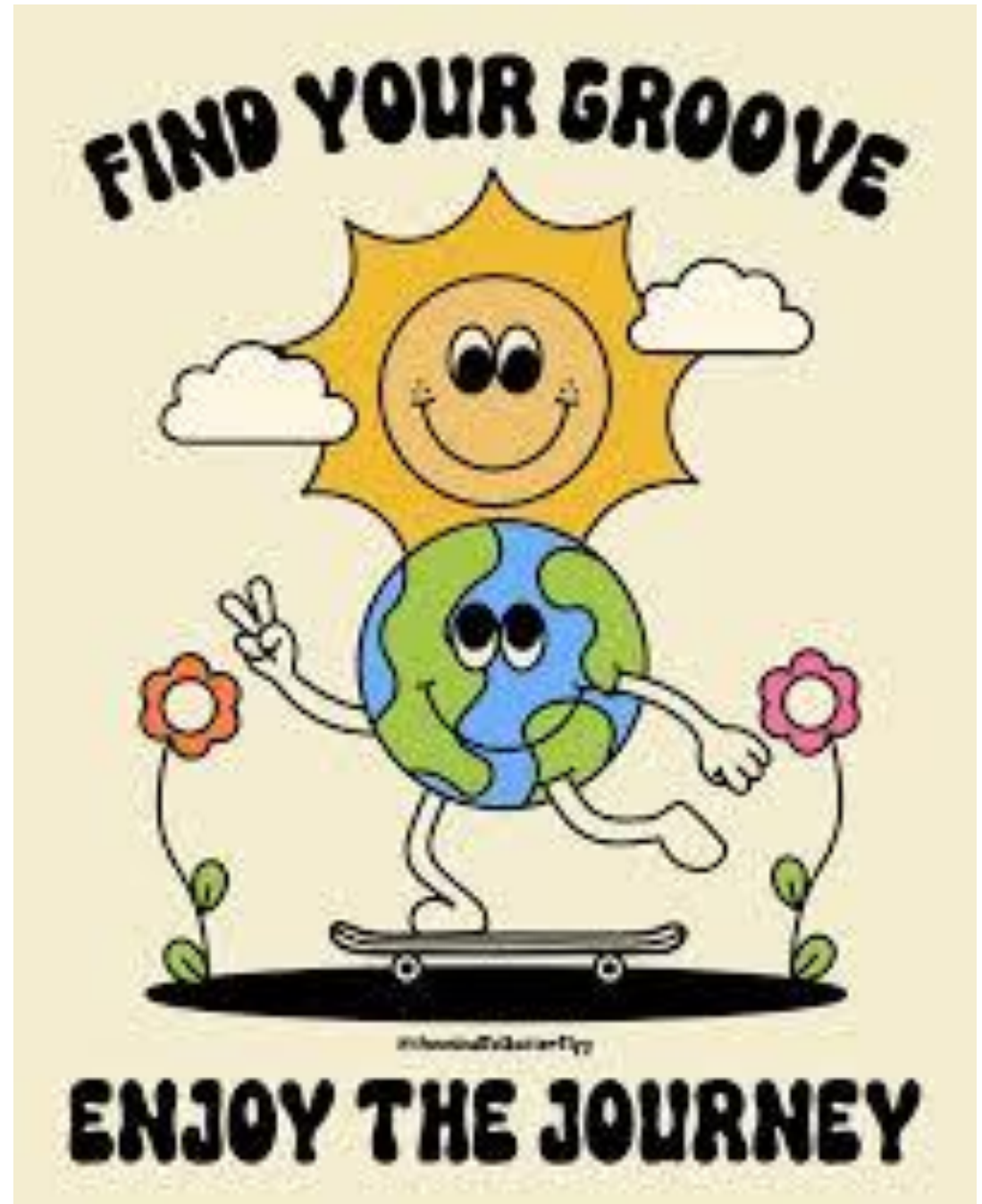


Graduate Pharmacology Orientation 2024



Agenda!!!

