



# 2022 Undergraduate Summer Research Information Session

USRA and LURA

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# Information session and contacts

## Information sessions

- January 25, 2022 - 9 am - 10 am - <https://yorku.zoom.us/j/99349619080>
- February 2, 2022 - 6 pm - 7 pm - <https://yorku.zoom.us/j/91483907990>
- February 10, 2022 - 2 pm - 3 pm - <https://yorku.zoom.us/j/93884707194>

## Drop-In sessions – Zoom link on [lassondeundergraduateresearch.com](http://lassondeundergraduateresearch.com)

- February 11, 2022 – 12:30 pm – 2:30 pm
- February 18, 2022 – 12:30 pm – 1:30 pm

## Contact

- James Li (Research Officer) – [jamesli@yorku.ca](mailto:jamesli@yorku.ca)
- General email – [resday@yorku.ca](mailto:resday@yorku.ca)

“

The experience was nothing short of phenomenal; my supervisor was able to piece together a virtual, collaborative environment between myself and the other summer researchers.

Four months of working alongside a team and being able to play off each other's strengths, allowed for me to put together a cohesive body of work in time for the end-of-summer research conference.

I loved this experience so much that I decided to propel my project forward during the 20/21 academic year as a LURA student!

”

- Rashiq Shahad, Mechanical Engineering student supervised by Cuiying Jian

# What are these awards?

## NSERC USRA

- Natural Science and Engineering Research Council of Canada Undergraduate Student Research Award
  - Lassonde School of Engineering has a quota of 18 awards, York U has 48 in total

## YorkU LURA

- Lassonde Undergraduate Research Award
  - Lassonde School of Engineering has 45 awards available

**You only need to submit one application for both awards!**

Apply on Fluid Review -

[https://apply.lassonde.yorku.ca/prog/lura\\_usra\\_competition\\_2022](https://apply.lassonde.yorku.ca/prog/lura_usra_competition_2022)

**February 21, 2022**

# Where can I find more information?

## Lassonde Undergraduate Research

> <http://lassondeundergraduateresearch.com/>

## Lassonde School of Engineering (to find more potential Professors and areas of research)

> <https://lassonde.yorku.ca/>

> Can access department sites via “Departments” tab

## NSERC USRA

> [https://www.nserc-crsng.gc.ca/Students-Etudiants/UG-PC/USRA-BRPC\\_eng.asp](https://www.nserc-crsng.gc.ca/Students-Etudiants/UG-PC/USRA-BRPC_eng.asp)

# What are these awards?

## What do I do?

- They awards provide students a stipend of **\$10,000** to work with a professor for **16 weeks** on a summer research project.

## Why would I do summer research?

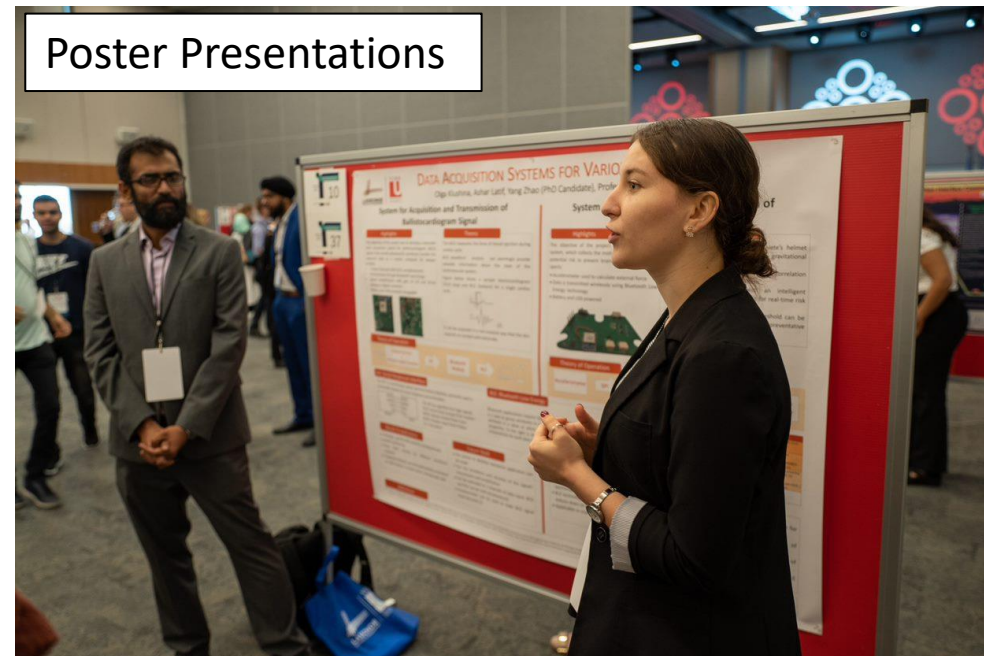
- Explore research
- Gain hands-on experience and develop new skills
- Learn about graduate school
- Establish relationships with professors and students
- Build your resume and get job experience related to your major

