

#### THE UNIVERSITY OF BRITISH COLUMBIA

# **MEDICAL GENETICS GRADUATE PROGRAM**

### **GUIDELINES FOR STUDENTS IN THE MEDICAL GENETICS GRADUATE PROGRAM**

#### INTRODUCTION

Membership in the Medical Genetics Graduate Program requires a serious commitment on the part of both the student and the Research Supervisor. Prior to entering their program, the incoming student is urged to discuss this commitment and associated responsibilities with their Supervisor. See: <u>Handbook of Graduate Supervision.</u>

<u>Policy 85</u> stipulates that before commencing research projects, the student should receive a letter from their principal investigator (Supervisor) outlining research conditions and expectations. For a sample letter, see: <u>Student Supervisor</u> <u>Agreement.</u>

#### 1. STUDENT'S SUPERVISORY COMMITTEE

### a. Membership:

- i. The MSc Student's Supervisory Committee is comprised of a minimum of three faculty members, including the Research Supervisor. At least two of the members, including the Supervisor, must have appointments in the Department of Medical Genetics (including Associate Faculty Members).
- ii. The PhD Student's Supervisory Committee is comprised of a minimum of four faculty members including the Research Supervisor. At least three of the members, including the Supervisor, must have appointments in the Department of Medical Genetics (including Associate Faculty Members). The majority of the Committee members must hold PhD degrees.
- iii. For a postdoctoral fellow (PDF) to join a student's supervisory committee, special approval is required. For service on doctoral committees, the disciplinary Faculty and the Faculty of Graduate and Postdoctoral Studies (G+PS) must approve; for service on master's committees, the approval of the graduate program advisor or department head suffices. A PDF can only be considered for membership after the minimum requirement of three (3) members for an MSc student and four (4) members for a PhD student, at least 50% of them G+PS members, has been met; the PDF will be an additional committee member. Please check the FoM Postdoctoral Fellows on PhD Supervisory Committees Guidelines for further details.

The Student's Supervisory Committee will be chosen in consultation with the Research Supervisor and the Graduate Advisor. In accordance with the Faculty of Medicine policy for graduate students in an industry-supported environment, if a student is associated with an industry-sponsored project, the majority of the Student's Supervisory Committee members must not have a personal association with the same industry sponsor. The student must work in the laboratory of their Supervisor for the majority of their time while in their graduate program.

## b. Function of the Student's Supervisory Committee:

The primary role of the student's Supervisory Committee is to offer advice and encouragement throughout the student's training. The Committee is responsible for ensuring that the student generates high-quality research. The student is responsible for taking advantage of the expertise and experience of their Committee members.

The MSc student planning to fast-track to the PhD program must arrange to meet with their Supervisory Committee to receive their approval to transfer and to take the comprehensive examination. Prior to taking the comprehensive exam, the student must have their research proposal approved by their Supervisory Committee. At the end of their program, the MSc / PhD student must meet with their Committee and obtain its written approval to write-up and defend their

thesis.

## c. Initial Supervisory Committee Meeting:

It is recommended that the incoming student's Supervisory Committee be established during the first term of their program. The student should consult their supervisor for input as to what to expect from their first committee meeting (discussion of their progress to date and plans for thesis project going forward, etc.) and for suggestions as to how to prepare for the meeting. The September-start student should have their committee meeting before **May 30**th of their first year. The September-start Rotation Program student should have their committee meeting before **June 30**th of their first year. The January-start student should have their committee meeting before **November 30th** of their first year.

The student's Research Supervisor is Chair of the student's Supervisory Committee meetings; and ensures that the Medical Genetics Guidelines are followed. The Committee is expected to have input into grading the student's progress in MEDG 548 (directed studies).

## **Subsequent Supervisory Committee Meetings:**

Following the initial Supervisory Committee Meeting, the student must arrange for at least one committee meeting annually. Additional committee meetings can be called when useful such as for approval to take the comprehensive exam, write up the thesis, etc. It is important that all committee members be present at every meeting.

#### d. Documentation:

The candidate is expected to provide each committee member with an outline of their research a minimum of three working days before the meeting. This outline will be comprised of one to three pages of text and up to six tables of figures detailing progress since the last meeting. It is suggested to also provide the Committee with an agenda. A committee meeting report form should be completed by the Research Supervisor at each committee meeting and signed by all attendees. Email the signed copy of the form to the Graduate Program Coordinator (medical.genetics@ubc.ca).

### e. Supervision:

Both the student and their Supervisory Committee are responsible for ensuring that the student's progress meets the requirements of the <u>Faculty of Graduate and Postdoctoral Studies</u> (G+PS) and the Medical Genetics Graduate Program. The final responsibility rests with the student. The student has the privilege to change Research Supervisors and members of their Supervisory Committee with the approval of the Medical Genetics Graduate Advisor and the supervisors involved.

