity of 35 students, and again is always oversubscribed. This course is currently restricted to ExMed students. At this point we are unable to set aside seats in the class for CANC students, as we often cannot accommodate our own students.

Regarding the 1-credit CANC courses, they are excellent for students who will perform cancer research. ExMed students will be permitted to take these 1-credit courses provided that they are relevant to their field of research. Moreover, we will request that they select 3 of them to substitute one of their 3-credit course requirements.

DATE: Monday November 30, 2022

To: Chair, Dr. Eduardo Franco Gerald Bronfman Department of Oncology 5100 de Maisonneuve Blvd West Suite 720 Montreal, Quebec H4A 3T2 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

ONCO 610 D1/D2 Fundamentals of Oncology and Cancer Research (6 credits) ONCO 611 Proteomics for Precision Medicine (3 credits) ONCO 615 Principles and Practice of Clinical Trials (3 credits) ONCO 620 Best Practices in Biomedical Research (3 credits) ONCO 615 Quality and Improvement Principles and Methods (3 credits) ONCO 635 Qualitative and Psychosocial Health Research (3 credits) ONCO 645 Seminars in Global Oncology (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Gerald Bronfman Department of Oncology, if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

Χ

NO OBJECTIONS

Trane

SOME OBJECTIONS

COMMENTS: I am very enthusiastic about this initiative

Signature:

e: December 12, 2022

Date:

DATE: Monday November 30, 2022

To: Chair, Dr. Albert Berghuis Department of Biochemistry McIntyre Medical Building 3655 Promenade Sir-William-Osler Room 905 Montréal, Québec H3G 1Y6 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

BIOC 600 Advanced Strategies in Genetics and Genomic (3 credits) BIOC 603 Genomics and Gene Expression (3 credits) BIOC 605 Protein Biology and Proteomics (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Biochemistry, if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

X

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

- We find the structure of the program innovative in that it offers students a lot of flexibility.
- The program could also offer a 1 credit tutorial on personalized cancer treatment.
- Consider opening an option to complete a PhD in more than one lab as an attractive multidisciplinary advantage to the program.
- Linking the new program with the McGill MD-PhD program may be beneficial.

Bhushan Nagan

Signature:

December 12, 2022

Date:

DATE: Monday November 30, 2022

To: Department of Biomedical Engineering Department Chair: David Juncker Duff Medical Building Room 316 3775 rue University Montréal, Québec H3A 2B4 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

BMDE 501 Selected Topics: Biomedical Engineering (3 credits) BMDE 507 Formulation and Delivery of Biotherapeutics (3 credits) BMDE 653 Patents in Biomedical Engineering (3 credits) BMDE 655 Biomedical Clinical Trials: Medical Devices (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Biomedical Engineering, if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.



NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

This is an interesting program proposal, and we are happy to see that its prospective students might also take courses from our program. Students are welcome to register in BMDE 653 and BMDE 655 as space allows, but the pertinence of BMDE 653 to this program may need some further consideration.

Finally, we recognize that nearly all departments have graduate students working on oncology related research, but it is unclear if this joint program takes away graduate students from our Department, or whether this a joint program with external departments. If the latter, it would be helpful to clarify the administrative arrangement.

Signature: Develation	
0	

Date:

February 8, 2023

DATE: Monday November 30, 2022

To: Department of Epidemiology, Biostatistics and Occupational Health Department Chair: Josée Dupuis 2001 McGill College, Suite 1200 Montréal, Québec H3A 1G1 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

EPIB 507 Biostats for Health Sciences (3 credits) EPIB 521 Regression Analysis for Health Sciences (3 credits) EPIB 635 Epidemiology and Biostatistics (3 credits) EPIB 671 Cancer Epidemiology and Prevention (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Epidemiology, Biostatistics and Occupational Health, if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

X

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

I have checked with the instructors for the EPIB courses listed above, and all instructors agreed that they could accommodate 1-3 students/year from this new program. The EPIB 635 instructor had the following comment: "I'd be happy to have students from this program enroll in EPIB 635. However, I should mention that the course description on the eCalendar is old and inaccurate: this course was developed in 2020 and is focused on statistical aspects of clinical trials. It covers statistical methodology relevant to oncology trials including adaptive and flexible designs, information borrowing, etc. But these methods require a solid statistical background including Bayesian statistics which is not normally included in intro stat courses."

