UNIVERSITY OF CALGARY | Cumming School of Medicine

GRADUATE SCIENCE EDUCATION STUDENT HANDBOOK

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Graduate Science Education Office

The Graduate Science Education (GSE) office is a place where current and future students, faculty and staff can come to receive information, support, and direction related to policies and procedures both from the GSE Graduate Education Committee and the Faculty of Graduate Studies (FGS). Roles in our office include:

Associate Dean, Graduate Education
Graduate Program Director (GPD)
Graduate Program Administrator (GPA)
Administrative Coordinator
Manager
Scholarship and Stipend Officer
Leaders in Medicine Administrator
Professional Skills Program Coordinator
Courses Administrator

We encourage you to connect with your Graduate Program Administrator early in your program. They can always direct you to the appropriate contact if you are not sure who to talk to. We are here to support you, so please feel welcome to contact us at any time.

Please visit our website for the most up to date GSE Contact Information. You can find a map to our office at the end of this handbook.

Vision

To provide consistent and timely support to all students and faculty supervising students at the CSM. To be a resource for policy and procedure to ensure students are successful in their unique graduate programs and that they have a great experience while at the University of Calgary (UofC).

Programs

Graduate Science Education supports ten Graduate Programs that are broken up into eight thesis based programs and two course based programs.. Each program adheres to general rules and regulations, but also has program specific requirements and awards. For more information about the program specific requirements see each program's section at the end of this document, or click on the link below to view the regulations in the University of Calgary graduate calendar.

MDBC (BMB) – Biochemistry and Molecular Biology
MDBT – Biomedical Technology
MDCH – Community Health Sciences
MDCV – Cardiovascular and Respiratory Sciences
MDGI – Gastrointestinal Sciences
MDIM - Immunology
MDMI – Microbiology and Infectious Diseases
MDNS – Neuroscience
MDPT – Pathologists' Assistant

MDSC – Medical Science

Graduate Science Education also supports graduate students in the following areas:

Professional Development
Scholarships and Financial Support
Leaders in Medicine

Program Time Limits

The maximum time to complete a Master of Science (MSc) degree is four (4) years and a Doctor of Philosophy (PhD) degree is six (6) years. Course-based programs allow for a maximum time of six (6) years. Students typically complete their degrees well ahead of these deadlines.

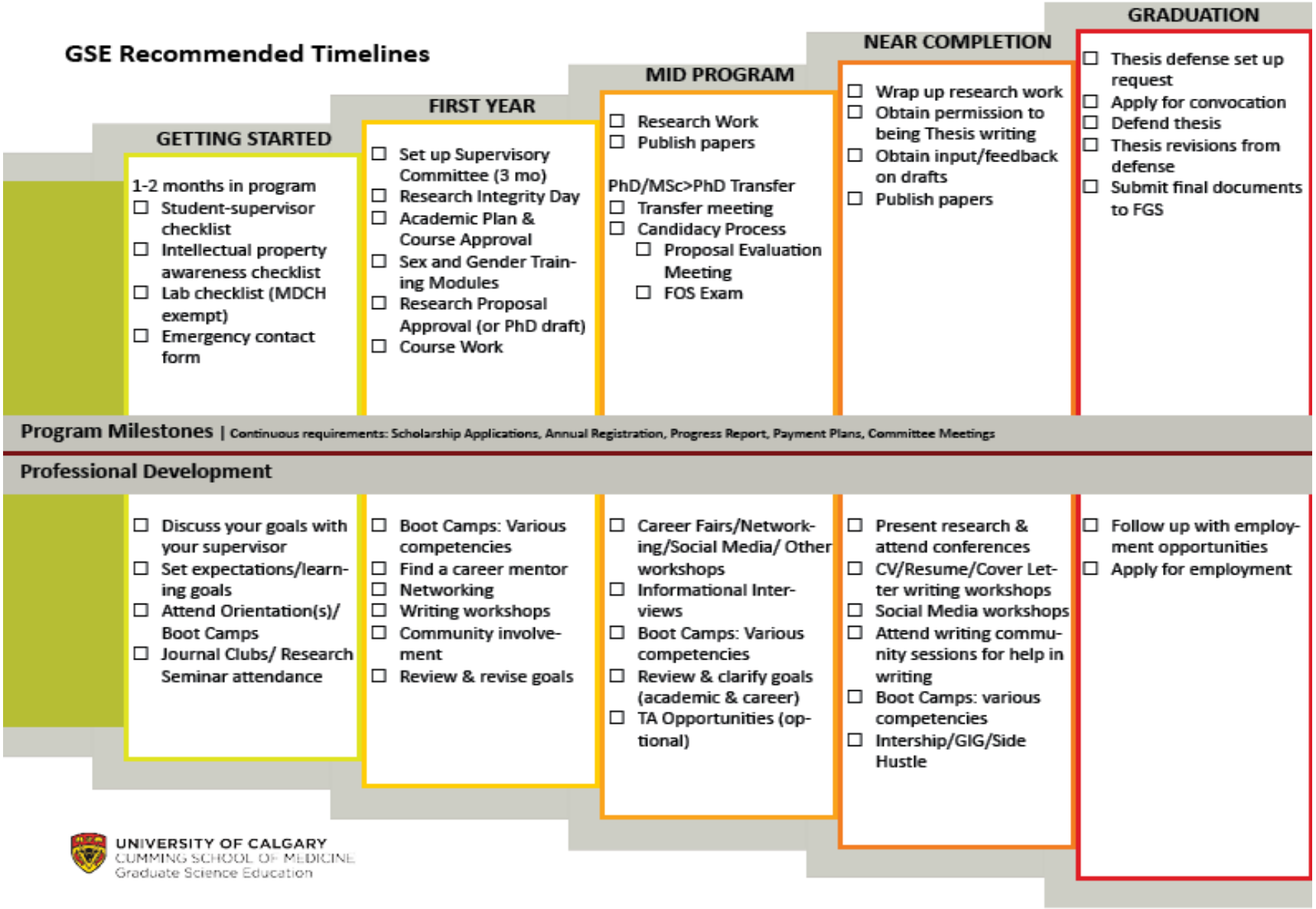
Should it be required, request for a program extension must be made using the "Program Extension Form". Please contact your graduate program administrator to request this form. Request will be reviewed by the GPD and then forwarded to the Associate Dean FGS, for approval.

