

The Actuarial Foundation of Canada Award
Prix de La Fondation actuarielle du Canada
Junior

Stephanie Christle

Food for the North; Sustainable Farming for Indigenous communities negatively affected by climate change

Bison – Manitoba



The Actuarial Foundation of Canada Award
Prix de La Fondation actuarielle du Canada
Intermediate / Intermédiaire

Derek Sheen

A Novel Approach to Detecting Melanoma Using Deep Learning

Waterloo-Wellington – Ontario



**The Actuarial Foundation of Canada Award
Prix de La Fondation actuarielle du Canada**

Senior / Sénior

**Koral Kulacoglu
Hanze Wu**

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York – Ontario



The Beaty Centre for Species Discovery Award
Prix du Centre Beaty pour la découverte des espèces

Senior / Sénior

Annabelle Rayson

**Plankton Wars: An Innovative Analysis of Daphnia Genotype
Biomanipulation for Algae Bloom Prevention**

Lambton County – Ontario



Brainspace Magazine Award
Prix du magazine Brainspace
Junior

Olivier Lafleur

Les plantes, des ordinateurs quantiques?

Bluewater – Ontario

INTERACTIVE & EDUCATIONAL
Brainspace



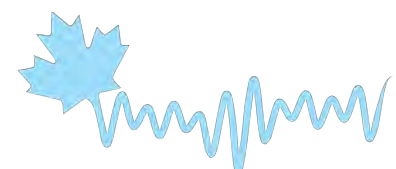
Canadian Acoustical Association Award
Prix de l'Association canadienne d'acoustique

Senior / Sénior

Mac Dykeman

A Simple, Scalable Method For Reducing Stress In Chicks During The First Seven Days Post Hatch.

4-H Canada



CANADIAN ASSOCIATION
ACOUSTICAL CANADIENNE
ASSOCIATION D'ACOUSTIQUE



**Canadian Meteorological and Oceanographic Society and the
Weather Network Award**

**Prix de la Société canadienne de météorologie et d'océanographie
et de Météomédia**

Senior / Sénior

Annabelle Rayson

**Plankton Wars: An Innovative Analysis of Daphnia Genotype
Biomanipulation for Algae Bloom Prevention**

Lambton County – Ontario



Météo
Média  The Weather
Network



Canadian Society for Clinical Chemists Award
Prix de la Société canadienne des clinico-chimistes

Senior / Sénior

Dheiksha Jayasankar

Smiglaside-C Part 2: Developing Hydrogel Films from A.muricata Extracts for Wound Healing Purposes

Niagara – Ontario



Canadian Stockholm Junior Water Prize

Prix du concours junior canadien au sujet de l'eau, à Stockholm

Senior / Sénior

Emily Goodson

A Novel Approach to the Reparation of Damaged Freshwater Ecosystems Simulating Wetland Filtration

Simcoe County – Ontario

Canadian WEF Member Associations, the
Canadian Water and Wastewater Association
and Jacobs



Canadian Stockholm Junior Water Prize

Prix du concours junior canadien au sujet de l'eau, à Stockholm

Senior / Sénior

Jessica Graham

Modified Fe Nanoparticles and a Rotating Magnetic Drum: Removing Aquatic Microplastics

South-East New Brunswick – New Brunswick

Canadian WEF Member Associations, the
Canadian Water and Wastewater Association
and Jacobs



Canadian Stockholm Junior Water Prize

Prix du concours junior canadien au sujet de l'eau, à Stockholm

Senior / Sénior

Annabelle Rayson

**Plankton Wars: An Innovative Analysis of Daphnia Genotype
Biomanipulation for Algae Bloom Prevention**

Lambton County – Ontario

Canadian WEF Member Associations, the
Canadian Water and Wastewater Association
and Jacobs



CAP Physics Prize

Prix en physique de l'ACP

Senior / Sénior

Zachary Ireland

Quantifying the Likelihood of Neutron Absorption Utilizing Radiative Capture Cross-Sections

Manitoba Schools Science Symposium – Manitoba



Centre for Canadian Nuclear Sustainability Award
Prix du Centre pour la durabilité du nucléaire canadien

Intermediate / Intermédiaire

Naila Moloo

Forecasting the Power Output of Photovoltaic Systems

Ottawa – Ontario



deutraMed Chemistry and Innovation Award
Prix deutraMed pour l'innovation en chimie

Junior

Kevin Cornell

Accessible Hydrogen Therapy with Graphite Electrodes

South-East New Brunswick – New Brunswick

deutraMed™ 
Your Partner For Deuterated Ingredients



Engineering Innovation Award
Prix de l'innovation en génie

Senior / Sénior

Alexis Krasnova

Detection and prevention of triggers for photosensitive epilepsy seizures in YouTube videos

Thames Valley – Ontario



Excellence in Astronomy Award
Prix d'excellence en astronomie
Junior

Arushi Nath

Strengthening Planetary Defense: Detecting Unknown Asteroids using Open Data, Math, and Python

Toronto – Ontario



Excellence in Astronomy Award
Prix d'excellence en astronomie
Intermediate / Intermédiaire

Silas Eastwood

SMARTEN: Simulated Microgravity and Reduced Friction Test Environment for Nanosatellites

Halifax – Nova Scotia



First Nations University of Canada Award
Prix de First Nations University of Canada (Université des
Premières Nations du Canada)

Junior

Dylan Bercier

Tap Water Quality in Kinonjeoshtegon First Nation

Manitoba First Nations ERC – Manitoba



Intact Climate Change Resilience Award

Prix « Intact » pour la résilience aux changements climatiques

Junior

Sia Mehta

Thermochromic Economics

Simcoe County – Ontario



Intact Climate Change Resilience Award

Prix « Intact » pour la résilience aux changements climatiques

Intermediate / Intermédiaire

Maya LeBlanc

Carbon Capture Depletion Using Catalyzed Photosynthesis to Promote Crop Growth

Bay Area - Ontario



Intact Climate Change Resilience Award

Prix « Intact » pour la résilience aux changements climatiques

Senior / Sénior

Emily Goodson

A Novel Approach to the Reparation of Damaged Freshwater Ecosystems
Simulating Wetland Filtration

Simcoe County – Ontario



**International Summer School for Young Physicists Award
Prix de l'École d'été internationale pour les jeunes physiciens**

Senior / Sénior

Gabrielle Seal

A Survey of Compact, Intermediate-Velocity H I Clouds in the Inner Milky Way

Calgary Youth – Alberta



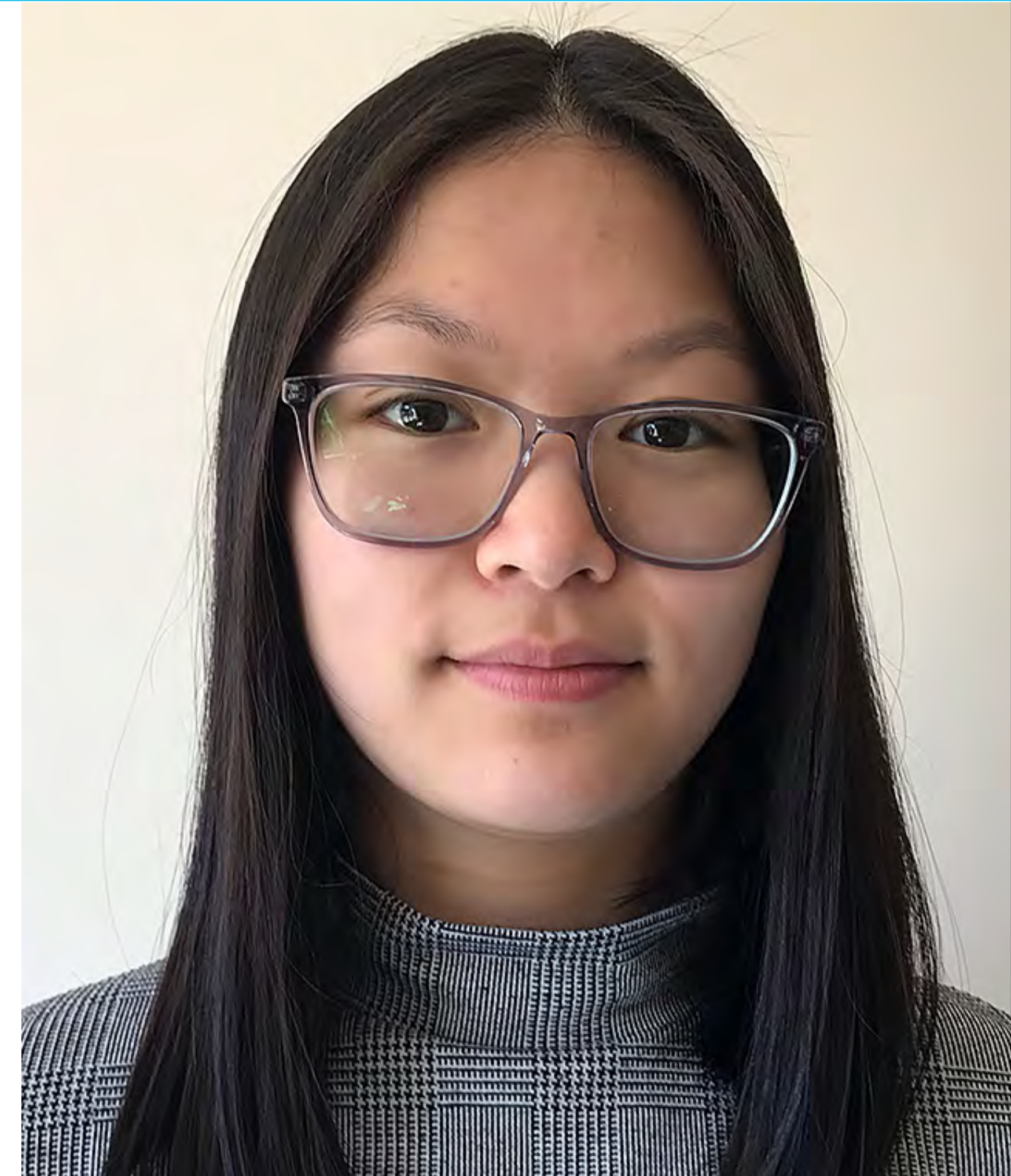
Nanotechnology for Sustainable Society Award
Prix de nanotechnologie pour une société durable

Junior

Sophia Zhang

Triboelectric Effect and Nanogenerator

Eastern Newfoundland – Newfoundland & Labrador



Nanotechnology for Sustainable Society Award
Prix de nanotechnologie pour une société durable

Intermediate / Intermédiaire

Katharine Morley

Coagulant Conundrum: Exploring the Efficacy of Natural and Chemical Coagulants on Microplastics

Vancouver Island – British Columbia



Nanotechnology for Sustainable Society Award
Prix de nanotechnologie pour une société durable

Senior / Sénior

Thomas Pronovost

Analyse ta foulée!

Réseau Technoscience – Québec



Nutrients for Life Foundation Award

Prix de la fondation « Nutriments pour la vie »

Senior / Sénior

Emily Goodson

A Novel Approach to the Reparation of Damaged Freshwater Ecosystems Simulating Wetland Filtration

Simcoe County – Ontario



Renewable Energy Award
Prix de l'énergie renouvelable

Junior

Vedant Sheel

Smart Solar Tracker!

Bluewater – Ontario



Renewable Energy Award

Prix de l'énergie renouvelable

Intermediate / Intermédiaire

Claire Mantrop

Water Works

Simcoe County – Ontario



Renewable Energy Award

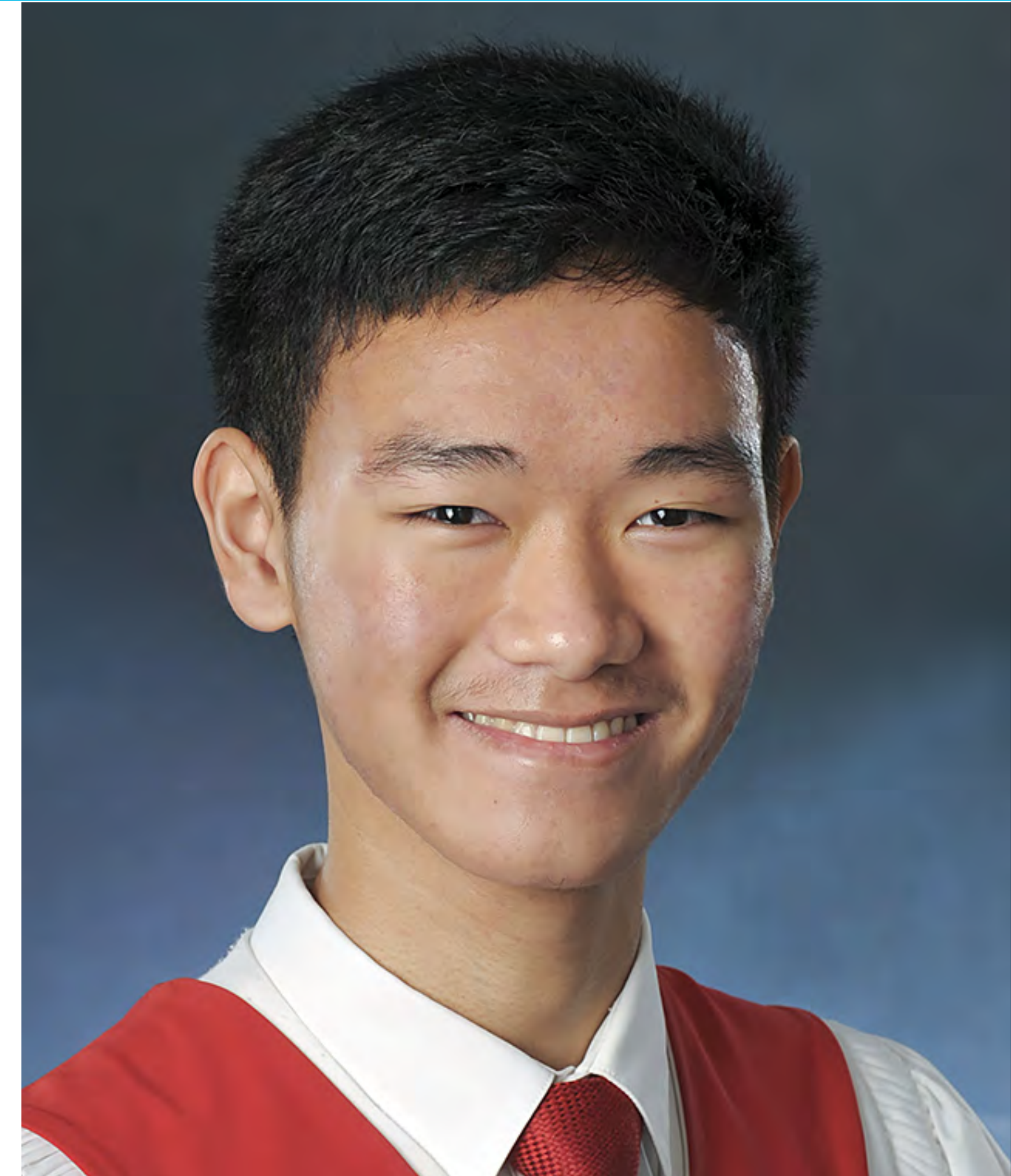
Prix de l'énergie renouvelable

Senior / Sénior

Bach Nguyen

Elevated Vehicle Routing in Reverse Logistics for Garbage Transportation in Saint John New Brunswick

South-East New Brunswick – New Brunswick



S.M. Blair Family Foundation Award

Prix S.M. Blair Family Foundation

Junior

Ryyan Hammoud

Smart Wash

South Fraser – British Columbia

**S.M. Blair
Family Foundation**



S.M. Blair Family Foundation Award

Prix S.M. Blair Family Foundation

Intermediate / Intermédiaire

Philippe Provencher

Le VéloTonome

Réseau Technoscience – Québec

**S.M. Blair
Family Foundation**



S.M. Blair Family Foundation Award

Prix S.M. Blair Family Foundation

Senior / Sénior

Yubo Wang
Matthew Zullo

**EyeInteract: Accessible Eye Tracking for the Physically Disabled Using
Computer Vision**

York – Ontario

**S.M. Blair
Family Foundation**



Shad Canada Scholarship Award

Bourse d'étude Shad Canada

Intermediate / Intermédiaire

Ava Fischer

COVID Coaster

Simcoe County – Ontario



Shad Canada Scholarship Award

Bourse d'étude Shad Canada

Intermediate / Intermédiaire

Nishka Rai

Buzz! - An Affordable Chronic Wound Alert System

Wood Buffalo - Alberta



Shad Canada Scholarship Award

Bourse d'étude Shad Canada

Intermediate / Intermédiaire

Hassan Amir

Understanding the Impact of Opioid-Related Substances on Yukon Youth

Yukon Stikine – Yukon



Statistical Society of Canada Award
Prix de la Société statistique du Canada
Intermediate / Intermédiaire

Elizabeth Chen

Design Parameters for CAR-T Cell Therapy using RNA Sequencing Analysis

Edmonton – Alberta



**Statistical Society of Canada Award
Prix de la Société statistique du Canada**

Senior / Sénior

Oumaima Malih

Réglisse et la durée de vie

Réseau Technoscience – Québec



**Sustainable Agriculture Award
Prix pour l'agriculture durable**

Junior

**Thông Quách
Aurora Leung-Vermette**

Saved from the Lepidopterans

Saskatoon – Saskatchewan



University of Ottawa Undergraduate Research Scholarship Award
Bourse de recherche de premier cycle de l'Université d'Ottawa

Senior / Sénior

Ria Patel

BlueViolet: a wearable eye-health monitor to counter the unseen health effects of COVID-19

Ottawa – Ontario



uOttawa



York University STEM Entrepreneurship Experience Scholarship Award

Bourse d'études pour le camp d'entraînement en entrepreneuriat lié aux STIM de l'Université York

Intermediate / Intermédiaire

Archie Shou
Edwin Wang

AI Object Location Recognition Software for the Blind

Toronto – Ontario



York University STEM Entrepreneurship Experience Scholarship Award

Bourse d'études pour le camp d'entraînement en entrepreneuriat lié aux STEM de l'Université York

Senior / Sénior

Morane Charbonneau

I-Muno

Réseau Technoscience – Québec



York University STEM Entrepreneurship Experience Scholarship Award

Bourse d'études pour le camp d'entraînement en entrepreneuriat lié aux STEM de l'Université York

Senior / Sénior

Ria Patel

BlueViolet: a wearable eye-health monitor to counter the unseen health effects of COVID-19

Ottawa – Ontario



York University STEM Entrepreneurship Experience Scholarship Award

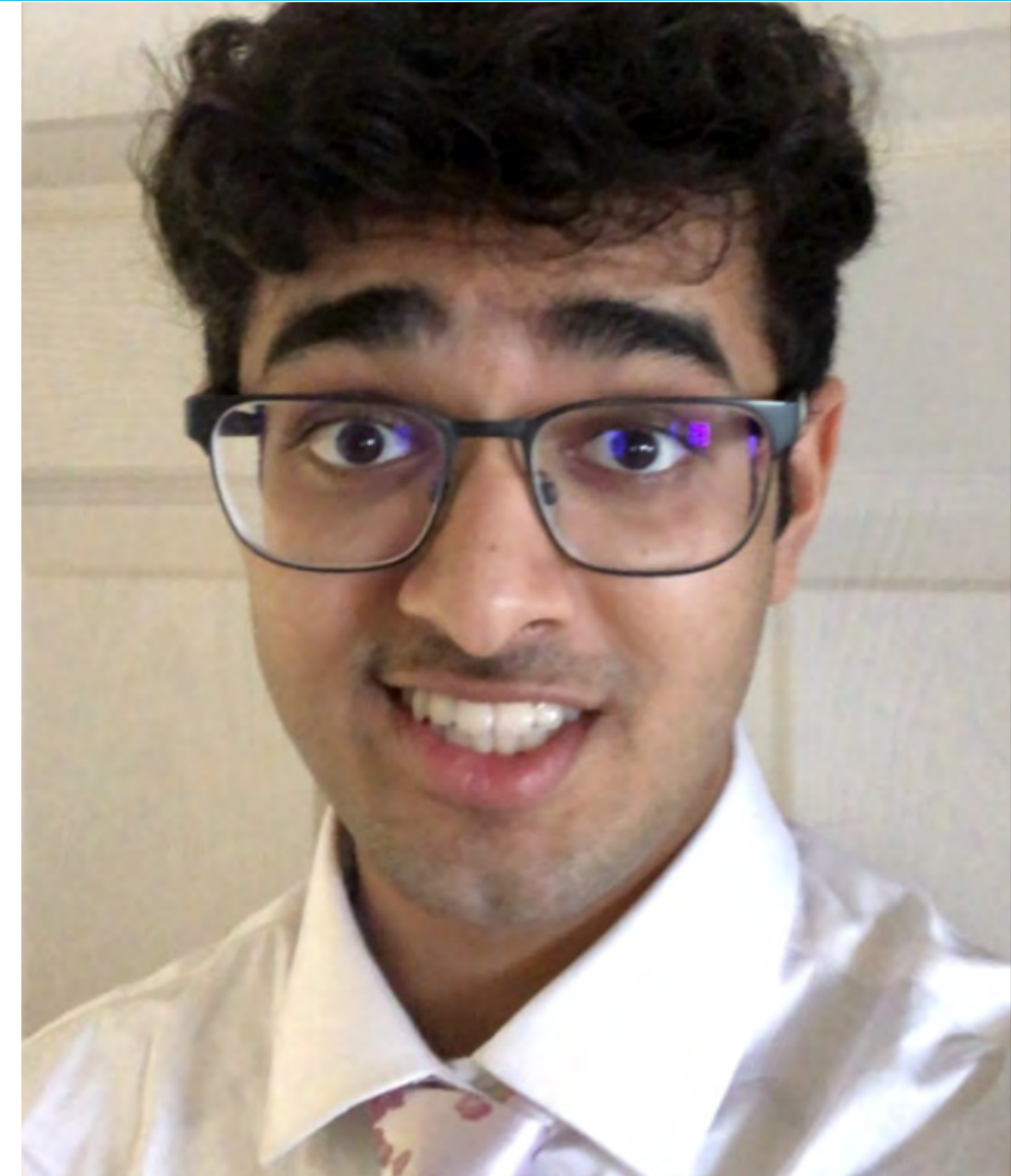
Bourse d'études pour le camp d'entraînement en entrepreneuriat lié aux STIM de l'Université York