- PGSA – Janet and Iulia co-Presidents
 - Graduate Supervision and Mentorship - Lauren Pais
- Collaborative Specialization in Biomedical Toxicology – Dr. Cindy Woodland
- Accommodations
- Leave of Absence and Stop-out
- Stay informed, how to contact us

Program –specific info (we'll split into breakout rooms)

September 9th – 12:30pm MSB 4227 Pizza Social and more info!

Health and Wellness

EDIIA presentation



Pharmacology Graduate Students Association

pgsa@utoronto.ca

Centre for Graduate Mentorship and Supervision

Lauren Pais, Case Coordinator

The Centre for Graduate mentorship & Supervision (CGMS)

FALL 2024

AZIZA KAJAN (she/her)
DIRECTOR, CGMS

LAUREN PAIS (she/her)
CASE COORDINATOR, CGMS



UNIVERSITY OF
TORONTO

CGMS Mandate

To support **successful** mentorship and supervisory relationships.

CGMS VISION STATEMENT

To ensure graduate students and supervisors experience a mentorship and supervisory relationship that is characterized by:

- Respect, inclusion, and support of the whole person
- Continued learning and collaboration by both the supervisor and the graduate student
- Shared responsibility and commitment to advancing academic and professional goals

Our services start with a confidential consultation

Anyone from the graduate community in a research stream program (students, faculty, and staff) can reach out to CGMS via email, telephone, or an online referral form (TBA).

During the consultation we will support individuals to unpack, debrief the situation, and begin the process of identifying the unique factors of the case. We will support to identify the desired outcomes and we will assist individuals in developing a strategy for a path forward.

OUR SERVICES INCLUDE:

Coaching: We can support you to develop your interpersonal communication skills and conflict management strategies. If you are a faculty member, we can assist you to address your supervision practice(s) and develop supervisory approaches which are aligned with best practices.

System Navigation: We can assess your concerns and help you determine who might be other appropriate partners and related policies/jurisdictions, assist in identifying all the potential resources and facilitate the connections/referrals.

Case Management: We can assist you in ensuring appropriate follow-up and key stakeholders are working collaboratively to address your concerns.

Mediation: During a mediated conversation, we can help a graduate student, their supervisor and any other involved parties discuss their interests and needs, identify their desired outcomes, and negotiate a mutually agreeable plan with clear and documented outcomes that resolves the conflict, and that each person is willing to follow.

Facilitation: During a facilitated conversation, we offer a confidential space for a graduate student, their supervisor and any other involved parties to share their experiences with each other, to work toward mutual understanding, to identify common ground and to make decisions about how differences of opinion can be managed. The goal of a facilitated conversation is to repair the supervisory relationship.

Workshops: We offer student and faculty workshops on understanding and resolving conflict and on having difficult conversations.

Examples of situations Where we can Assist

- Graduate student who is expressing concerns regarding the lack of availability and contact with their supervisor which is impacting their academic progress.
- Graduate student being new to research and the supervisory relationship and feel they do not have a good sense of their roles and responsibilities.
- Graduate student or faculty member seeking coaching on interpersonal communication skills and strategies.
- Faculty member expressing concerns regarding a student's progress which they attribute to either interpersonal and/or a wellness concern.
- Graduate Chair seeking support/assistance in addressing concerns raised by a student about their supervisor, or vice versa.

SGS Supervision Guidelines for Students

Available at: <https://www.sgs.utoronto.ca/resources-supports/supervision/supervision-guidelines/>

[Section 2: General Characteristics of Graduate Supervision](#)

[Section 3: Choosing a Supervisor](#)

[Section 4: Responsibilities of the Student, Supervisor, and Supervisory Committee](#)

[Section 5: If You Need Academic Accommodations](#)

[Section 6: When Problems Arise](#)

[Section 7: Finishing Up](#)

[Section 8: Scenarios](#)

[Section 9: Appendix 1 – Resources](#)

[Section 10: Appendix 2 – Checklist for Students](#)



Supervision Guidelines

[Home](#) / [Resources & Supports](#) / [Supervision Support](#) / [Supervision Guidelines](#)

The student-supervisor relationship is a key contributor to a successful and satisfying graduate experience. To help foster a fulfilling supervisory relationship, the School of Graduate Studies has created student and faculty-specific supervision resources that outline the characteristics of graduate supervision, review the roles and responsibilities of key stakeholders (e.g., supervisor, graduate student, supervisory committee), offer best practices for navigating challenges encountered throughout the graduate journey, and provide guidance for identifying and resolving potential issues. Resources for supporting mentorship and supervision at a distance are also available below.

