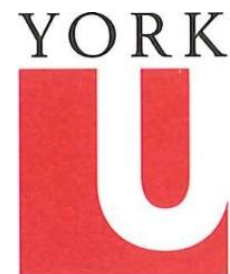


YRSTF 2024 AWARDS CEREMONY



YRSTF 2024 AWARDS CEREMONY

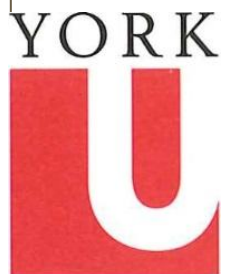


Land Acknowledgement

We recognize that the York Region Science and Technology Fair located on the lands of two treaties. These treaties have been signed with the Mississaugas of the Credit First Nation and the First Nations of the Williams Treaties who are: the Mississaugas of Alderville, Curve Lake, Hiawatha, Scugog Island; and the Chippewas of Beausoleil, Rama, and Georgina Island. To honour this agreement we will take up our responsibility to be respectful of their traditions, knowledge and inherent rights as sovereign nations. We will respect their relationship with these lands and recognize that our connection to this land is through the continued relationship with these First Nations, and we acknowledge our shared responsibility to respect and care for the land and waters for future generations.



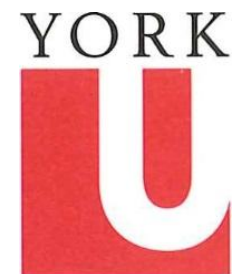
YRSTF 2024 AWARDS CEREMONY



Welcome and Introductions!



YRSTF 2024 AWARDS CEREMONY





York Catholic District School Board

Catholic Education Centre, 320 Bloomington Road West, Aurora, Ontario L4G 0M1
Tel: 905-713-1211, 416-221-5051, 1-800-363-2711
Fax: 905-713-1272 • www.ycdsb.ca



April 6, 2024

On behalf of the York Catholic District School Board (YCDSB), we are happy to send our greetings to all those taking part in the 2024 York Region Science & Technology Fair.

Through Pathways and Experiential Learning, we hope to provide all YCDSB students with an opportunity to further explore Science and Technology.

The YCDSB has a deep commitment to teaching and promoting science and technology. We have opened STREAM Centres of Excellence (Science, Technology, Religion, Engineering, Arts and Math) throughout our Board, so students can use state-of-the-art technology to develop innovative solutions to the world's most pressing issues.

It is always inspiring to see the creativity of students and to imagine the amazing world that the next generation will create.

We applaud you for using your God-given talents for such important work. May today be an excellent opportunity to learn, to be inspired and to foster lifelong friendships.

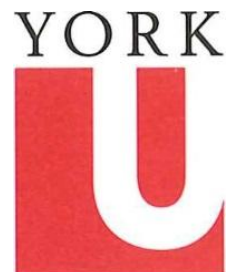
Yours in Christ,

A handwritten signature in black ink that reads "Elizabeth Crowe".

Elizabeth Crowe
Chair of the Board

A handwritten signature in black ink that reads "John DeFaveri".

John DeFaveri
Interim Director of Education

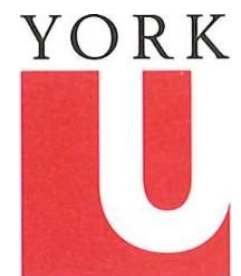


MESSAGE FROM THE DIRECTOR

YORK REGION SCIENCE AND TECHNOLOGY FAIR



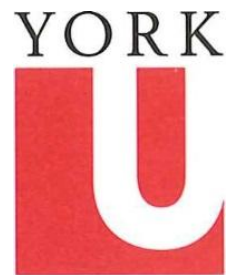
YRSTF 2024 AWARDS CEREMONY



SPECIAL AWARDS



YRSTF 2024 AWARDS CEREMONY



Sanofi Biogenius Award

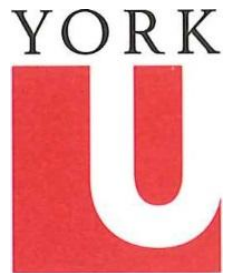
This \$100.00 award is presented to an outstanding project by students in grades 7-12 related to biotechnology – the use of biological systems to produce goods and services – health or life sciences.



biogenius



YRSTF 2024 AWARDS CEREMONY



Sanofi Biogenius Award

4303 - PulmoScan

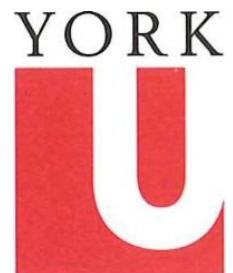
Terry Xiao, Matthew Siu



biogenius



YRSTF 2024 AWARDS CEREMONY

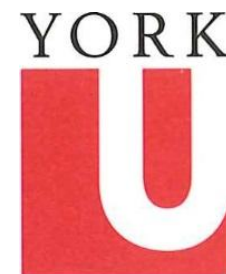


Special Invitation

In partnership with the City of Markham, 5 projects by Markham students have been selected to represent YRSTF at the Markham Celebrates Earth Day on April 20th, 2024.



