

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Prix de La Fondation actuarielle du Canada

Junior

Sponsor: Prix de La Fondation actuarielle du Canada
500 \$ en argent comptant et un certificat

Abereham Moges – Western Manitoba – MB

Mood Foods: Testing the Impact of Nutrients on Cognitive Function and Reversing Neurodegeneration

Prix de La Fondation actuarielle du Canada

Intermédiaire

Sponsor: Prix de La Fondation actuarielle du Canada
750 \$ en argent comptant et un certificat

Kaitlyn Chan – Vancouver Island – BC

Predicting Surgical Patient Outcomes

Prix de La Fondation actuarielle du Canada

Sénior

Sponsor: Prix de La Fondation actuarielle du Canada
1 000 \$ en argent comptant et un certificat

Artash Nath – Toronto – ON

Deep Learning for Marine Mammal Conservation: Multi-Species Detection and Underwater Noise Assessment

Prix du Centre Beaty pour la découverte des espèces

Junior

Sponsor: Prix du Centre Beaty pour la découverte des espèces
500 \$ en argent comptant, certificat et adhésion familiale du Musée canadien de la nature pour un an

Nara Harvey – Greater Vancouver – BC

Using Deep Learning to Understand Endangered Orca Pregnancies

Prix du Centre Beaty pour la découverte des espèces

Intermédiaire

Sponsor: Prix du Centre Beaty pour la découverte des espèces
750 \$ en argent comptant, certificat et adhésion familiale du Musée canadien de la nature pour un an

Sarah Murimboh – Annapolis Valley – NS

Friend or Foe: Evaluating the Toxicity of Natural Pesticides on Springtails

Prix du Centre Beaty pour la découverte des espèces

Sénior

Sponsor: Prix du Centre Beaty pour la découverte des espèces
1 000 \$ en argent comptant, certificat et adhésion familiale du Musée canadien de la nature pour un an

Jonathan Leung – Greater Vancouver – BC

Comparing Spider Diversity between 2 Farming Communities & Assessing Alpha, Beta & Gamma Diversities

Prix de l'Association canadienne d'acoustique

Sénior

Sponsor: Prix de l'Association canadienne d'acoustique
1 000 \$, en argent comptant, un certificat et un abonnement au périodique trimestriel de l'Association canadienne de l'acoustique

Artash Nath – Toronto – ON

Deep Learning for Marine Mammal Conservation: Multi-Species Detection and Underwater Noise Assessment

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Prix de l'Association pour l'intelligence artificielle au Canada

Junior

Sponsor: Prix de l'Association pour l'intelligence artificielle au Canada
500 \$ en argent comptant et un certificat

Evan Budz – Bay Area – ON

Virtual Lifeguard: A Novel AI Approach to Drowning Prevention

Prix de la Société canadienne des clinico-chimistes

Sénior

Sponsor: Prix de la Société canadienne des clinico-chimistes
1 000 \$ en argent comptant et un certificat

Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

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

Sénior

Sponsor: Prix du concours junior canadien au sujet de l'eau, à Stockholm
Participation en personne au concours junior au sujet de l'eau présenté 28 août - 1er septembre 2022, projet gagnant afin de représenter le Canada au Concours junior international au sujet de l'eau, à Stockholm. Le second et le troisième recevront chacun un prix de 300 \$.

Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

Veronica Guo – Greater Vancouver – BC

A Novel, Cost-Effective Biological Photovoltaic for Wastewater Treatment

Ava Haynes – Saskatchewan First Nations – SK

Observing and Culturing Cyanobacteria

Prix en physique de l'ACP

Sénior

Sponsor: Prix en physique de l'ACP
1 000 \$ en argent comptant et un certificat

Victor Xu – Toronto – ON

Hysteresis Inhibition for Performance Improvement via Halide Engineering in Perovskite Solar Cells

Prix deutraMed pour l'innovation en chimie

Junior

Sponsor: Prix deutraMed pour l'innovation en chimie
500 \$ en argent comptant et un certificat

Justin Guo – Greater Vancouver – BC

Plastic degradation through a novel Thermal Electro-Fenton System

Prix de l'innovation en génie

Sénior

Sponsor: Prix de l'innovation en génie
1 000 \$ en argent comptant et un certificat