### 2. COURSE REQUIREMENTS

The incoming student should normally have a background in upper-level genetics, biochemistry, and statistics (biometrics). If the student lacks any of these prerequisites, they may be required to make up the deficiency during their first year in addition to the required graduate course load. The student must consult with their Supervisor before registering for any electives; and must forward a completed *Proposed Coursework Approval Form* to the Graduate Program Coordinator by the first week of classes.

Core (required) courses for MSc and PhD Medical Genetics students:

- MEDG 520 Advanced Human Molecular Genetics (3 credits)
- MEDG 530 Human Genetics (3 credits)
- MEDG 548 Directed Studies (3 or 6 credits over two terms)
- MEDG 549 (MSc) / MEDG 649 (PhD) Thesis Course

**MSc Student:** takes a minimum of 18 credits of core and elective courses in addition to the 12-credit MSc thesis, MEDG 549, for a total of 30 credits.

**PhD Student:** takes 12 - 18 credits of courses. The number of total credits required depends on the student's previous degree and coursework, and is subject to approval by the Graduate Advisor. The student entering PhD studies from a first-class BSc degree generally takes coursework as outlined for the MSc student. The student entering PhD studies from an MSc degree usually takes MEDG 520, 530, 548 and any other courses recommended by their Research Supervisor.

- MSc and PhD students in the Medical Genetics Graduate Program are expected to obtain a grade of 75% or above in each of the core courses, MEDG 520, 530 and 548.
- The student should be familiar with the UBC policy regarding <u>plagiarism</u>.
- Course requirements are to be completed during the first two terms of the graduate program. If the student needs to take a course after their first year, including auditing a course, they must receive permission from their Research Supervisor, Supervisory Committee and the Graduate Advisor.

### 3. FINANCIAL SUPPORT

## **Stipend Amount and Duration:**

As of September 1, 2022, the recommended minimum yearly stipend for a full-time Medical Genetics (MEDG) thesis-based graduate student is as follows:

MSc: \$26,500PhD: \$28,000

The student pays tuition from their stipend (the cost of tuition depends on whether the student is domestic or international as well as on the time spent in our graduate program). The stipend may come from an independent studentship award and/or from the Research Supervisor's research grant. Admission to the Medical Genetics Graduate Program normally includes a commitment from the Supervisor to ensure that each student is supported to the recommended funding level. Exceptions to this policy may be granted under unusual circumstances. Financial support from personal resources is not acceptable as "funding" for incoming students in the Medical Genetics Graduate Program.

The duration of the annual stipend is normally two and a half years for an MSc student and five years for a PhD student. After the two-and-a-half year MSc and five-year PhD point, continued funding is at the discretion of the Supervisor. The Supervisor should inform the student in writing (with a copy to the Medical Genetics Graduate Program office) at least six months prior to the end-date of the student's stipend.

Funding depends on both satisfactory academic and research progress, as determined by the student's Supervisory Committee, and on the Research Supervisor's continued grant support. Funding termination for other justifiable reasons must be approved by a majority of the Medical Genetics Graduate Advisory Committee.

## **Recommended MEDG Student Stipends for Award Winners:**

#### MSc

- i. MSc student wins a one-year MEDG Rotation Program or Entrance Award of \$18,200. Student's Supervisor tops up award by \$10,800. The total student stipend is \$29,000.
- ii. MSc student wins a one-year Tri-Agency Canada Graduate Scholarship Master's (CGS M) of \$17,500. Supervisor tops up award by \$11,500. The total student stipend is \$29,000.
- iii. MSc student wins a one-year UBC Affiliated Fellowship of \$16,000. Supervisor tops up award by \$13,000. The total student stipend is \$29,000.
- iv. MSc student wins a one-year UBC Affiliated Fellowship of \$18,000. Supervisor tops up award by \$11,000. The total student stipend is \$29,000.