YRSTF 2024 AWARDS CEREMONY



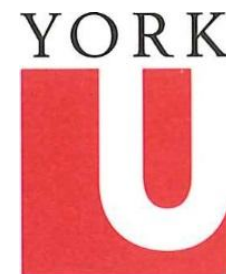
Special Invitation

1301 - Hydrology: The Smarter Way of Plant Irrigation

Nicholas Ching, Albert Liao



YRSTF 2024 AWARDS CEREMONY



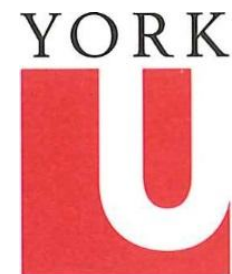
Special Invitation

6107 - No Plastic Beyond this Point

Kelly Chen, Ella Zhao



YRSTF 2024 AWARDS CEREMONY



Special Invitation

1106 - Improving the Sustainability of Aquaculture

Katie Chen, Yifei Wang



YRSTF 2024 AWARDS CEREMONY

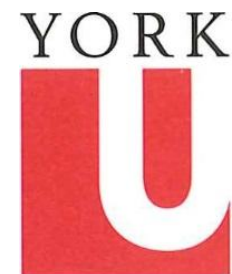


Special Invitation

5301 - Wind Tunnel
James So, Jessica Lo



YRSTF 2024 AWARDS CEREMONY

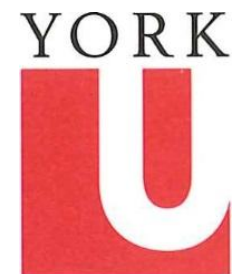


Special Invitation

8102 - AI Agents and their Application in Wildfires Ethan Wu



YRSTF 2024 AWARDS CEREMONY

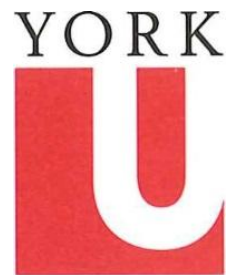




EcoSpark Environmentalist Award



YRSTF 2024 AWARDS CEREMONY





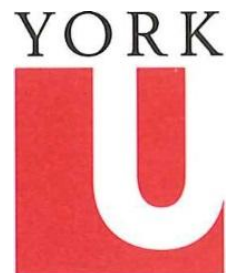
EcoSpark Environmentalist Award

1108 - Your Fridge.exe: A novel approach to resolving the modern issue of food waste

Jean-Ethan Yang, William Bork



YRSTF 2024 AWARDS CEREMONY





Canadian
Meteorological and
Oceanographic Society

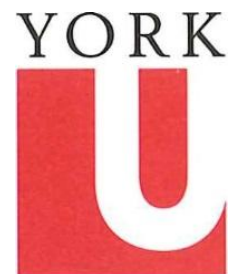
La Société Canadienne
de Météorologie et
d'Océanographie

Canadian Meteorological and Oceanographic Society Award

This prize will be given to the best project in Meteorological and Oceanographic Sciences. This includes projects in weather, air quality, climate, climate change and the oceans.



YRSTF 2024 AWARDS CEREMONY





Canadian Meteorological and Oceanographic Society Award

Canadian Meteorological and Oceanographic Society

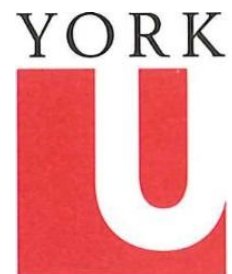
La Société Canadienne de Météorologie et d'Océanographie