Joti Gokaraju – Saskatoon – SK

TouchTalk: A Novel Braille Communication Platform for the Deafblind

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Prix d'excellence en astronomie

Junior

Sponsor: Prix d'excellence en astronomie

Un télescope, un certificat et un abonnement d'un an à la SRAC

Aalyzha Ferrer – North-West New Brunswick – NB

Plants in Space: Investigating How Microgravity Influences Plant Growth

Prix d'excellence en astronomie

Intermédiaire

Sponsor: Prix d'excellence en astronomie

Un télescope, un certificat et un abonnement d'un an à la SRAC

Bram St. Peters – Halifax – NS

How human biosolids can be used in lunar soils to optimize food production on the moon

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

Junior

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

500 \$ en argent comptant et un certificat

Dexter Rocky Roy Mentuck – MFNERC Schools – MB

Testing the Hydrating Power of Bear Grease Bath Bombs

Prix CWT Voyages Harvey

Intermédiaire

Sponsor: Prix CWT Voyages Harvey

750 \$ en argent comptant et un certificat

Ben Kawa – Sudbury – ON

Driver Wake Up 2.0: A Compact Standalone Device

Prix de l'énergie verte optimisée par l'hydrogène

Sénior

Sponsor: Prix de l'énergie verte optimisée par l'hydrogène

1 000 \$ en argent comptant et un certificat

Veronica Guo – Greater Vancouver – BC

A Novel, Cost-Effective Biological Photovoltaic for Wastewater Treatment

Prix « Intact » pour la résilience aux changements climatiques

Junior

Sponsor: Prix « Intact » pour la résilience aux changements climatiques

500 \$ en argent comptant et un certificat

Matt Fong, William Zhou – Toronto – ON

Extending Mileage on EV and Hybrid Vehicles using a Ratchet and Flywheel Regenerative Shock Absorber

Prix « Intact » pour la résilience aux changements climatiques

Intermédiaire

Sponsor: Prix « Intact » pour la résilience aux changements climatiques

750 \$ en argent comptant et un certificat

Tanvir Mundra – Greater Vancouver – BC

Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Prix « Intact » pour la résilience aux changements climatiques

Sénior

Sponsor: Prix « Intact » pour la résilience aux changements climatiques

Une somme de 1 000 \$ en argent comptant et une visite virtuelle de l'Université de Waterloo et du Centre Intact sur l'adaptation aux changements climatiques, le principal centre de recherche canadien sur la résilience au changement climatique, à Waterloo (Ontario).

Zachary Dostie, Mickael Plante – Réseau Technoscience – QC

Les algues sauvent les élèves!

Prix de nanotechnologie pour une société durable

Junior

Sponsor: Prix de nanotechnologie pour une société durable

500 \$ en argent comptant et un certificat

Madhav Saravanan – Peel – ON

Fantastic Bioplastics

Prix de nanotechnologie pour une société durable

Intermédiaire

Sponsor: Prix de nanotechnologie pour une société durable

750 \$ en argent comptant et un certificat

Sophia Zhang – Eastern Newfoundland – NL

Optimization of Novel Triboelectric Nanogenerators for Wind Energy Harvesting at Low Speeds

Prix de nanotechnologie pour une société durable

Sénior

Sponsor: Prix de nanotechnologie pour une société durable

1 000 \$ en argent comptant et un certificat

Isabella Bu – Thames Valley – ON

A SEND-Based Imaging Approach to Track mRNA Delivery for Gene Therapy

Prix de la fondation « Nutriments pour la vie »

Junior

Sponsor: Prix de la fondation « Nutriments pour la vie »

500 \$, en argent comptant, un certificat

Charlotte Campbell, Leila Djelouah – Prince Edward Island – PE

The Root of the Problem

Prix de l'énergie renouvelable

Junior

Sponsor: Prix de l'énergie renouvelable

500 \$ en argent comptant et un certificat

Matt Fong, William Zhou – Toronto – ON

Extending Mileage on EV and Hybrid Vehicles using a Ratchet and Flywheel Regenerative Shock Absorber