Required information for extension requests:

- Reason for extension
- Detailed timeline for use of extra time (example: planned committee meetings, thesis writing deadlines, etc)
- Additional documents as requested

Figures 1 and 2 are examples of timelines for MSc and PhD students who have maintained satisfactory progress through their programs.

Sample Program Timeline



Program Milestones

Milestones are the steps and activities required to complete degree requirements. For thesis based students these include: continued registration, course work, committee meetings, journal clubs, work in progress meetings, research integrity day attendance, completion of the sex and gender modules, annual progress report, candidacy exam (for PhD students) and thesis defense. You can find an outline of the program requirements and milestones on the GSE Website.

Course Based Students

MDBT (MBT) and MPATH students do not have the same program milestones that thesis based students do. The requirements of course based students are: continued registration, course work, research integrity day attendance, and completion of the sex and gender modules.

Registration (All Students)

Students are required to initialize their registration at the beginning of their program and each academic year in their anniversary term (i.e. the term in which they first started your program). This is required for the duration of the program even when the student is not registered in courses. Completing this annual registration confirms that a student is continuing their studies and ensures that fees are properly applied to their account. Failure to initiate the annual registration by the posted deadlines will result in withdrawal from the program.

Instructions on how to complete Annual Registration

All GSE students have a full-time registration status unless a student is in a course-based program with permission to attend part-time.

Annual Progress Report (Thesis Based Students)

The Annual Progress Report (APR) is mandatory for all thesis based students. It is completed online each May and includes sequential contributions from the student, supervisor, co-supervisor (if applicable) and GPD. It must be completed each year no later than May 31. The intent of the APR is to ensure the student is maintaining satisfactory progress in their program.

An APR submitted at the end of the third year of an MSc program or the fifth year of a PhD program must include a detailed timeline, approved by the Supervisory Committee, outlining any additional work required for completion of the degree, and estimates of when the work will be completed, when the student will begin writing the thesis, and a tentative range of dates for the defense.

A “withhold” may be placed on the student’s record if they fail to submit the APR on time. The “withhold” is removed after a completed report is submitted. See the Withhold Section for details.

Course Requirements (All Students)

Different graduate programs have different course requirements. You can find more information on the course requirements page on the GSE Website. Please also refer to the University of Calgary graduate calendar for the most current information about your course requirements. If there is a discrepancy between the course requirements page and the calendar please follow the calendar regulations.

Program Specific Laboratory Certification (All Students)

Students working with chemicals, biohazards, radioactivity, and/or animals must complete the necessary training requirements and certification prior to beginning their research project and/or working in the laboratory. All students are required to take the WHIMIS and Radiation Safety courses (offered through Safety Services https://www.ucalgary.ca/safety/courses). Where appropriate, students should also arrange to take the relevant portions of MDSC 603: Use of Laboratory Animals in Biomedical Research.

Students working with human primary material or subjects also need approval from the Conjoined Research Ethics Board (CHREB) prior to initiating the research. The Supervisor may need to request the addition of the student to their ethics approval.

Students can consult with their supervisor and/or lab manager for guidance on the safety modules required for their lab and research (or with their GPD in the case of course based students). More information about these requirements can be found on the GSE Milestones and Program Requirements page under Environment, Health and Safety section and the Ethics, Animal Care and Biohazardous Certification section.

Supervisor Requirement (Thesis Based Students)

All students must have a permanent supervisor for the duration of their program. The academic regulations around supervision can be found in the University of Calgary graduate calendar. You can find helpful information about supervision expectations on the Faculty of Graduate Studies page Working with your supervisor – A best practices guide.

Administrative Responsibilities of the Supervisor:

Supervisors are responsible for setting up the student's Supervisory Committee, all aspects of the Candidacy proposal approval meeting and exam and the Thesis Defense. This is done in consultation with the student under the Graduate Student Supervision Policy. A list of expectations is listed under point 5 of this policy.