Senior / Sénior

Sparsh Patel

FOCUS! - An EEG And ANN Powered Brain Sensing Headband For Accident Prevention

Wood Buffalo - Alberta



Excellence Award - Bronze

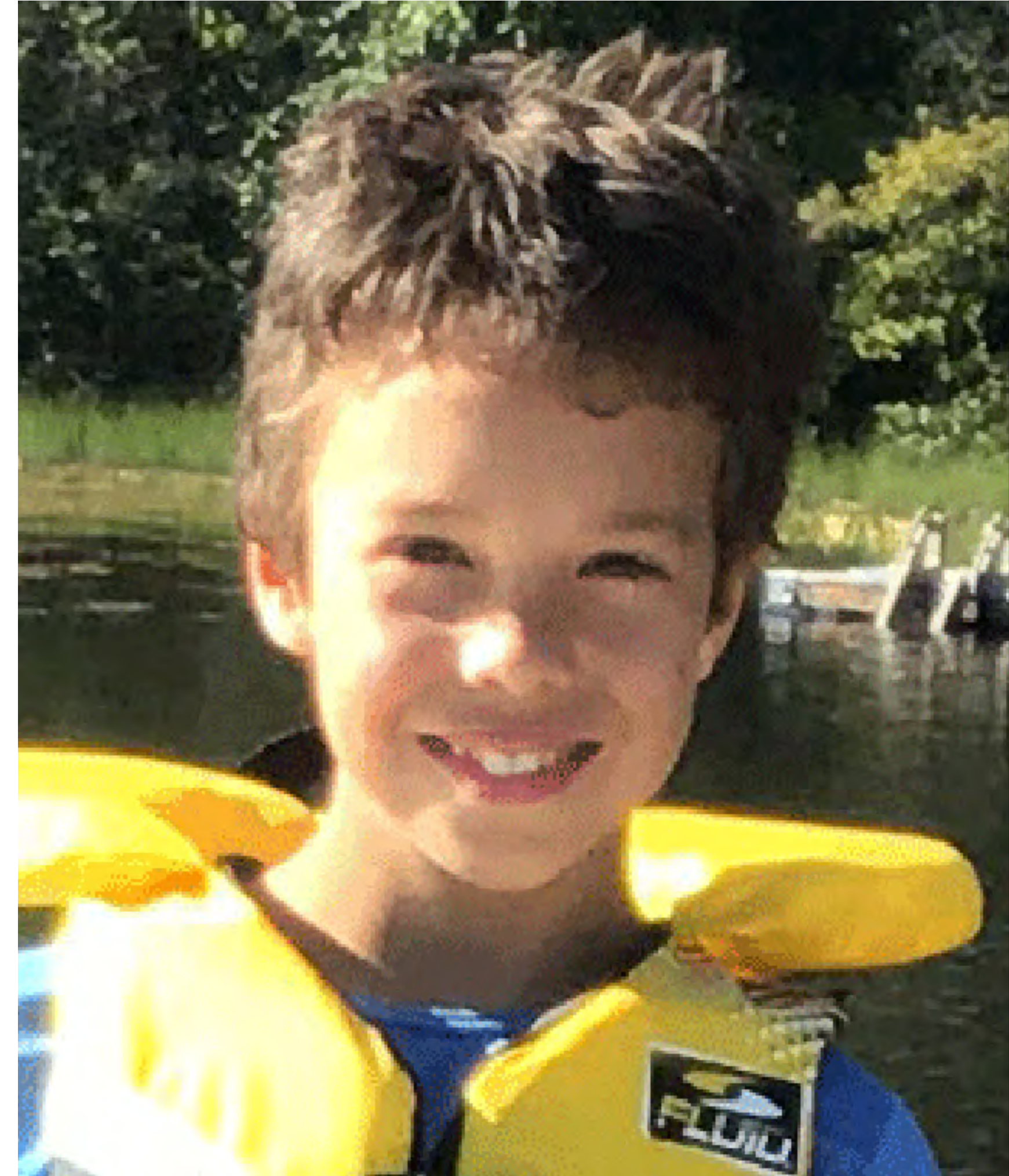
Prix d'excellence - bronze

Junior

Sebastian Audet

Floating Heart is Breaking my Heart

YSC Virtual



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Kaan Bektas

Collision Avoiding and Concussion Identifying Bicycle Helmet

Toronto – Ontario

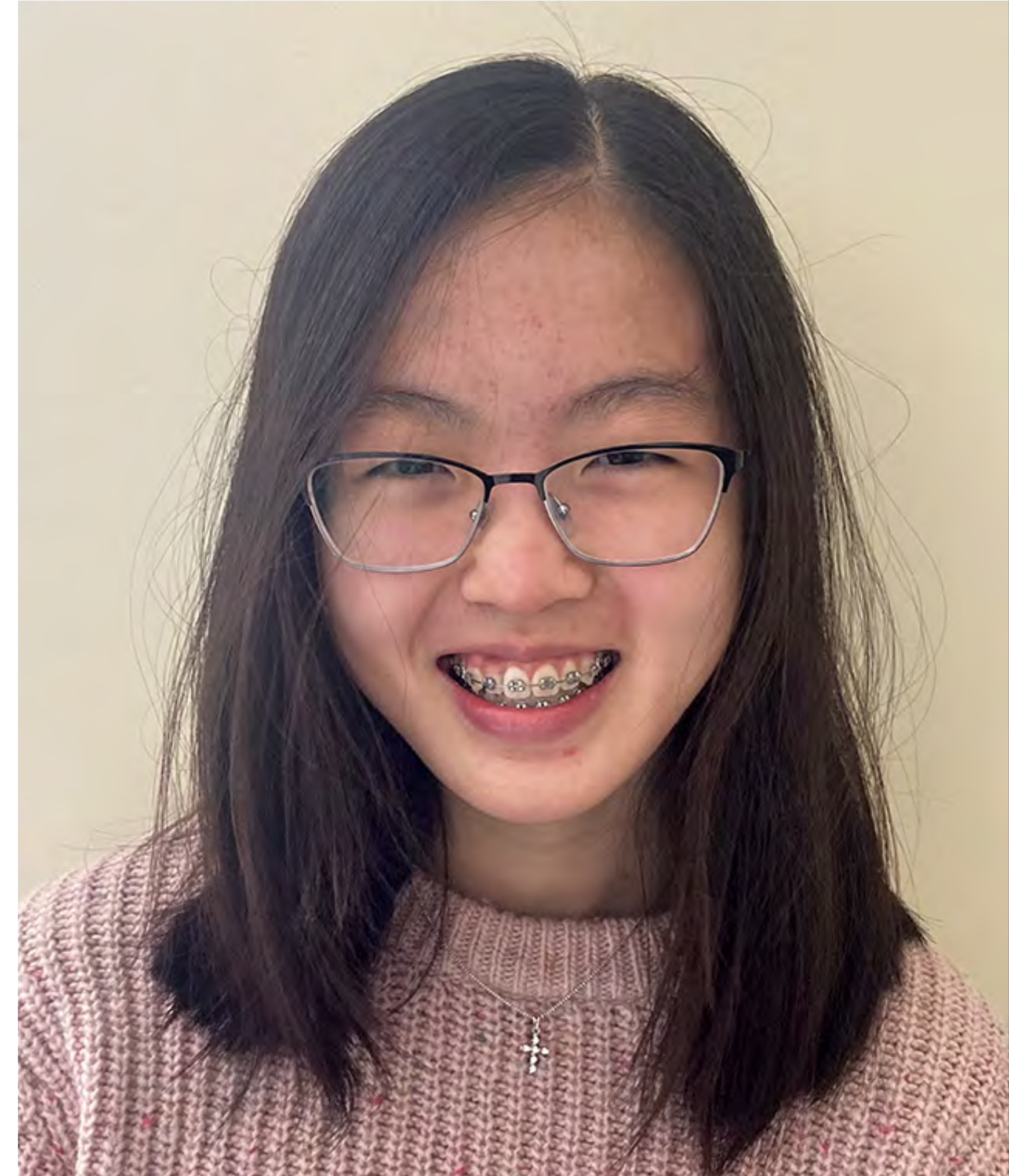


Excellence Award - Bronze
Prix d'excellence - bronze
Junior

Hannah Cheang

Fish Powered Plant Growth

York – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Isla Corkum

Which Light Is Right?

Strait – Nova Scotia



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Chloe Dafoe

Ocean Acidification

Halifax – Nova Scotia



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Param Dixit

Lost In Translation

Toronto – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Nuala Gibbs

L'impact du climat: Exploration de l'énergie éolienne

United Counties – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Sadie Hanley

Pitch Perfect: How Cold Temperature Affects the Frequency of Musical Notes

Ottawa – Ontario



Excellence Award - Bronze
Prix d'excellence - bronze
Junior

Marion Harvey

Soulever à la force des fibres

Réseau Technoscience – Québec



Excellence Award - Bronze
Prix d'excellence - bronze
Junior

Jordan Hussey

It's going to be lit!

North-West New Brunswick – New Brunswick



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Nathan Janssen

Resisting Rust

Thames Valley – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Frankie La Peter

'Peer'ing into Pressure

East Kootenay – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Nate Martin

To Mask or not to Mask? Why is that Even a Question?

Manitoba Schools Science Symposium – Manitoba



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Elise Munro

Lymeon: A Novel Way To Test Lyme Disease in Minutes

Strait – Nova Scotia



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Jora Singh Nahal

Drowsiness Detection and Virtual Friend Speech-Robot for Safe Driving: A Novel App

Cariboo Mainline – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Caden Oliphant

Masks Rock! Which Face Masks are More Effective?

Thames Valley – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Nicholas Pacifici

Head On A Swivel 2.0: Brace For Impact

Bay Area - Ontario



Excellence Award - Bronze

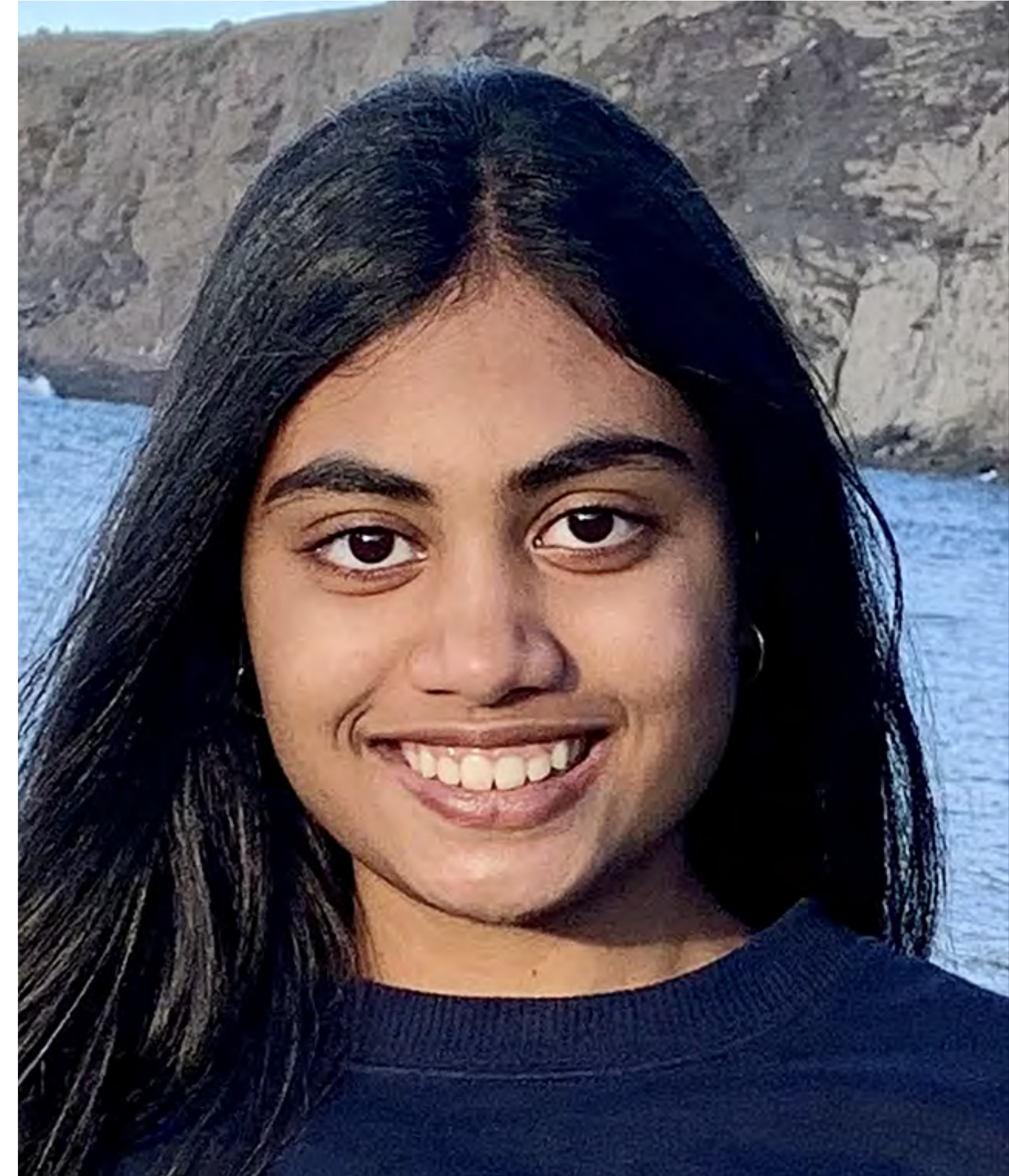
Prix d'excellence - bronze

Junior

Alpita Patro

Algae: The Future of Biofuel

Eastern Newfoundland – Newfoundland & Labrador



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Timothy Riddolls

Electromagnetic Pulse Effects on Non-Volatile Digital Memory

Ottawa – Ontario



Excellence Award - Bronze

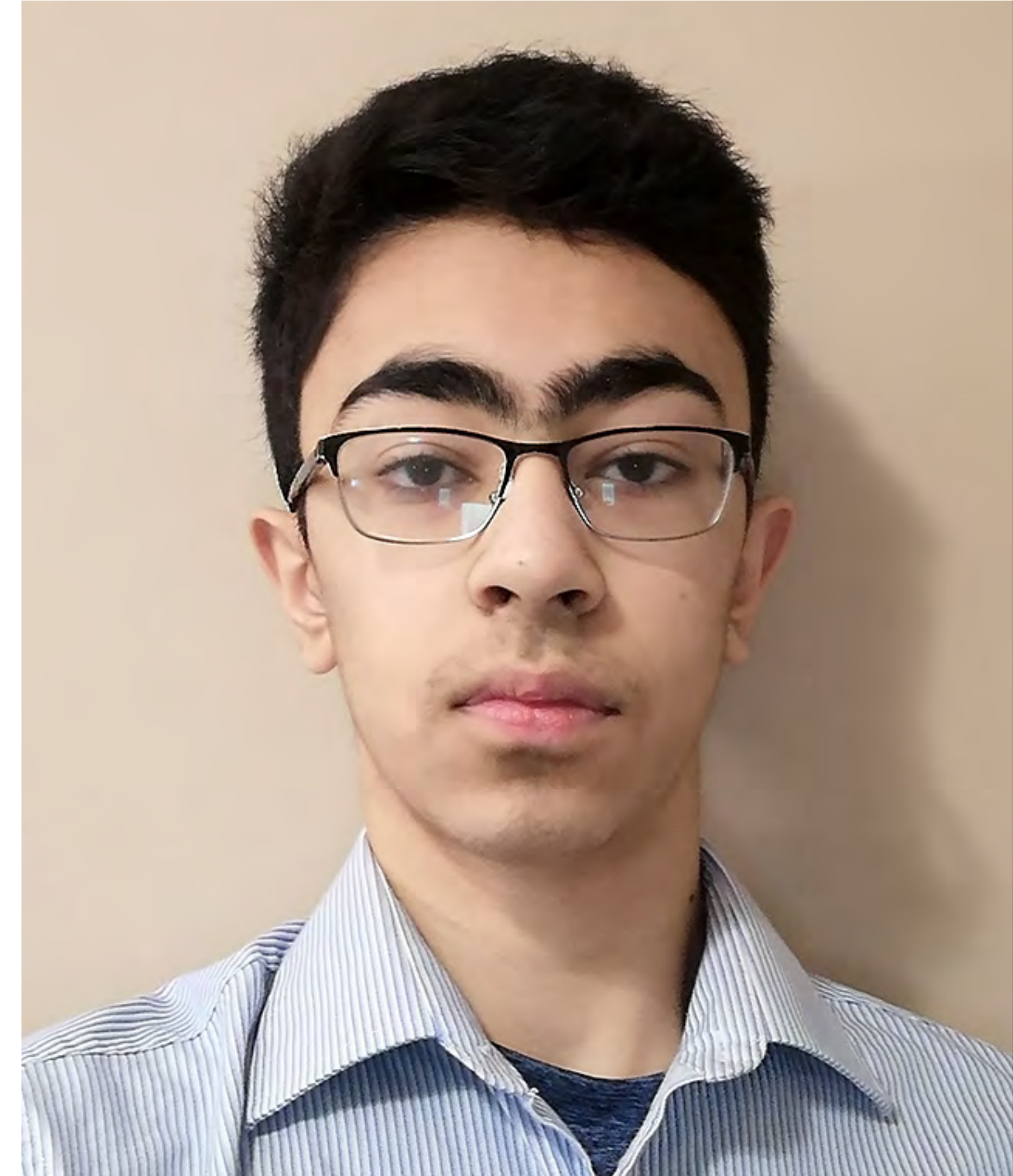
Prix d'excellence - bronze

Junior

Hussain Rizvi

Modelling Invasive Species Growth with Zebra Mussels

Regina – Saskatchewan



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Ava Romano

Can CAR T-Cell Therapy Be Used to Cure Alzheimer's Disease?

Bay Area - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Onkit Saha

Thermoelectric, Reusable, and Sustainable Heat cycle

North-West New Brunswick – New Brunswick



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Ella Sehn

**Vegetation Sanitation: Measuring the Impact of Oil Spills on Oxygen
Production of Aquatic Plants**

Peterborough – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Margo Senchenko

Attractive Cat Scratcher

South Fraser – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Isaiah Sienna

The Effects of Plastic Contamination in Plastic Water Bottles Due to Environmental Variables

Bay Area - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Jaime So

Testing Tampons. Toxic or Terrific?

Ottawa – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Maya Sternin

What is your temperature?

Niagara – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Junior

Misha van Anders

Canoe believe it?

