

# ROAD TO **RESEARCH**

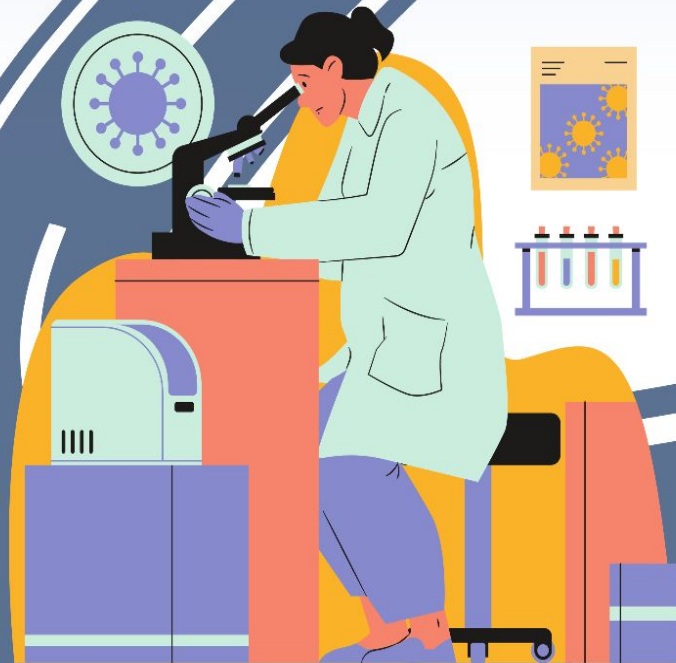


***Discovering Research Opportunities***

***October 16 5-7PM***  
***MS3154***



**We will officially begin at 5:10!**





## EVENT AGENDA

**5:10 - 5:15** OPENING REMARKS

**5:15 - 5:30** HOW TO LAND RESEARCH

Tips on finding supervisors, searching for opportunities, and how to write a “cold” email

**5:30 - 5:40** THE PRINCETON REVIEW

MCAT prep presentation and a giveaway

**5:40 - 6:50** PANELIST PRESENTATIONS

Presentations by a Work Study student, Amgen & Laidlaw Scholar, PharmTox NSERC, BME NSERC, Harvard PEY and MIT PEY.

**7:00 - 7:10** CLOSING REMARKS

# LANDING A PI/LAB

## STEP 1:

Find a **field of research** that interests you!

- Clinical
- Bioinformatics
- Animal Models



## STEP 2:

Surf the Web!

- **Faculty websites** for research courses (i.e. ROP)
- **Lab websites** for open positions
- Work Study programs
- **Hospital affiliated programs**

## STEP 3:

Start Applying:

- **Cold Email** Researchers
- LinkedIn/Academic events

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### Research Opportunities Program

The Research Opportunities Program (ROP) gives second- and third-year Faculty of Arts & Science undergraduate students the chance to join an instructor's research project and earn course credit towards their degree.

Students learn research methods, get to know fellow students and share in the excitement and discovery of acquiring new knowledge. They develop relationships with faculty members who can act as mentors during their undergraduate years and assist them in applications to graduate schools or professional faculties. Students also participate in the bi-annual Research Fair, which offers the opportunity to share their work with peers and attendees.

Regular tuition fees apply for ROP courses.

The application period for 2021-22 ROP courses is now closed. The application period for 2022-23 ROP courses will take place in Winter 2022. Please review the program dates below. For any questions about ROP, please email [rop.artsci@utoronto.ca](mailto:rop.artsci@utoronto.ca).