# What are these awards?

## End of year presentation

- All students are required to present at the annual Lassonde Undergraduate Research Conference -

*In 2019...*

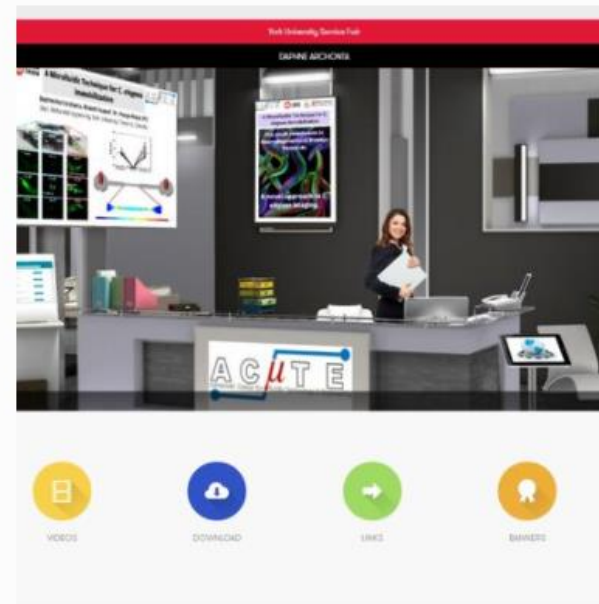
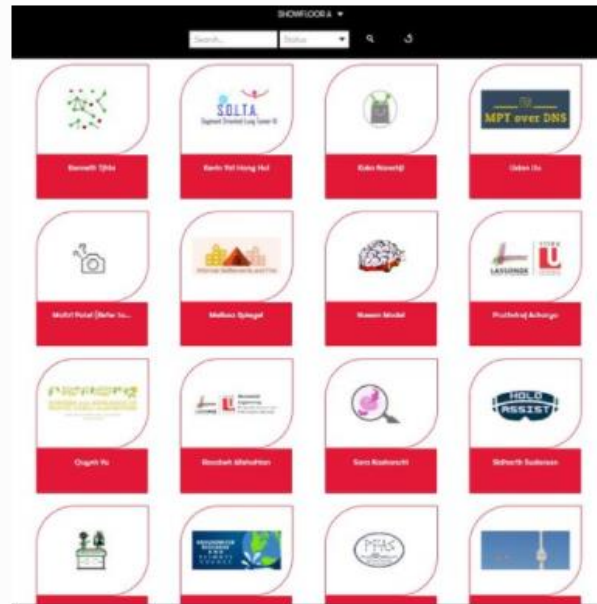


# What are these awards?

## End of year presentation

- All students are required to present at the annual Lassonde Undergraduate Research Conference =
  - In 2020 and 2021 <https://yuevents.easyvirtualfair.com/>

*In 2020 and 2021...*





**I am interested in applying,  
am I eligible?**

# Eligibility criteria – NSERC USRA

## To be eligible to apply for an award, you must

- be a Canadian citizen or permanent resident of Canada as of the deadline date for applications at the institution
- be registered, as of the deadline date for applications at the institution, in a bachelor's degree program at an eligible institution
- have obtained, over the previous years of study, a “B” cumulative average

## In addition...

- if you already hold a bachelor's degree and are studying toward a second bachelor's degree, you may still apply for this award
- you may hold only one USRA per fiscal year (April 1 to March 31)
- you may hold a maximum of three USRAs throughout your undergraduate university career

# Eligibility criteria – NSERC USRA

## To hold an award, you must

- have completed all the course requirements of at least the first year of university study (or two academic terms) of your bachelor's degree
- have been registered at the time of application and in at least one of the two terms immediately before holding the award in a bachelor's degree program at an eligible institution
- not have started a program of graduate studies in the natural sciences or engineering at any time
- be engaged on a full-time basis in research and development activities in the natural sciences or engineering during the tenure of the award

# Eligibility criteria – LURA

## To apply you must:

- Be a Canadian citizen, permanent resident of Canada, **or an International Student**
- All full-time undergraduate students who meet the requirements for the project (as determined by professors)
- 1 year completed by the time of the award is preferred
- Students may not enroll in more than **two (2) three-credit courses** during the tenure of the award. Applicants are encouraged to discuss this with the potential supervisor.