Signature:	Josie Dupue
Date:	December 6, 2022 //

DATE: Thursday, January 19, 2023

To: Department of Epidemiology, Biostatistics and Occupational Health Department Chair: Josée Dupuis 2001 McGill College, Suite 1200 Montréal, Québec H3A 1G1 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The proposal for the Ph.D. in Cancer Sciences program has been submitted to the Curriculum/Academic Committee, and they have concerns regarding the proposed 1-credit course, *CANC 602 Epidemiology of Cancer* and possibly overlap with the 3-credit course, *EPIB 671 Cancer Epidemiology and Prevention* offered by the Department of Epidemiology, Biostatistics and Occupational Health.

Would you be good enough to review the CANC 602 course outline, and let us know before January 20, 2023 on this form, whether your department has any objections to, or comments regarding, the inclusion of the proposed 1-credit course, *CANC 602 Epidemiology of Cancer* in the proposed Interdisciplinary Ph.D. Program in Cancer Sciences.

x NO OBJECTIONS SOME OBJECTIONS

COMMENTS:

Because of the overlap between these two courses, a restriction should be added such that students who have taken EPIB 671 (3 credit) CANNOT enroll in CANC 602 (1 credit).

Signature:

(-)	
Josie Dupues	

Date:

January 19, 2023

DATE: Monday November 30, 2022

Department of Experimental Surgery Chair: Dr. Liane S Feldman Experimental Surgery Program Director: Dr. Fackson Mwale. Montreal General Hospital 1650 Cedar Avenue, A7-117 Montréal, Québec H3A 1A4 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

EXSU 500 Artificial Intelligence in Medicine (3 credits) EXSU 505 Trends in Precision Oncology (3 credits) EXSU 606 Statistics for Surgical Research (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Experimental Surgery if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

X

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

Signature:

Date:

2nd December, 2022_____

DATE: Monday November 30, 2022

TO: Department of Human Genetics Department Chair: Eric Shoubridge Rm 2/38, Strathcona Anatomy & Dentistry Building Montréal, Québec H3A 0C7 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

HGEN 676 Lab Course in Genomics (3 credits) HGEN 677 Statistical Concepts in Genetic and Genomic Analysis (3 credits) HGEN 679 Cancer Genetics: Precision Oncology (3 credits) HGEN 690 Inherited Cancer Syndromes (3 credits) HGEN 693 Using Bioinformatic Resources (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Human Genetics if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

Х

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS: I assume that students in this program will be registered in one or the other departments in FOM, but will opt for a specialization in cancer? I am curious as to why you restrict the program to doctoral students, as many MSc students fast track into the PhD, and the proposed program does not offer this possibility. I am curious about what is meant by the following sentence in the executive summary "Achievement of core competencies will be evaluated robustly using a structuring competency ladder in cancer sciences". Looks like you are proposing another level of evaluation, but it not at all clear to me what this means in practice.

I have no objections to opening the courses in HGEN to students in the program, but it is not possible to allot slots. The lab course in Genomics has very limited enrollment and it is unlikely that students in the Cancer program would be admitted unless they are registered in the HGEN graduate program. The one credit courses sound like a reasonable idea, and I like the fact that they are really targeted to specific audiences. I guess pass/fail is appropriate here, though some students may prefer a grade.

Friet-Shurbridge

Signature:

Date:

5 December, 2022_____

DATE: Monday November 30, 2022

TO: Department of Human Genetics Department Chair: Eric Shoubridge Rm 2/38, Strathcona Anatomy & Dentistry Building Montréal, Québec H3A 0C7 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

HGEN 676 Lab Course in Genomics (3 credits) HGEN 677 Statistical Concepts in Genetic and Genomic Analysis (3 credits) HGEN 679 Cancer Genetics: Precision Oncology (3 credits) HGEN 690 Inherited Cancer Syndromes (3 credits) HGEN 693 Using Bioinformatic Resources (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Human Genetics if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

Х

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

HGEN677 is currently capped at a max of 25 students. Most years, there are almost this number of students enrolled. It would certainly be possible to have a few more students in the course. Depending on numbers, a slightly larger classroom would be needed, and possibly a few more hours of TA time.

Culia Greenwood

Signature:

Date:

4 December 2022____

DATE: Monday November 30, 2022

TO: Department of Human Genetics Department Chair: Eric Shoubridge Rm 2/38, Strathcona Anatomy & Dentistry Building Montréal, Québec H3A 0C7 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to courses offered by your division:

HGEN 676 Lab Course in Genomics (3 credits) HGEN 677 Statistical Concepts in Genetic and Genomic Analysis (3 credits) HGEN 679 Cancer Genetics: Precision Oncology (3 credits) HGEN 690 Inherited Cancer Syndromes (3 credits) HGEN 693 Using Bioinformatic Resources (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Human Genetics if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

Χ

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

1. HGEN 676 Lab Course in Genomics (3 credits)

This course, offered annually, is often oversubscribed. Priority will be given to graduate students earning their degrees in the Department of Human Genetics.