#### Student Eligibility

- To participate in ROP for the 2022-23 academic year, students must be enrolled in a **Faculty of Arts & Science (A&S) degree program** and have between 4.0 credits and 13.5 credits completed by the end of the April 2022 exam period. Part-time students are eligible for ROP.
- Students are required to sign an agreement (ROP contract) with their supervising professor to participate in an ROP course. The ROP contract will serve as the syllabus for the ROP course and permits the Office of the Dean to enrol students into the course on ACORN.
- Students will be placed into a 299 course for their first ROP and a 399 course for their second ROP.
- Students can only participate in one ROP course at a time and can participate in a maximum of two ROP courses during their

Current Students  
Academic Advising and Support

#### Academics

Academic Calendar  
Course Planning  
Course Enrolment  
Program Toolkit

#### Research Opportunities

International Opportunities  
Arts & Science Internship  
Program (ASIP)  
Credit/No Credit & Late  
Withdrawal  
Attendance Status  
Faculty Registrar Services and  
Support  
Dates & Deadlines



## WHY WORK STUDY?

- Paid on-campus/remote positions for students (must be enrolled in studies)

## WHEN DOES IT HAPPEN?

- Sep - Apr (Fall-Winter) or May - Aug (Summer)

**CLNx**

## WHEN TO APPLY

- Aug - Sep (Fall-Winter)  
or
- Apr - May (Summer)

## HOW TO APPLY

- On **CLNx** under **Jobs & Recruitment** → **Work Study**
- Usually requires: cover letter, CV +/- unofficial transcript

# RESEARCH OPPORTUNITY PROGRAM

(more [here](#))

## WHY ROP?

- Provides **2nd and 3rd year** students opportunities to gain research experience and earn a course credit (must be enrolled in studies)

## WHEN DOES IT HAPPEN?

- Fall ROP: Jun → Sep
- Summer ROP: Apr → May

CLNx

## WHEN TO APPLY

- Deadline is **March 22, 2023**

## HOW TO APPLY

- CLNx Applications open **February 22, 2023**
- CLNx → Experiential Learning at Faculty of Arts & Science
- Usually requires: cover letter and statement of interest, CV +/- unofficial transcript
- Maximum of 5 ROP supervisors

# RESEARCH BASED COURSES

(more [here](#))

## WHY RESEARCH BASED COURSES?

- Requirement for some specialist programs
- Great way to get involved in a research project and develop skills

## WHEN DOES IT HAPPEN?

- Full Year Course (Sept → Apr)

## WHEN TO APPLY

- Need to secure supervisor **before** start of school year

## HOW TO APPLY

- Applications for different programs open at various times before the school year, keep an eye on the **websites**
- Applications **require approval from the project PI**, along with an **abstract** about the project



# LAB BASED COURSES

## WHY RESEARCH BASED COURSES?

- To gain hands-on dry and wet laboratory skills/techniques to better position yourself as a great candidate when applying to research positions

## HMB EXAMPLES

- **HMB310** Laboratory in Neuroscience,
- **HMB311** Laboratory in Fundamental Genetics and its Applications,
- **HMB312** Laboratory in Health and Disease,
- **HMB314** Laboratory in Human Biology,
- **HMB489** Advanced Laboratory in Human Biology

## OTHER DEPARTMENTS

- **PCL367** Drug Development Pipeline I *In vitro*,
- **MGY360** Whole-Genome Sequencing and Analysis Laboratory,
- **PSL372** Mammalian Physiology Laboratory,
- **BCH370** Laboratory Course in Biochemical Techniques
- **CSB330** Techniques in Molecular and Cell Biology



Contains: Undergraduate summer research programs, ROPs, research project courses, international research opportunities, high school research opportunities, research grants/awards, and research case competitions

Canva Link Access:

[https://www.canva.com/design/DAFYa\\_oUSXA/U185P8w9ymg793pZNAfifQ/view?utm\\_content=DAFYa\\_oUSXA&utm\\_campaign=designshere&utm\\_medium=link2&utm\\_source=sharebutton](https://www.canva.com/design/DAFYa_oUSXA/U185P8w9ymg793pZNAfifQ/view?utm_content=DAFYa_oUSXA&utm_campaign=designshere&utm_medium=link2&utm_source=sharebutton)

PDF Access:

[https://drive.google.com/file/d/13KHvRvOE-2oQUYuv09TgQ0hIRJ\\_IQhOf/view?usp=sharing](https://drive.google.com/file/d/13KHvRvOE-2oQUYuv09TgQ0hIRJ_IQhOf/view?usp=sharing)