\$150 1st place

1201 - Hustling & Bustling
Aayan Hirani, Brian Lin



YRSTF 2024 AWARDS CEREMONY





Canadian Meteorological and Oceanographic Society Award

Canadian Meteorological and Oceanographic Society

La Société Canadienne de Météorologie et d'Océanographie

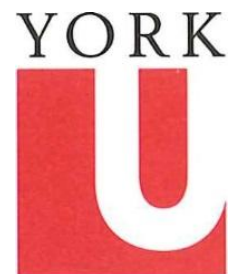
\$75.00 2nd place

6106 - DANGER: Hypoxic Waters Ahead

Cassia Stoodley



YRSTF 2024 AWARDS CEREMONY





EVGENY ROSEN
Real Estate Broker
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416.495.4030 OFFICE
evgenyrosen@homula.com
www.realtorrosen.ca

 **omula** 211 CONSUMERS RD. #101
Healthy Brokerage TORONTO ON M2J 1G8
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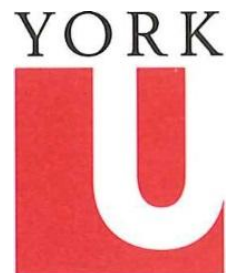
The Home Innovation Award

Sponsored by Evgeny Rosen

The \$50 "Home Innovation Award" is presented to a project that best demonstrates innovation in the area of home improvements and/or the development of sustainable homes.



YRSTF 2024 AWARDS CEREMONY





EVGENY ROSEN
Real Estate Broker
416.888.4267 CELL/TEXT
416.495.4030 OFFICE
evgenyrosen@homula.com
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 **omula** 211 CONSUMERS RD. #101
Healthy Brokerage* TORONTO ON M2J 1G8
BUY • RENT • INVEST

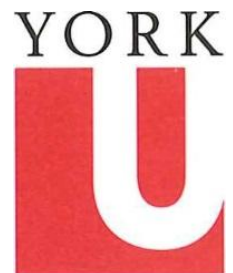
The Home Innovation Award

Sponsored by Evgeny Rosen

**1102 - Smart Watering System for
Healthy Plants**
Huseyin Canbulat



YIRSTF 2024 AWARDS CEREMONY



Vernadsky Award



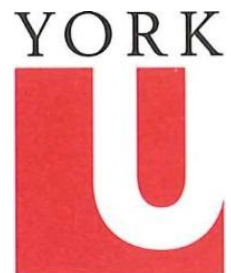
Awarded to a project that that reflects ideas that best support sustainable development.

In honour of Vladimir Ivan Vernadsky whose works have contributed to geology, geography, geosphere, biosphere and noosphere

\$ 100.00 Award



YRSTF 2024 AWARDS CEREMONY



Vernadsky Award

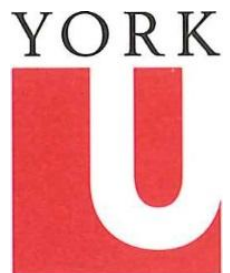


1301 - Hydrology: The Smarter Way of Plant Irrigation

Nicholas Ching, Albert Liao



YRSTF 2024 AWARDS CEREMONY



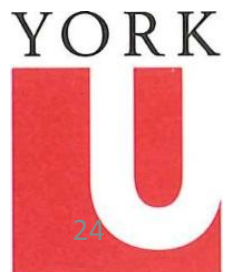
Dr. Ray Clement Environment Award

Awarded to a project judged to be the Best-in-Fair in the field of environmental science. The winning project demonstrates clarity and logic and was conducted according to the best principles of scientific investigation.

\$300 Award



YRSTF 2024 AWARDS CEREMONY



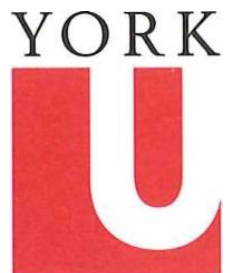
Dr. Ray Clement Environment Award

**1101 - Creating Vertical Hydroponic Farms
for Schools and Community Centres**

Issac Yip



YIRSTF 2024 AWARDS CEREMONY



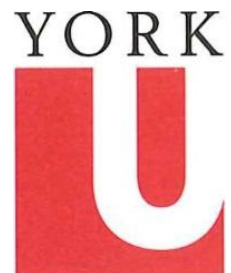


The WEAO Award

This \$200 award will be awarded to a project focused on innovative ideas for preserving and/or enhancing the water environment in recognition that water is our most valuable resource that requires on-going efforts to manage it in a responsible and sustainable manner.



YRSTF 2024 AWARDS CEREMONY





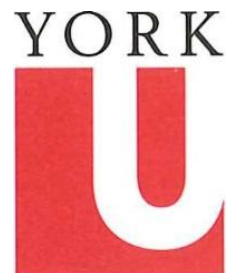
The WEAO Award

6107 - No Plastic Beyond this Point

Kelly Chen, Ella Zhao



YRSTF 2024 AWARDS CEREMONY

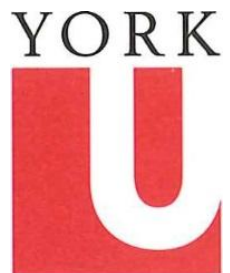


Young Innovator's Award

This \$200.00 award is presented to an outstanding project that demonstrates innovative thinking.