If you have questions, please [contact the School of Graduate Studies \(SGS\)](#).



Students

- [Graduate Supervision Guidelines – Student Edition](#)
- [Reference Guide for Students \(PDF\)](#)

SGS Supervision Guidelines for FACULTY

Available at: <https://www.sgs.utoronto.ca/resources-supports/supervision/supervision-guidelines/>

- Section 1: [Introduction](#)
- Section 2: [Supervision and Mentoring](#)
- Section 3: [Supervisory Styles](#)
- Section 4: [Effective Supervision in Practice: From the Initial Stage to Finishing Up](#)
- Section 5: [Supporting Students to Completion and Beyond](#)
- Section 6: [Creating Equality and Equity When Working with Students](#)
- Section 7: [When a Student May Need Accommodations](#)
- Section 8: [When Problems Arise](#)
- Section 9: [Appendix 1 – Resources](#)
- Section 10: [Appendix 2 – Checklist for Supervisors](#)

The screenshot shows the top navigation bar of the School of Graduate Studies website, featuring the university logo and a menu with links for ABOUT SGS, PROGRAMS, FUTURE STUDENTS, CURRENT STUDENTS, AWARDS & FUNDING, RESOURCES & SUPPORTS, and INTERNATIONAL. Below the navigation bar is the page title "Supervision Guidelines" and a breadcrumb trail: "/ Resources & Supports / Supervision Support / Supervision Guidelines". The main content area contains a paragraph about the student-supervisor relationship, a note about contacting the School of Graduate Studies (SGS) for questions, and two sections: "Students" and "Faculty".

Students

- [Graduate Supervision Guidelines – Student Edition](#)
- [Reference Guide for Students \(PDF\)](#)

Faculty

- [Best Practices for Supervisors & Instructors of Graduate Students with Family Responsibilities](#)
- [Graduate Supervision Guidelines – Faculty Edition](#)
- [Reference Guide for Faculty \(PDF\)](#)

Upcoming workshops

Faculty Workshops

How to Succeed as a Graduate Supervisor

Accessibility, Accommodations, and Graduate Supervision

Giving Productive and Sensitive Feedback on Graduate Student Writing

Communicating Boundaries and Expectations in the Supervisory Relationship

Student Workshops

Best Practices and Recommendations for Developing and Maintaining a Successful Supervisory Relationship

Having Courageous Conversations



your situation matters. We can help. Contact us.

Step 1: Are you a graduate student or faculty member experiencing a conflict in your supervisory relationship? Contact us at cgms@utoronto.ca.

Step 2: We will contact you as soon as possible to book a confidential consultation.

Step 3: Meet with us online or in-person. We will assist you in unpacking, debriefing, and identifying next steps forward.

Office hours: 9 AM – 5 PM
In-person and virtual consultations offered Monday-Wednesday
Virtual consultations only Thursdays and Fridays
We are located at 65/63 St. George Street
www.cgms.utoronto.ca
cgms@utoronto.ca
416-978-2379



CST!

COLLABORATIVE SPECIALIZATION IN TOXICOLOGY

Administrative Home: Department of Pharmacology & Toxicology

Director: Dr. Cindy Woodland (cindy.woodland@utoronto.ca)

What is CST?

- An interdisciplinary academic specialization for MSc or PhD student conducting research related to toxicology

problematic substance use

receptor binding

drug-induced toxicity

kinetics

neurotransmitters

adverse drug reactions

genetic differences in drug handling

models of disease

drug interactions

metabolic pathways

antidotes

teratogenesis

proteomics

signal transduction

permissible exposure limits

environmental contaminants

Who participates?