Frontenac, Lennox & Addington – Ontario



Excellence Award - Bronze

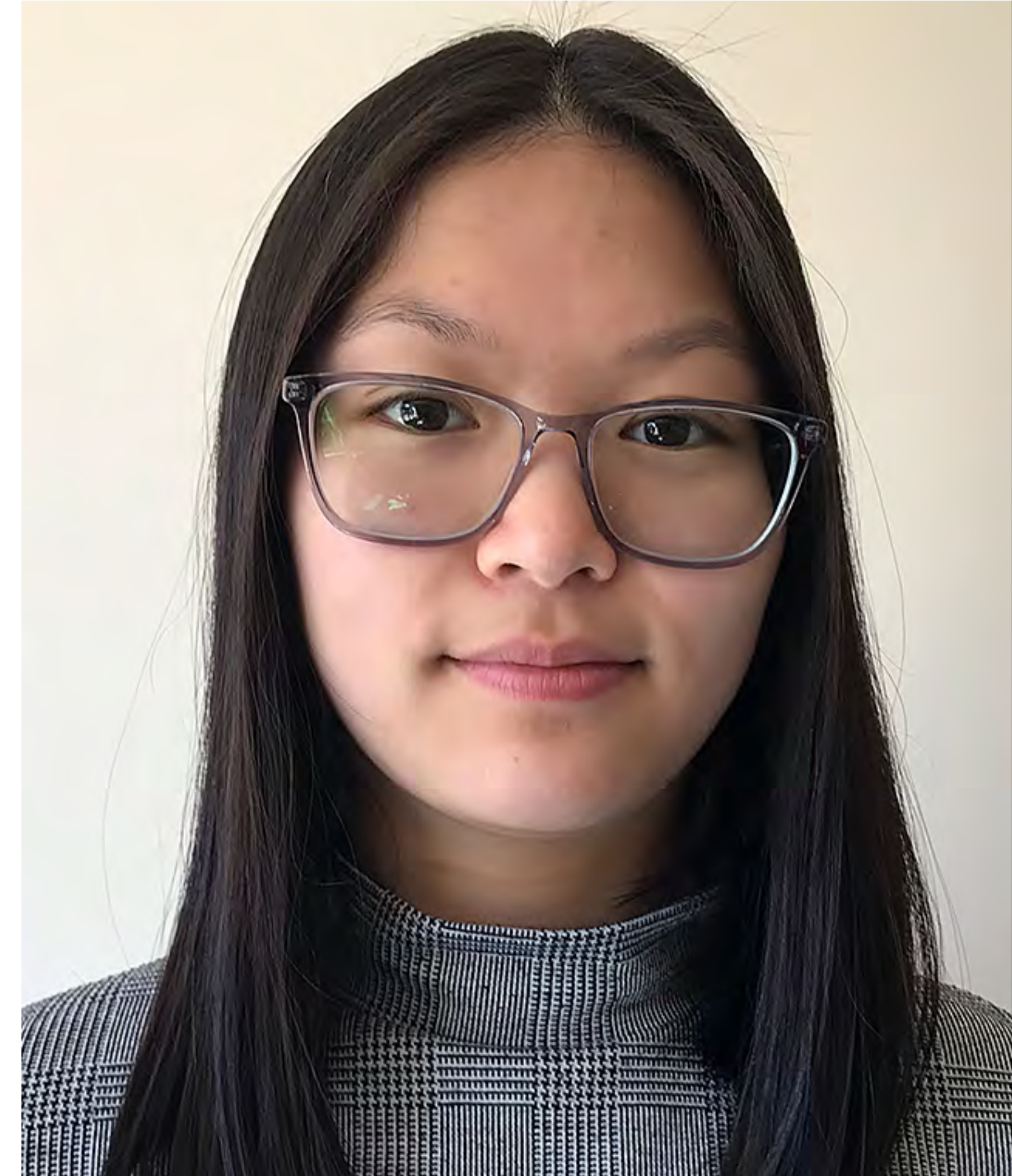
Prix d'excellence - bronze

Junior

Sophia Zhang

Triboelectric Effect and Nanogenerator

Eastern Newfoundland – Newfoundland & Labrador



Excellence Award - Bronze

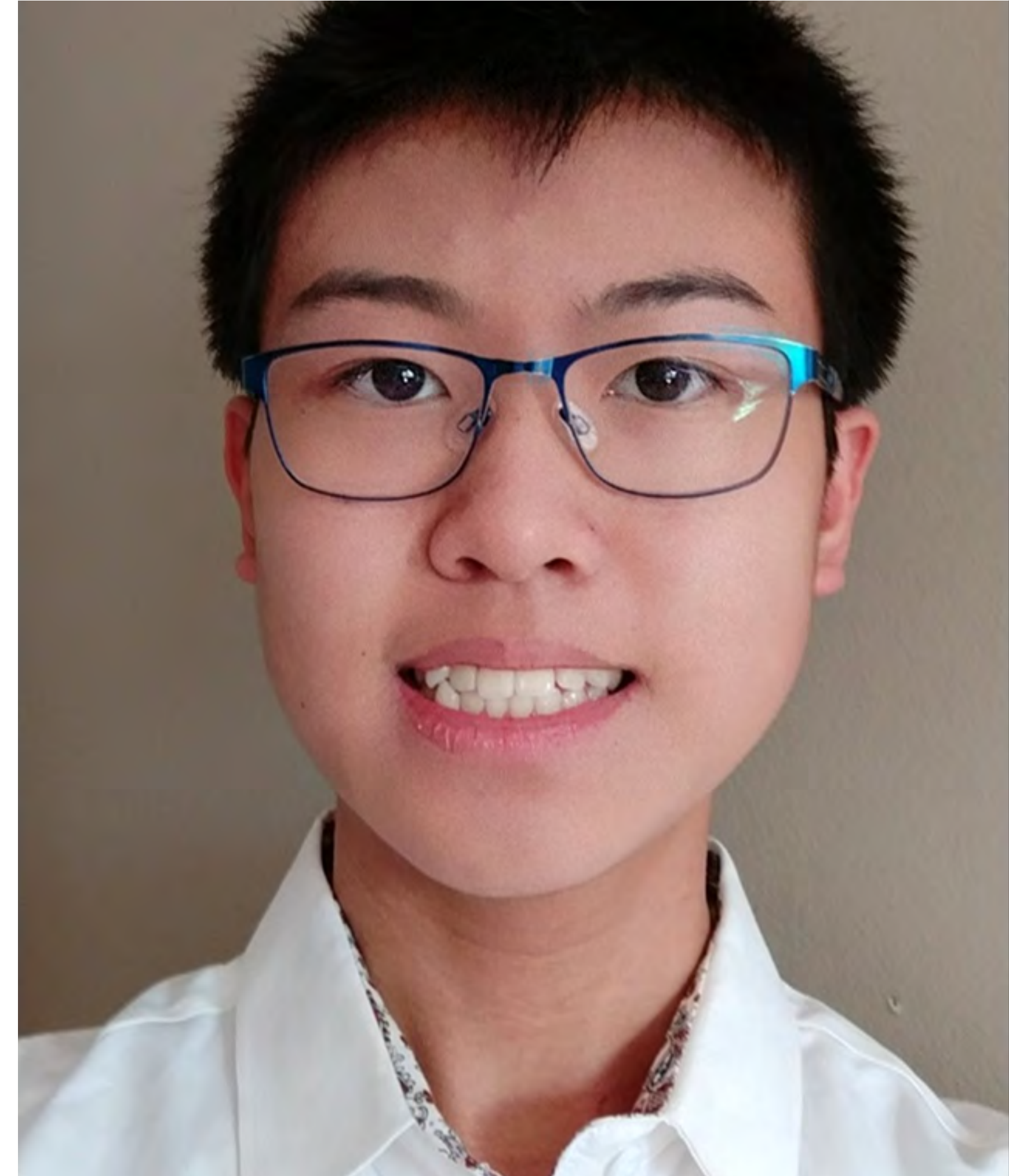
Prix d'excellence - bronze

Junior

Michael Zheng

Detecting Mask-Wearing via Machine Learning

Calgary Youth – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Hassan Amir

Understanding the Impact of Opioid-Related Substances on Yukon Youth

Yukon Stikine – Yukon



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Silas Armstrong

House Dressing

Halifax – Nova Scotia



Excellence Award - Bronze

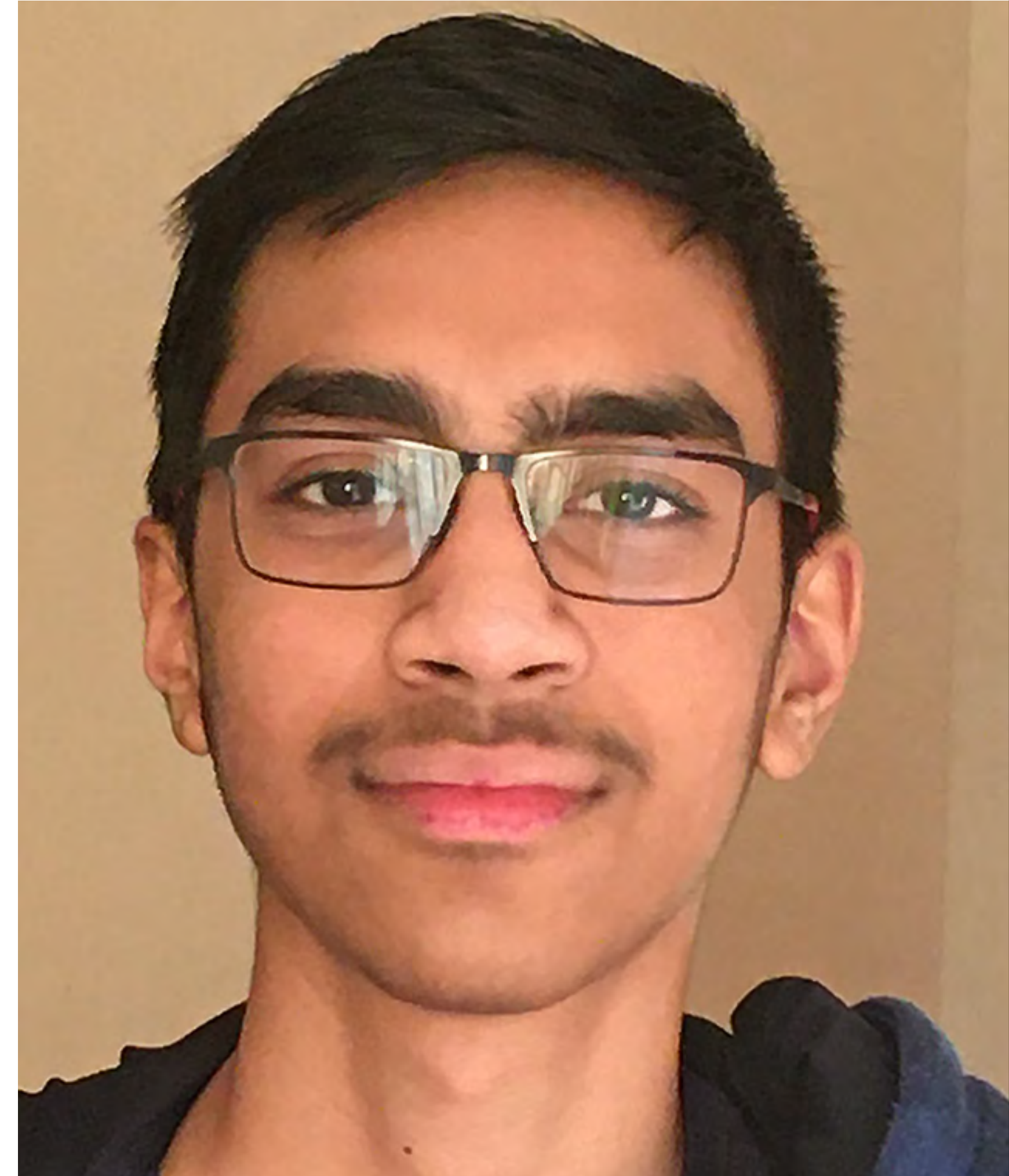
Prix d'excellence - bronze

Intermediate / Intermédiaire

Arham Aziz

Decrypting the facial code of Alzheimer's disease

Thames Valley – Ontario



Excellence Award - Bronze

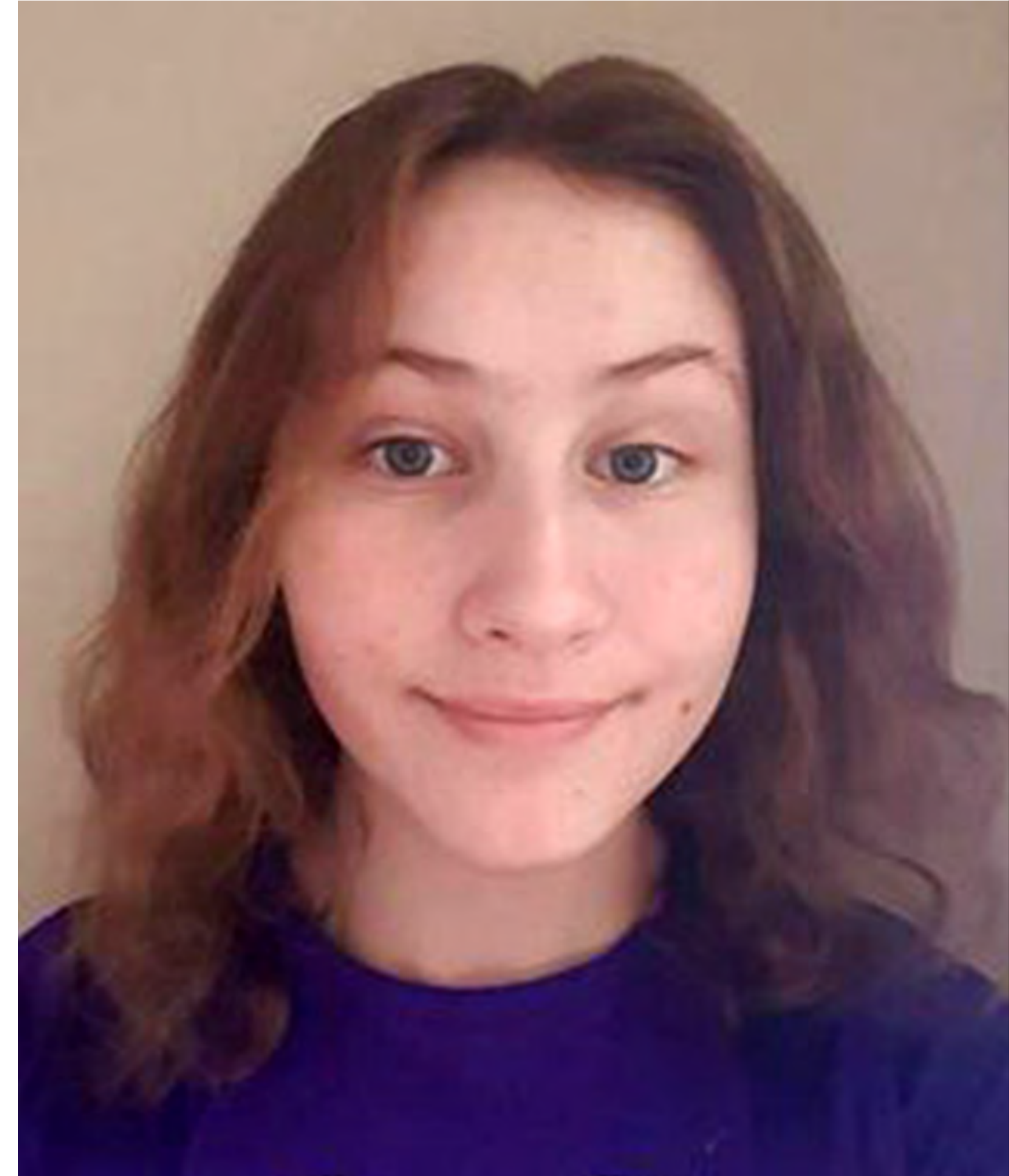
Prix d'excellence - bronze

Intermediate / Intermédiaire

Katie Buchel

Wonderous World of Angular Velocity: Diving Edition

Thames Valley – Ontario



Excellence Award - Bronze

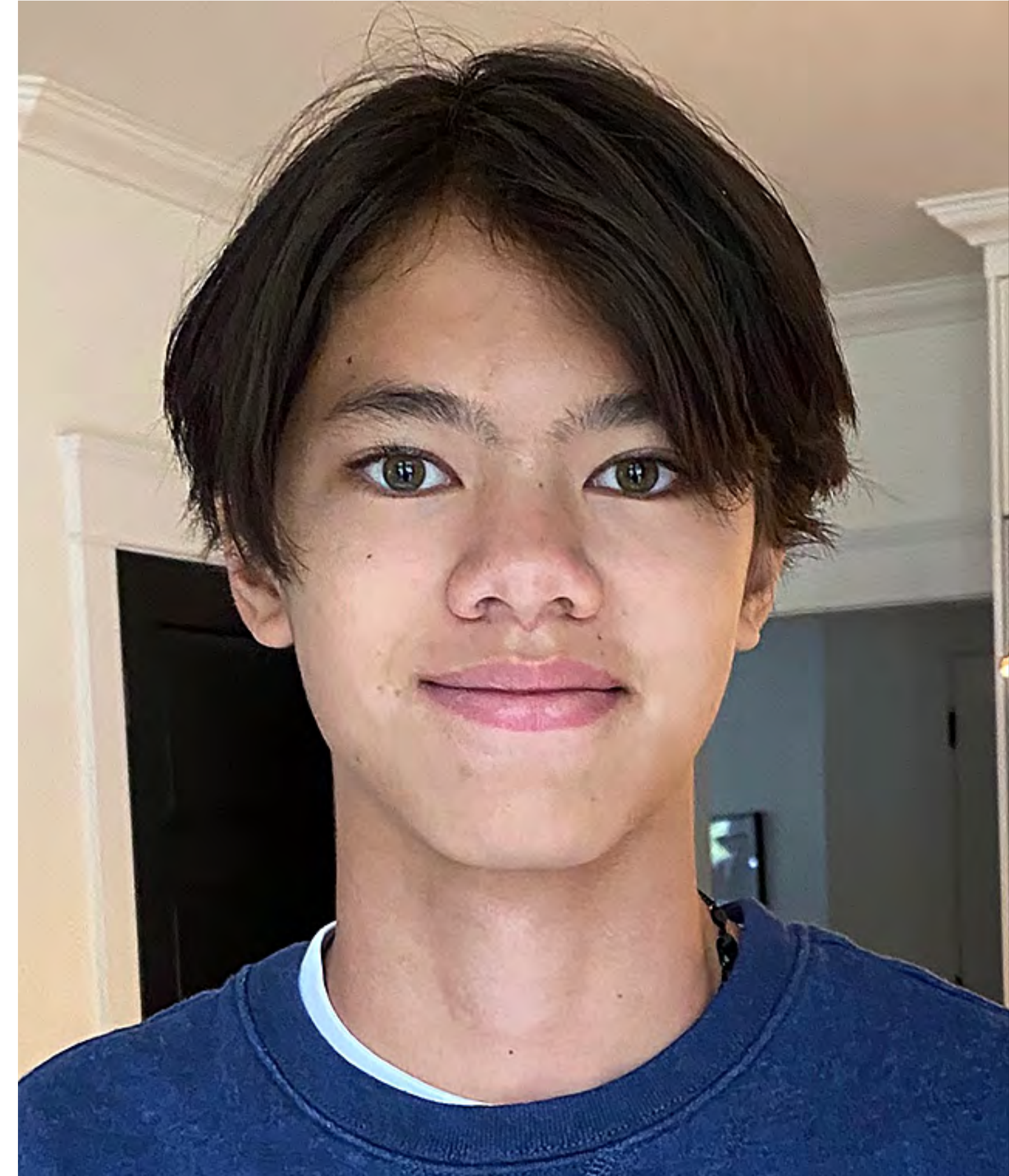
Prix d'excellence - bronze

Intermediate / Intermédiaire

Keanu Chan

Design, Implementation and Assessment of Novel universal Design Internal Spine Concept (NuDISC)

East Kootenay – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Sophia Croft

To Fry or not to Fry: Does Cooking Pollute Indoor Air?

Halifax – Nova Scotia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Ava Fischer

COVID Coaster

Simcoe County – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Ishan Gehlaut

Using Regression Learning to predict Algal Blooms in the Great Lakes

Toronto - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Pari Goyal
Lucie Li

Windblade

Greater Vancouver – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Islay Graham

The National Helmet Expiry Inquiry

Bluewater – Ontario



Excellence Award - Bronze

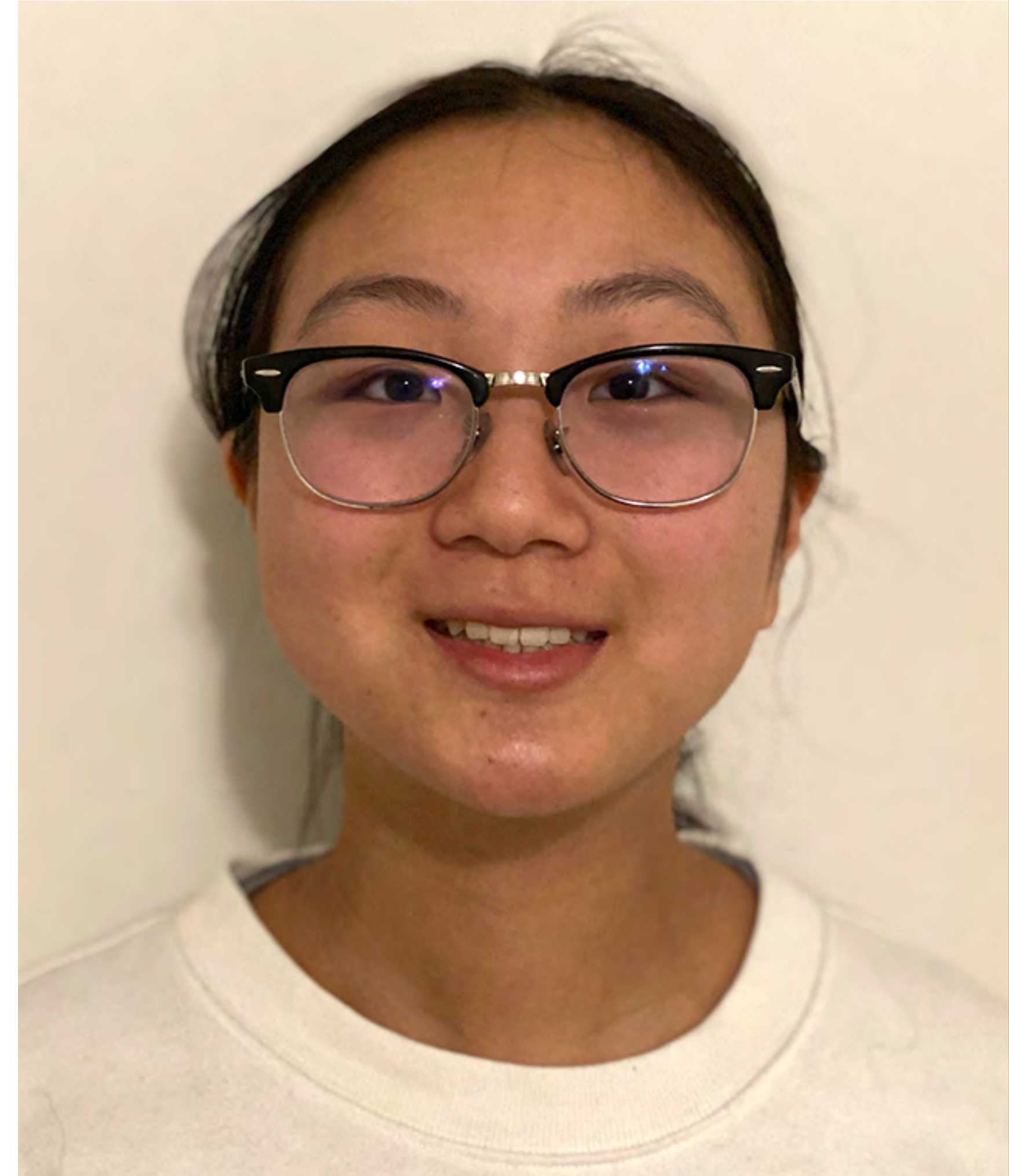
Prix d'excellence - bronze

Intermediate / Intermédiaire

Grace Ko

SoilTO: Using Statistical Analysis to Determine How Race and Income Affect Toronto's Soil Quality

Toronto - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Alex Lea

**Sustainable Nutrient Regeneration: The Effects of Wood Ash and Nitrogen
on Pasture Grass Nutrition**

Central Interior BC – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Maya LeBlanc

Carbon Capture Depletion Using Catalyzed Photosynthesis to Promote Crop Growth

Bay Area - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Farhan Ahmed
Alexander Li

The Methane Recycler

South Fraser – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Claire Mantrop

Water Works

Simcoe County – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Naila Moloo

Forecasting the Power Output of Photovoltaic Systems

Ottawa – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Katharine Morley

Coagulant Conundrum: Exploring the Efficacy of Natural and Chemical Coagulants on Microplastics

Vancouver Island – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Annalise Musclow Sydney Dobbin

Quantitative Study of Microplastics in Jackson's Creek

Peterborough – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Natalie Parker

Microplastics - A Big Little Problem

Northwestern Ontario – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Nadine Persad

Development and Testing of a Novel Post Harvest Treatment

West Kootenay & Boundary – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Philippe Provencher

Le VéloTome

Réseau Technoscience – Québec



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Nishka Rai

Buzz! - An Affordable Chronic Wound Alert System

Wood Buffalo – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Derek Sheen

A Novel Approach to Detecting Melanoma Using Deep Learning

Waterloo-Wellington – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Ken Shibata

Kyokukey: Wearable Input Device Using Conductive Threads

Toronto – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Sohila Sidhu

Proof of Concept: Artificial Pancreas for Patients with Diabetes

Windsor – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Rachel Simantov

Framework for Optimal Pandemic Management

Calgary Youth – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Viduni Siriwardana

**Novel, High-Yielding DNA Extraction Protocol via Automated Device to
Provide Facile Forensic Analysis**

Greater Vancouver – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Harshita Srikanth

Creativity = TRIZ!

Quinte - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Alan Van

A Model for Medical Diagnosis Using Artificial Intelligence

Toronto – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Intermediate / Intermédiaire

Ann Wang

An Acidic Future

Greater Vancouver – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Eunjo An

Orange Peels as Biosorbents in the Treatment of Heavy Metal Wastewater

Vancouver Island – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Rhea Bhalla

Dementia and COVID-19: Comparison of Responsive Behaviours in the Initial and Later Pandemic Waves

Calgary Youth – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Elsa Bienenstock
Alex Alam

Parkinson's Spoon

Toronto - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Chloe Brodie

Identifying Zinc-Containing Neurons to Widen Research into Zinc's Role in Neuroplasticity

Calgary Youth – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Morane Charbonneau

I-Muno

Réseau Technoscience – Québec



Excellence Award - Bronze

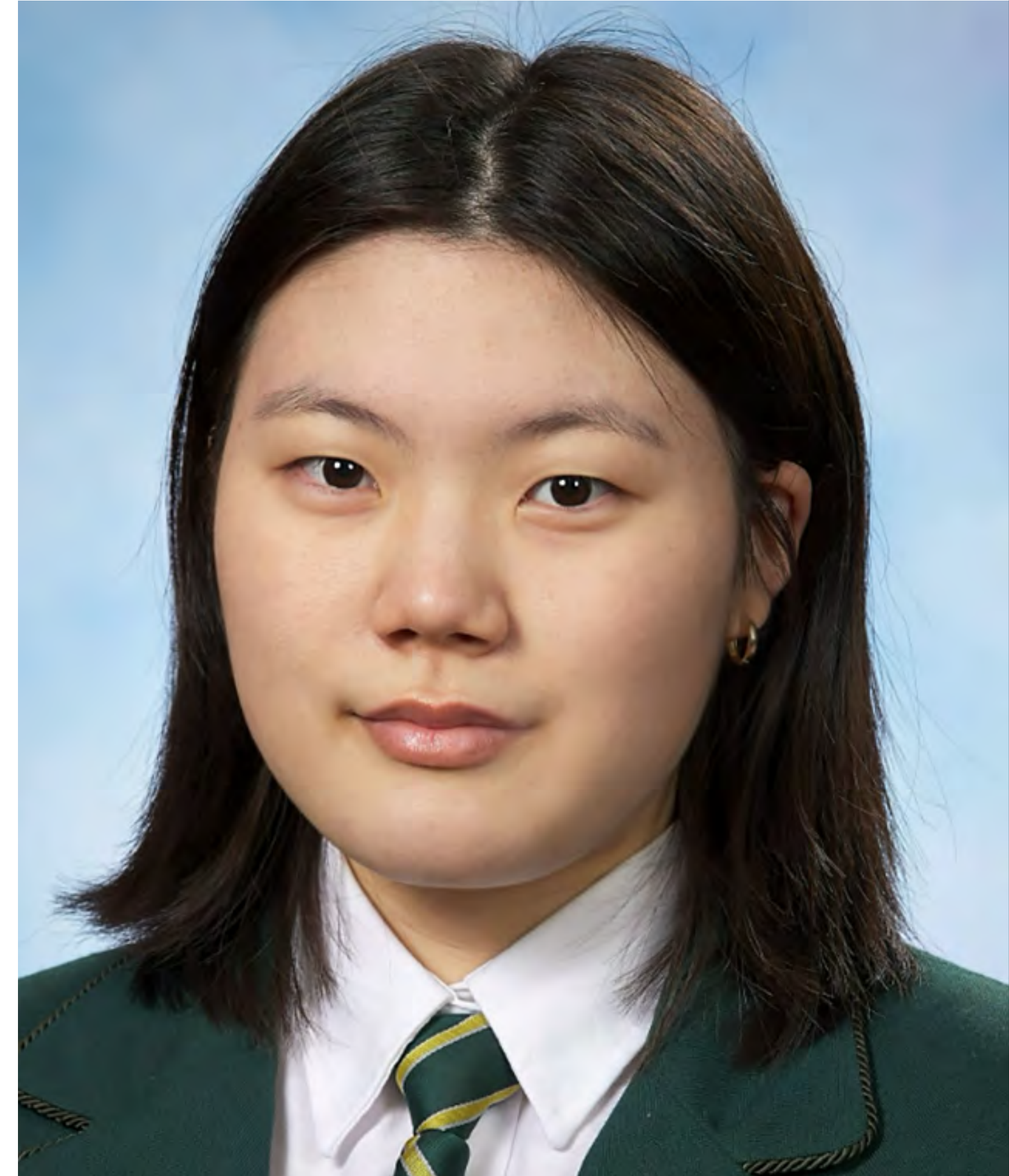
Prix d'excellence - bronze

Senior / Sénior

Kristin Cho

**Inducement of Autoimmune Disease from Lead Exposure and Prevention
Using Fermented Food Bacteria**

Toronto – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Krish Desai

Investigating Kalanchoe pinnata as a potential treatment for acute nephrolithiasis

YSC Virtual



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Armaandeeep Dhanoa

Fabrication of Micro-Optical-Ring-Electrodes and their Application on Biological Samples

Manitoba Schools Science Symposium – Manitoba



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Manorama Joshi

Automotive SMART Cane for the Visually and Auditorily Impaired

Wood Buffalo – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Samarah Kanji

Demyelination in Diffuse Axonal injury in mTBI

Calgary Youth – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Anantjot Khosa

Fabrication of electrodes to detect Cytochrome C Oxidase deficiency

Manitoba Schools Science Symposium – Manitoba



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Jeffrey Klinck

MediRecord: a Quasi-Permissioned Blockchain Medical Record Verification System

Bay Area - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Alexis Krasnova

Detection and prevention of triggers for photosensitive epilepsy seizures in YouTube videos

Thames Valley – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Seungmyoung Lee **Amyna Ismail**

Eye Spy: A Novel Way to Predict & Detect Alzheimer's Disease

Toronto - Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

William Li

Development of a Novel Pesticide for Rice Blast Disease

Greater Vancouver – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Julia Mansiere

**Were Urban Heat Islands a Factor in the Deadliness of the Summer 2021
Heat Dome in British Columbia?**

YSC Virtual



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

LiLi Miko

Can't Afford Accuracy? A Three-Dimensional Printer for Sustainable Scavengers

Thames Valley – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Tri Nguyen
Rena Warren

SmartLifeJacket - An Automatic Inflating Life Jacket When The User Is In Distressed

Central Alberta Rotary – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Teighin Nordholt

Modifying Cloud Chamber Technologies

South-East New Brunswick – New Brunswick



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Dhyan Patel

Where What Goes: The combination of CV and AI to enhance the recycling experience.

Wood Buffalo – Alberta



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Kiran Prasad
Arushi Rawat

**SeaQuester: A Novel Approach to Increasing the Carbon Dioxide Absorption
and Alkalinity of the Ocean**

Lambton County – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Aiden Shlien

A Miracle or a Mistake?