YRSTF 2024 AWARDS CEREMONY



Young Innovator's Award

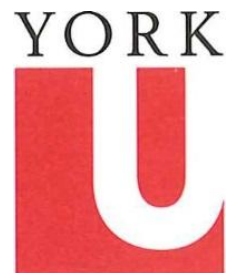
2302 - Inchworm Inspired Robot:

Worminator

Jiayao Chen



YIRSTF 2024 AWARDS CEREMONY



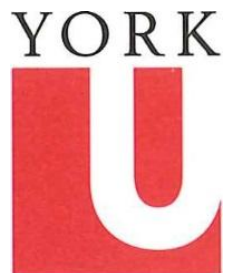


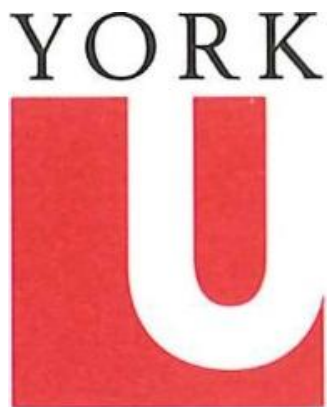
York University Science Explorations Camp Award

Awarded to a high performing junior student
One week at summer camp



YRSTF 2024 AWARDS CEREMONY





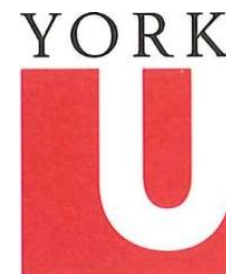
York University Science Explorations Camp Award

**4107 - Beyond Epinephrine: A New
Frontier in Auto injector Technology**

Tyler Mo



YRSTF 2024 AWARDS CEREMONY





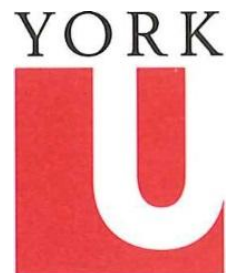
York University's Spark Lab Program 2023

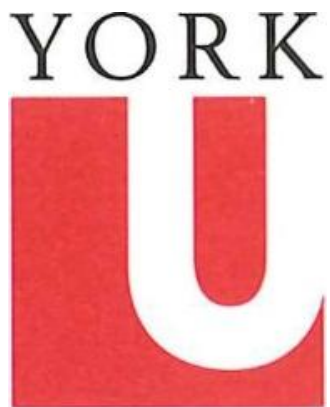
Awarded to a high performing senior
student

One week at summer camp



YRSTF 2024 AWARDS CEREMONY





York University's Spark Lab Program 2023

7201 - BeBella

ShanzeH Haji



YRSTF 2024 AWARDS CEREMONY





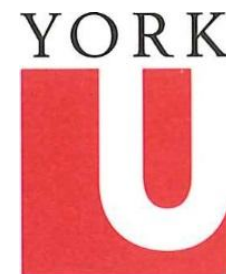
YRSTF Communication and Presentation Award

Awarded to a project with an outstanding oral presentation, online projectboard, and display board

\$ 100.00 Award



YRSTF 2024 AWARDS CEREMONY



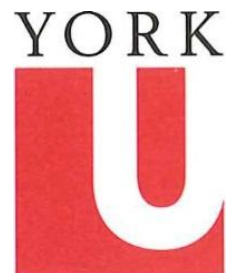


YRSTF Communication and Presentation Award

**4103 - β -Cyclodextrin as a Novel Additive
to Pancreatic Enzyme Replacement
Therapy
Candace Hon**



YRSTF 2024 AWARDS CEREMONY





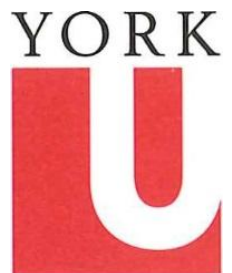
YRSTF Challenge Awards

These \$100 awards are presented to the best project in each of the CWSF Challenge categories

\$100 Award



YRSTF 2024 AWARDS CEREMONY





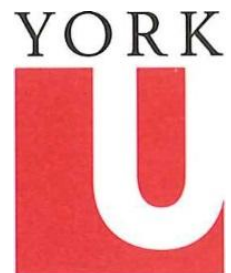
YRSTF Challenge Award Agriculture, Fisheries and Food Challenge