- Laboratory Medicine and Pathobiology
- Medical Sciences
- Nutritional Sciences
- Pharmaceutical Sciences
- Pharmacology & Toxicology



Specialization Requirements

Research

- Research topic related to toxicology

Coursework

- JNP1016H Graduate Seminar in Toxicology (Prerequisite: background coursework in toxicology)
- PhD: additional 0.5 FCE elective toxicology course

Seminar Attendance

- MSc: Attend 6 seminars related to toxicology
- PhD: Attend 12 seminars related to toxicology

Some of the Benefits

- Breadth of knowledge in toxicology
- Collaboration
- Skill development
 - Effective communication
 - Critical appraisal
 - Building a network
- Designation on transcript, “Completed MSc/PhD Specialization in Toxicology”

Accommodations

The University of Toronto is committed to providing a learning environment that is accessible and open to all students, regardless of their disability.

- You might have a documented disability, health issues or special needs
- The University provides many resources to assist you with your academic progress. **If you believe you may need a disability-related academic accommodation, your first step should be to consult with the University of Toronto [Accessibility Services](#).**
- **confidential** assessment of your needs, helps you identify available resources, including adaptive technology, test and exam accommodations, note-taking, extensions, and tutoring among others.
- will **not** disclose to your supervisor personal medical information, including a medical diagnosis... **YOU ARE IN CONTROL**

Leave of Absence OR Stop-out

- You might encounter serious life events, health or personal problems that hinder your performance or progress in your program
- You might need time away from your studies – medical treatment / parental leave
- **Thesis-Based students** – possible to take a one-session to three-session [leave of absence](#) during their program of study. The leave period is not included in the time limit for completion of the degree.
- **ACP students** may take a leave of absence or [temporarily stop-out](#) and re-register within 12 months without re-applying to the program. However, unlike a leave of absence, the “stop-out” period is included in the time period for completion of the degree.
- Talk to me about Leave of Absence

Stipendial Support is available from Faculty of Medicine (talk to me)

School of Graduate Studies [SGS Parental Grant program](#)

Stay Informed / Stay Connected

- U of T Pharmacology: www.pharmtox.utoronto.ca
- U of T Faculty of Medicine Graduate and Life Sciences Education: www.glse.utoronto.ca/
- U of T School of Graduate Studies: www.sgs.utoronto.ca

Amy and Diana – PCL Graduate Office – pharmtox.dept@utoronto.ca

Graduate Coordinator – Peter McPherson – peter.mcpherson@utoronto.ca,
416-892-4543

Getting Started Handbook

-get your Tcard, utorid, utoronto.ca email address, acorn, how to enroll in courses, GEMS, health and dental plan

‘Weekly Roundup’ – events, upcoming seminars, award deadlines

Agenda!!!

Program –specific info

- course curriculum
- money
- awards
- the ELEFANT document

Program Overview:

<https://pharmtox.utoronto.ca/program-guidelines-forms-and-links>

M.Sc. Thesis-based program – 2 year program

PCL3000H, PCL3001H plus one elective 0.25 FCE = 0.75 FCEs

Supervisor Report and Advisor Report, need one per year

First Year Seminars

Thesis write-up and MSc Oral Examination – contact me

Transfer to Ph.D. program – contact me

Ph.D. program – 4 year program / Direct-entry Ph.D. program – 5 year program

PCL3000H, PCL3001H, PCL3002H, plus 1.25FCEs + PCL1003Y = 3.0 FCEs

PhD minor course

PhD committee – at least once per year, let us know when you schedule the meetings!

First Year, midpoint and exit seminars

Thesis write-up and PhD Final Oral Examinations – contact me

PCL3000H (0.25FCE) Foundational Pharmacology Principles

Fall term: MS4227 Thursdays 1 – 3 pm

Course Goals: The purpose of this course is to provide instruction to incoming graduate students on foundational principles in Pharmacology. Although a significant number of our incoming graduate class have mastered these concepts through our undergraduate PCL programs, an increasing number of our new graduate students come with undergraduate education that does not include a significant instruction in pharmacology. **Incoming students with undergraduate PCL will be allowed to opt out of completing this module provided they score 70% or greater on an 'opt out' exam scheduled for October 3rd. If you wish to write this exam, you will need to notify me by email no later than Friday September 20th. The exam will be two hours in duration and be composed of multiple-choice questions as well as short-answer questions. More information is available on the course website.**