Financial Responsibilities of the Supervisor

Supervisors in lab-based studies, in GSE are required to guarantee a stipend of $21,000/year for MSc students and $23,000/year for PhD students. This stipend may be adjusted as a student secures scholarship funding. Please see the GSE Funding Policy for further information.

Guidelines for Resolving Student-Supervisor Conflict

It is understood that the supervisor-student relationship by its very nature is unique and can sometimes lead to different types of difficulties. The Graduate Science Education office is here to help you if you're having difficulties. At any time, students should feel free to approach their GPD, Head of their Department or Associate Dean GSE in confidence to mediate or for advice. You are also welcome to contact your program GPA or the FGS Graduate Academic Specialists as well.

Changing Supervisors

In rare circumstances a change of supervisor may be appropriate. Please consult with your GPA or GPD if you have questions about this process and refer to the information available on the FGS Change of

Supervisor page. All change of supervision requests must be approved by your graduate program and by the Faculty of Graduate Studies.

Supervisory Committee (Thesis Based Students)

Supervisory committees are required for all thesis-based students. These committees consist of Supervisor and Co-supervisor (if applicable), plus two additional members. Committee members are typically other faculty members who have expertise in advising students through their thesis work, however in some cases they can also member of the research community outside of the University of Calgary. Post-Doctoral Fellows (PDF) can be committee members in addition to the 2 or 3 faculty members. PDF's cannot participate in voting on candidacy processes or thesis defense if their supervisor is also part of the candidate's supervisory committee. Consult with the Graduate Program Administrator for specific details.

Supervisory Committee members are required to participate in Supervisory Committee meetings and formal evaluations and examinations of the student.

Functions of Supervisory Committee

The Supervisory Committee provides direction and expertise to the student to direct their research. This includes regular participation through feedback on the progress of the research in Supervisory Committee meetings.

Supervisory Committee members become examiners in the Candidacy Process and during the final Thesis Defense Examinations.

Research Integrity (RI) Day (All Students)

Research Integrity Day is a mandatory requirement in the first year of a student's program. RI Day is focused on Academic Integrity and Responsible conduct of research. Please visit the RI Day webpage for more information and to register in a session.

Sex and Gender Modules (All Students)

The inclusion of Sex and Gender in Research programs is becoming more prominent. All graduate students in the Cumming School of Medicine are required to complete one of the CIHR sex and gender online training modules found at discoversexandgender.ca within the first year of their program. This should be the module that is most applicable to a student's research or program. Upon successful completion of the module, students can send their certificate of completion to their graduate program administrator. Completion of training modules related to sex and gender which will help researchers account for and appropriately assess the integration of sex and gender across multiple areas of health research.

Work in Progress and Journal Club Requirements (Thesis Based Students*)

Students are required to participate in both journal club and work-in-progress seminar programs administered by the Institute or Research Group to which the student and his/her supervisor belong, and the student will present at least one (1) journal club seminar and one (1) work-in-progress presentation per year. Please consult your supervisor if you have questions about which journal club or seminar program to join.

**The MDCH and MDNS programs do not require work-in-progress or journal club presentations.*

Research Proposal Requirement (Thesis Based Students)

Students are required to have an evaluated and approved research proposal. PhD students are required to submit a draft proposal to their program within 12 months of the start of the program, but their final proposals are formally evaluated and approved through the Admission to Candidacy process (See Admission to Candidacy Process for more information).

MSc student research proposals are informally evaluated and approved through a committee meeting and the submission of the Thesis Proposal Approval Form found on the GSE website. MSc Proposals should be approved and submitted to the Graduate Program Administrator within 12 months of the start of the program.

The supervisor and committee will work with the student to determine the direction regarding content of the proposal.

Program Transfers (Thesis Based Students)

Transferring from a Master's to Doctoral degree may be considered for exceptional students. Please contact your GPA for details on your specific program's transfer process. In general, transfers must be requested through the GPD who will chair a supervisory committee meeting in which the program change is discussed. Transfers must be completed within the first twenty-four (24) months of a student's program (unless a student is in the MDCH program, in which case please see below).

PhD Transfer Checklist

Exception: The MDCH program has their own transfer policy which must be completed within 12 months if a student wishes to transfer. Please visit the GSE Milestones and Program Requirements page and refer to the Process to Transfer from MSc to PhD section for MDCH.

Students are also able to transfer from a PhD to MSc program. However, this needs to be completed prior to the Candidacy Process being completed.

All transfers require a Change of Program form to be submitted to FGS.

Doctoral Candidacy Process (Thesis Based Students)

Admission into candidacy in the CSM GSE Graduate Programs requires that students have a solid foundation of knowledge and comprehension of topics and concepts in their field of research. Please refer to the relevant candidacy process for your program:

CSM Candidacy Examination Process - All thesis based programs except for MDCH
MDCH Candidacy Process – MDCH students only

Please refer to the below links for a visual reference of your candidacy requirements and timelines They are intended to be used as a guide:

Candidacy Process Timeline Chart – All thesis based programs except for MDCH
MDCH Candidacy Process Timeline Chart – MDCH Only

Further information, timelines and set up forms for the thesis proposal evaluation and field of study components can be found on the GSE Milestones and Program Requirements page. Please contact your GPA if you have any questions.