**1301 - Hydrology: The Smarter Way of
Plant Irrigation**

Nicholas Ching, Albert Liao



YRSTF 2024 AWARDS CEREMONY





YRSTF Challenge Award Curiosity and Ingenuity

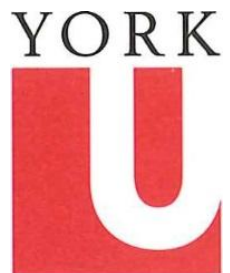
2104 - Coding Unknown Music Scales

Using Python

Charles Tam, Haygen Lin



YRSTF 2024 AWARDS CEREMONY



YRSTF Challenge Award Digital Technology

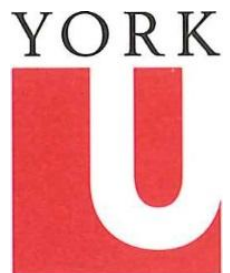


**7301 - GrocerEye: The app that identifies
groceries for the visually impaired**

Tina Nasiri, Chloe Fu



YRSTF 2024 AWARDS CEREMONY





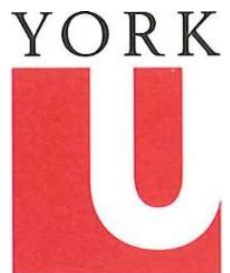
YRSTF Challenge Award Disease and Illness

**4107 - Beyond Epinephrine: A New
Frontier in Auto injector Technology**

Tyler Mo



YRSTF 2024 AWARDS CEREMONY



YRSTF Challenge Award Energy

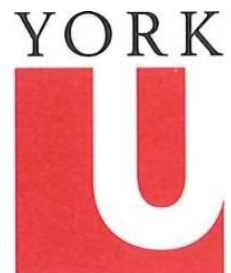


**6101 - Light pollution in Toronto and York
region.**

Anton Lazarchyk



YRSTF 2024 AWARDS CEREMONY



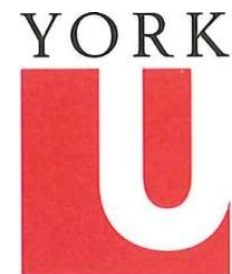


YRSTF Challenge Award Environment and Climate Change

6107 - No Plastic Beyond this Point
Kelly Chen, Ella Zhao



YRSTF 2024 AWARDS CEREMONY





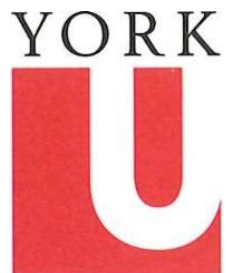
YRSTF Challenge Award Health and Wellness

7303 - ClearCardio: Detecting Heart Issues Live with AI and Custom, Affordable Monitor

Nima Vasigh, Ian Patrick Tan



YRSTF 2024 AWARDS CEREMONY





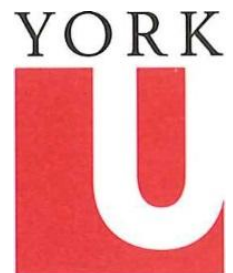
YRSTF Challenge Award Natural Resources

1101 - Creating Vertical Hydroponic Farms for Schools and Community Centres

Issac Yip



YRSTF 2024 AWARDS CEREMONY

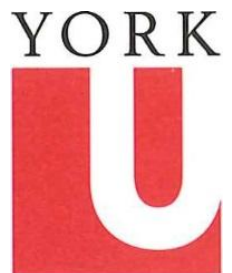




YRSTF Promising Biologist Award



YRSTF 2024 AWARDS CEREMONY



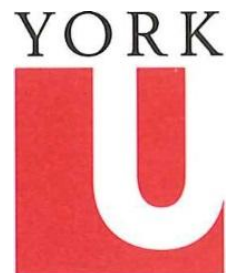


YRSTF Promising Biologist Award

**4103 - β -Cyclodextrin as a Novel Additive
to Pancreatic Enzyme Replacement
Therapy
Candace Hon**



YRSTF 2024 AWARDS CEREMONY





Cournoyea/Paz-Soldan Peer Award

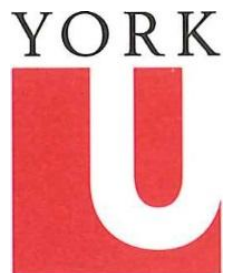
Awarded to the 'best project' as selected by their peers