Date	Time	Topic
Oct 3 rd	1 – 3 pm	Opt-out Exam
Oct 17 th	1 – 3 pm	Introduction Principles of Pharmacokinetics – Absorption & Distribution
Oct 24 th	1 – 3 pm	Principles of Pharmacokinetics – Biotransformation and Excretion Principles of Pharmacodynamics
Oct 31 st	1 – 3 pm	Variability in Drug Response and other Factors Affecting Therapeutic Outcome
Nov 7 th	1 – 3 pm	Adverse Drug Reactions Principles of Toxicology
Nov 14 th	1 – 3 pm	Drug Development and Regulation
Nov 21 st	1 – 3 pm	Exam

PCL 3001H

Winter Session: - Thursday 1-3pm, **Jan-Feb**

Credit / No Credit – 5 of 6 classes; 80% to receive credit

Dr. Ho Yu and Peter McPherson

Each assignment will be reviewed in classes 3, 6 and 7 (two hour wrap up 2 weeks later)

Session 1 – Career Opportunities as a Pharmacologist/Toxicologist/Medical Specialist

Sessions 2 & 3 – Operating a Research group

Session 4 – Starting a biotech

Session 5 – Science Advocacy

Session 6 – Effective Science Communication

Session 7 – Wrap-up

PCL3002H Research Proposal

Tutorials to get PhD students ready for their first supervisory committee meeting

Summer (May / June)

PCL3100H Behavioural Pharmacology I – Zawertailo

PCL3101H Behavioural Pharmacology II – Zawertailo (next year)

PCL3102H Clinical Neuropsychopharmacology – Lanctot / Swardfager (next year)

PCL3103H Fundamentals of Pharmacogenomics – Chenoweth / Tyndale (next year)

PCL3104H Small Molecule Drug Discovery – Harding (next year)

PCL3105H Epilepsy Pharmacology – Poehlmann-Eden

PCL3106H Dopamine Neurotransmission – Salahpour/Beaulieu (next year)

PCL3107H G protein-coupled Receptors – Salahpour/Beaulieu

PCL3110H Molecular Approaches in Pharmacology Research – Recombinant DNA technology

PCL3111H Molecular Approaches in Pharmacology Research – Flow Cytometry

PCL3112H The DNA damage response in Pharmacology & Toxicology – McPherson

PCL3113H Clinical Trials - DiCiano

PCL3114H *In silico* approaches for drug discovery – Schapira

PCL3116H Endocrine Disruptors – Elyse Caron-Beaudoin

PCL3117H Gene and Nucleic Acid-based Therapies – Hubbard & Colleagues (next year)

PCL3118H Career Readiness for the Pharmaceutical Industry – McPherson

PCL3119H Theoretical and Applied Pharmacogenetics – Goncalves (next year)

Collaborative Specializations:

- Collaborative Specializations give you an opportunity to explore an interdisciplinary area complementary to your home degree program.
- Pharmacology participates in seven collaborative specializations:
- [Addiction Studies](#)
- [Cardiovascular Sciences](#)
- [Musculoskeletal Sciences](#)
- [Neuroscience](#)
- Resuscitation Sciences (*admissions have been administratively suspended*)
- [Toxicology](#)
- [Women's Health](#)

1. Total Base Funding, 2024/2025

2024-2025 Student Base Funding for Doctoral Stream MSc and PhD Students ^a					
Domestic				International	
MSc (2023-24)	MSc (2024-25)	PhD		MSc	PhD
29,235.18	29,235.18	32,265.18	Living Allowance	29,235.18	32,265.18
8,393.96	8,393.96	8,213.96	Tuition & Fees ^b	33,733.96	8,393.96
n/a	n/a	n/a	UHIP	756	756
37,629.14	37,629.14	40,479.14	Total	63,725.14	41,415.14

U of T Open Fellowships – payment once a term
 Graduate Student Supplement

Your supervisor

3. Top-Up Practices

All awards that require student applications are eligible for a top-up from their supervisor or graduate unit.