# Lassonde Co-op

**Both USRA and LURA can count as Co-op for eligible students**

**Contact the Co-op office for more information**

- Marilyn Molina – [marily.molina@Lassonde.yorku.ca](mailto:marily.molina@Lassonde.yorku.ca)
- Mayolyn Dagsi – [dagsi@yorku.ca](mailto:dagsi@yorku.ca)

**More information about Co-op can be found on their website**

- <https://coop.lassonde.yorku.ca/>

# How do I apply?

# What are the application steps?

## 1) Find a professor and a project

- Project Postings – Visit our website to see > 60 positions posted
  - <http://lassondeundergraduateresearch.com>
- Search professors from the Lassonde School of Engineering website

## 2) Contact supervisor and get their endorsement

- Deadline for professors to confirm support is February 16, 2022
- Supervisor Endorsement Form signed

## 3) Submit the application online

- **Deadline is February 21, 2022**
- Instructions <http://lassondeundergraduateresearch.com>
- Use FluidReview -  
[https://apply.lassonde.yorku.ca/prog/lura\\_usra\\_competition\\_2022](https://apply.lassonde.yorku.ca/prog/lura_usra_competition_2022)

# 1) lasondeundergraduateresearch.com

## Top section:

Competition details, guidelines, and instructions

JANUARY 25, 2022 (9AM – 10AM)

FEBRUARY 2, 2022 (6PM – 7PM)

FEBRUARY 10, 2022 (2PM – 3PM)

Background on LURA and USRA



Award Value and Duration



**Important Dates and Deadlines**



**Jan 17, 2022:** Competition Opened

**Jan 25, 2022 9am -10am:** Information Session (<https://yorku.zoom.us/j/99349619080>)

**Feb 2, 2022 6pm – 7pm:** Information Session (<https://yorku.zoom.us/j/91483907990>)

**Feb 10, 2022 2pm – 3pm:** Information Session (<https://yorku.zoom.us/j/93884707194>)

**Feb 16, 2022:** Last day for professors to decide which student(s) to support

**Feb 21, 2022:** Application Deadline

**Late March:** Awards will be announced

How to Apply



Eligibility





# 1) lassondeundergraduateresearch.com

## Bottom Section: Project postings



[Study](#) ▾ [Admissions & Aid](#) ▾ [Student Life](#) ▾ [Research](#) ▾ [About](#) ▾

### Browse Projects:

Civil Engineering ▾

**Earth and Space Science and Engineering** ▾

Electrical Engineering & Computer Science ▾

Mechanical Engineering ▾

BEST Lab ▾

[APPLY NOW](#)

[HAVE A QUESTION?](#)



# 1) [lassondeundergraduateresearch.com](https://lassondeundergraduateresearch.com)

## Bottom Section: Project postings

Earth and Space Science and Engineering



### Star Tracker Design for Space Object Tracking

**Professor:** Regina Lee

**Lab Website:** <https://nanosatellite.lab.yorku.ca/>

**Position Type:** Lasonde Undergraduate Research Award (LURA);NSERC Undergraduate Student Research Award (USRA);

**Open Positions:** 2

**Project Description:** Main research objective is to design and characterize a camera payload for upcoming CSA Stratospheric balloon mission (2022 launch) to demonstrate Resident Space Object (RSO) detection using a low-resolution camera. LURA or USRA students will assist in the final testing, assembly and operation of the payload for 2022 August launch and prepare for the post-launch data process.

**Duties and Responsibilities:** Each RA will be responsible for a series of functional test of the payload (long-form functional, thermal cycling, battery life, etc.) to demonstrate the full functionality of the payload. (S)he will also develop an algorithm to process on-orbit data to detect and characterize objects in space. the team will work closely with Magellan (Industry sponsor) and DRDC (government research partners) to further develop infrastructure (a network of small satellites equipped with proposed payload) to provide security and sustainability in operations in space environment.