Réseau Technoscience – Québec



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Prabhnoor Sidhu

Mitigating the Effects of Debris Flows

Central Interior BC – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Anna Siekierzycki

Corticosteroid Injections/ Hyaluronic Acid and Their Use in Performance Horses

Bluewater – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Michaela Stillwell
Antonia Tannert von Baer

The Effects of Microplastics on Phytoplankton

Central Interior BC – British Columbia



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Grace Tuglavina

The domino effect-how changing ice patterns in the North have far reaching consequences

Labrador, Western & Central Newfoundland – Newfoundland & Labrador



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Nuha Akhand Mariya Turetska

Inhibition of Cancer Cells Through Algae Derived EPA

Waterloo-Wellington – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Lauren Wilkes

Effet des additifs au sel de voirie sur la réduction de la pollution routière

Ottawa – Ontario



Excellence Award - Bronze

Prix d'excellence - bronze

Senior / Sénior

Yitian Zhang

Effects of 16/8 Intermittent Fasting Diet on Type 2 Diabetes

South-East New Brunswick – New Brunswick



Excellence Award - Bronze

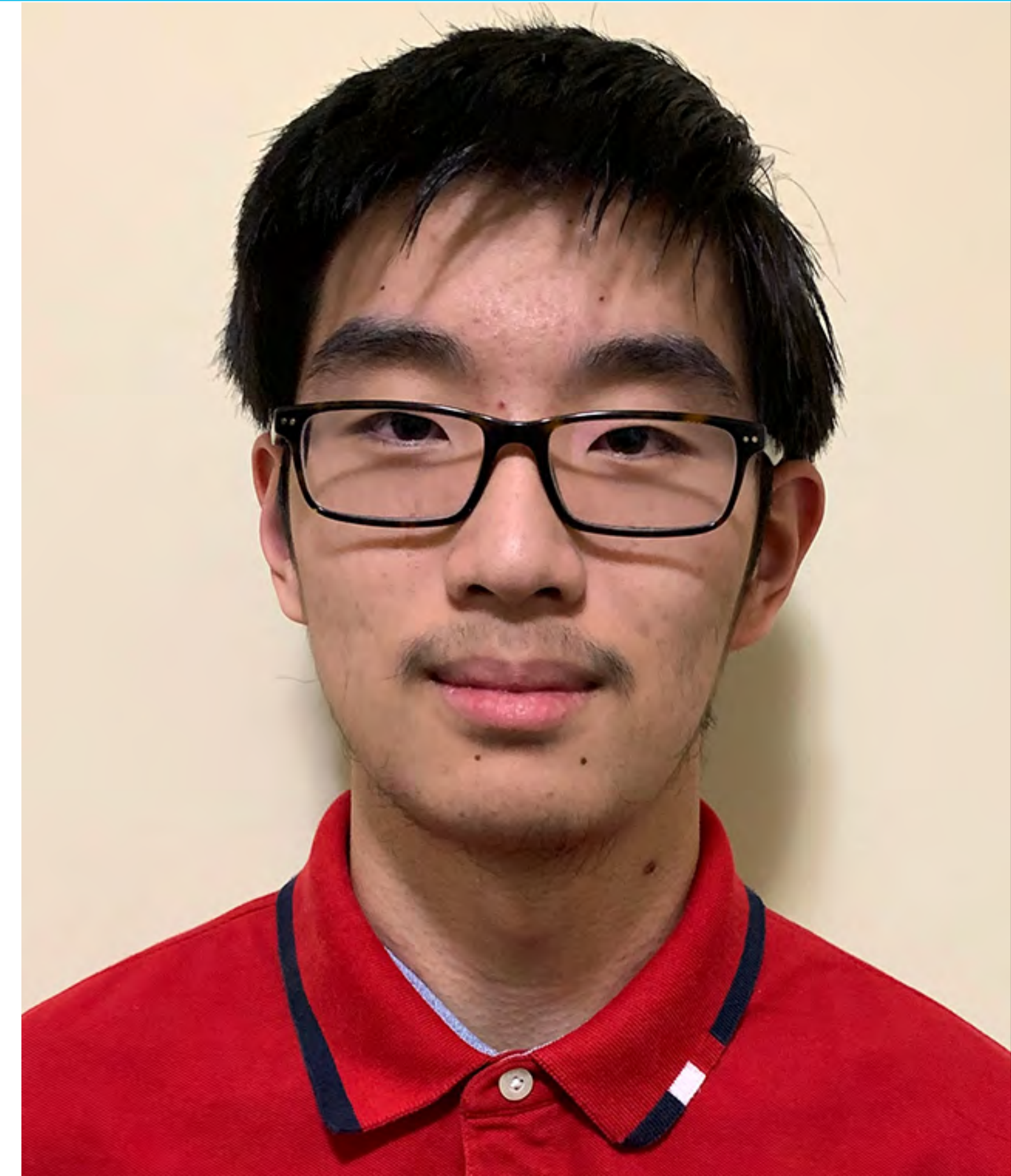
Prix d'excellence - bronze

Senior / Sénior

Gary Zhu

Doctor X - An AI Powered Personal Medical Assistant

Thames Valley – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Angela Cao

Fountain of Youth

Greater Vancouver – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Junior

Armaan Chaudhari

Health Benefits of Copper

Western Manitoba – Manitoba

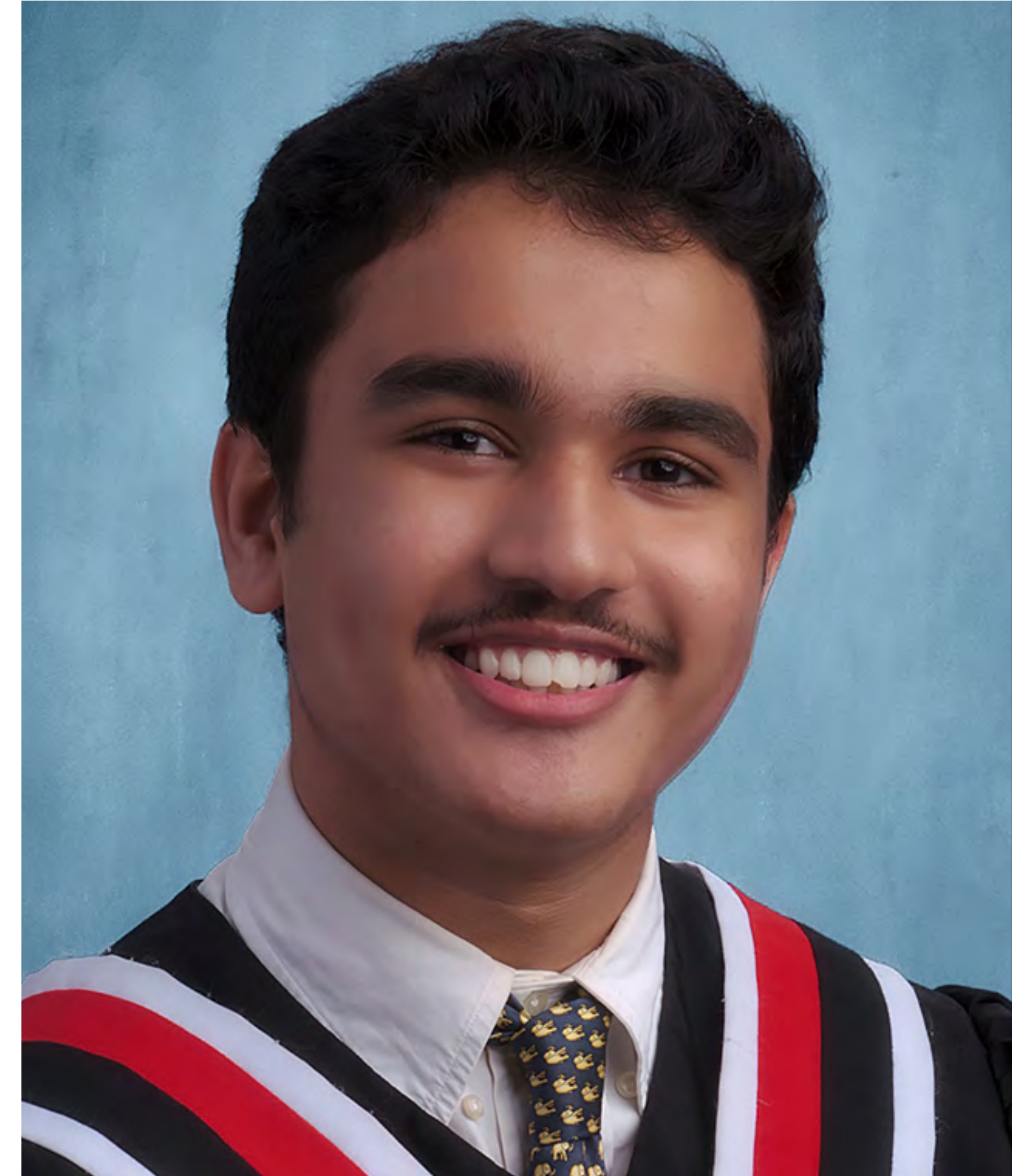


Excellence Award - Silver
Prix d'excellence - argent
Junior

Ashish Chettimada

Bacteriophages: Curing One Infection With Another

Waterloo-Wellington – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Abdul-Rahman Dannawey **Abdul Majeed Al Riahi**

Smart Cane for Visually Impaired People

Windsor – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Ila Giroux

Fire Cannot Brew Without O2

Algoma Rotary – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Isha Goyal

CRISPR vs COVID: Genetic Modification to Treat SARS-CoV-2

Calgary Youth – Alberta



Excellence Award - Silver
Prix d'excellence - argent
Junior

Ryyan Hammoud

Smart Wash

South Fraser – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Junior

Ariana Harrison
Everett Harrison

A Strawy Mess Phase 2

Edmonton - Alberta



Excellence Award - Silver
Prix d'excellence - argent
Junior

James Hoag

Keep The Noise Out!

Greater Vancouver – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Junior

Ryan Layton-Matthews

Walking on Thin Ice

Frontenac, Lennox & Addington – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Teddy Mao

Transparent Wood: A Window to the Future?

Bay Area - Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Sia Mehta

Thermochromic Economics

Simcoe County - Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Sebastien Menard

Roofing for a Green Future

Frontenac, Lennox & Addington – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Sarah Murimboh

The Effect of Fertilizers on the Hatch Success of *Triops longicaudatus*

Annapolis Valley – Nova Scotia



Excellence Award - Silver
Prix d'excellence - argent
Junior

Reuel Ramalingam

Pink to Brown - How to Prevent Concussions

YSC Virtual



Excellence Award - Silver
Prix d'excellence - argent
Junior

Lauren Rasalingam

Not on my back!

Ottawa – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Mohamed Saleh

Pumpkin Plastic

Windsor – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Vedant Sheel

Smart Solar Tracker!

Bluewater – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Tamsen Taylor

Dark Skies in Ottawa

Ottawa – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Junior

Julia Valdez

Does the BPM of Music Rather than the Type of Music Affect the Learning Process in Mice?

West Kootenay & Boundary – British Columbia

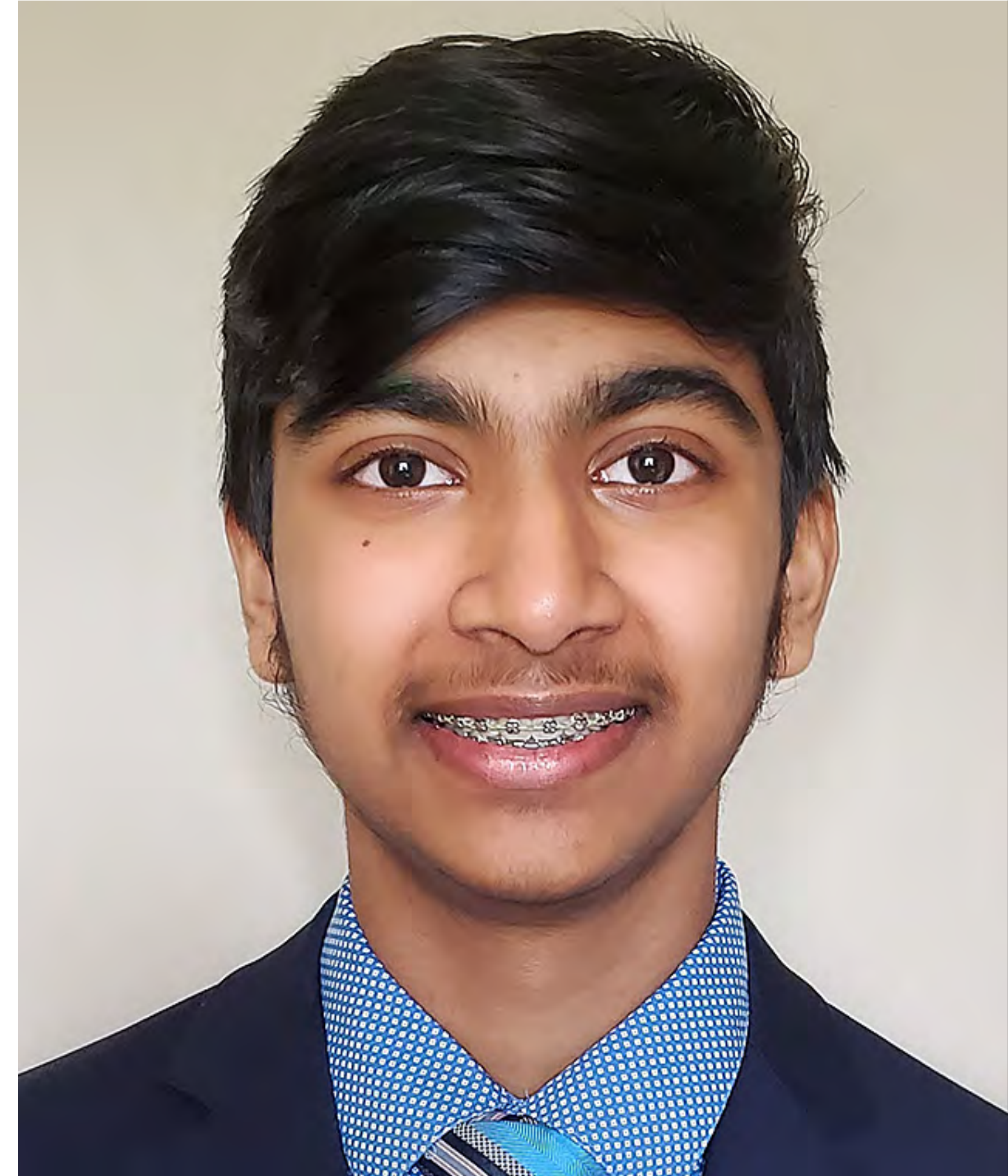


Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Tesko Chaganti

Unraveling the Secrets of Healthy Aging

Windsor – Ontario

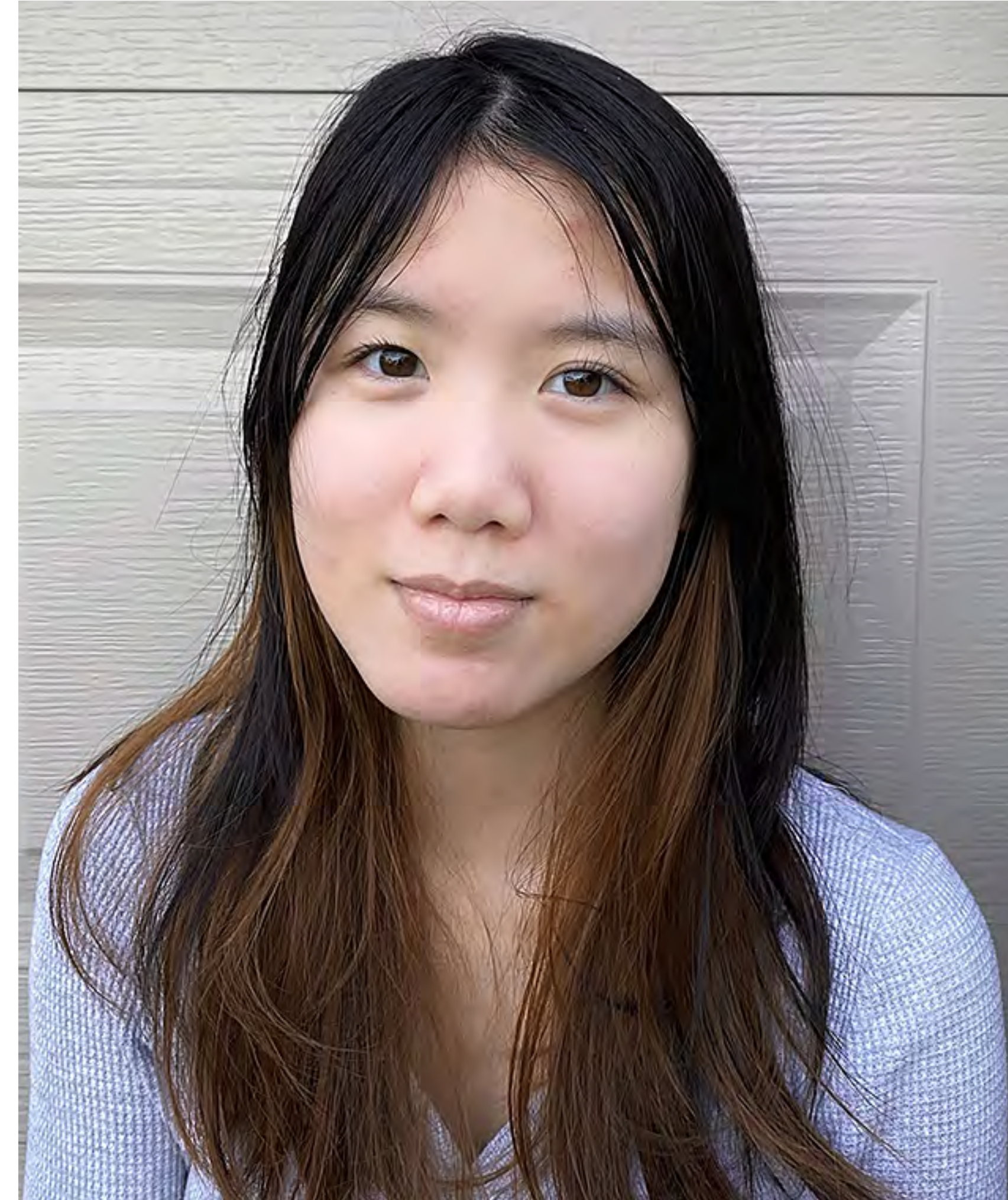


Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Emily Chan

Sea Scrap Slippers

Greater Vancouver – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Ethan Chase

RESeTCO2: Residential Emission Sequestration Technologies for Carbon Dioxide.

Greater Vancouver – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Elizabeth Chen

Design Parameters for CAR-T Cell Therapy using RNA Sequencing Analysis

Edmonton - Alberta



Excellence Award - Silver
Prix d'excellence - argent

Intermediate / Intermédiaire

Sophie Filion
Chloe Filion

The Dynamic Highway Speed Emission Control System

Niagara - Ontario

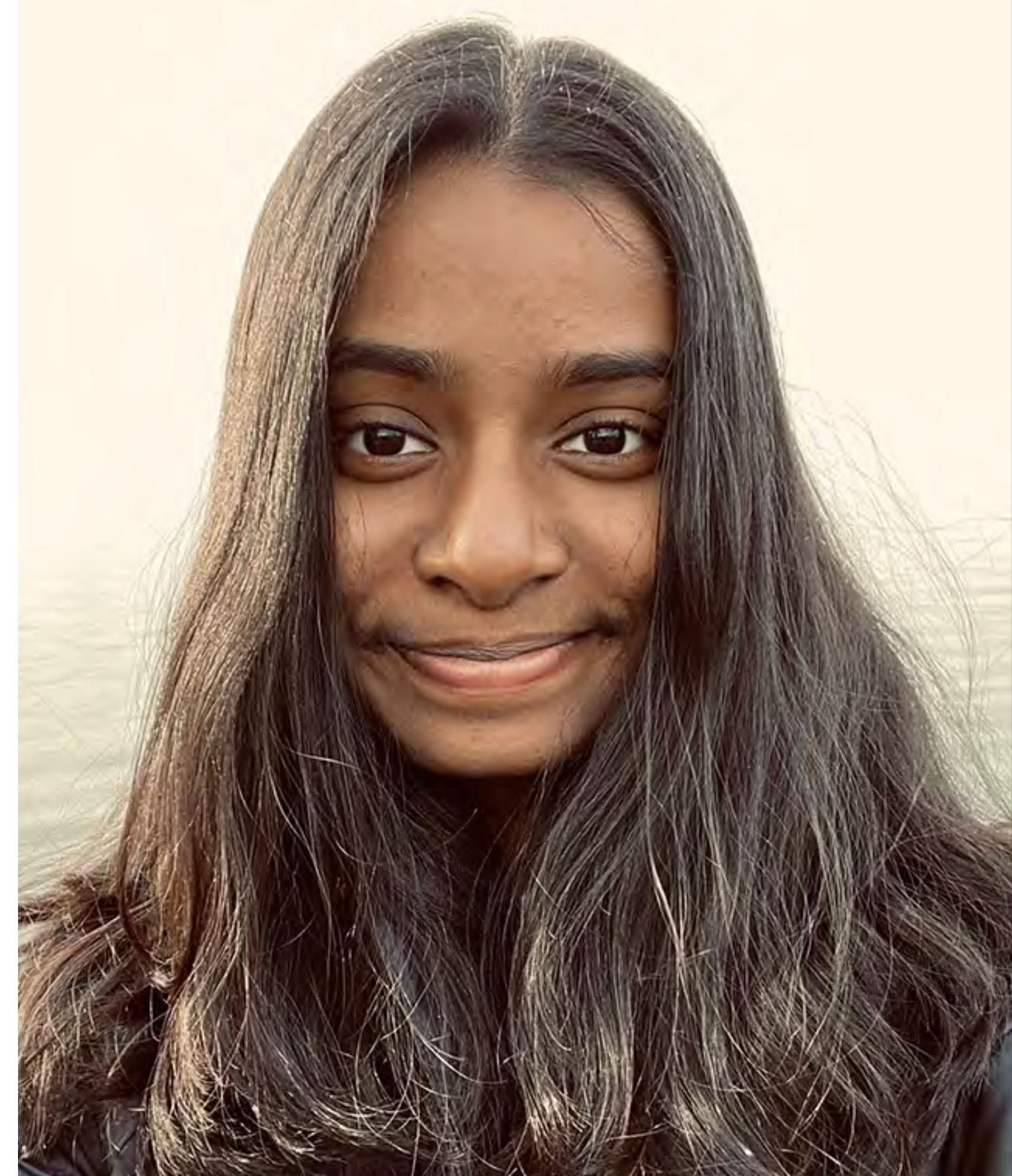


Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Tharunika Gnaneshan

Hidden Women: A Project on Women of Color in STEM

YSC Virtual



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Veronica Guo

Bioelectric Batteries: Using Algae to Make the Battery Renewable

Greater Vancouver – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Brennah Hammond

Do You PerSEEEve What I PerSEEEve?