Defenses: Doctoral & Masters (Thesis Based Students Only)

Permission to Write

Prior to scheduling the defense, students must meet with their Supervisory Committee and discuss the data to be included in the thesis. The Committee may provide approval, or conditional approval where the completion of a small number of clearly specified experiments is required, for the student to write their thesis and schedule the thesis defense examination. The student must receive this approval, to be recorded in the minutes of their meeting, and submitted to the Graduate Program Administrator, before the Notice of Doctoral or Master's Thesis Examination is approved. Note that, as per University regulations, a student who has successfully completed all Faculty of Graduate Studies and program requirements has the right to submit and defend a thesis even if doing so may be contrary to the advice of the supervisor and supervisory committee.

Once the research is complete the student needs to request and complete the Permission to Write Form from the Supervisory Committee. This form needs to be submitted to the Graduate Program Administrator. "Permission to write" indicates that the student has completed the body of work that the committee believes is sufficient for a thesis. It is not necessarily an endorsement of all aspects of the thesis research. The decision to pass or fail a thesis is made by each examiner, including the supervisory committee members, at the Defense Examination.

Thesis Preparation

For instructions on preparing your thesis and submitting it, refer to the Thesis Section on the FGS website. Thesis templates can also be found there.

CHS Guidelines for Manuscript Based Thesis provide distinct guidelines for MDCH students who are considering completing a manuscript based thesis. These are in addition to the FGS requirements.

MDGI-MDIM-MDMI Guidelines for Manuscript Based Thesis provide distinct guidelines for Tri Program students who are considering completing a manuscript based thesis. These are in addition to the FGS requirements.

Requirements for Thesis Defense

The oral defense of a thesis is an FGS requirement. Review the Thesis Defense section of the FGS website for full details on the policy and rules for examinations. There is also a link to the University of Calgary Graduate Calendar policies on Thesis Examinations on that page as well.

To set up the thesis defense the following need to be completed:

- Research Integrity Day attended
- Sex and Gender Modules completed
- Complete Courses required for degree, meeting the minimum 3.0 GPA requirement
- PhD – Successful Admission to Candidacy
- Supervisor/Committee indication that thesis is ready to defend.

- Submission of Request to Set Up Thesis Defense Form (minimum of six (6) weeks (MSc) or eight (8) weeks (PhD) prior to proposed defense date). This form **must** be submitted by the supervisor. Form submissions from the student will not be accepted.

If any of the above are not complete the student will not be approved to move forward to defense.

- MSc Deadline to submit the MSc Request to Set Up Thesis Defense Form is six (6) weeks prior to the oral defense date and is a firm deadline. This form **must** be submitted by the supervisor. Form submissions from the student will not be accepted.
- PhD Deadline to submit the PhD Request to Set Up Thesis Defense Form is eight (8) weeks prior to the oral defense date and is a firm deadline. This form **must** be submitted by the supervisor. Form submissions from the student will not be accepted.

Thesis Examination Committees

Supervisor Responsibility

The Supervisor, with the assistance of the Graduate Program Administrator, is responsible for ensuring that all steps necessary for arranging the thesis oral examination are completed.

Student Responsibility

The Student must ensure that the MSc or PhD thesis is in the hands of all examiners, both local and external, at least three (3) weeks prior to the proposed date of the oral examination. The Graduate Program Administrator will forward the "Examiners' Report on Thesis" form and further instructions to all examiners.

Thesis exams start on the date when the thesis is due to be handed out to the examiners. After this date, the exam cannot be changed unless there are extenuating circumstances. The committee is reminded that examining committee members should not discuss the exam prior to the oral defense.

The Neutral Chair

The thesis oral examination is chaired by the GPD, or delegate, assigned by the Graduate Program Administrator. The chair reports to the results to the student and Dean by completing the Report of Thesis Oral Defense given to the Graduate Program Administrator once the exam is complete.

Composition of Master's Thesis Examination Committee

The Master's Thesis Examination Committee shall consist of the student's Supervisory Committee and at least one (1) other examiner. This examiner should be external to the student's program, unless the program specifies otherwise. The composition of the committee must be approved by the Dean of FGS, upon the recommendation of the GPD.

Composition of Doctoral Thesis Examination Committee

The Doctoral Thesis Examination Committee shall consist of the student's Supervisory Committee and at least two (2) other examiners, one (1) of whom shall be external to the student's program but internal to the University of Calgary (This examiner should be external to the student's program, unless your program specifies otherwise). The other additional committee member, the External Examiner, shall be external to the University. The choice of the additional examiners is made in consultation between the student, the supervisor and the supervisory committee. The composition of the thesis examination committee must be approved by the Dean (FGS) upon the recommendation of the GPD. FGS may

appoint a Dean's representative to observe the examination to ensure that the rules of the exam are followed and that the student is treated fairly.