#### **PhD**

- v. PhD student wins a one-year MEDG Rotation Program or Entrance Award of \$18,200. Supervisor tops up award by \$12,800. The total student stipend is \$31,000.
- vi. PhD student wins a MEDG Four Year Doctoral Fellowship (4YF-G) of \$18,200 plus tuition/year. Supervisor tops up award by \$11,800. The total student stipend is \$30,000 plus tuition support.
- vii. PhD student wins a Tri-Agency (CIHR/NSERC) Canada Graduate Scholarship Doctoral (CGS D) or Vanier Doctoral award and becomes a UBC 4YF-T holder (funded through Faculty of Graduate Studies G+PS):
  - PhD student wins an NSERC Postgraduate Scholarship Doctoral (PGS D) award of \$21,000/year. The student becomes a 4YF-T holder and G+PS pays tuition in full. Supervisor tops up award by \$10,000. The total student stipend is \$31,000 plus tuition support.
  - o PhD student wins a CIHR CGS-D of \$35,000 stipend/ year for 3 years. Supervisor top-ups by \$1,000. The total stipend is \$36,000.
    - Students who received the CIHR CGS- D award before 2022W, will receive \$30,000 + \$5,000 research allowance/ year for 3 years. The student becomes a 4YF-T holder and G+PS pays tuition up to \$5,000. Supervisor top-ups by \$1,000. The total stipend is \$36,000.
  - o PhD student wins a NSERC CGS-D of \$35,000/year, and no tuition support from G+PS. Supervisor tops up award by \$1,000. The total student stipend is \$36,000.
  - PhD student wins a Vanier (CIHR/NSERC) doctoral scholarship of \$50,000/year. The Supervisor does not pay
    the student a top-up and G+PS provides no tuition support.
- viii. PhD student wins a one-year UBC Affiliated Fellowship of \$16,000. Supervisor tops up award by \$15,000. The total student stipend is \$31,000.
- ix. PhD student wins a one-year UBC Affiliated Fellowship of \$18,000. Supervisor tops up award by \$13,000. The total student stipend is \$31,000.

#### MSc or PhD

- x. MSc or PhD student wins any award below \$16,000/year. Supervisor tops up award by \$2,000 over the minimum recommended stipend to a total of \$28,500 (MSc) / \$30,000 (PhD).
- xi. MSc or PhD student wins a BCCHR graduate studentship in the amount of \$22,000/year for one two years. Supervisor tops up award by \$4,000/year over recommended minimum stipend. The total student stipend is \$30,500 (MSc) / \$32,000 (PhD) per year. If the value of the BCCHR graduate studentship is less than \$22,000 (partner awards), rules in x or xii apply.
- xii. MSc or PhD student wins other award(s): Supervisor tops up MSc award to \$29,000 and PhD award to \$31,000 if award is \$16,000-28,000. Supervisor tops up MSc/PhD to \$33,000 if award is \$28,001-32,000; and tops up MSc/PhD to \$36,000 if award is \$32,001-35,000.
- xiii. MSc or PhD Student wins any award \$36,000 or above. The Supervisor does not normally pay the student a topup and UBC G+PS provides no tuition support.

Additional information on award values for 4YF holders is in the <u>4YF Guidelines</u> on the Faculty of Graduate Studies website.

## Other Funding:

Financial support from personal resources is not acceptable as "funding" for incoming students in the Medical Genetics Graduate Program.

## **Teaching Assistant (TA) Positions in Medical Genetics:**

The Medical Genetics Graduate Program offers six part-time Teaching Assistant (TA) positions that are posted in March each year. The Program encourages every student to TA once during their graduate career and thus encourages the Research Supervisor to not reduce the student's stipend the first time their student TA's. Whether funding from subsequent TA positions is considered "part of" or "in addition to" a student's stipend is at the discretion of the individual Supervisor and should be discussed between the student and the Supervisor before the student accepts a TA position (in Medical Genetics or another department).

#### **Hours Per Week and Salaries:**

PhD students - GTA I; MSc students - GTA II

**MEDG 419, 420, 505:** nine hours per week x 16 weeks (144 hours total). Salary: \$1,264.53/month (GTA I); and \$1,216.82/month (GTA II)

MEDG 421, MEDG 520, and 530: eleven hours per week x 16 weeks (176 hours total). Salary: \$1,545.60/month (GTA I); and \$1,487.28/month (GTA II)

### **Medical Genetics TA Award**

Course Coordinators are asked to comment on the TA's performance of their duties. The Teaching Assistant Award Review Committee is composed of several members of the Research Day Committee. They receive copies of the student and course coordinator evaluations where the identifiers (the TA's name and course name) have been removed, ensuring an unbiased process of selection. On Research Day, the Medical Genetics TA Award in the amount of \$200 is presented to the TA Award winner.

#### 4. ACADEMIC PROGRESS

## a. Supervisory Committee Meetings:

The progress of each student working towards a Master's / Doctoral degree will be reviewed regularly by the student's Supervisory Committee; and at least once each year by the Medical Genetics Supervisory Committee; and the Dean of the Faculty of Graduate and Postdoctoral Studies. The student's progress must be satisfactory in their coursework, research, comprehensive examination (if applicable), advancement to candidacy (Doctoral students only), seminar presentation(s), and thesis / dissertation. A candidate may be required to withdraw if progress is not satisfactory.

Medical Genetics graduate students are required to meet with the Graduate Program Coordinator once a year to discuss academic progress and next steps in their program and any issues or concerns.