Named after the founding members of YRSTF

\$ 50.00 + Crystal Award



YRSTF 2024 AWARDS CEREMONY





Cournoyea/Paz-Soldan Peer Award

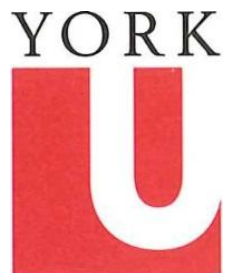
**7302 - ConvoSpark AI: A Novel Approach to Supporting
Social Interactions for Individuals with Alzheimers**

Caitlyn Chiu, Rachael Chan

Health and Wellness, Senior (Grade 11/12)



YRSTF 2024 AWARDS CEREMONY





Honourable Mentions

Honourable Mentions

1105 - Hand-Prepared Meals: Is your food truly safe?

Carina Ngo, Jenna Saleh

1302 - Travelling Bacteria - In Our Daily Produce (YRSTF)

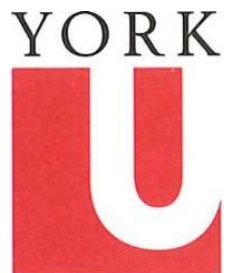
Leigha Ahn, Rachel John

7101 - Effects of Technology before Bed on Sleep

Havish Bhavsar



YRSTF 2024 AWARDS CEREMONY



Honourable Mentions

3101 - Optimizing Traffic Lights

Timothy Chan, Lucas Chan

3306 - Foe-to: A Smart Extension to Verify the Authenticity of your Photo

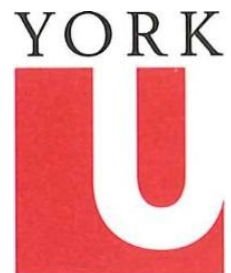
Chloe Hong, Katie Lee

8102 - AI Agents and their Application in Wildfires

Ethan Wu



YRSTF 2024 AWARDS CEREMONY



Honourable Mentions

6201 - Soap-prise! Mother Nature's Soap

Olivia Ho, Shagana Senthana

7105 - Bio-Patch: Using Bioplastics to Create an Improved Traditional Bandage

Melody Dang, Nika Zarrehbini - Esfahani

3103 - Autopilot and Crash Prevention for Electric Bikes

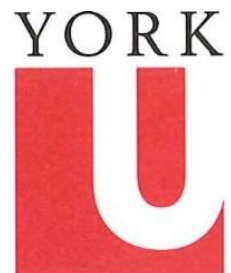
Matthew Komor

3303 - GPU Power and Performance Research

Ryan Qin , Eric Zhou



YRSTF 2024 AWARDS CEREMONY



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Science and Technology Fair

**CONGRATULATIONS TO
ALL PARTICIPANTS &
WINNERS**





Bronze Medal Winners



Bronze Medal Winners

4301 - Analyzing Patient Symptoms and Treatment Effectiveness of Lung Cancer Drug Therapies with Machine Learning Algorithms

Victoria Yu

7301 - GrocerEye: The app that identifies groceries for the visually impaired

Tina Nasiri, Chloe Fu



YRSTF 2024 AWARDS CEREMONY





Bronze Medal Winners

5301 - Wind Tunnel

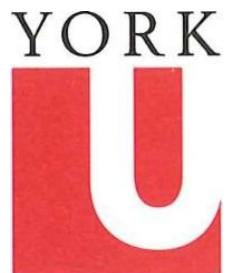
James So, Jessica Lo

6106 - DANGER: Hypoxic Waters Ahead

Cassia Stoodley



YRSTF 2024 AWARDS CEREMONY





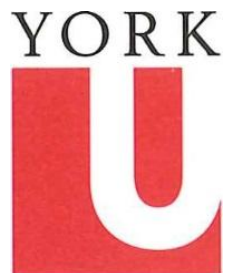
Bronze Medal Winners

1108 - Your Fridge.exe: A novel approach to resolving the modern issue of food waste
Jean-Ethan Yang, William Bork

7201 - BeBella
Shanzeh Haji



YRSTF 2024 AWARDS CEREMONY





Bronze Medal Winners

4202 - Can Immunosuppressants increase NSC retention and potentially offer a new treatment for Alzheimer's?

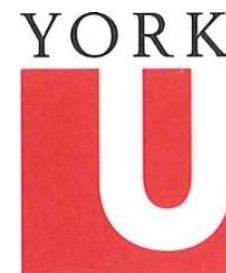
Aashika Reddy

7108 - Unraveling The Flaws of MLB Bases!