**Work Setting:** Project work is carried out on campus, but can be shifted to remote work if necessary









**Desired Technical Skills:** Programming (Python and MATLAB preferred), working knowledge in embedded system, CAD skills

**Desired Course(s):** Space, Computer, Electrical or Mechanical

**Other Desired Qualifications:** N/A

**Contact Info:** Prof. Regina Lee ([REGINAL@yorku.ca](mailto:REGINAL@yorku.ca))

# 1) Search for a project on Lassonde's website

← → ↻ [lassonde.yorku.ca/esse/research/earth-and-atmospheric-science-research/](https://lassonde.yorku.ca/esse/research/earth-and-atmospheric-science-research/)        

## Earth and Space Science and Engineering



[Undergraduate](#) ▾ [Graduate](#) ▾ [Research](#) ▾ [About](#) ▾

[Earth and Atmospheric Science](#)

[Geomatics Science and Engineering](#)

[Space Science & Space Engineering](#)

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[Research Talks](#)

[Centre for Research in Earth and](#)

[GeoTalks Webinars](#)

[Space Science](#)

[Lab Directory](#)

# Earth and Atmospheric Science Research

# 2) Get supervisor's endorsement and a signed form

- A supervisor must endorse you for a position **prior to submitting on FluidReview!**
- Fill out Supervisor Endorsement Form and have it signed
- This also means you will have to reach out to a professor to convey your interest in working for them prior to making a submissions.

LURA and NSERC USRA - Summer 2022

## SUPERVISOR ENDORSEMENT FORM

This form needs to be completed and signed by the supervisor (i.e. professor). The student needs to upload the completed form with the application in FluidReview.

Professor (supervisor name):

Agrees to support (student name):

In application for:

LURA

\*Check the box(es) that apply. See the table on

USRA

page 2 for eligibility and cost – new value!

Title of project:

\_\_\_\_\_  
**Professor Signature**

\_\_\_\_\_  
Dated Signed

**Expected quality of the training to be received** - NSERC is recommending universities ensure that the training received by the students is of top quality. Please use the space below to briefly describe the proposed training (mentorship/supervision, what activities the student will participate in, what technical skills will be developed, and any other outcomes). The departmental evaluation committees will use this statement to assess eligibility of the training environment.

## 2) Get supervisor's endorsement and a signed form

- Proper email communications with the professor is critical.
- Email etiquette
- Suggest to attach your **resume** and **unofficial transcript**, or at have it ready at this stage
- Can reach out to 2 or 3 professors, but remember you can only obtain submit one endorsement form (i.e. choose one project)

# What documents do I need to apply?

Log In

Register

## Fluid Review

- Contact details
- Self-Identification survey (optional)

## Supervisor Endorsement Form

## Resume (2 pg. max)

## Research Interest Statement (1 pg.)

## Transcript



Lassonde School of Engineering

Home of the Renaissance Engineer

### LURA USRA Competition 2022

The Lassonde School of Engineering is accepting applications for the Lassonde Undergraduate Research Award (LURA) for Summer 2022.

For complete competition guidelines, visit our website - <https://lassonde.yorku.ca/research/2022-lura-and-usra-research-at-lassonde>

#### What is required?

- **Contact Details**
- **Resume (2 pg. maximum)**
- **Research Interest Statement (1 pg.)**
  - Provide examples of both your research interests and any previous experience with research projects either course-based or in a lab. You can include reasons for wanting to participate in a research project, as well as your future aspirations and career plans.
- **Supervisor Endorsement Form**
  - Your potential supervisor must provide you the completed and signed Supervisor Endorsement form for you to upload. The form can be found here, direct link - <https://lassonde.yorku.ca/wp-content/uploads/Summer-2022-Undergraduate-Research-Supervisor-Endorsement-Form18.pdf>
- **Unofficial Transcript**
  - Upload an unofficial transcript (<https://registrar.yorku.ca/index.php/transcripts>) OR upload a grade report AND course and grade list

APPLY

Opens

2022 Jan 17 12:01 AM (EST)

Deadline

2022 Feb 21 11:59 AM (EST)

# 3) How to I submit my application?

## FluidReview

- Register for an account -  
[https://apply.lassonde.yorku.ca/prog/lura\\_usra\\_competition\\_2022](https://apply.lassonde.yorku.ca/prog/lura_usra_competition_2022)
- Start application to “LURA USRA Competition 2022”
- Upload all documents to FluidReview
  - General Information
    - *Contact Details*
    - *Self-Identification Form (Voluntary)*
  - Supervisor Endorsement Form
  - Research Interest Statement
  - Resume
  - Transcript

# What documents do I need to apply?

## Supervisor Endorsement Form

- Each professor will fill out and sign this form for every student
- Available online - <https://lassonde.yorku.ca/wp-content/uploads/Summer-2022-Undergraduate-Research-Supervisor-Endorsement-Form18.pdf>
- *Quality of the training environment*
  - Professors will complete this to identify your proposed training, mentorship/supervision, activities, technical skills, and other aspects.
- NSERC forms 202 will not be used at this stage
  - Students and supervisors awarded an NSERC USRA will be asked to fill out NSERC forms at a later stage.