Prix de l'énergie renouvelable

Intermédiaire

Sponsor: Prix de l'énergie renouvelable

750 \$ en argent comptant et un certificat

Sophia Zhang – Eastern Newfoundland – NL

Optimization of Novel Triboelectric Nanogenerators for Wind Energy Harvesting at Low Speeds

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Prix de l'énergie renouvelable

Sénior

Sponsor: Prix de l'énergie renouvelable
1 000 \$ en argent comptant et un certificat

Veronica Guo – Greater Vancouver – BC
A Novel, Cost-Effective Biological Photovoltaic for Wastewater Treatment

Prix S.M. Blair Family Foundation

Junior

Sponsor: Prix S.M. Blair Family Foundation
500 \$ en argent comptant et un certificat

Evan Budz – Bay Area – ON
Virtual Lifeguard: A Novel AI Approach to Drowning Prevention

Prix S.M. Blair Family Foundation

Intermédiaire

Sponsor: Prix S.M. Blair Family Foundation
750 \$ en argent comptant et un certificat

Joy Akinkunmi – Canadian Black Scientists Network Youth – CA
Pill Smart 2.0

Prix S.M. Blair Family Foundation

Sénior

Sponsor: Prix S.M. Blair Family Foundation
1 000 \$ en argent comptant et un certificat

Casper Dong – Waterloo-Wellington – ON
“Solving A Water Crisis” A Novel Device For Water Generation and Utilization in Desert Solar Arrays

Bourses d'étude Shad Canada

Intermédiaire

Sponsor: Bourses d'étude Shad Canada
Certificat. Une bourse de 1 000 \$ pour couvrir les frais de participation au programme Shad en juillet 2024. Pour être admissible à la bourse, la ou le finaliste doit poser sa candidature et être admis au programme pendant le cycle de candidatures Shad 2024.

Joy Akinkunmi – Canadian Black Scientists Network Youth – CA
Pill Smart 2.0

Annaliese Froehler – East Kootenay – BC
Hands-On Healing: Exploring Sustainable Rehabilitation Possibilities Using VR Hand Tracking

Thông Quách – Saskatoon – SK
Project PolyQuant: Quantifying Genomic DNA from Biofilms on Polyethylene in an Urban River Ecosystem

Riley Saha Halder – Wood Buffalo – AB
Enhancing Bioplastic Performance Using Eggshell Waste and Chitosan

Katelynn Standell – Southeast Alberta – AB
Is Your Happiness Killing You?

Dexter Wrigley – Northwestern Ontario – ON
The effect of barrel length on a projectile

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Prix de la Société statistique du Canada

Intermédiaire

Sponsor: Prix de la Société statistique du Canada
750 \$ en argent comptant et un certificat

Nico Pacifici – Bay Area – ON

The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using AI

Prix de la Société statistique du Canada

Sénior

Sponsor: Prix de la Société statistique du Canada
1 000 \$ en argent comptant et un certificat

Angela Cao – Greater Vancouver – BC

S2S: AI-Powered Translation Between Sign and Spoken Languages

Bourse de recherche de premier cycle de l'Université d'Ottawa

Sénior

Sponsor: Bourse de recherche de premier cycle de l'Université d'Ottawa
11 500 \$ research scholarship et certificat

Donae Houle, Gunner Malcolm-Spence – Manitoba Indigenous – MB

Accessible Computer Mouse For People With Upper Limb Disabilities

Prix d'excellence - bronze

Junior

Sponsor: Prix d'excellence - bronze
Médaille et un certificat

Eden Abols – Sudbury – ON

Metallurgical Mushrooms

Imran Allarakhia, Mithru Narayan Naidu – Bay Area – ON

LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

Muhammad Mustafa Arif – Lambton County – ON

Thoughts-To-Text: A Novel Approach To BCIs

Aaron Bai – Greater Vancouver – BC

ChromaSight: Traffic Signal Assistant - A novel machine learning model to detect traffic signals

Charlotte Campbell, Leila Djelouah – Prince Edward Island – PE

The Root of the Problem

Kayley Carter Phillips – Peterborough – ON

The Addition of Triz-EDTA to Topical Antibiotics

Aadhi Chandrasekaran – Manitoba Schools Science Symposium – MB

A Novel Approach to Optimize the Concentration of Flocculants in Water Purification