Karson Kwong, Vinush Vakeesan



YRSTF 2024 AWARDS CEREMONY





Bronze Medal Winners

1101 - Creating Vertical Hydroponic Farms for Schools and Community Centres

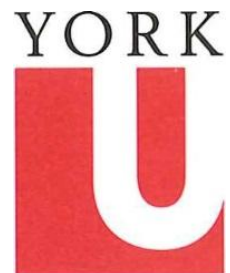
Issac Yip

6103 - Instant Extinguish! With Campfire Watcher

Sophia Wang, Maggie Ma



YRSTF 2024 AWARDS CEREMONY





Silver Medal Winners



Silver Medal Winners

1301 - Hydrology: The Smarter Way of Plant Irrigation

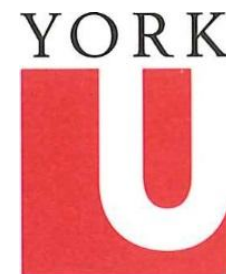
Nicholas Ching, Albert Liao

2302 - Inchworm Inspired Robot: Worminator

Jiayao Chen



YRSTF 2024 AWARDS CEREMONY





Silver Medal Winners

7104 - Do You Breathe Right?

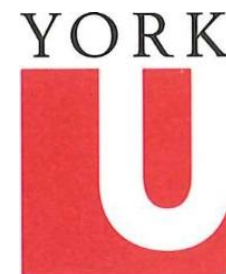
Radin Gharavi

2104 - Coding Unknown Music Scales Using Python

Charles Tam, Haygen Lin



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Silver Medal Winners

7303 - ClearCardio: Detecting Heart Issues Live with AI and Custom, Affordable Monitor

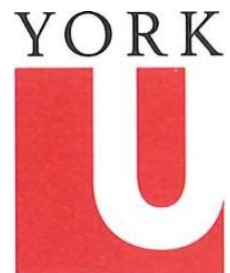
Nima Vasigh, Ian Patrick Tan

2303 - The Next Step Wheelchair: An Innovative Approach Towards Transport Inequality.

Clara Fu



YRSTF 2024 AWARDS CEREMONY





Silver Medal Winners

3302 - Access n' Assist: Cutting-Edge Biometric Solution for Paramedic Support

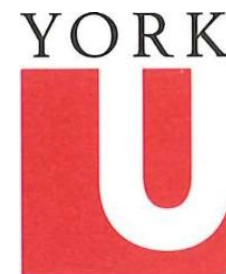
Sakina Abbas, Zahra Shahhaidari

6107 - No Plastic Beyond this Point

Kelly Chen, Ella Zhao



YRSTF 2024 AWARDS CEREMONY





Silver Medal Winners

4107 - Beyond Epinephrine: A New Frontier in Auto injector Technology

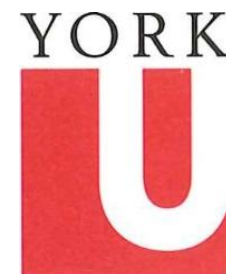
Tyler Mo

4103 - β -Cyclodextrin as a Novel Additive to Pancreatic Enzyme Replacement Therapy

Candace Hon



YRSTF 2024 AWARDS CEREMONY





Gold Medal Winners



**OTTAWA
2024**

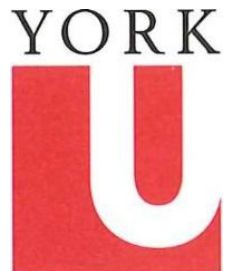
Gold Medal Winner Canada Wide Science Fair Finalist

4303 - PulmoScan

Terry Xiao, Matthew Siu



YRSTF 2024 AWARDS CEREMONY





**OTTAWA
2024**

Gold Medal Winner

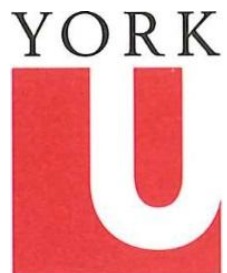
Canada Wide Science Fair Finalist

**3304 - AutoShield 2.0: The Dual-Defense System
For All Vehicles**

Mohammadmahdi Shahhaidari, Khaleel Khaki



YRSTF 2024 AWARDS CEREMONY





**OTTAWA
2024**

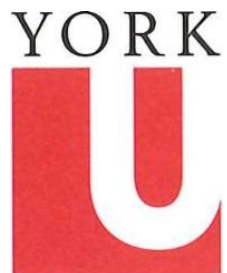
Gold Medal Winner Canada Wide Science Fair Finalist