Peterborough – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Nathan Hellner-Mestelman

Breakup is a Drag - Using a lower CubeSat Orbit to Protect Space Infrastructure

Vancouver Island - British Columbia

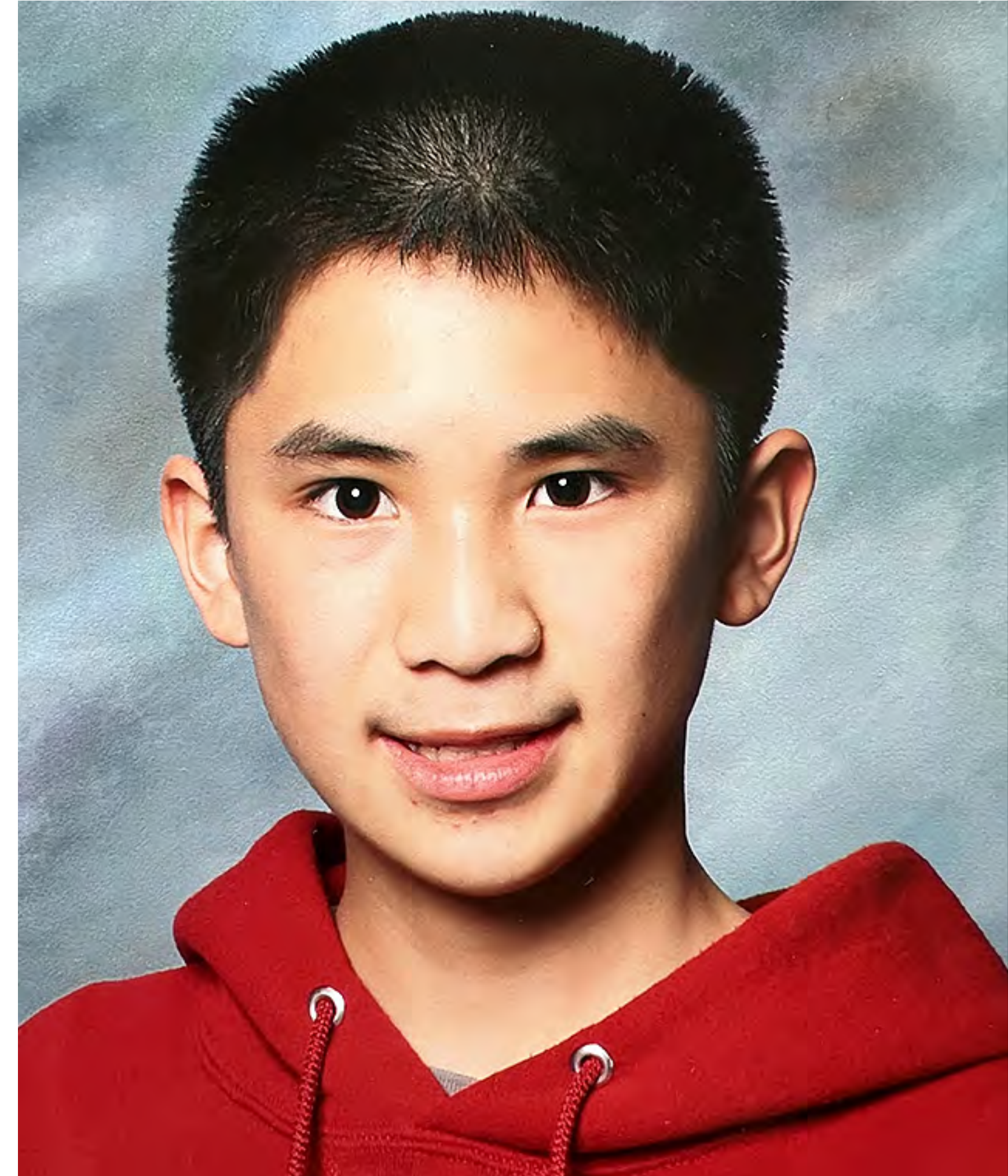


Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Jonathan Leung

A Case Study of Wildlife Feeding and Coyote Attacks in Vancouver's Stanley Park

Greater Vancouver – British Columbia



Excellence Award - Silver
Prix d'excellence - argent

Intermediate / Intermédiaire

Ziyu Li
Zipeng Li

Tenebrio Molitor Polystyrene Foam Consumption - The Effect of Additional Nutritional Sources

Calgary Youth - Alberta

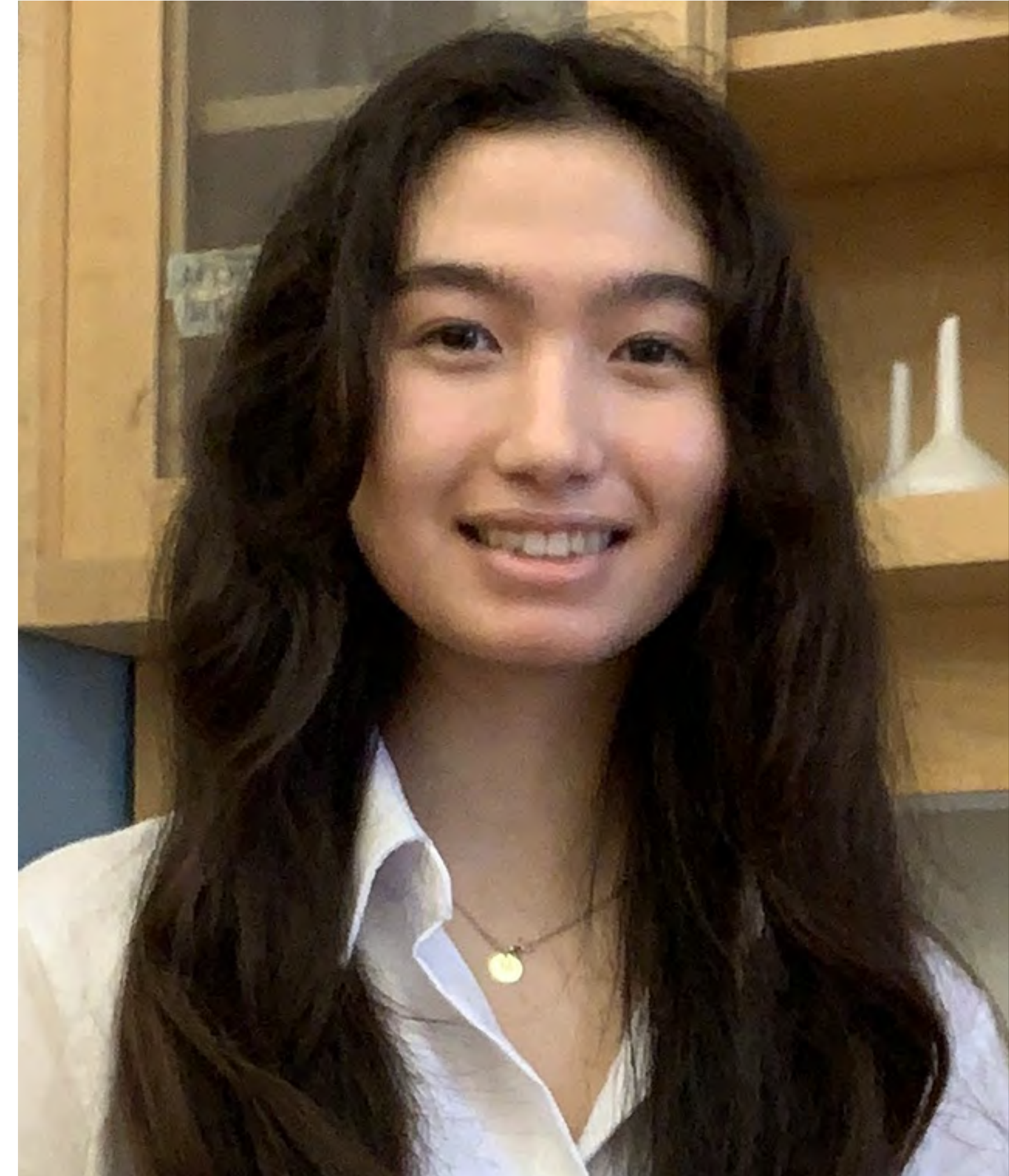


Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Marissa Magsino

Behavioral modification of *Tenebrio molitor* by toxins to maximize the biodegradation of polystyrene

Manitoba Schools Science Symposium – Manitoba



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Mark Norregaard

A Comparison of Natural Corrosion Inhibitors on Metals

4-H Canada



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Evan Papps

Can Slime Mold Adapt and Communicate?

Vancouver Island – British Columbia

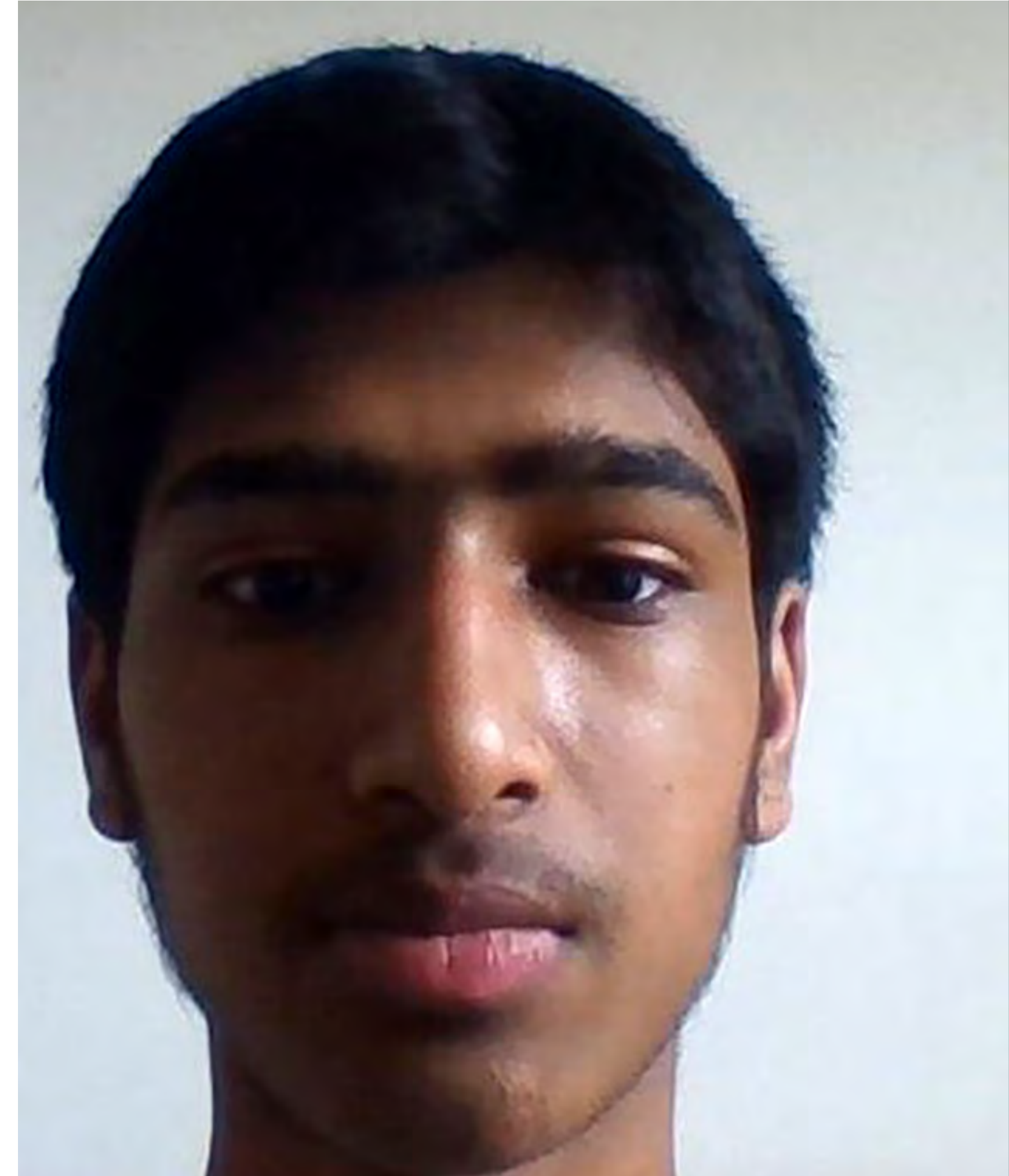


Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Kadhir Ponnambalam

Effect Of Electrical Field On Tardigrades In A Microfluidic Environment

Bay Area - Ontario



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Kayla Salasidis

OR in Focus: An Automatic Focusing Overhead Operating Room Light

Réseau Technoscience – Québec



Excellence Award - Silver
Prix d'excellence - argent

Intermediate / Intermédiaire

Archie Shou
Edwin Wang

AI Object Location Recognition Software for the Blind

Toronto - Ontario



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Tara Zhan

Medical Mo-Cap

Greater Vancouver – British Columbia



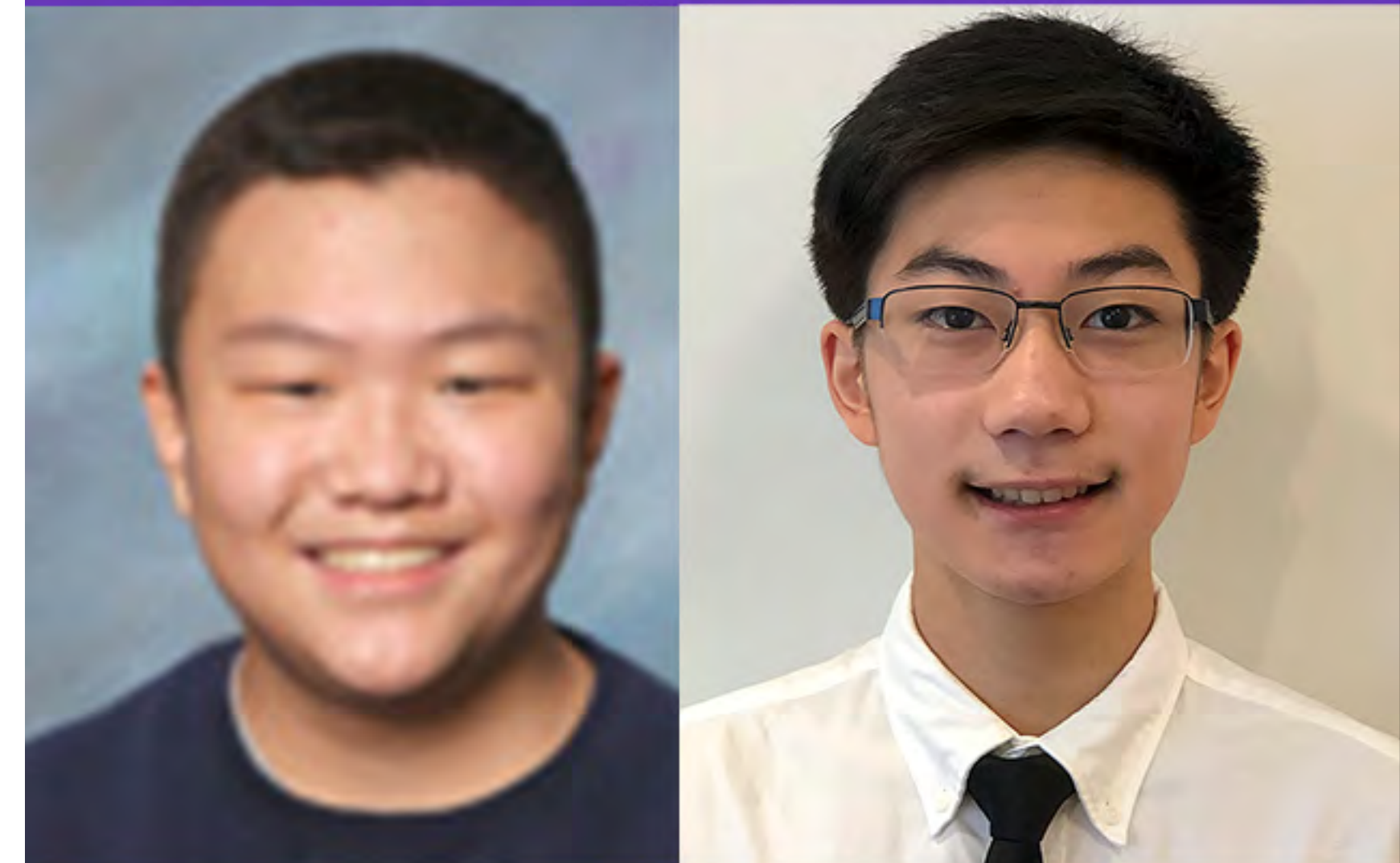
Excellence Award - Silver
Prix d'excellence - argent

Intermediate / Intermédiaire

Nathan Yeung
Charlie Zhang

Lento: Goal-Based Productivity

South Fraser – British Columbia



Excellence Award - Silver
Prix d'excellence - argent
Intermediate / Intermédiaire

Timothy Zhou

Toilet Leak Detector

Calgary Youth – Alberta



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Rafay Ahmed

An FDA-Approved Drug Screening to Eliminate Telomerase Over-Expressing Pancreatic Cancer

Northern Saskatchewan – Saskatchewan



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Grace Awotundun

Quantification of ASD-related Gene Transcripts in Glyphosate-exposed Zebrafish Through Larval Stages

Calgary Youth – Alberta



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Oliver Baker

**Baseline Assessment of Marine Water Entering Freshwater Waterways
Through the Aboiteaux in Dykes**

Annapolis Valley – Nova Scotia



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Becca Barbera

QSAR Model for the Inhibition of A β 1-42 Peptide: Molecular Dynamics and Bioinformatics Study

Bay Area - Ontario



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Carlynn Davidson

Young Extracellular Vesicles as Revitalizing Agents for Age Associated Cellular Dysfunction

Winnipeg Schools – Manitoba



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Ella Dunsmore

Testing Aprepitant as a Possible Therapeutic in Two Pediatric Cancer Cell Lines

Calgary Youth – Alberta



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Emily Goodson

A Novel Approach to the Reparation of Damaged Freshwater Ecosystems
Simulating Wetland Filtration

Simcoe County – Ontario



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Jessica Graham

**Modified Fe Nanoparticles and a Rotating Magnetic Drum: Removing
Aquatic Microplastics**

South-East New Brunswick – New Brunswick



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Chloe Hill

Autonomous Search And Rescue Aircraft

Simcoe County – Ontario



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Rawaan Ibrahim

Grassheet

Edmonton – Alberta



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Zachary Ireland

**Quantifying the Likelihood of Neutron Absorption Utilizing Radiative
Capture Cross-Sections**

Manitoba Schools Science Symposium – Manitoba



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Oumaima Malih

Réglisse et la durée de vie

Réseau Technoscience – Québec



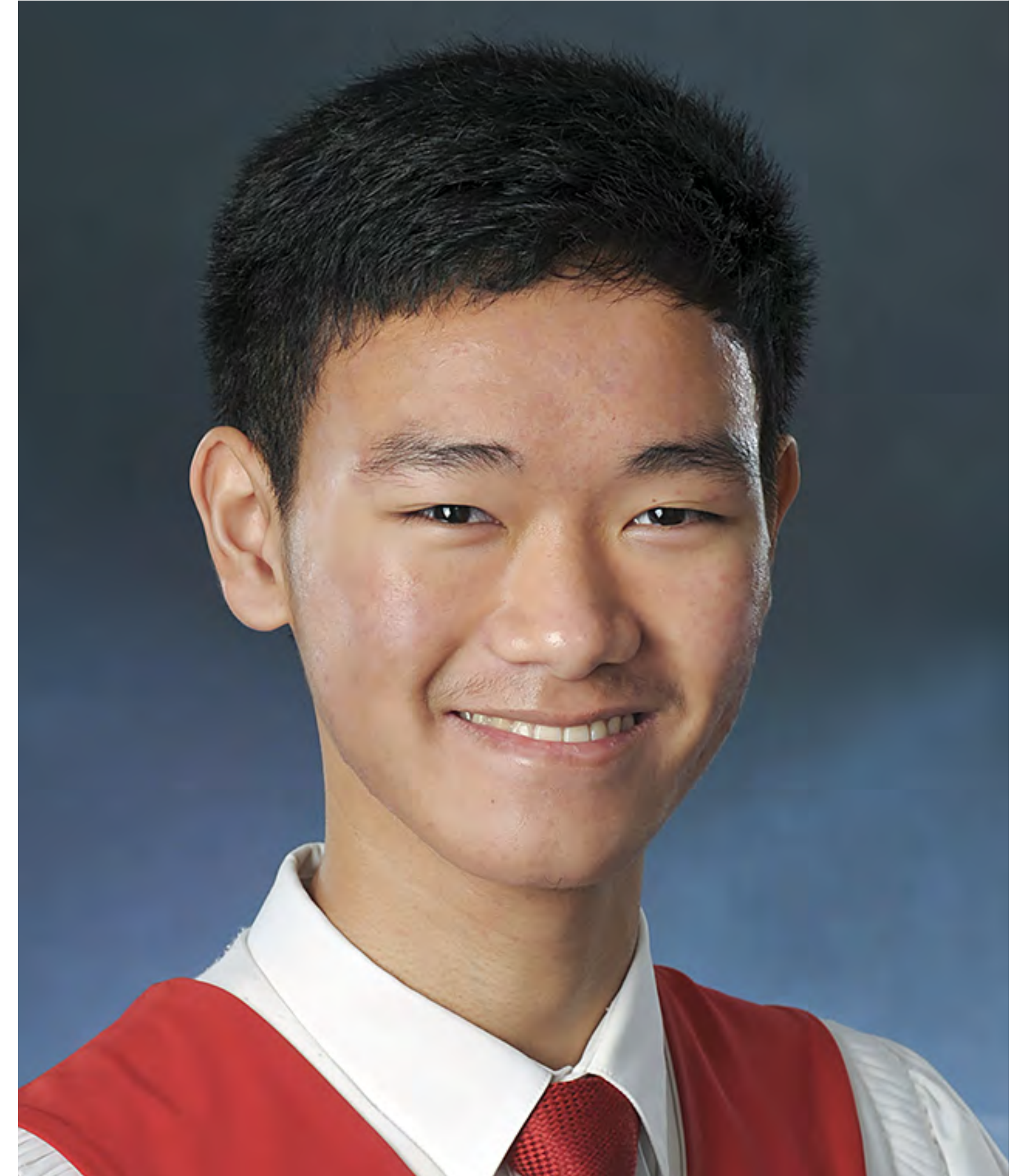
Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Bach Nguyen

Elevated Vehicle Routing in Reverse Logistics for Garbage Transportation in Saint John New Brunswick

South-East New Brunswick – New Brunswick



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Ria Patel

BlueViolet: a wearable eye-health monitor to counter the unseen health effects of COVID-19

Ottawa – Ontario



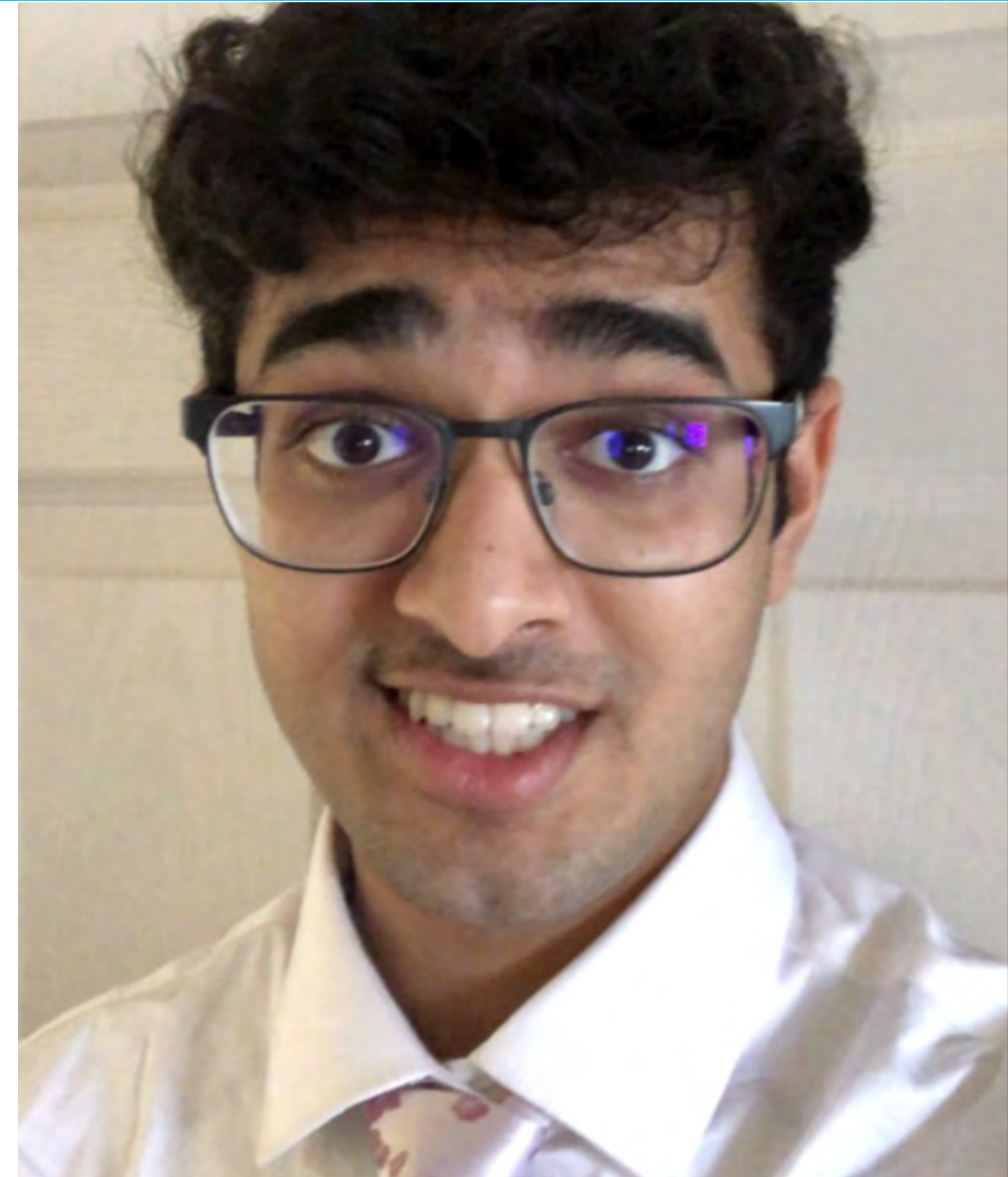
Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Sparsh Patel