## b. Transfer to PhD Studies and Comprehensive Examination:

The Master of Science student who has the approval of their Supervisory Committee shall apply to the Medical Genetics Graduate Program to transfer from MSc to PhD studies before 20 months of initial registration in their program. As a prerequisite for transfer, the student will be required to successfully complete a PhD comprehensive examination. MSc fast-tracking students transfer and advance to PhD candidacy at the beginning of the next term following their comprehensive exam. If the student is unsuccessful in this exam, they will remain in the MSc program with no effect on eligibility for acceptance into PhD studies after completion of the MSc degree. The comprehensive exam is not required for any student completing their MSc degree.

The student who is currently registered in PhD studies should take the comprehensive exam and advance to PhD candidacy within 20 months and no later than 24 months of initial registration in their program. Consult the *Medical Genetics Guidelines for the PhD Comprehensive Examination* for more information.

## c. Seminar Requirement:

- **MSc Student:** is expected to give a departmental exit seminar on their research near the end of their program.
- **PhD Student:** is expected to give at least two departmental seminars on their work a mid-point seminar at two to two-and-a-half years after admission, and an exit seminar near the end of their program.

## d. Dissertation and Thesis Preparation:

The term "thesis" is used collectively to refer to both the Master's thesis and the Doctoral dissertation:

- A Master's thesis must demonstrate that the student knows the background and principal works of the
  research area, and can produce significant scholarly work. It should contain some original contribution
  whenever possible.
- A Doctoral thesis must contain a substantial contribution of new knowledge to the field of study. It presents the results and an analysis of original research, and should be significant enough to be published.
- Before proceeding to write the thesis, the MSc / PhD student must meet with their Supervisory Committee to review the proposed contents of the thesis with respect to scientific adequacy, and to receive formal approval to write-up.

- The Faculty of Graduate and Postdoctoral Studies (G+PS) sets the criteria for <u>dissertation and thesis</u> preparation.
- Students should forward a draft thesis to G+PS for a <u>pre-review</u> early in the preparation stage; and also when the thesis is nearly ready for examination. The Doctoral thesis must be submitted electronically to G+PS for review immediately prior to transmission to the External Examiner.

## e. Final Master of Science / Doctoral Oral Examination:

- The final Master of Science oral examination is overseen and scheduled by the Medical Genetics Graduate Program. See the *Medical Genetics Master of Science Thesis Defence Guidelines*.
- The final Doctoral oral examination is overseen and scheduled by G+PS.

### **Notes for the Doctoral Student:**

- G+PS Nominations for External Examiner form must be signed by the student's Research Supervisor and the Medical Genetics Graduate Advisor and submitted at least two months prior to forwarding the thesis to the External Examiner.
- Review G+PS "Selecting the External Examiner" section of the <u>Doctoral Exam Guide</u>. Before the Graduate Advisor signs-off the *Nomination for External Examiner Form*, it must be forwarded to the Graduate Program Coordinator to check that the proposed external examiners have not examined other Medical Genetics doctoral students' dissertations in the last three years.
- Prior to submitting the thesis for transmission to the External Examiner, the student must submit to the
  Graduate Program Coordinator the departmental <u>PhD Student's Supervisory Committee: Approval of Thesis</u>
  <u>for Defence</u> form signed by all members of their Supervisory Committee. In exchange, the Graduate Program
  Coordinator will give the student the G+PS form / memo <u>Graduate Program Approval Form</u> signed by the
  Graduate Advisor. Please email the Graduate Program Coordinator your supervisor's speed-chart code for
  inclusion in the memo.

# f. Program Completion

- The student is expected to submit their <u>final</u> thesis electronically to G+PS. Once the thesis is accepted to cIRcle, the student's program will be closed.
- Students who successfully defend their theses must apply to graduate.
- Reimbursement of tuition: After completing their program, the student may request reimbursement of tuition. Contact the Tuition Fee Payment Office at Brock Hall, 2016-1874 East Mall, to request a refund of any remaining portion of the term's tuition fees. Only full months of tuition can be refunded.

#### **5.GRADUATE STUDENT VACATION POLICY**

Graduate students are entitled to three weeks of <u>vacation</u> (15 working days) from their academic obligations per academic year.

## **MEDICAL GENETICS GRADUATE PROGRAM CONTACTS**

Graduate Program Advisor
Dr. Stefan Taubert
Centre for Molecular Medicine & Therapeutics (CMMT)
Room 2024 - 950 W. 28<sup>th</sup> Avenue
Vancouver, BC V5Z 4H4
taubert@cmmt.ubc.ca
Phone 604-875-3860

Graduate Program Coordinator
Azin Zeinali
Life Sciences Centre (LSC)
Room 1364 - 2350 Health Sciences Mall
Vancouver, BC V6T 1 Z3
medical.genetics@ubc.ca
Phone 604-822-5312