**6101 - Light pollution in Toronto and
York region.**

Anton Lazarchyk



YRSTF 2024 AWARDS CEREMONY



University of Ottawa Entrance Scholarship



uOttawa

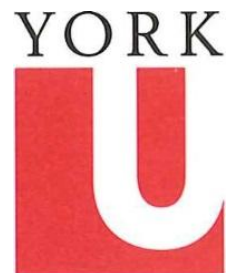
L'Université canadienne
Canada's university

Awarded to a top Senior project to encourage the winner(s) to pursue university studies in health, sciences or technology

A \$1,000 Scholarship to be applied to tuition fees when student(s) register in an undergraduate program in the Faculties of Engineering, Science, or Health Sciences



YRSTF 2024 AWARDS CEREMONY



University of Ottawa Entrance Scholarship



uOttawa

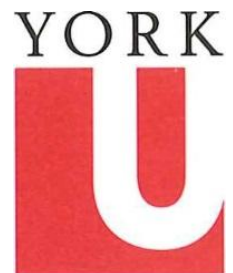
L'Université canadienne
Canada's university

3304 - AutoShield 2.0: The Dual-Defense System For All Vehicles

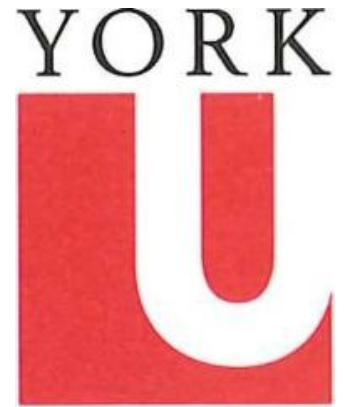
Mohammadmahdi Shahhaidari, Khaleel Khaki



YRSTF 2024 AWARDS CEREMONY



York University Admission Scholarship

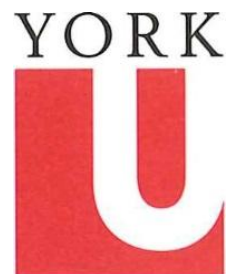


Awarded to the top Senior project

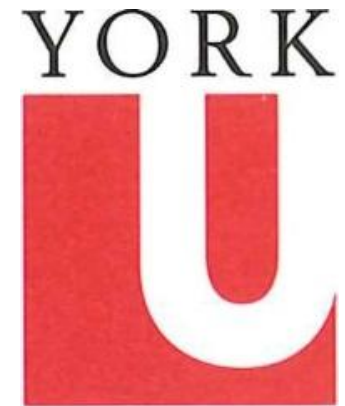
A \$2,500 Scholarship (\$1250/partner) to be applied to tuition fees when student(s) register in an undergraduate program at York University



YRSTF 2024 AWARDS CEREMONY



York University Admission Scholarship

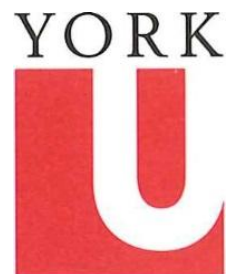


4303 - PulmoScan

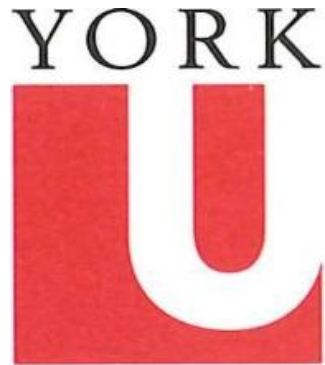
Terry Xiao, Matthew Siu



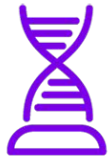
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Thank You



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Dr. Ray Clement

Graziella Sadler



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THANK YOU

- **Volunteers**
- **Judges**
- **Teachers**
- **Parents**
- **York University**
- **Our Lady Queen of the World Volunteers
and Custodial Staff**
- **YRSTF supporters**



YRSTF 2024 Committee

The fair is a passion project for many of our committee members. Without them, we would not be here! Thank you!

A special Thank You to

Graziella Sadler - Our Judging Coordinator!!!

Michael Frankfort - Community Partnerships and Sponsorship

Dr. Ray Clement - Chief Judge

Dennis Stam - YRDSB Liaison

Germaine Falzone - YCDSB Liaison

Joe Ciccone - CWSF Chaperone and President

Vanessa Quidayan - Private School Liaison

and our volunteers: Pierre, Jenn, Jonathan, Kim, Patrick, Norene, Stuart