FOCUS! - An EEG And ANN Powered Brain Sensing Headband For Accident Prevention

Wood Buffalo – Alberta



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Parmin Sedigh

Exposure to glyphosate-based herbicide and zebrafish fin regeneration

Frontenac, Lennox & Addington – Ontario



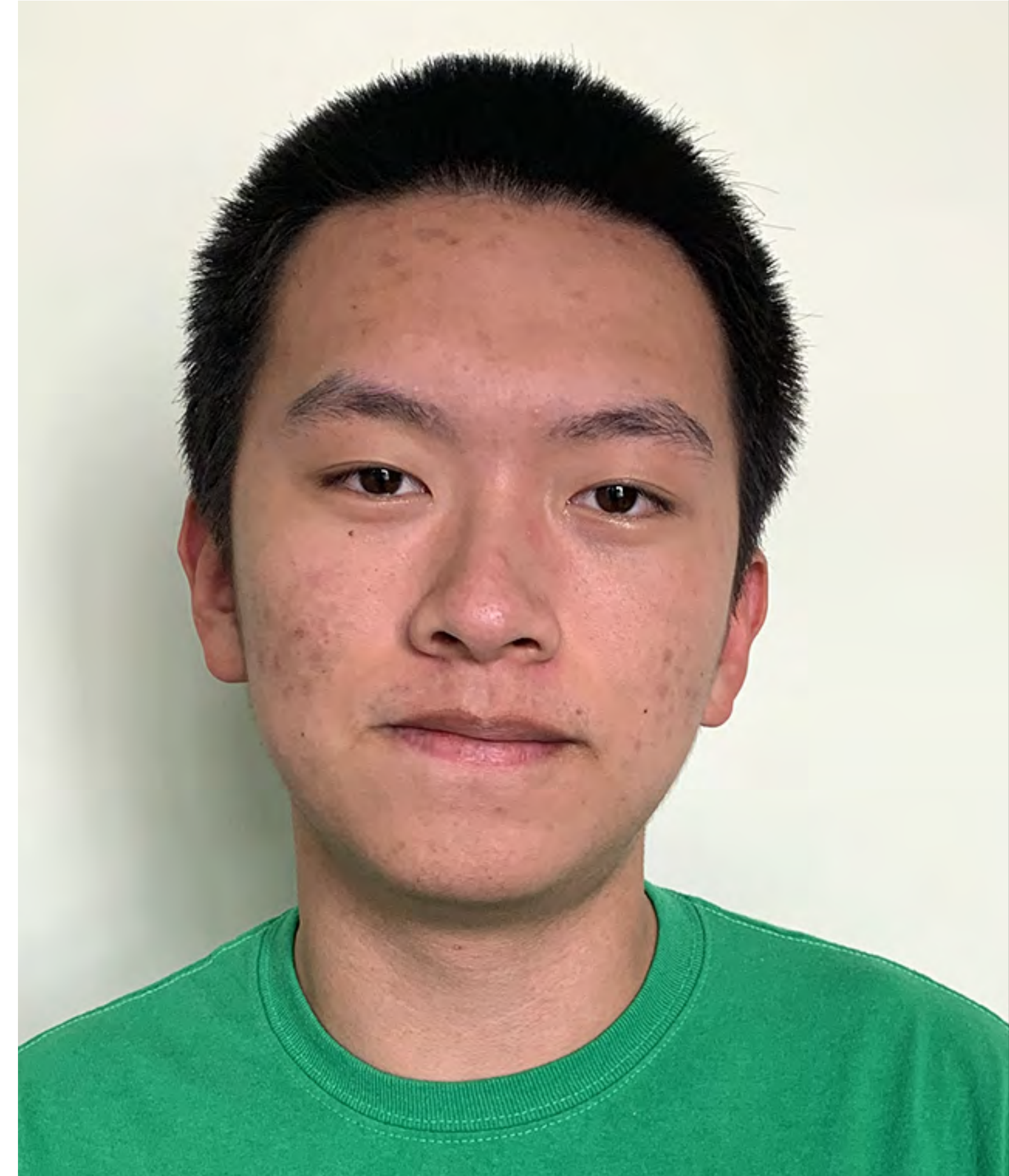
Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Kevin Shao

A Computer Vision-Controlled Smart Robotic Arm

Thames Valley – Ontario



Excellence Award - Silver
Prix d'excellence - argent
Senior / Sénior

Graydon Strachan

MAC: A Novel Method for Clinical Weight Estimation

Winnipeg Schools – Manitoba



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Sarah Syed

Harnessing Nanotechnology in Biomass and Carboxyl Grouping for Water Remediation

Toronto – Ontario



Excellence Award - Silver
Prix d'excellence - argent

Senior / Sénior

Yubo Wang
Matthew Zullo

**EyeInteract: Accessible Eye Tracking for the Physically Disabled Using
Computer Vision**

York – Ontario



Excellence Award - Gold
Prix d'excellence - or
Junior

Abigail Chan

Regulating Digital Eye Strain using Similarity Index

Waterloo-Wellington – Ontario



Excellence Award - Gold

Prix d'excellence - or

Junior

Caroline Chan

Do Masks Mask Your Emotions? AI Emotion Recognition in the Era of Face Masks

Toronto – Ontario



Excellence Award - Gold

Prix d'excellence - or

Junior

Audrey Cowen

The Hidden Side of Your Dog's Love

Toronto – Ontario



Excellence Award - Gold

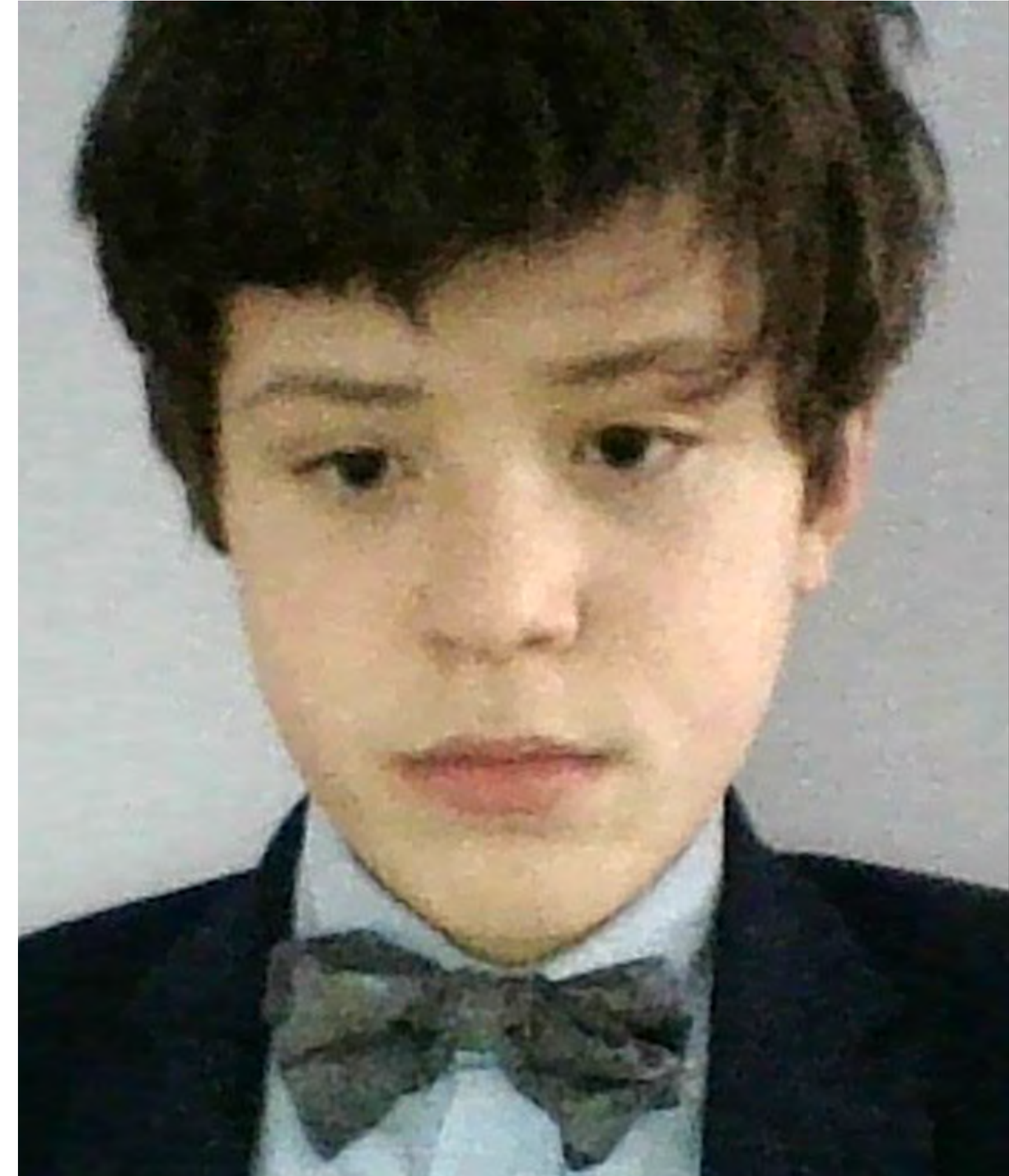
Prix d'excellence - or

Junior

Jamie Drysdale

Genetically modifying K 12 Escherichia coli to produce Recombinant Sars-Cov-2 Spike Protein

Ottawa – Ontario



Excellence Award - Gold

Prix d'excellence - or

Junior

Aiyaan Faisal

Geometric Exploration of Musical Rhythms using Phase Space Plots

Winnipeg Schools – Manitoba



Youth Science Canada
Sciences jeunesse Canada



Excellence Award - Gold

Prix d'excellence - or

Junior

Malaya Jung Little

Does a Walk in Nature Improve your Memory?

West Kootenay & Boundary – British Columbia



Excellence Award - Gold

Prix d'excellence - or

Junior

Arushi Nath

Strengthening Planetary Defense: Detecting Unknown Asteroids using Open Data, Math, and Python

Toronto – Ontario



Excellence Award - Gold

Prix d'excellence - or

Junior

Anjali Patel

**Discovery of Novel Gene Biomarkers to Improve CAR-T Cell Immunotherapy
for Pancreatic Adenocarcinoma**

Frontenac, Lennox & Addington – Ontario



Excellence Award - Gold
Prix d'excellence - or
Junior

Emily Lin
Ruiyi Sang

Writing a cleaner future with E-Coal

South Fraser – British Columbia



Excellence Award - Gold

Prix d'excellence - or

Junior

Surya Narayan Santhakumar

Snow SBOT V2

Quinte - Ontario



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Ken Cheng

A Need For Speed: Enhancing F1 Race Cars with Computational Fluid Dynamics and Machine Learning

Toronto – Ontario



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Max Du

A Novel Pre-Hospital Indoor Rescue Drone

Calgary Youth – Alberta



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Silas Eastwood

**SMARTEN: Simulated Microgravity and Reduced Friction Test Environment
for Nanosatellites**

Halifax – Nova Scotia



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Séréna Harvey

Bactéries pour souper!

Réseau Technoscience – Québec



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Hudson Jantzi

Using Robotics to Naturally Trim the Dandelion Cycle - A Novel Approach to Eliminating Chemicals on Lawns

Waterloo-Wellington – Ontario



Excellence Award - Gold

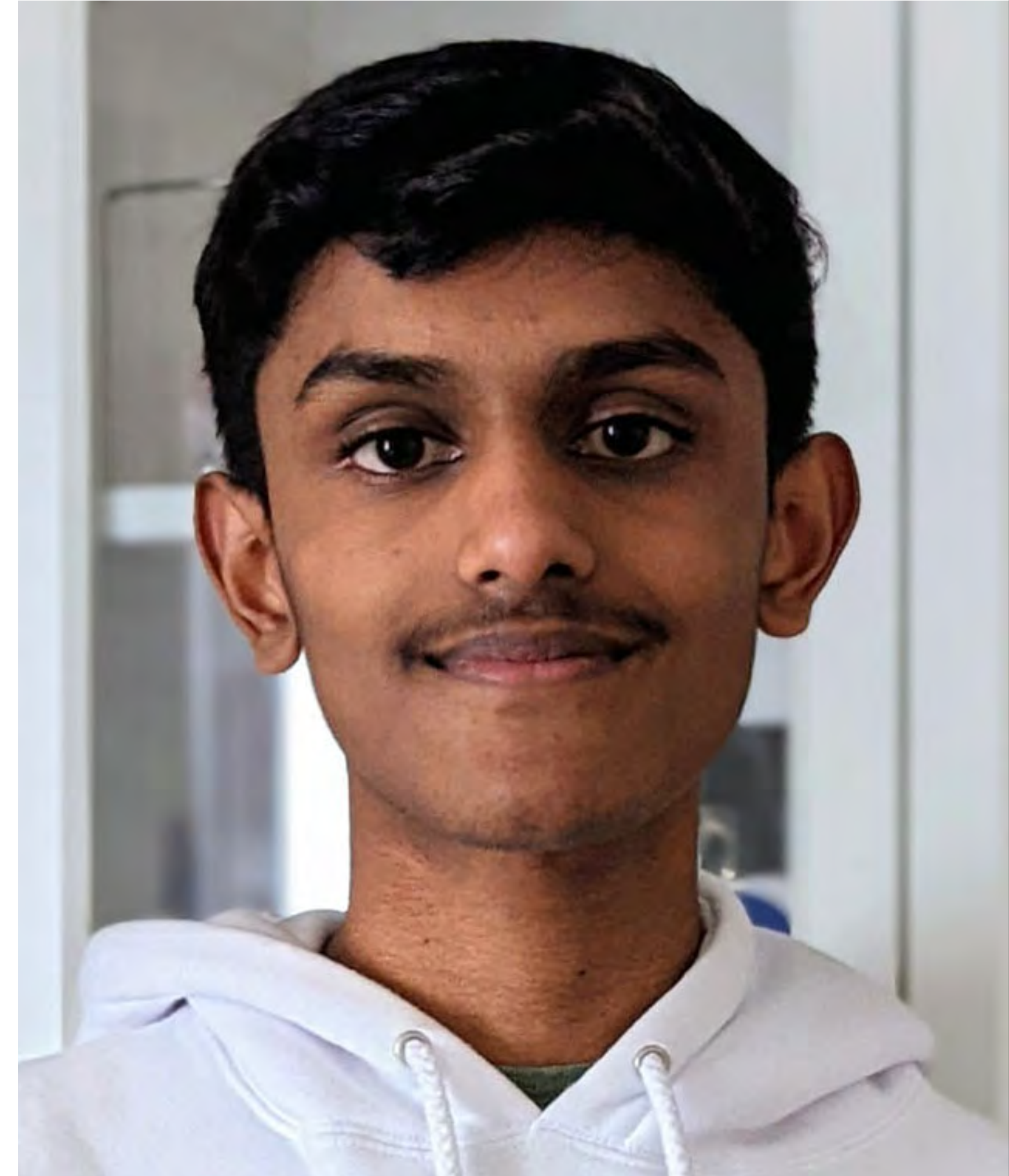
Prix d'excellence - or

Intermediate / Intermédiaire

Keerthan Kamala Krishnamoorthy

Using Deep Learning to Identify Harmful Micro-Organisms in Drinking Water

Manitoba Schools Science Symposium – Manitoba



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Kibo Nagasaki

Survival of Indigenous Ancestors

Bay Area - Ontario



Excellence Award - Gold

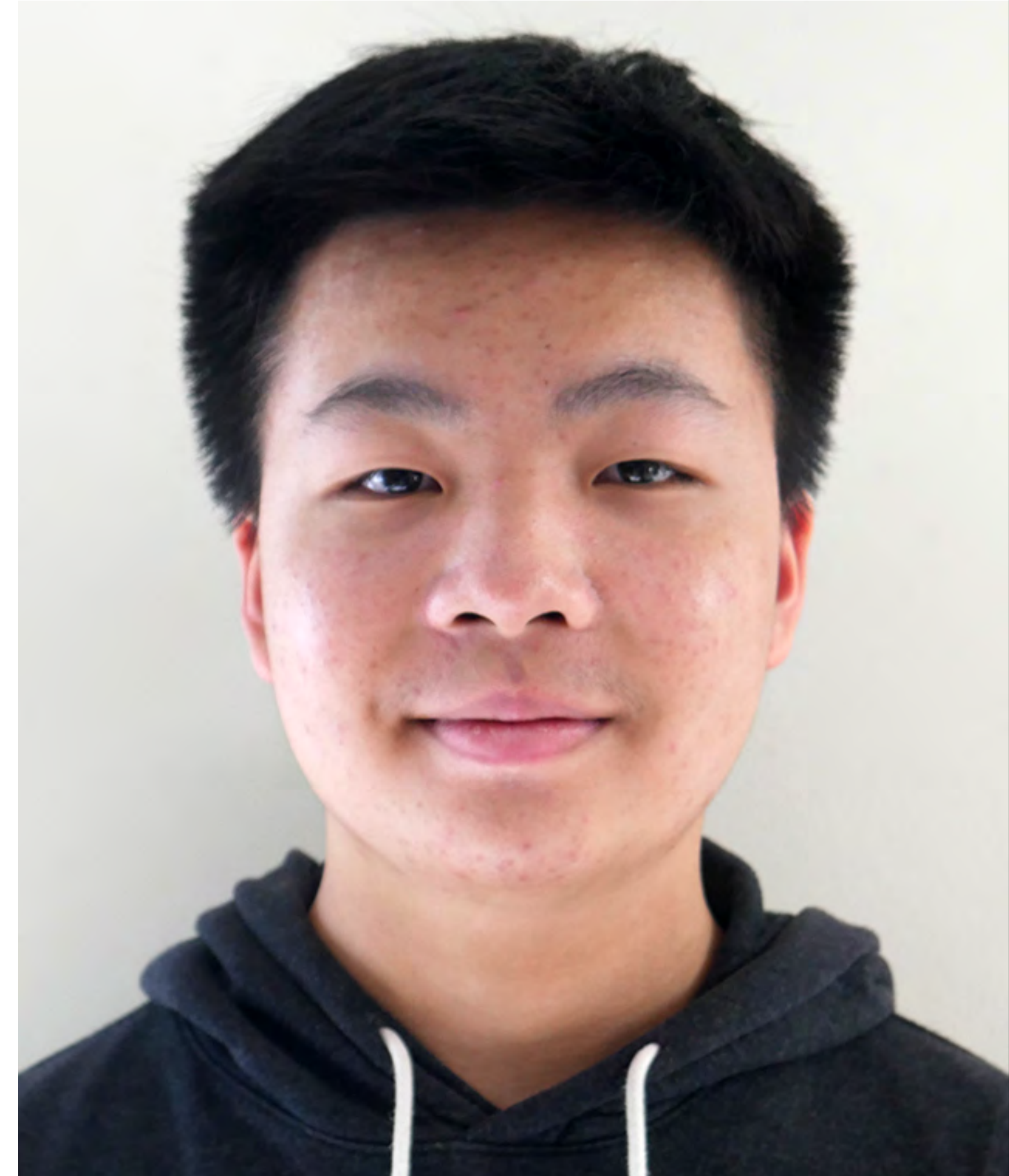
Prix d'excellence - or

Intermediate / Intermédiaire

Justin Peng

Taking Control: A Novel Galvanic Stimulation Device for the Visually Impaired

Greater Vancouver – British Columbia



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Jasmine Schneider

Phosphate Removal from Groundwater Using Mussel Shell Biochar

Waterloo-Wellington – Ontario



Excellence Award - Gold

Prix d'excellence - or

Intermediate / Intermédiaire

Mihaela Iluta Akram Tahar Chaouch

Oh la vache!

Réseau Technoscience – Québec



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Dheiksha Jayasankar

**Smiglaside-C Part 2: Developing Hydrogel Films from A.muricata Extracts
for Wound Healing Purposes**

Niagara – Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Gurnirmal Kaur

EzerBot: Detecting Phrases Indicative of Emotional Distress Within Online Platforms

Bay Area - Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Koral Kulacoglu **Hanze Wu**

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York – Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Krish Modi

Pee Xylophone: A Novel Non-Invasive System to Measure Bladder Pressure

Lambton County – Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Thomas Pronovost

Analyse ta foulée!

Réseau Technoscience – Québec



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Annabelle Rayson

**Plankton Wars: An Innovative Analysis of Daphnia Genotype
Biomanipulation for Algae Bloom Prevention**

Lambton County – Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Patricia Rea

BioGrade Yeast: The Function of a Novel cfAFP-501-CcMreB Filament-Forming AFP

York – Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Gabrielle Seal

A Survey of Compact, Intermediate-Velocity H I Clouds in the Inner Milky Way

Calgary Youth – Alberta



Excellence Award - Gold

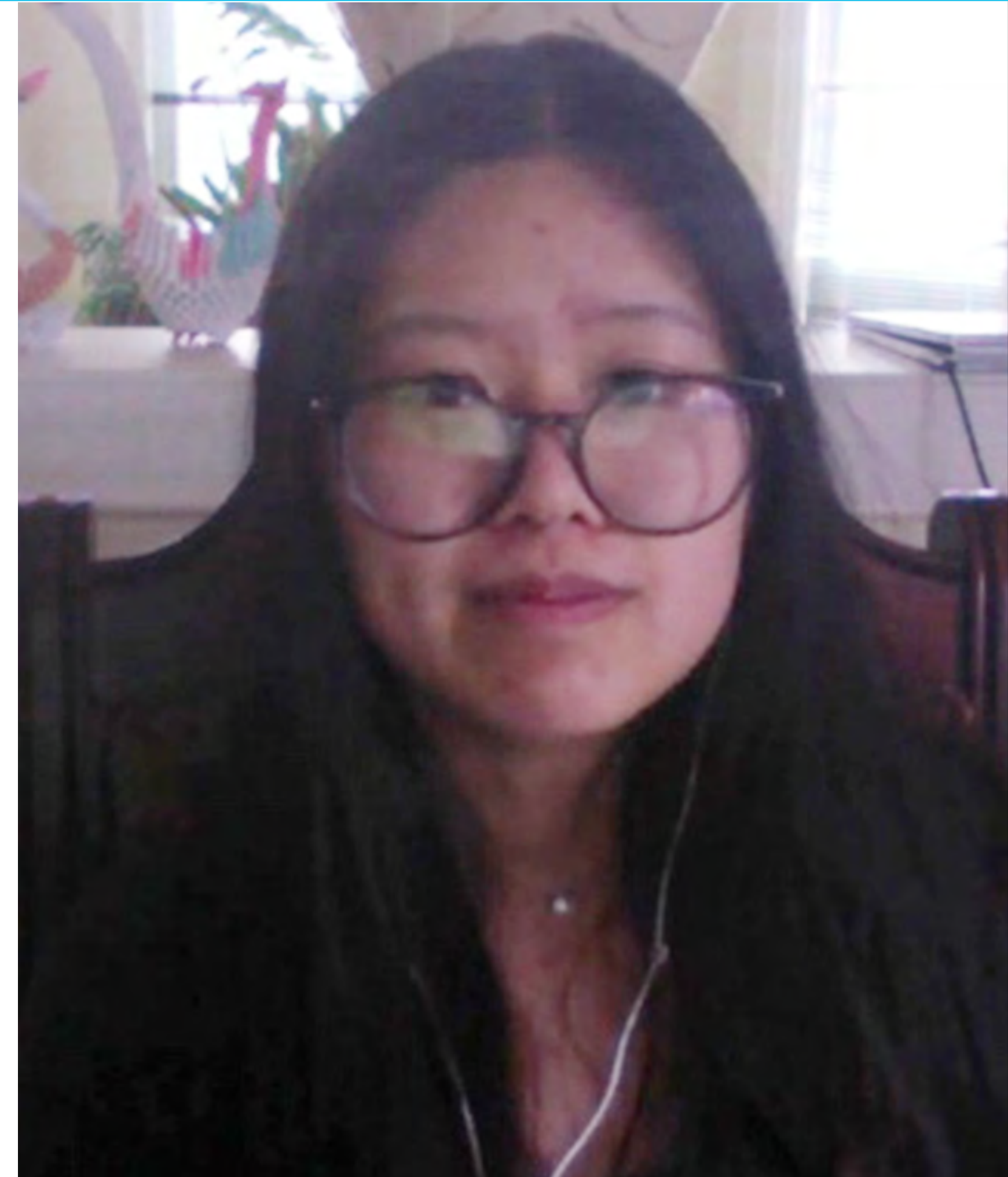
Prix d'excellence - or

Senior / Sénior

Maria Xu

Analyzing Treatment-related Symptoms in Metastatic Colorectal Cancer Patients with Machine Learning