Choosing an Internal and External Examiner

As per the Graduate Calendar, the Internal and External Examiners must meet certain criteria, as follows:

a. have a well-established research reputation
b. have expertise in the area of the student's research
c. have experience in evaluating theses at the graduate level
d. have experience in supervising to completion at the graduate level
e. not be a close personal friend of the supervisor
f. not have collaborated with the supervisor in past five years
g. not be closely related to, or have worked with the candidate

In addition, the external examiner normally

a. must not have been a supervisor in the candidate's graduate program in the past three years
b. must not have served as external examiner in the candidate's program in the past two years.

Request for Approval of External Examiners

The External Examiner must be recommended to the Dean (FGS) by the GPD at least eight (8) weeks before the proposed date of the examination. The recommendation is made on a Request for Approval of External Examiner form generated by the Graduate Program Administrator, and must be accompanied by a CV. An approved External Examiner is invited in writing by the Dean, FGS, to participate in the examination

Examiners in Absentia

Only two (2) examiners will be authorized to attend from a distance. This can be done either through teleconference or videoconference. It is the responsibility of the student and supervisor to arrange satisfactory connections and backup arrangements when using videoconferencing. It is highly recommended that the connection be tested prior to the examination date.

If the examination is being held in the Graduate Science Education Boardroom (HSC G344) telephone numbers need to be provided to the Graduate Program Administrator and neutral chair to contact the distant examiners.

Notice of Doctoral/Masters Thesis Oral Examination

The supervisor should provide the Graduate Program Administrator a completed "Request to Set-Up Thesis Defense form" a minimum if six (6) weeks prior to the oral defense date for MSc and eight (8) weeks for PhD.

MSc Request to Set Up Thesis Defense Form
PhD Request to Set Up Thesis Defense Form

These set up forms will be used to create the Notice of Exam.

The Notice of Doctoral or Master's Thesis Oral Examination (NOE) is the mechanism for approval of the Examination Committee. The NOE, indicating the title of the thesis, the time and place of examination, and the names of the recommended examiners, endorsed by the GPD must be received in the FGS office

at least four (4) weeks prior to the time of examination. The committee will not be approved earlier than three (3) months before the planned examination date.

The NOE includes a confirmation that the student has cleared all departmental requirements.

Posting the NOE

The Notice will be publicly posted at least two (2) weeks before the date of examination on the GSE Exam Notices page. Copies of the NOE will be sent by the Graduate Program Administrator to the student and the members of the Examination Committee along with further instructions three (3) weeks prior to the oral defense date.

Attendance at Thesis Oral Examinations

Thesis examinations are open to the public but only examiners may question the student. After the examination there will be private and confidential deliberations. Everyone will leave the room except the Neutral Chair, the examining committee and, if present, the Department/Program Head and the Dean of FGS or the Dean's Representative.

Convocation/Graduation

Students should apply for convocation prior to their Oral Defense. Typically, the application is due at the beginning of the term in which the Convocation Ceremony will occur and can be submitted through the MyUofC Student Centre. Review the criteria to be cleared for convocation to make sure deadlines are not missed.

Part of the process to be cleared for convocation is the completion of the Notice of Completion form for both thesis and course based students.

For course based students this will be completed by the Graduate Program Administrator after final grades have been submitted for the last course taken. Please ensure that the Graduate Program Administrator is notified prior to the end of the term in which the final course is completed to ensure that deadlines are not missed.

Program Leaves

Vacation

Students are entitled to two weeks of annual vacation, not including statutory holidays or days the University is scheduled to be closed. The student will inform the supervisor when they are planning to take time off. It is strongly recommended that students discuss with the supervisor the needs as it relates to lab work and studying for courses, preparing for candidacy and writing the thesis to ensure that both the student and supervisor's expectations are met

Students must understand that stipends are paid from public funds, whether they are operating grants or studentship awards, and that a certain minimum amount of time spent on research in the lab is expected. At the same time, supervisors understand that students are trainees - not employees - and need time to study for courses and exams, attend seminars, retreats and conferences, and to read, think and talk about research.

Absence From Program

The Leave of Absence (LOA) Policy exists to assist students who are unable to continue their programs for a period of time. Reasons for requiring a leave normally include bereavement, care giving, medical, military service and parental leave. Students are advised to discuss the need for a leave with their supervisors, Graduate Program Administrator, GPD and/or Supervisory Committee members.

In the rare event that a student and supervisor have difficulty agreeing to the leave arrangements, students should consult first with the GPD and then, if necessary, with FGS.

There are several considerations that a student should look at when taking a leave, such as how it make affect scholarships, study permits, etc. Please visit the Leave of Absence page for further details.

Withdrawals

Voluntary Withdrawal

Students may withdraw from their program at any time for any reason by completing the withdrawal form found on the Faculty of Graduate Studies page on Withdrawals. It is the student's responsibility to ensure that all fees are paid up to date at the time of withdrawal.

Students who have voluntarily withdrawn may request re-admission at any time after the withdrawal.

Involuntary Withdrawal

Students may be required to withdraw from their program for the following reasons:

- poor academic standing
- lack of satisfactory progress in either course work or research
- failure to register

In all cases, your **transcript** will indicate an *involuntary withdrawal*.

Readmission

Readmission after being withdrawn may be available. Students who have been withdrawn from program are required to apply for readmission to the graduate program. Please refer to the academic calendar for more information.