The top-up amounts are as follows:

Award Amount	Top-Up*
\$0.00 to \$2,000	There will be no top-up but the student gets to keep the award(s), up to a combined maximum of \$2,000. The amount of the award will not be deducted from the base funding.
Between \$2,001 to \$9,999 (cumulative awards)	Award goes towards the base funding and the student receives a \$2,000 top-up over their base funding.
Between \$10,000 to \$15,000 (cumulative awards)	Award goes towards the base funding and the student receives a \$3,000 top-up over their base funding.
Over \$15,000 (cumulative awards \$15,001 and up)	Award goes towards the base funding and student receives a \$4,000 top-up over their base funding.

how to get a graduate award/scholarship - the inside scoop

It has never been harder to win scholarships and awards

The percentage of students that win major awards has declined significantly in the past 20 years
-expectations of supervisor vs. applicant expectation

Many 'major' awards contribute less and less to the cost of the total student stipend.

Less than 20% will hold a major award at any time during their graduate training.

Many of you will never win an award – you are in the majority – everything is ok

But hey, it would still be cool to win one...

Now is great time to plan AHEAD and figure out what to apply for in the coming year

What are 'they' looking for? Excellence through Evidence

Academic Record – this is calculated in various ways for different awards

- last two years
- combined graduate GPA if 3 years or more (OGS)
- anything goes

Evidence of Research Excellence

- tangible evidence of productivity
- publications and presentations

Letters of Reference

- essentially need to be perfect
- some reference letters use a 'ranking' system e.g. top 2% vs. top 5%
- excellence through evidence

Service and Engagement

- outreach activities, leadership, student community involvement

Types of Awards

National

Provincial

University level – administered by SGS

Faculty level – administered by GLSE

Research Institute level

Collaborative Programs / Specialized research units / Research Societies

PCL Department

Types of Awards

National

Vanier CGS

CGS-D awards – CIHR or NSERC (aka CIHR Doctoral Research Awards)

CGS-M awards

Provincial

University level – administered by SGS

Faculty level – administered by GLSE

Research Institute level

Collaborative Programs / Specialized research units / Research Societies

PCL Department

Vanier CGS - The Vanier CGS program aims to attract and retain world-class doctoral students by supporting students who demonstrate both leadership skills and a high standard of scholarly achievement in graduate studies in social sciences and humanities, natural sciences and engineering, and health. Awardees will receive an annual stipend **of \$50,000 per year for a maximum of three years**. Students wishing to apply for a Vanier CGS must do so through the Canadian university to which they are applying for doctoral studies. Learn more about how to be nominated by the University of Toronto at: [Vanier Canada Graduate Scholarship](#) or visit the Vanier CGS website at [Vanier Canada Graduate Scholarship](#).

Academic Excellence, Research Potential, Personal Leadership

ResearchNet online application – domestic and international applicants

**There is a quota – U of T last year was ‘allotted’ 42 CIHR-based awards and 20 NSERC-based awards:
for CIHR competition at U of T, 106 applications received, quota was 42 and 12 were successful
(11%)**

PCL is allowed to nominate one student per year

We have won only 1 – 2 of these in the past 10 years

Canada Graduate Scholarships Doctoral (CGS - D) - NSERC and CIHR offers Canada Graduate Scholarships (CGS) that provides financial support to outstanding graduate students pursuing a doctoral degree in natural sciences or engineering. Canada Graduate Scholarship Doctoral awards are valued at **\$40,000/year** for 36 months (depending on eligibility).

NSERC or CIHR Doctoral Awards Competition –

NSERC and CIHR gives U of T a set number of awards to send to national competition (275) – PCL has quota we can send – adjudicated at SGS level, then at National level

Pay attention to CIHR priority announcements

Unpredictable outcomes

Should I apply to CIHR awards or NSERC awards?

Canada Graduate Scholarships-Master's (CGS M) Program - The objective of the Canada Graduate Scholarships-Master's (CGS M) Program is to help develop research skills and assist in the training of highly qualified personnel by supporting students who demonstrate a high standard of achievement in undergraduate and early graduate studies. Awardees will receive an annual stipend of **\$27,000** for one year.