Toronto – Ontario



Excellence Award - Gold

Prix d'excellence - or

Senior / Sénior

Grace Yu
Akira Yoshiyama

On the Generative Design of Airfoils

Fraser Valley – British Columbia





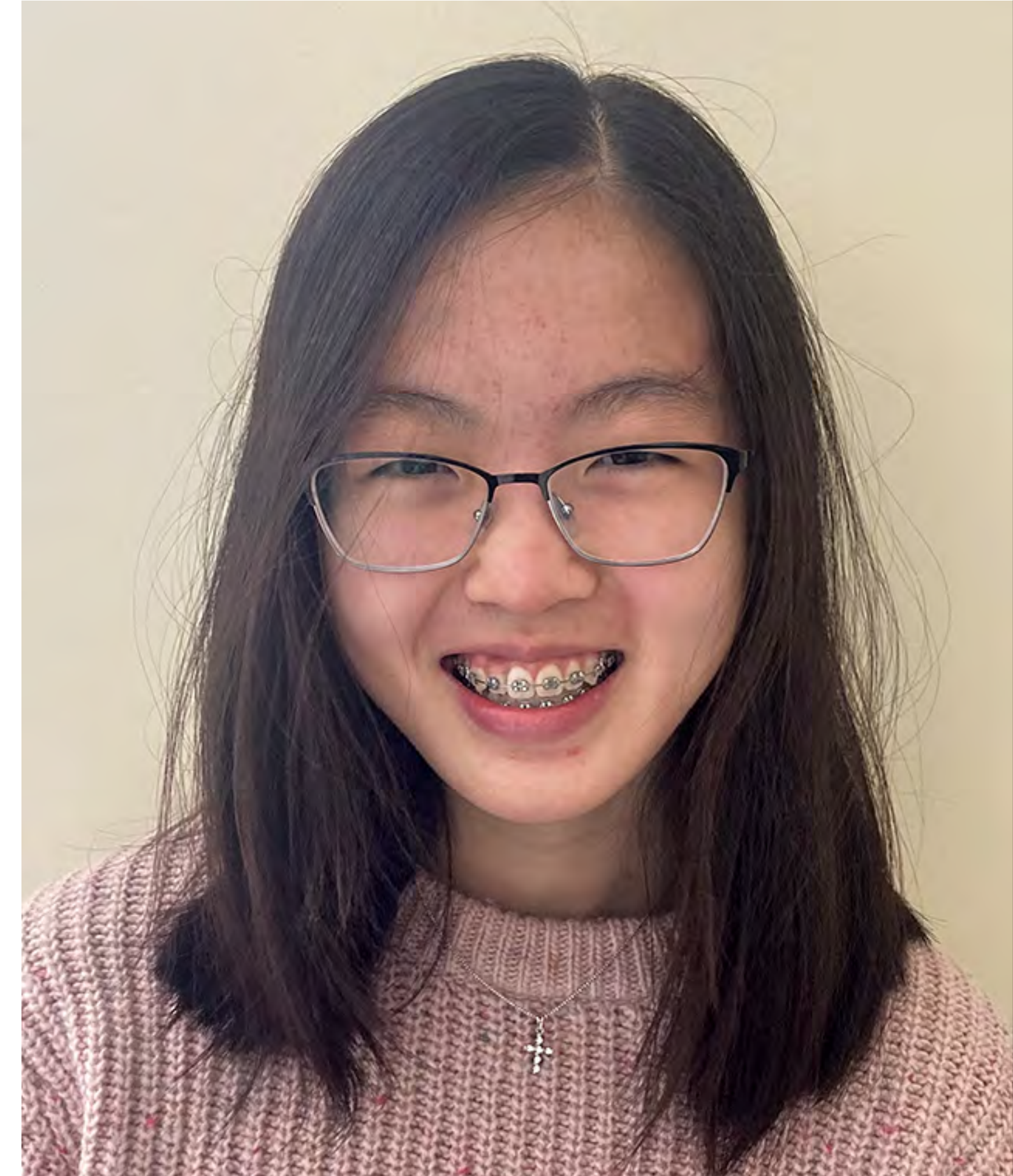
Challenge Award - Agriculture, Fisheries and Food
Prix du défi - Agriculture, pêche et alimentation

Junior

Hannah Cheang

Fish Powered Plant Growth

York - Ontario





Challenge Award - Agriculture, Fisheries and Food

Prix du défi - Agriculture, pêche et alimentation

Intermediate / Intermédiaire

Nadine Persad

Development and Testing of a Novel Post Harvest Treatment

West Kootenay & Boundary – British Columbia



Youth Science Canada
Sciences jeunesse Canada





Challenge Award - Agriculture, Fisheries and Food
Prix du défi - Agriculture, pêche et alimentation

Senior / Sénior

Mac Dykeman

A Simple, Scalable Method For Reducing Stress In Chicks During The First Seven Days Post Hatch.

4-H Canada





Challenge Award - Curiosity and Ingenuity

Prix du défi - Curiosité et ingéniosité

Junior

Arushi Nath

Strengthening Planetary Defense: Detecting Unknown Asteroids using Open Data, Math, and Python

Toronto – Ontario





Challenge Award - Curiosity and Ingenuity

Prix du défi - Curiosité et ingéniosité

Intermediate / Intermédiaire

Max Du

A Novel Pre-Hospital Indoor Rescue Drone

Calgary Youth – Alberta



Youth Science Canada
Sciences jeunesse Canada





Challenge Award - Curiosity and Ingenuity

Prix du défi - Curiosité et ingéniosité

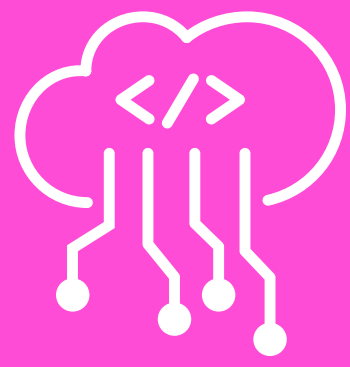
Senior / Sénior

Patricia Rea

BioGrade Yeast: The Function of a Novel cfAFP-501-CcMreB Filament-Forming AFP

York - Ontario





Challenge Award - Digital Technology

Prix du défi - Technologie numérique

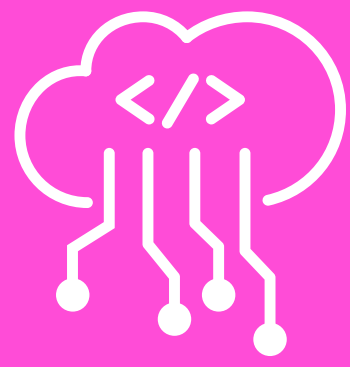
Junior

Surya Narayan Santhakumar

Snow SBOT V2

Quinte - Ontario





Challenge Award - Digital Technology

Prix du défi - Technologie numérique

Intermediate / Intermédiaire

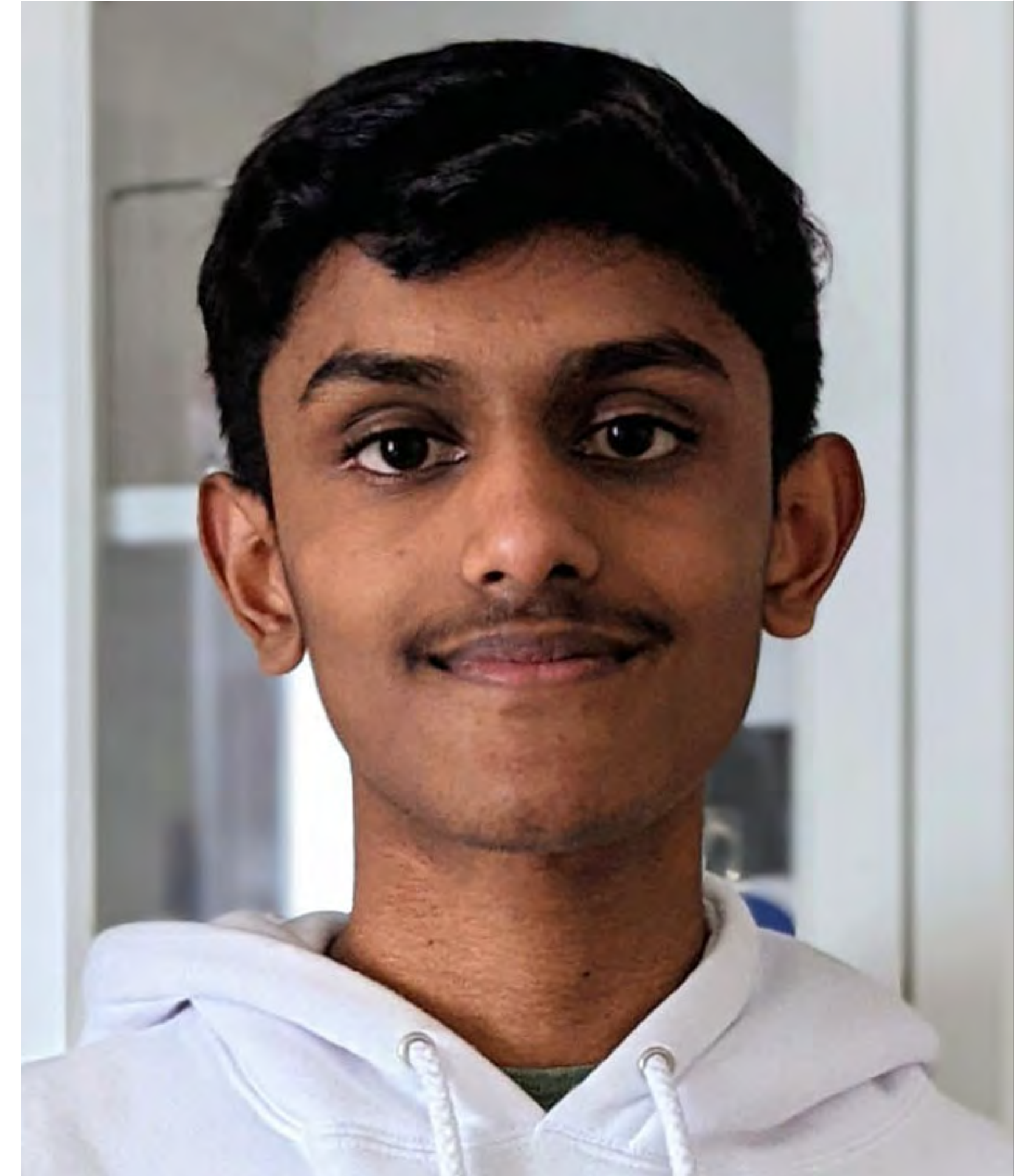
Keerthan Kamala Krishnamoorthy

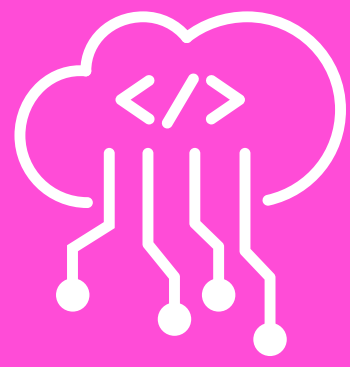
Using Deep Learning to Identify Harmful Micro-Organisms in Drinking Water

Manitoba Schools Science Symposium – Manitoba



Youth Science Canada
Sciences jeunesse Canada





Challenge Award - Digital Technology

Prix du défi - Technologie numérique

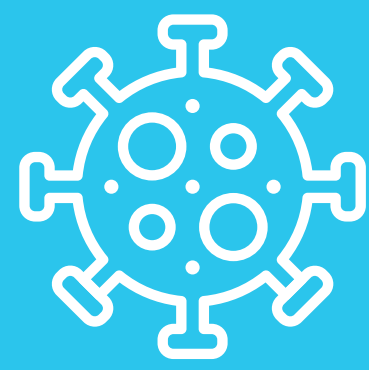
Senior / Sénior

Thomas Pronovost

Analyse ta foulée!

Réseau Technoscience – Québec





Challenge Award - Disease and Illness

Prix du défi - Maladies et infections

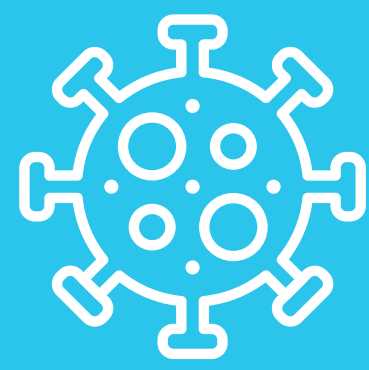
Junior

Anjali Patel

Discovery of Novel Gene Biomarkers to Improve CAR-T Cell Immunotherapy for Pancreatic Adenocarcinoma

Frontenac, Lennox & Addington – Ontario





Challenge Award - Disease and Illness

Prix du défi - Maladies et infections

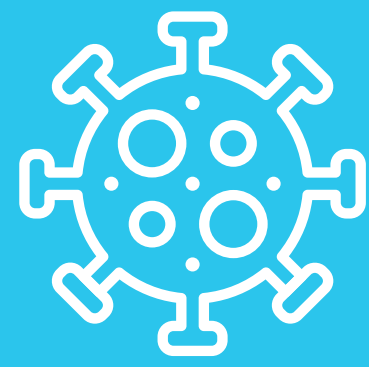
Intermediate / Intermédiaire

Séréna Harvey

Bactéries pour souper!

Réseau Technoscience – Québec





Challenge Award - Disease and Illness

Prix du défi - Maladies et infections

Senior / Sénior

Koral Kulacoglu
Hanze Wu

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York – Ontario





Challenge Award - Energy

Prix du défi - Énergie

Junior

Vedant Sheel

Smart Solar Tracker!

Bluewater – Ontario





Challenge Award - Energy

Prix du défi - Énergie

Intermediate / Intermédiaire

Veronica Guo

Bioelectric Batteries: Using Algae to Make the Battery Renewable

Greater Vancouver – British Columbia





Challenge Award - Energy

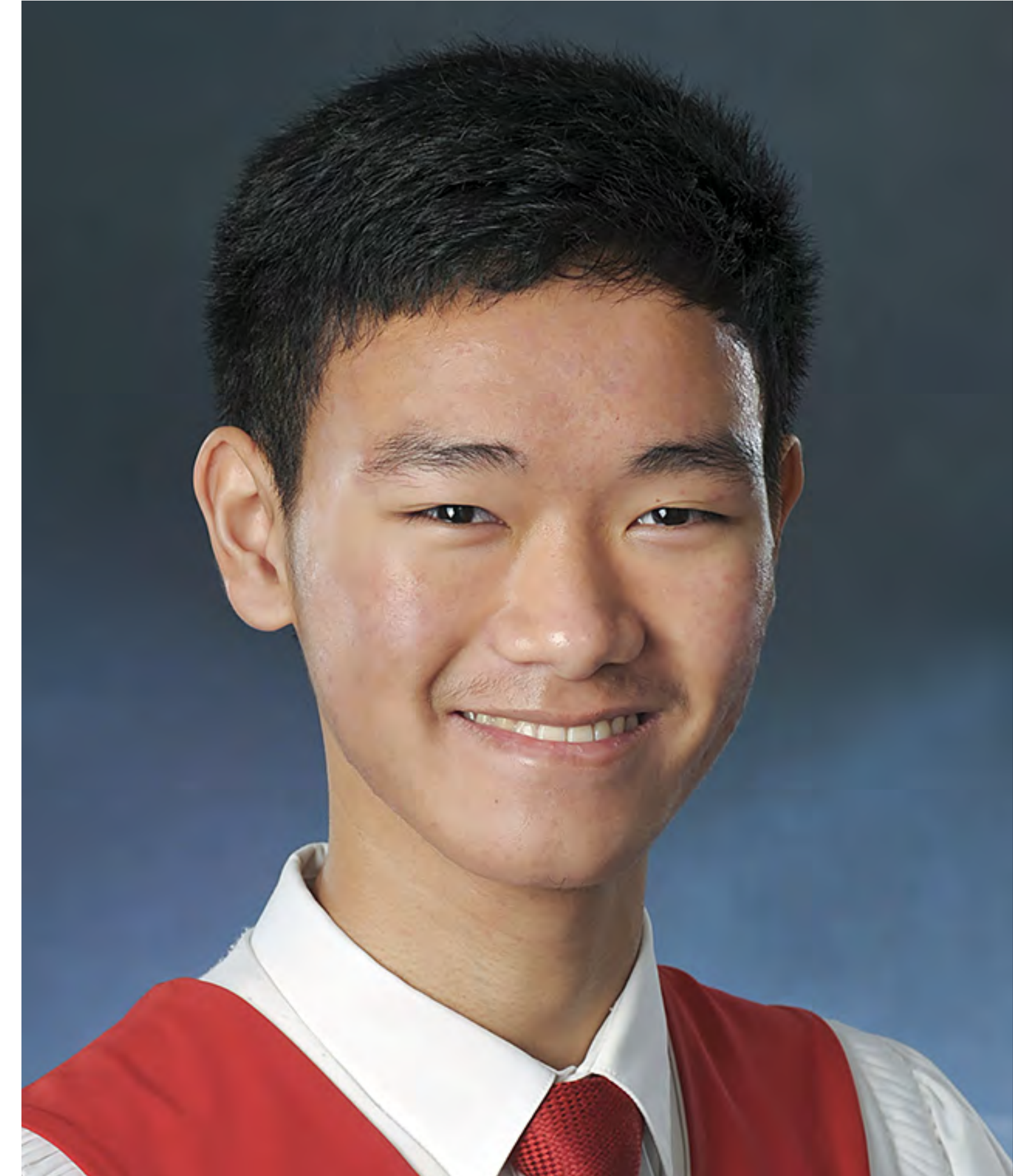
Prix du défi - Énergie

Senior / Sénior

Bach Nguyen

Elevated Vehicle Routing in Reverse Logistics for Garbage Transportation in Saint John New Brunswick

South-East New Brunswick – New Brunswick





Challenge Award - Environment and Climate Change
Prix du défi - Environnement et changement climatique

Junior

Sebastien Menard

Roofing for a Green Future

Frontenac, Lennox & Addington – Ontario



Youth Science Canada
Sciences jeunesse Canada





Challenge Award - Environment and Climate Change
Prix du défi - Environnement et changement climatique

Intermediate / Intermédiaire

Jasmine Schneider

Phosphate Removal from Groundwater Using Mussel Shell Biochar

Waterloo-Wellington – Ontario



Youth Science Canada
Sciences jeunesse Canada





Challenge Award - Environment and Climate Change
Prix du défi - Environnement et changement climatique

Senior / Sénior

Annabelle Rayson

**Plankton Wars: An Innovative Analysis of Daphnia Genotype
Biomanipulation for Algae Bloom Prevention**

Lambton County – Ontario





Challenge Award - Health and Wellness

Prix du défi - Santé ou bien être

Junior

Malaya Jung Little

Does a Walk in Nature Improve your Memory?

West Kootenay & Boundary – British Columbia





Challenge Award - Health and Wellness

Prix du défi - Santé ou bien être

Intermediate / Intermédiaire

Mihaela Iluta Akram Tahar Chaouch

Oh la vache!

Réseau Technoscience – Québec





Challenge Award - Health and Wellness

Prix du défi - Santé ou bien être

Senior / Sénior

Gurnirmal Kaur

EzerBot: Detecting Phrases Indicative of Emotional Distress Within Online Platforms

Bay Area - Ontario



Youth Science Canada
Sciences jeunesse Canada





Challenge Award - Natural Resources

Prix du défi - Ressources naturelles

Junior

Emily Lin
Ruiyi Sang

Writing a cleaner future with E-Coal

South Fraser – British Columbia





Challenge Award - Natural Resources

Prix du défi - Ressources naturelles

Senior / Sénior

Rawaan Ibrahim

Grassheet

Edmonton - Alberta



Youth Science Canada
Sciences jeunesse Canada





Sanofi Biogenius Canada Award
Prix Sanofi Biogenius Canada

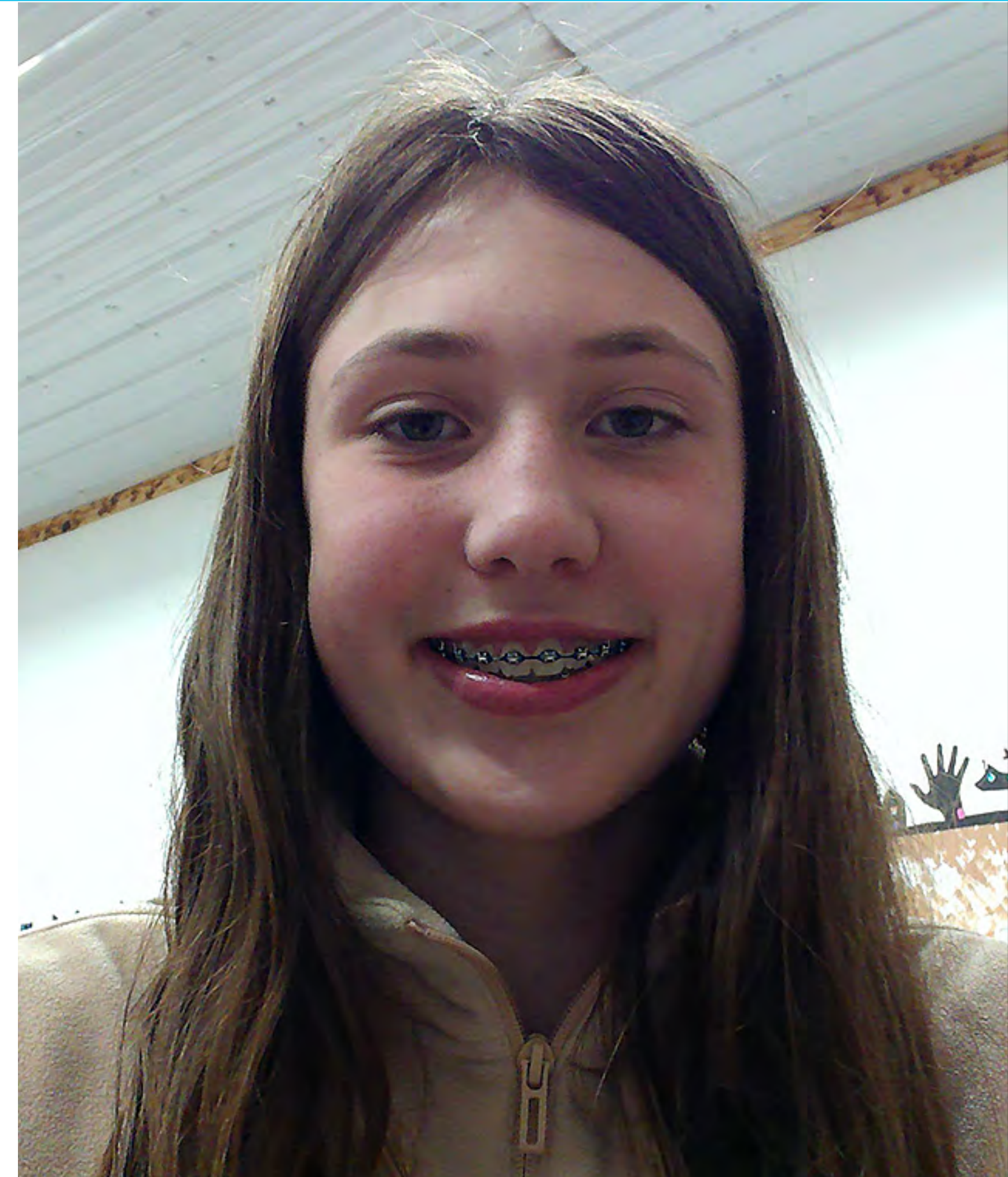
Junior

Sage Elliott

Magnet Magic!