Professional Development

The GSE Office supports and coordinates a Professional Development Program (PDP) for students in the CSM. The purpose of the PDP is to establish an organized and effective framework of professional development for our students that is recognized by the Faculty. This involves developing competencies within our graduate programs that are important to becoming a successful researcher and to support excellence in health research. It provides strategies for trainees to achieve academic and career success.

Competencies

The CSM has defined a set of competencies or skills that are critical for a student to be a successful researcher. These competencies are collaborate, generate scientific knowledge, teach/mentor, communicate, and lead/manage.

The competencies can be obtained by a variety of means including daily research, course work, research and journal club presentations, conference presentations and workshops offered in the PDP.

The degree to which these competencies have been acquired can be at three levels:

1. Awareness
2. Early Skill Development
3. Demonstrating Excellence

Students can also visit the FGS My GradSkills page for more information on professional development.

Scholarships and Awards

Thesis Based students are expected to apply for scholarships and funding that they may be eligible for. Please see the following links for details:

GSE Scholarships and Funding Page
FGS Awards Page
FGS Graduate Awards Database

You can also contact awardsgse@ucalgary.ca for more information.

Graduate Assistantships

A graduate assistantship is an opportunity for graduate students to perform work related to areas of their academic discipline and receive funding attached to it. There are three categories available: teaching, non-teaching, and research. The Cumming School of Medicine has limited assistantships available. Your GPA will advertise any opportunities offered by your program. Students can only take Graduate Assistant Teaching (GAT) positions with the approval of their supervisors.

Please refer to the Graduate Students' Association webpage for a link to the most recent collective agreement.

Appendix A: Program Specific Links and Details

GSE – Graduate Science Education

Contact info: https://cumming.ucalgary.ca/gse/contact
General Website: https://cumming.ucalgary.ca/gse/home
Milestones and Program Requirements: https://cumming.ucalgary.ca/education/gse/current-students/milestone-program-requirements
Scholarships and Financial Support: https://cumming.ucalgary.ca/gse/current-students/scholarships
Professional Development: https://cumming.ucalgary.ca/gse/current-students/proskills
Council of Foothills DGA (CFD): https://cumming.ucalgary.ca/gse/current-students/council-foothills-dgas
Courses: https://cumming.ucalgary.ca/gse/current-students/courses
Exam Notices: https://cumming.ucalgary.ca/gse/current-students/exam-notices

MDBC – Biochemistry & Molecular Biology:

Contact info: bmbgrad@ucalgary.ca
Website: MDBC Program Website
Academic Regulations: MDBC Graduate Calendar Entry
Specializations:
Bioinformatics
Course Requirements: Please refer to the MDBC Graduate Calendar Entry
Program Specific Awards: MDBC Program Awards
Student Group: BMB DGA (Biochemistry and Molecular Biology Departmental Graduate Student Association) – Details on the MDBC Program Website

MDBT – Masters of Biomedical Technology

Contact info: mbtgrad@ucalgary.ca
Website: MDBT Program Website
Academic Regulations: MDBT Graduate Calendar Entry
Course Requirements: Please refer to the MDBT Graduate Calendar Entry
Program Specific Awards: MDBT Program Awards
Student Group: MBT GSA (Masters of Biomedical Technology Graduate Student Association) – Details on the MDBT Program Website

MDCH – Community Health Sciences

Contact info: chsgrad@ucalgary.ca
Website: MDCH Program Website
Academic Regulations: MDCH Graduate Calendar Entry
Specializations:

Biostatistics
Community Rehabilitation & Disability Studies
Epidemiology
Healthcare Epidemiology
Clinical Epidemiology
Health Economics
Health Services Research
Medical Education
Population/Public Health
Course Requirements: Please refer to the MDCH Graduate Calendar Entry or the specialization links above
Program Specific Awards: MDCH Program Awards
Student Group: CHSSE (Community Health Sciences Student Executive: chsse@ucalgary.ca – Details on the MDCH Program Website

MDCV – Cardiovascular and Respiratory Sciences

Contact info: cvrgrad@ucalgary.ca
Website: MDCV Program Website
Academic Regulations: MDCV Graduate Calendar Entry
Specializations: N/A
Course Requirements: Please refer to the MDCV Graduate Calendar Entry
Program Specific Awards: MDCV Program Awards
Student Group: MDCV DGA (Cardiovascular and Respiratory Sciences Departmental Graduate Student Association

MDGI – Gastrointestinal Sciences

Contact info: gigrad@ucalgary.ca
Website: MDGI Program Website
Academic Regulations: MDGI Graduate Calendar Entry
Specializations:
Physiology
Biochemistry
Molecular Biology
Pharmacology
Immunology
Immunopharmacology
Microbiology
Nutrition
Parasitology
Pathology
Epidemiology
Host-Pathogen Interactions
Course Requirements: Please refer to the MDGI Graduate Calendar Entry

Program Specific Awards: MDGI Program Awards
Student Group: GIGSA (Gastrointestinal Sciences Graduate Student Association) – Details on the MDGI Program Website