Google Doc Access:

[https://docs.google.com/document/d/1\\_XsacLGDhRyDhaDS2HUBr6OIAew0Hc-jYOYhA8IxnBQ/edit?usp=sharing](https://docs.google.com/document/d/1_XsacLGDhRyDhaDS2HUBr6OIAew0Hc-jYOYhA8IxnBQ/edit?usp=sharing)



# WHAT IS NEEDED IN AN APPLICATION?

- CV or Resume
- Cover Letter or Cold Email
- Transcript
- Reference Letter



# CV or Resume

- Curriculum vitae (CV) is an **in-depth history** of your **professional** and **academic** credentials and accomplishments
  - Can be 3-10 pages long
- Resume is a concise curation of your **professional** experience, skills and qualifications
  - no longer than 2 pages



# Cover Letter or Cold Email

- A Cover Letter is a **document** submitted with resume in a formal application
- A Cold Email is an **inquiry for research** position (resume can be attached)



# Transcript and References

- Official Transcript must be purchased from the University
  - Done through ACORN
- Unofficial Transcript = print out of academic history (with grades)
- References can be requested to profs/previous PIs
  - Sometimes required to write letter
  - Sometimes just require contact info



# HOW TO WRITE A “COLD EMAIL” OR COVER LETTER

## STRUCTURE

- 3-4 short paragraphs: introduction of yourself, background and why you're applying, conclusion/call to action

## INTRODUCTION

- Year of study, program of study, school
- Your interests
- Intent behind the email/letter

## BACKGROUND

- Relevant skills/experience (GPA/previous coursework, previous research experience, lab skills, coding/statistical skills)
- Translatable soft skills from extracurriculars/work
- Reference your CV and transcript if applicable

## REASONS FOR APPLYING

- Explain why you want to work at the lab → be specific

## CONCLUSION

- Thank them for their time/consideration
- If “cold emailing” → call to action such as requesting a quick meeting with them

# EXAMPLE COLD EMAIL

Hello/Dear \_\_\_\_\_,

I am writing to you to express my interest in being a research assistant at your lab. I am a \_\_\_\_\_ year undergraduate student studying \_\_\_\_\_ at \_\_\_\_\_. My main research interests include \_\_\_\_\_.

I have previous research experience at \_\_\_\_\_ doing \_\_\_\_\_. In addition, I have \_\_\_\_\_ skills and experience with \_\_\_\_\_. [Point of this paragraph is to market yourself and demonstrate how you can add value to the lab]. Please find my CV and transcript attached to this email.

I have a strong interest in \_\_\_\_\_ which aligns with the current research at your lab. [Explain other reasons why you want to join the lab, how you will benefit from learning from them]

~~Please let me know if you are open to a 20 minute call to discuss this further within the next two weeks. I would really love to learn more about your project and gain insights/guidance about research from you.~~

Thank you very much for your time and consideration. I look forward to hearing back from you.

Best regards,

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**INTRODUCTION**

**BACKGROUND**

**WHY YOU'RE APPLYING**

**CONCLUSION/CALL TO ACTION**

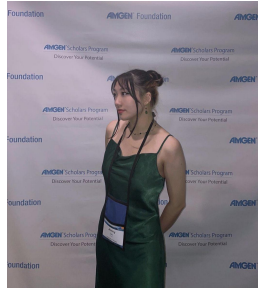


# RESEARCH PANELISTS

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**Paul Lifotra**  
Zadeh Lab @ UHN



**Jenny Liu**  
Attisano Lab (MolGen)



**Eric Chiu**  
Shoichet Lab (IBBME)



**Lucia Huang**  
Maikawa Lab (IBBME)



**Ilham Rabbi**  
Garton Lab (IBBME)



**Shayan Rabbi**  
Billia Lab @ UHN



**Michelle Wang**  
Tyndale Lab (PharmTox)