Northern British Columbia – British Columbia

sanofi





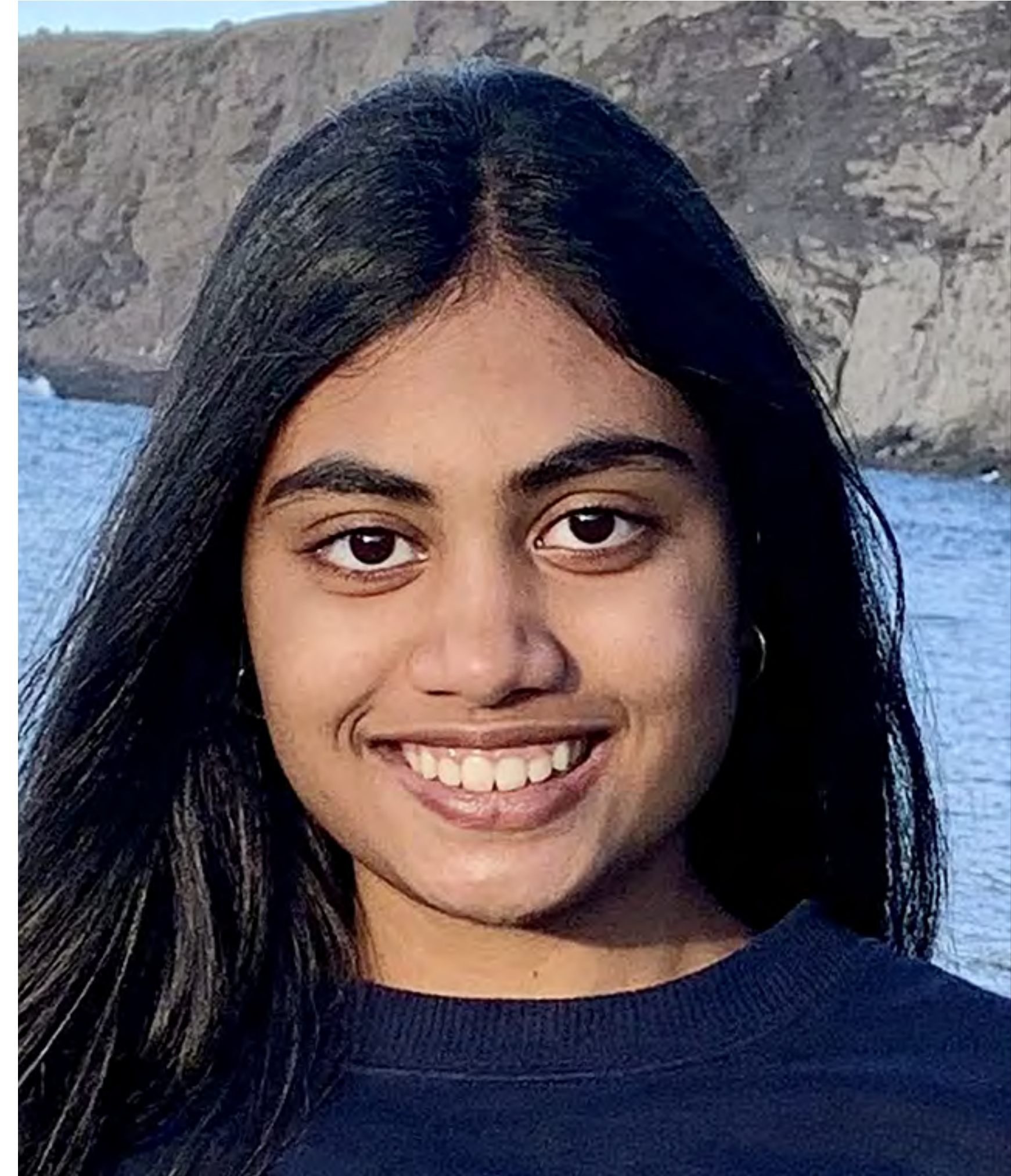
Sanofi Biogenius Canada Award
Prix Sanofi Biogenius Canada

Junior

Alpita Patro

Algae: The Future of Biofuel

Eastern Newfoundland – Newfoundland & Labrador



sanofi

biogenius



CWSF  **2022**
ESPC

Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

Junior

Mohamed Saleh

Pumpkin Plastic

Windsor – Ontario

sanofi



Virtual – Fredericton, NB • Virtuelle – Fredericton (N.-B.)



Youth Science Canada
Sciences jeunesse Canada



Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

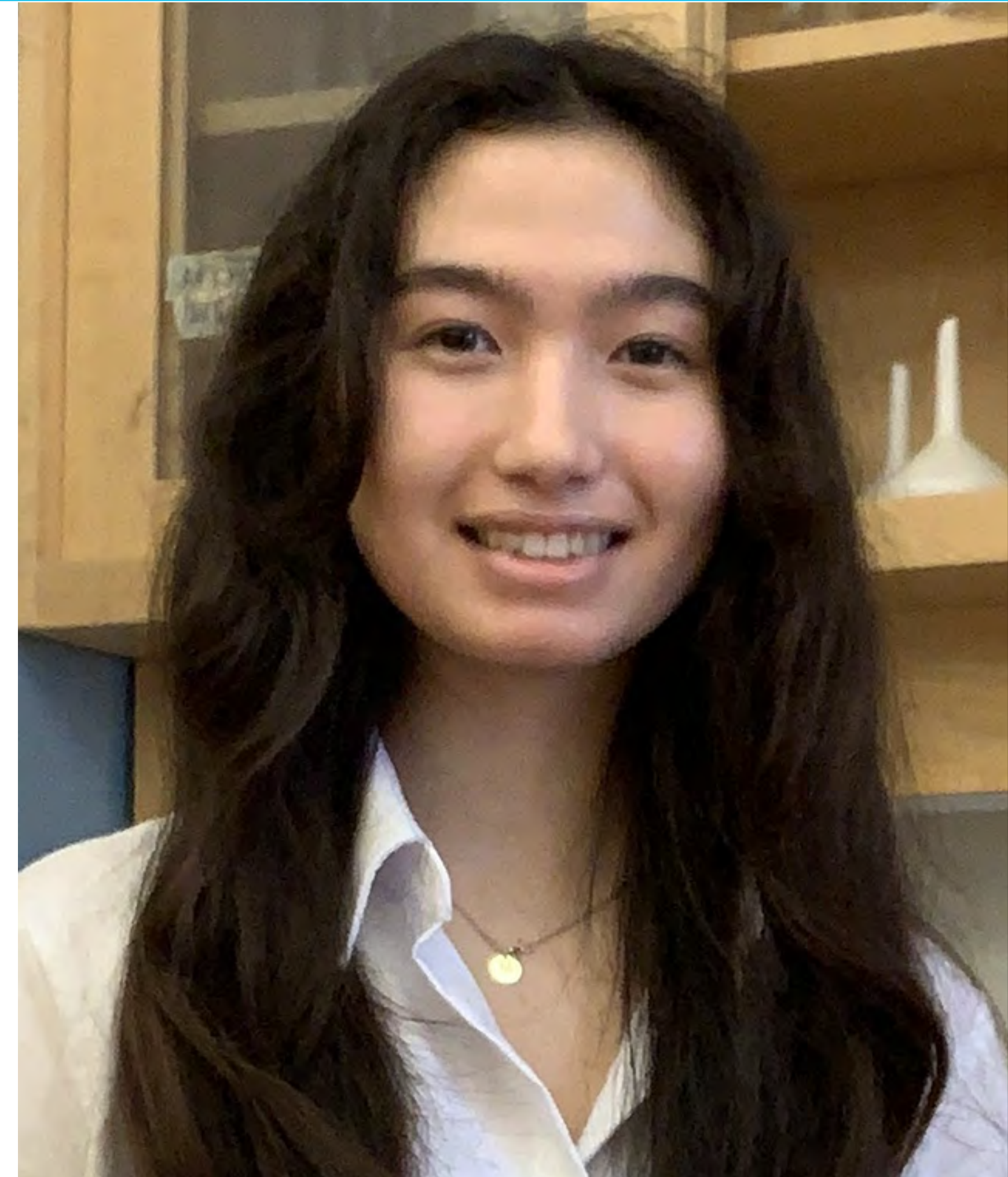
Intermediate / Intermédiaire

Marissa Magsino

Behavioral modification of *Tenebrio molitor* by toxins to maximize the biodegradation of polystyrene

Manitoba Schools Science Symposium – Manitoba

sanofi



sanofi

biogenius



CWSF  **2022 ESPC**

Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

Intermediate / Intermédiaire

Sohila Sidhu

Proof of Concept: Artificial Pancreas for Patients with Diabetes

Windsor – Ontario

sanofi



Virtual – Fredericton, NB • Virtuelle – Fredericton (N.-B.)



Youth Science Canada
Sciences jeunesse Canada



Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

Intermediate / Intermédiaire

Ansh Vashisht

E. coli Defence: The effect of Antibacterial T4r Bacteriophage on Escherichia Coli on Espheria Coli

Cariboo Mainline – British Columbia



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biogenius



CWSF  **2022**
ESPC

Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

Senior / Sénior

Eunjo An

Orange Peels as Biosorbents in the Treatment of Heavy Metal Wastewater

Vancouver Island – British Columbia

sanofi



Virtual – Fredericton, NB • Virtuelle – Fredericton (N.-B.)



Youth Science Canada
Sciences jeunesse Canada



Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

Senior / Sénior

Koral Kulacoglu
Hanze Wu

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York - Ontario

sanofi





Sanofi Biogenius Canada Award

Prix Sanofi Biogenius Canada

Senior / Sénior

Parmin Sedigh

Exposure to glyphosate-based herbicide and zebrafish fin regeneration

Frontenac, Lennox & Addington – Ontario



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bioGENEius



CWSF  2022
ESPC

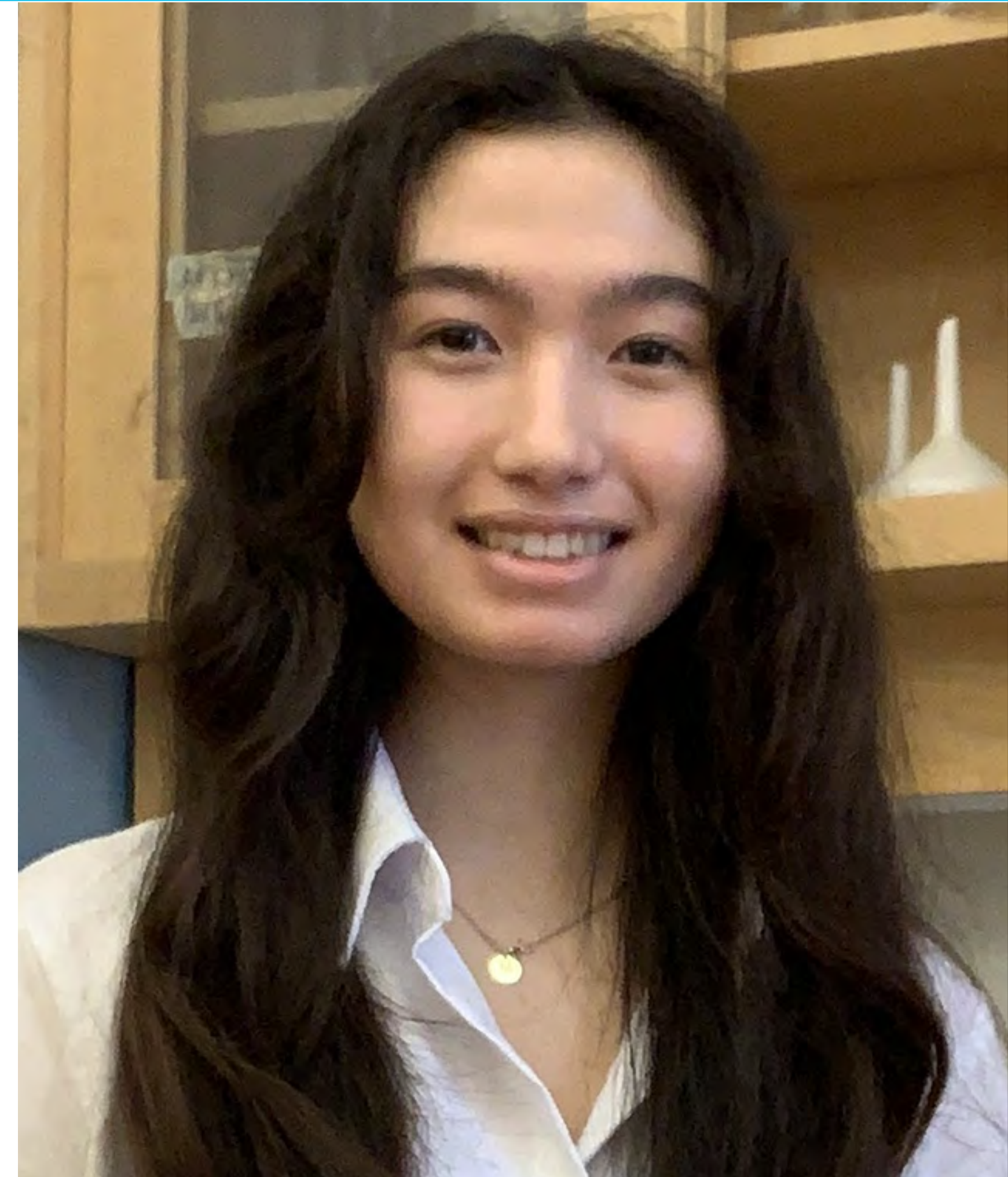
Sanofi International BioGENEius Challenge Award
Prix du défi international Sanofi BioGENEius

Marissa Magsino

Behavioral modification of *Tenebrio molitor* by toxins to maximize the biodegradation of polystyrene

Manitoba Schools Science Symposium – Manitoba

sanofi



Virtual – Fredericton, NB • Virtuelle – Fredericton (N.-B.)



Youth Science Canada
Sciences jeunesse Canada

Youth Can Innovate Award
Prix Jeunesse innovante

Junior

Audrey Cowen

The Hidden Side of Your Dog's Love

Toronto – Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante
Junior

Aiyaan Faisal

Geometric Exploration of Musical Rhythms using Phase Space Plots

Winnipeg Schools – Manitoba

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

Junior

Arushi Nath

Strengthening Planetary Defense: Detecting Unknown Asteroids using Open Data, Math, and Python

Toronto – Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

Junior

Emily Lin
Ruiyi Sang

Writing a cleaner future with E-Coal

South Fraser – British Columbia

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Intermediate / Intermédiaire

Ethan Chase

RESeTCO2: Residential Emission Sequestration Technologies for Carbon Dioxide.

Greater Vancouver – British Columbia

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Intermediate / Intermédiaire

Max Du

A Novel Pre-Hospital Indoor Rescue Drone

Calgary Youth – Alberta

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Intermediate / Intermédiaire

Silas Eastwood

**SMARTEN: Simulated Microgravity and Reduced Friction Test Environment
for Nanosatellites**

Halifax – Nova Scotia

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Intermediate / Intermédiaire

Archie Shou
Edwin Wang

AI Object Location Recognition Software for the Blind

Toronto - Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Senior / Sénior

Jessica Graham

Modified Fe Nanoparticles and a Rotating Magnetic Drum: Removing Aquatic Microplastics

South-East New Brunswick – New Brunswick

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

Senior / Sénior

Dheiksha Jayasankar

**Smiglaside-C Part 2: Developing Hydrogel Films from A.muricata Extracts
for Wound Healing Purposes**

Niagara - Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

Senior / Sénior

Gurnirmal Kaur

EzerBot: Detecting Phrases Indicative of Emotional Distress Within Online Platforms

Bay Area - Ontario



Youth Can Innovate Award
Prix Jeunesse innovante

Senior / Sénior

Koral Kulacoglu
Hanze Wu

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York – Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Senior / Sénior

Krish Modi

Pee Xylophone: A Novel Non-Invasive System to Measure Bladder Pressure

Lambton County – Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

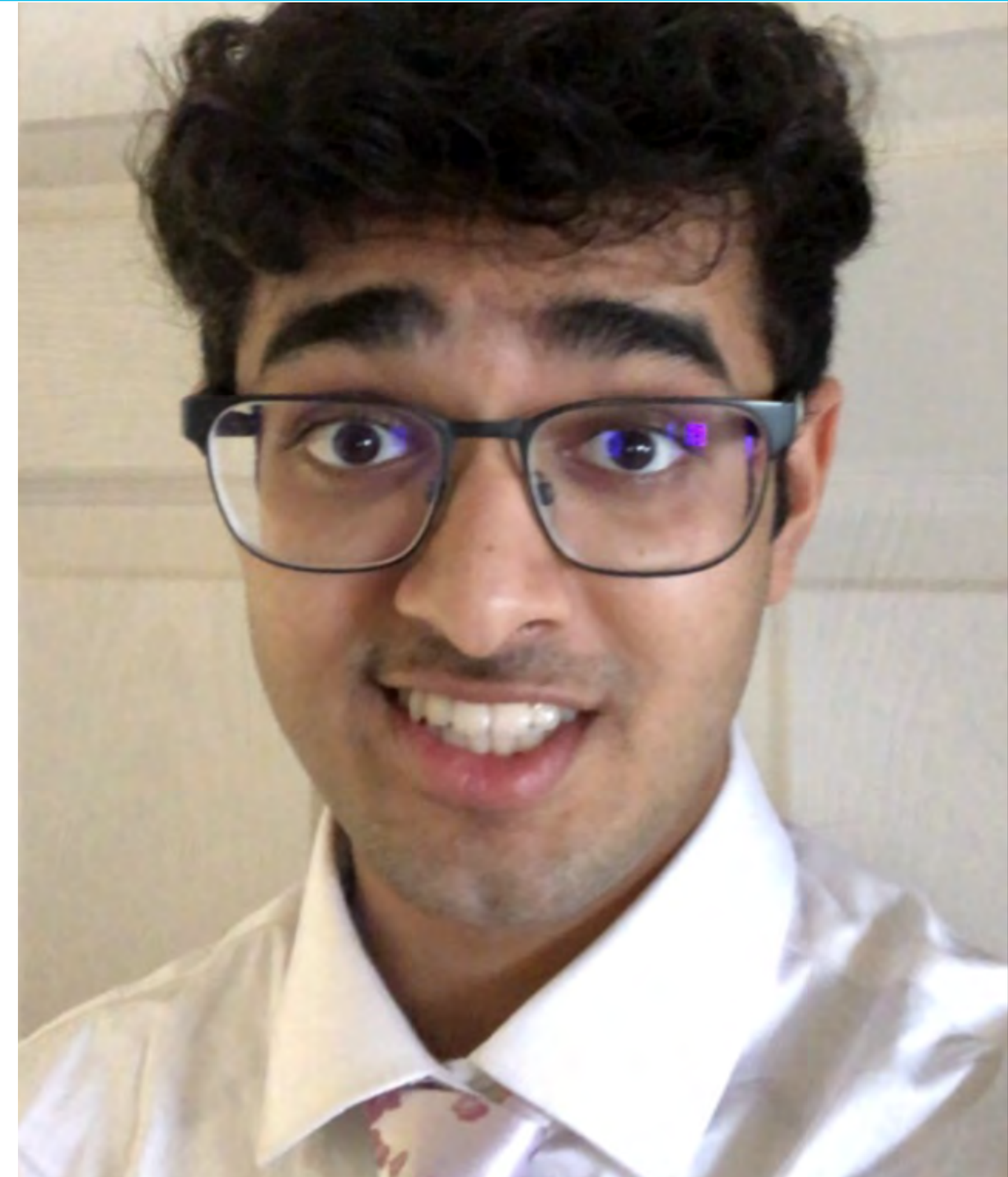
Senior / Sénior

Sparsh Patel

FOCUS! - An EEG And ANN Powered Brain Sensing Headband For Accident Prevention

Wood Buffalo - Alberta

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante
Senior / Sénior

Thomas Pronovost

Analyse ta foulée!

Réseau Technoscience – Québec

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

Senior / Sénior

Grace Yu
Akira Yoshiyama

On the Generative Design of Airfoils

Fraser Valley – British Columbia

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Senior / Sénior

Gurnirmal Kaur

EzerBot: Detecting Phrases Indicative of Emotional Distress Within Online Platforms

Bay Area - Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award
Prix Jeunesse innovante

Senior / Sénior

Koral Kulacoglu
Hanze Wu

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York – Ontario

YOUTH CAN
INNOVATE



Youth Can Innovate Award

Prix Jeunesse innovante

Senior / Sénior

Krish Modi

Pee Xylophone: A Novel Non-Invasive System to Measure Bladder Pressure

Lambton County – Ontario

YOUTH CAN
INNOVATE



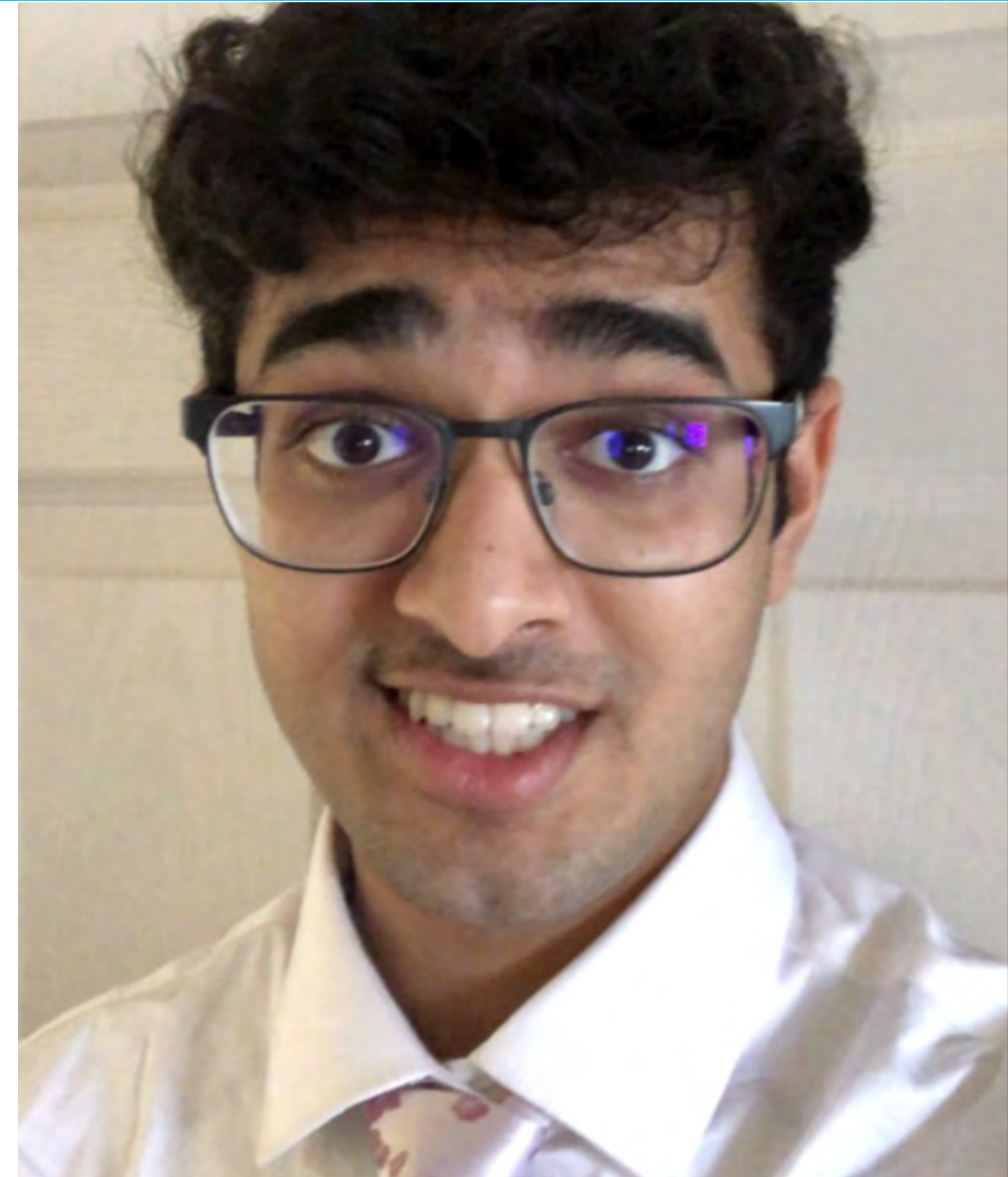
Youth Can Innovate Award
Prix Jeunesse innovante

Senior / Sénior

Sparsh Patel

FOCUS! - An EEG And ANN Powered Brain Sensing Headband For Accident Prevention

Wood Buffalo - Alberta



Platinum Award - Discovery

Prix platine - découverte

Junior

Audrey Cowen

The Hidden Side of Your Dog's Love

Toronto - Ontario



Platinum Award - Discovery

Prix platine - découverte

Intermediate / Intermédiaire

Jasmine Schneider

Phosphate Removal from Groundwater Using Mussel Shell Biochar

Waterloo-Wellington – Ontario



Platinum Award - Innovation

Prix platine - innovation

Intermediate / Intermédiaire

Max Du

A Novel Pre-Hospital Indoor Rescue Drone

Calgary Youth – Alberta



Platinum Award - Innovation

Prix platine - innovation

Senior / Sénior

Koral Kulacoglu
Hanze Wu

FourSight: Analysis of Cancerous Genetic Profiles With Artificial Neural Networks

York - Ontario



Best Project Award - Discovery
Prix du meilleur projet - découverte

Annabelle Rayson

**Plankton Wars: An Innovative Analysis of Daphnia Genotype
Biomanipulation for Algae Bloom Prevention**

Lambton County – Ontario

YOUTH CAN
INNOVATE



Best Project Award - Innovation
Prix du meilleur projet - innovation

Arushi Nath

Strengthening Planetary Defense: Detecting Unknown Asteroids using Open Data, Math, and Python

Toronto - Ontario

YOUTH CAN
INNOVATE