MDIM – Immunology

Contact info: imgrad@ucalgary.ca
Website: MDIM Program Website
Academic Regulations: MDIM Graduate Calendar Entry
Specializations:
Host-Pathogen Interactions
Course Requirements: Please refer to the MDIM Graduate Calendar Entry
Program Specific Awards: MDIM Program Awards
Student Group: IGA (Immunology Graduate Association) – Details on the MDIM Program Website

MDMI – Microbiology and Infectious Diseases

Contact info: midgrad@ucalgary.ca
Website: MDMI Program Website
Academic Regulations: MDMI Graduate Calendar Entry
Specializations: N/A
Course Requirements: Please refer to the MDMI Graduate Calendar Entry
Program Specific Awards: MDMI Program Awards
Student Group: Microbiology and Infectious Diseases Graduate Association – Details on the MDMI Program Website

MDSC – Medical Science

Contact info: medgrad@ucalgary.ca
Website: MDSC Program Website
Academic Regulations: MDSC Graduate Calendar Entry
Specializations: Please visit the MDSC Specializations page for details:
Cancer Biology
Critical Care Medicine
Mountain Medicine and High Altitude Physiology
Joint Injury and Arthritis
Biomechanics *(currently on hold)*
Biomedical Ethics *(currently on hold)*
Molecular & Medical Genetics
Pathologists' Assistant *(currently on hold)*
Physiology *(currently on hold)*
Surgery (In co-operation with the Department of Surgery)
Medical Imaging (Interdisciplinary)
Course Requirements: Please refer to the MDSC Graduate Calendar Entry
Program Specific Awards: MDSC Program Awards

Student Group: Medical Science Student Association – mdscsa@ucalgary.ca - Details on the MDSC Program Website

MDNS – Neuroscience

Contact info: neurosci@ucalgary.ca
Website: MDNS Program Website
Academic Regulations: MDNS Graduate Calendar Entry
Specializations: N/A
Course Requirements: Please refer to the MDNS Graduate Calendar Entry
Program Specific Awards: MDNS Program Awards
Student Group: HBITO – hbito@ucalgary.ca

MDPA – Pathologists' Assistant

Contact info: mpath@ucalgary.ca
Website: MDPA Program Website
Academic Regulations: MDPA Graduate Calendar Entry
Course Requirements: Please refer to the MDPA Graduate Calendar Entry
Program Specific Awards: MDPA Program Awards
Student Group: Masters of Pathologists' Assistant Departmental Graduate Student Association

Appendix B: Leaders in Medicine

LIM Program Description

The Leaders in Medicine (LiM) program is a joint physician-scientist training program at the University of Calgary's Cumming School of Medicine. The program is designed to enable highly motivated students to complete a graduate and medical degree through the University of Calgary.

Our students are registered in MD/PhD and MD/MSc programs, as well as MD/MBA and MD/MA degrees. The most common graduate programs selected by Leaders in Medicine participants are offered through the Cumming School of Medicine, although students from many other faculties including Business and Engineering are welcome to participate.

LIM Program Eligibility

University of Calgary students who are enrolled in a graduate degree and have been accepted in the MD program, or vice versa, are eligible to apply for the LIM joint degree program. Although there is some flexibility, joint degree students generally defer their MD matriculation until completion of graduate studies.

Application into a graduate program and Undergraduate Medical Education (UME) must be done separately, based on each programs eligibility requirements. Once accepted into both programs a student then contacts the LiM program office mdgrad@ucalgary.ca and requests a LIM joint degree application. UME sends offers of admission in April and May, and the joint degree enrolment generally starts in the summer semester.

The program is flexible so there are some anomalies regarding start and end times for each part of the joint degree. Students work with the program office and program director, along with their graduate program supervisor(s) and the UME office to coordinate any exceptions. The figure below visually represents the two standard study streams. The top is the most likely stream and the bottom is for MD students who wish to pursue a graduate degree.

More information about the program is available on the website https://cumming.ucalgary.ca/gse/current-students/leaders-medicine

Any question concerning the Leaders in Medicine program should be directed to the LIM program administrator at mdgrad@ucalgary.ca