2. HGEN 677 Statistical Concepts in Genetic and Genomic Analysis (3 credits)

This course, offered in alternative years, is often oversubscribed. Priority will be given to graduate students earning their degrees in the Department of Human Genetics.

3. HGEN 679 Cancer Genetics: Precision Oncology (3 credits)

This course is offered annually. Priority will be given to graduate students earning their degrees in the Department of Human Genetics.

4. HGEN 690 Inherited Cancer Syndromes (3 credits)

This course is being considered for revision and is not currently offered.

5. HGEN 693 Using Bioinformatic Resources (3 credits)

This course, offered in alternative years, is often oversubscribed. Priority will be given to graduate students earning their degrees in the Department of Human Genetics.

Further comments were addressed in direct communication.

On behalf of Eric Shoubridge, Chair, Department of Human: Patricia N. Tonin, PhD Professor Chair, Science Curriculum Committee Department of Human Genetics

Signature:

Date:

January 18, 2023

Re: New Interdisciplinary PhD Program in Cancer Sciences - request for consultation

i You replied on Mon 2022-12-12 12:57 PM



Josee Bonneau, Prof. To: Rosanne Marie Seguin, Dr

Hello Dr. Seguin,

Thank you for reaching out to the Ingram School of Nursing.

I apologize for the delay as I was seeking input from our graduate Program Directors.

We would be more than happy to include your students in both NUR2 515 and NUR2 783. We would not require any resources given the small number of students this would represent.

Regarding your course outlines, we feel they are well developed and complete. We do not have any suggestions to make.

Please do not hesitate to reach out should you have any additional questions.

Very best, Josee

Josée Bonneau

Associate Director – Education, Assistant Professor / Directrice Adjointe – Éducation, Professeure adjointe Ingram School of Nursing / École des sciences infirmières Ingram

McGill University / Université McGill 680 Sherbrooke Ouest, 19e étage, bureau 1931 Montréal (Québec) H3A 2M7 T 514-398-4149 www.mcgill.ca/nursing Facebook | Twitter | Instagram

Working hours: *Monday, Tuesday, Wednesday, Thursday & Friday (9:00am-5:00pm)* Heures de travail: *Lundi, mardi, mercredi, jeudi et vendredi (9h à 17h)*

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Mon 2022-12-12 12:52 PM

DATE: Monday November 30, 2022

TO: Department of Pathology Department Chair: (Interim) Dr. Marie-Christine Guiot Duff Medical Building (B Wing) 3775 University Street, Room B4 Montréal, Québec H3A 2B4 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to course offered by your division:

PATH 652 Molecular Biology of Disease (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Pathology if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

NO OBJECTIONS

COMMENTS:

Cancer is treated by multidisciplinary teams in the clinical world, based on data from multiple sources clinical, imaging, pathology, genomics, genetics....

An interdisciplinary program in Cancer Sciences is a great initiative.

	$b \leq t$	
Signature:	- frint	-
Date:	December 11 th 2022	

DATE: Monday December 1, 2022

TO: Department of Pathology Graduate Program Director: Dr. Edith Zorychta Duff Medical Building (B Wing) 3775 University Street, Room B4 Montréal, Québec H3A 2B4 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to course offered by your division:

PATH 652 Molecular Biology of Disease (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Pathology if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

none

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS: COURSES: The 1-credit courses are a good idea – they focus on a specific topic and cover it in a few days, so they are easy to fit into a research schedule. The topics are well chosen and each course is directed to a subset of students who require information and sometimes practical training in a certain area. The course on mouse models is particularly impressive and will be a great help for students who are beginning research projects using these animals.

PROGRAM: The proposed Interdisciplinary PhD Program in Cancer Sciences will be a welcome addition to our many excellent graduate training programs that currently are centered within specific departments. **FUNDING:** Adding a few more students to our PATH 652 course would not increase the cost. However, adding additional graduate students within the Faculty will require more resources to support them – the current FMHS minimum for a Canadian PhD student is \$25K; it is \$40K for an international student, and this is expected to rise significantly each year. A campaign to raise money for scholarships/bursaries for the program would be very beneficial.