LURA and NSERC USRA - Summer 2022  
**SUPERVISOR ENDORSEMENT FORM**

This form needs to be completed and signed by the supervisor (i.e. professor). The student needs to upload the completed form with the application in FluidReview.

Professor (supervisor name):

Agrees to support (student name):

In application for:  LURA  USRA \*Check the box(es) that apply. See the table on page 2 for eligibility and cost – new value!

Title of project:

\_\_\_\_\_  
Professor Signature                      Dated Signed

**Expected quality of the training to be received** - NSERC is recommending universities ensure that the training received by the students is of top quality. Please use the space below to briefly describe the proposed training (mentorship/supervision, what activities the student will participate in, what technical skills will be developed, and any other outcomes). The departmental evaluation committees will use this statement to assess eligibility of the training environment.



# What documents do I need to apply?

## Resume

- Contact information
- Education
  - High school, college, university
- Work experience
- Volunteer experience
- Skills
  - Link to the project; Add anything unique!
- Clubs, activities, roles
- Awards
- Publications or posters

### Tips!

- Highlight your research and/or academic achievement
- Consider highlighting how you used 'soft skills' in your non-research work experience (e.g. communication, teamwork, flexibility, etc).
- Check spelling and grammar

# What documents do I need to apply?

## Research Interest Statement (1 pg.)

- Past experience (laboratory or course-related)
- Skills you bring to the project
- Why you are interested in the project or topic, working with the professor, and/or research in general
- What you plan to learn from the experience
- Future plans

### Tips!

- Avoid repeating your resume
- Try to use formal language
- Check spelling and grammar

# What documents do I need to apply?

## Transcripts

- **All students** must upload unofficial transcripts
- **Non-York students** also need to provide official transcripts to the Lassonde School of Engineering Dean's Office
  - Consult with the Registrar's Office at your institution for ordering options
  - Contact James Li ([jamesli@yorku.ca](mailto:jamesli@yorku.ca)) for more information

## Students Awarded a USRA

- Students awarded an NSERC USRA will need to provide official transcripts to NSERC at a later date.

# How will my application be assessed?

**Applications will be reviewed by professors within each department as well as a selection committee.**

## **Criteria include:**

- GPA – 60%
- Research Potential – 30%
- Communication – 10%

## **Results will be sent by end of March**

- Accept or Reject within 2 weeks

# Applying to another Faculty?

**Many faculties at York University (or elsewhere) host NSERC USRA or other summer research students**

## Contacts

- Faculty of Science
  - Stefanie Bernaudo – [sbr@yorku.ca](mailto:sbr@yorku.ca)
- Faculty of Health (contact Departments directly)
  - Kinesiology and Health Science (KAHS): [ugkhs@yorku.ca](mailto:ugkhs@yorku.ca)
  - Global Health (GLBH): [globhlth@yorku.ca](mailto:globhlth@yorku.ca)
  - Psychology (PSYC): [psyc@yorku.ca](mailto:psyc@yorku.ca)
  - School of Health Policy and Management (SHPM): [shpm@yorku.ca](mailto:shpm@yorku.ca)
  - Nursing (NURS): [nursing@yorku.ca](mailto:nursing@yorku.ca)

# Awards in the Faculty of Science

To [apply](#) and browse available projects, please visit:

[www.yorku.ca/science/research/nserc-usra-summer-2022/](http://www.yorku.ca/science/research/nserc-usra-summer-2022/)

- **FSc will offer 18 USRAs (+ 15 DURAs)**
- **Deadline:** March 4<sup>th</sup> 2022
- Valued at \$8,400/award
- **More information:**
  - **Stefanie Bernaudo**  
Email: [sbr@yorku.ca](mailto:sbr@yorku.ca)
  - **Joanne Sequeira**  
Email: [adminres@yorku.ca](mailto:adminres@yorku.ca)
  - Drop in [Q&A Session](#): February 23<sup>rd</sup> at 10:00am

# Information session and contacts

## Information sessions

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