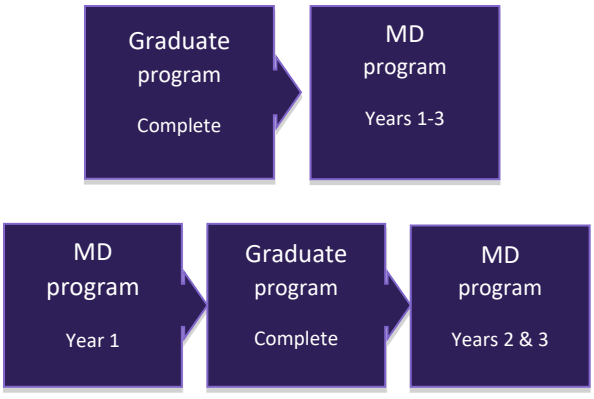


Figure: Leaders in Medicine Progression

Appendix C: Acronym Glossary

APR - Annual Progress Report

BMB - Biochemistry and Molecular Biology

CHREB - Conjoined Research Ethics Board

CHS - Community Health Sciences

CORE - Community Rehabilitation

CSM – Cumming School of Medicine

FGS – Faculty of Graduate Studies

FOS - Field of Study

GAT - Graduate Assistant Teaching

GPA - Grade Point Average or Graduate Program Administrator

GPD - Graduate Program Director

GSE – Graduate Science Education

LiM – Leaders in Medicine Joint Degree Program

LOA - Leave of Absence

MBT – Master of Biomedical Technology Degree

MDBC – Biochemistry and Molecular Biology Program

MDBT – Biomedical Technology Program

MDCH – Community Health Sciences Program

MDCS - Master of Disability and Community Studies

MDCV – Cardiovascular and Respiratory Sciences Program

MDGI – Gastrointestinal Science Program

MDIM – Immunology Program

MDMI – Microbiology and Infectious Diseases Program

MDNS – Neuroscience program

MDPA – Pathologists' Assistant Program

MDSC – Medical Science Program

MPath – Master of Pathologists' Assistant Degree

MSc – Master of Science

NOE/NTOE - Notice of (Thesis) Oral Exam

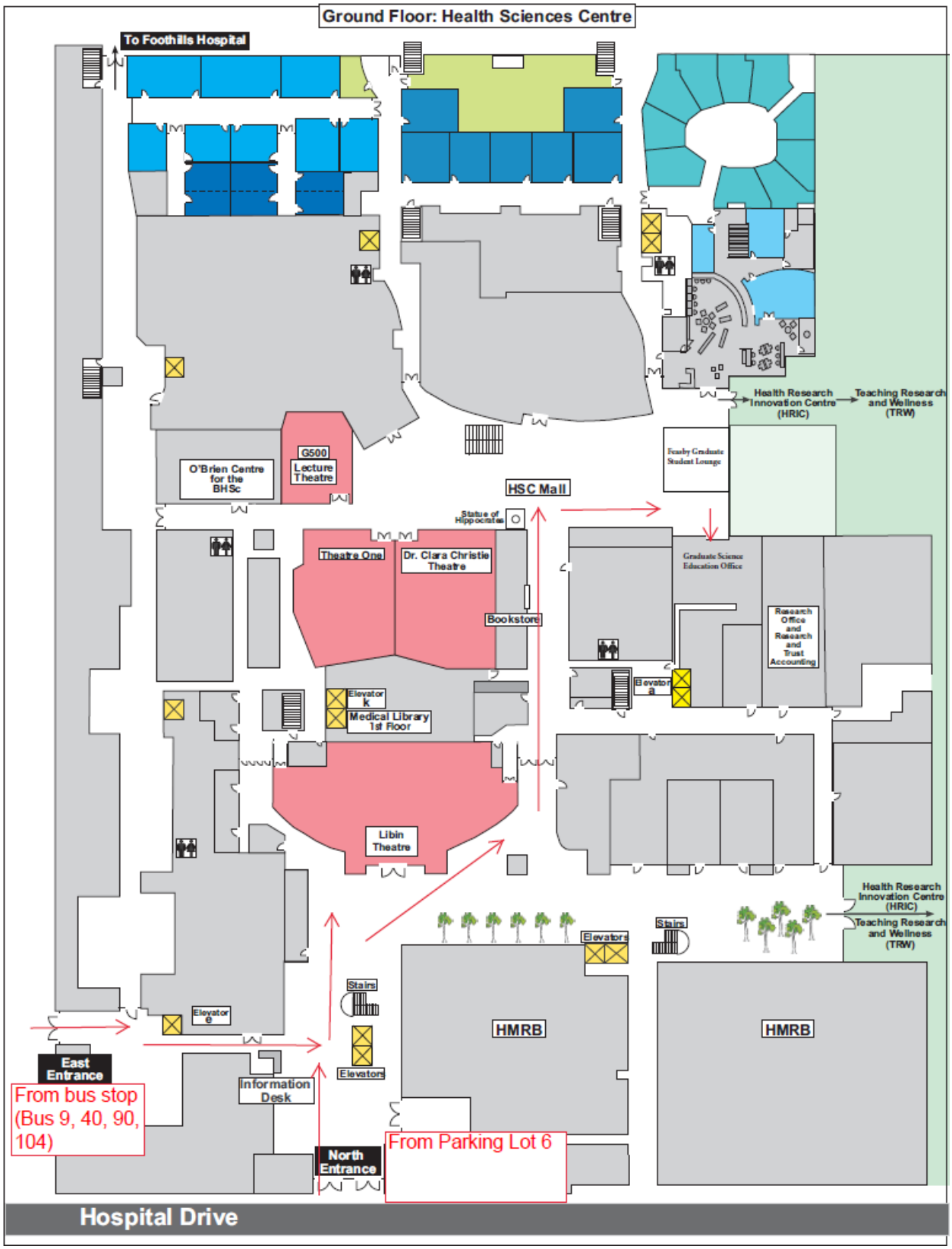
PD - Professional Development

PDP - Professional Development Program

PhD – Doctor of Philosophy

RI Day – Research Integrity Day

UCID - University of Calgary Identification

UofC - University of Calgary

Appendix D: Map to the GSE Office