Edith Znychto

Signature:

December 1, 2022

Date:

DATE: Monday November 30, 2022

To: Department of Pharmacology and Therapeutics Department Chair: Dr. Koren Mann McIntyre Medical Building 3655 Promenade Sir-William-Osler Room 1325 Montréal, Québec H3A 1G1 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to course offered by your division:

PHAR 508 Drug Discovery and Development (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Pharmacology and Therapeutics if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Bioinformatic Tools in Cancer Research (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

PHAR 508: I believe Dr. Hebert has also been consulted and I agree with him that a small number of students can probably be accommodated. However, if the number is increased, a discussion will need to be initiated regarding contribution towards TA stipends. In addition, there are several pre-requisites for this course. If the student has not taken these at McGill, permission of the instructor will need to be acquired. Finally, this is an undergraduate course, and this should be recognized by the PhD students enrolling.

General Comments: I applaud the idea of developing a cancer program that encompasses across all pillars of investigation. This is and will continue to grow in importance in training of the future cancer researchers. However, it is unclear where the intersection of the two groups (basic vs clinical) will occur. As I see the content, this will only occur through the required seminar course and the bi-yearly workshops. As written, there is no single foundational course. Thus, I worry that a "cohort" identity will not be established. There may be another problem for those students recruited from McGill; they may have already taken ONCO 610

or EXMD 635. A plan should be developed for this case, especially if using the ONCO certificate as a recruitment population. Finally, I think that those students not engaged in basic research will require both a qualitative and quantitative methods course in order to successfully complete their research. This is not acknowledged, nor does it fit within the 4 complimentary course credits.

Kun Man

Signature:

Date:

December 5, 2022

DATE: Monday November 30, 2022

To: Department of Pharmacology and Therapeutics Department Chair: Dr. Koren Mann McIntyre Medical Building 3655 Promenade Sir-William-Osler Room 1325 Montréal, Québec H3A 1G1 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to course offered by your division:

PHAR 508 Drug Discovery and Development (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Pharmacology and Therapeutics if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Bioinformatic Tools in Cancer Research (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

These courses seem well-designed in general. I wonder why you cannot accept students that fast track to PhD programs without obtaining their MSc degrees?

NO OBJECTIONS X SOME OBJECTIONS

COMMENTS: I know you've stated 1-3 students could be added to our PHAR 508 course. That seems reasonable. But if you could contribute to ½ TA position if this number increases that would make it entirely possible.

Tenglin

Signature:

Date: December 3, 2022

DATE: Thursday November 30, 2022

To: Department of Physiology Department Chair: John White 3655 Promenade Sir William Osler Montréal, Québec H3G 1Y6 Canada

FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to course offered by your division:

PHGY 513 Translational Immunology (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from Department of Physiology if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before December 12, 2022, on this form, whether your department has any objections to, or comments regarding, the proposal.

x NO OBJECTIONS

SOME OBJECTIONS

COMMENTS: Excellent program. I like the 1-credit workshop-style courses.

Signature:

wet.

Signature

Date:

Nov. 30, 2022

DATE: Tuesday, January 24, 2023

To: School of Physical and Occupational Therapy Dr. Liliane Asseraf-Pasin, Director of Physical Therapy Program 3654 Prom Sir-William Osler Montreal, Quebec, h3G 1Y5 Faculty of Medicine and Health Sciences FROM: The Working Committee for the Interdisciplinary Ph.D. Program in Cancer Sciences

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

We are requesting students in the proposed program to have access to course offered by your division:

POTH 637 Cancer Rehabilitation (3 credits)

We also would like your feedback regarding our proposed 1-credit courses which will be open to students from the School of Physical and Occupational Therapy if they so wish to attend.

CANC 601 Patient Engagement in Cancer Clinical Studies and Research CANC 602 Epidemiology of Cancer (1 credit) CANC 603 Mouse Models in Cancer (1 credit) CANC 604 Cancer Genomics Data Analyses (1 credit) CANC 605 Psychosocial Issues of Cancer Patients and Caregivers (1 credit) CANC 606 Tumor Microenvironment (1 credit) CANC 607 Cancer Immunotherapies (1 credit) CANC 608 Oncometabolism (1 credit)

Would you be good enough to review this proposal and let me know before January 27, 2023, on this form, whether your department has any objections to, or comments regarding, the proposal.

Χ

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

Signature:

Liliana Assaraf Pasin

Date:

January 24, 2023