This is a 'pseudo quota' system

PCL is given x nomination spots

– goes into SGS pool of applicants that then get ranked by committee

-don't assume each member of the committee is an expert in your field

-don't assume each application is handled equally well

'e.g.' there might be 102 award applications, and 80 can move forward

-many times our 1st overall pick is rejected and our 3rd overall pick wins the money

85% of winners are 1st year students entering their second year of program

Types of Awards

**National
CIHR Doctoral Research Awards**

Provincial - OGS and QEII-GSST

University level – administered by SGS

Faculty level – administered by GLSE

Research Institute level

Collaborative Programs / Specialized research units / Research Societies

PCL

THE QUEEN ELIZABETH II GRADUATE SCHOLARSHIPS IN SCIENCE AND TECHNOLOGY (QEII-GSST)

- some are offered through Fac of Medicine (GLSE) but some are restricted to certain departments or research units
- usually 15K a year

Ontario Graduate Scholarships (OGS)

The Ontario Graduate Scholarship Program recognizes academic excellence in graduate studies at the master's and doctoral levels in all disciplines of academic study. The OGS program at U of T is jointly funded by the Province of Ontario and the University of Toronto. The Province of Ontario provides about \$30 million towards these scholarships and eligible institutions provide \$15 million. Departments nominate their own students to hold an OGS award in their allocation of awards. For further information, visit: [Ontario Graduate Scholarships](#)

- **About 60 applicants for 9 – 10 awards**
- **Our allotment for these awards has been going up each year**
- **Decided IN HOUSE by award committee**
- **These are advertised as 15K / year but actually are only worth 10K**

Types of Awards

National

CIHR Doctoral Research Awards

Provincial

University level – administered by SGS OR

Faculty level – administered by GLSE

OSOTF and other endowed awards

Research Institute level

CAMH Grad Student Award – November

Collaborative Programs / Specialized research units / Research Societies

PCL

OSOTF and other endowed awards (Ontario Student Opportunity Trust Fund)

Usually theme-based – ‘ovarian cancer research, neurological illness, pediatric cancer’

OSOTF – there is a ‘financial needs’ form you fill out

Merit based vs. financial needs based

Amount of money depends on what committee decides, how much donor allocates

Can range by thousands of dollars from year to year

Your best chance of winning an award, as long as you meet the criteria ... but they are still very competitive
ALSO you can hold this AND hold major award

There is a set of OSOTFs looked after by SGS, another set looked after by GLSE (Fac of Medicine)
– don’t get confused!

Types of Awards

**National
CIHR Doctoral Research Awards**

Provincial

University level – administered by SGS

Faculty level – administered by GLSE

**Research Institute level
CAMH Grad Student Award – November**

Collaborative Programs / Specialized research units / Research Societies

PCL

Types of Awards

National

CIHR Doctoral Research Awards

Provincial

University level – administered by SGS

Faculty level – administered by GLSE

Research Institute level

CAMH Grad Student Award – November

Collaborative Programs and Specialized research unites

Frist award in neuropsychpharmacology

Mito2i

TC3

PCL

Types of Awards

National

CIHR Doctoral Research Awards

Provincial

University level – administered by SGS

Faculty level – administered by GLSE

Research Institute level

CAMH Grad Student Award – November

Collaborative Programs and Specialized research unites

Frist award in neuropsychopharmacology

Mito2i

TC3

PCL –

**Amar K Sen
Book Fund**

**U of T open
EDI award**

**Harold Kalant award
Romet**

Our website

Link to award deadlines

PCL deadline vs. 'Real' deadline

Things to remember

- **We have your original transcripts (are they up to date?)**
- **Original and UP TO DATE transcripts of your current program are a MUST**

- **Your ability to secure an award will not dictate your success in getting a postdoc, a career in academia or just about anything else**

Principles for Transparency Agreement

for Thesis-based MSc and PhD Graduate Students and Supervisors

ELEFANT

Environment | Limits | Employment | Funding | Academics | Non-Academics | Thesis



Success in Graduate Pharmacology

'do as I say, but don't do what I did'