Mohammad Chaudhry – Toronto – ON

MobiMate: Low-Cost Intelligent Collision-Avoidance and Auto-Steering for Mobility Devices

Story Fitzgerald – Mi'kmaq Schools – NS

Teen Mental Health due to the COVID Lockdown

Claire Friesen – Central Alberta Rotary – AB

Preventing Flow Separation Using Known and Novel Methods

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Genevieve Gagnon – Pacific Northwest – BC

To Glide or Not to Glide

Isabella Guan – Quinte – ON

The Sound Catcher 2.0: A new and improved innovative device harvesting energy from sound

Kanav Gulati – Regina – SK

B.I.D.S. (Black Ice Detection System) - A system to detect an invisible threat - Black Ice!

Yui Jennings – Tri-County – NS

The Ideal Locker

Gunnar Koehn – Cariboo Mainline – BC

Exploring Thermal Paste Alternatives

Yuewen Li, Siqi Tan – Bay Area – ON

CRISPR-Mediated Knockout to Improve PDAC Prognosis through TME Disruption

Chloe MacLeod, Briyanna Wilberforce – Rideau-St. Lawrence – ON

Stick It To The Bacteria

Dexter Rocky Roy Mentuck – MFNERC Schools – MB

Testing the Hydrating Power of Bear Grease Bath Bombs

Abereham Moges – Western Manitoba – MB

Mood Foods: Testing the Impact of Nutrients on Cognitive Function and Reversing Neurodegeneration

Felix Naghi – Sudbury – ON

Plastic Purge: Marine Debris Eliminator

Ryan Noel – Lakeland – AB

Vaping in Youth: Why are kids starting to vape?

Jack O'Connell – Sudbury – ON

Are Adults Dirtier Than Kids?

Aditi Ramanarayan – Edmonton – AB

Separation of Pigments from Spinach Leaves and Kiwi Fruit by Thin Layer Chromatography

Zavier Simard – Sudbury – ON

VAWT to WATT: Capturing Wind Energy on Cars

Kristina Tannert – Central Interior BC – BC

From Oil Spills to Algae Thrills

Suhandan Thangadurai – Calgary Youth – AB

Now You See Me Too

Saanvi Vishwakarma – Strait – NS

Microscopic Investigation of Indigenous Food Preservation Technique

Wesley Wilding – Niagara – ON

Lettuce Compost Together: Exploring Alternatives to Hydroponics Pots

Makenna Wilson – Bluewater – ON

Body Temperature

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Sylvan Zheng – Calgary Youth – AB

Soaring With the Birds: Biomimicking the Avian Wing to Improve the Performance of Modern Aircraft

Prix d'excellence - bronze

Intermédiaire

Sponsor: Prix d'excellence - bronze

Médaille et un certificat

Finn Adamson – Vancouver Island – BC

Pain Science and the Peak-End Rule

Joel Amaldas – Calgary Youth – AB

The Skin Screener: an AI Detector for Melanoma Skin Cancer

Shayan Awan – Wood Buffalo – AB

NeuroSpectrum: A Brainwave-Powered Vision Enhancement Device

Kaitlyn Chan – Vancouver Island – BC

Predicting Surgical Patient Outcomes

Brian Chang – Saskatoon – SK

Conversion of Food Waste to Energy: Scaled Up from Saskatoon to Canada

Lyla Chiasson – Rideau-St. Lawrence – ON

Seep and Destroy

Kevin Cornell – South-East New Brunswick – NB

Carbon-Negative Electricity: Generating Electricity from the Combustion of Scrap Metal

Kylie Dysart, Claire Linklater – Frontier Schools – MB

Human Impacts on the South Indian Lake Ecosystem

Shanika-Skye Einish-Nattawappio, Alyson Einish-Tooma – Aboriginal Québec Autochtone – QC

The Effect of Consuming Nicotine Vapes on Human Health and Lifestyle: An Investigative Study

Annaliese Froehler – East Kootenay – BC

Hands-On Healing: Exploring Sustainable Rehabilitation Possibilities Using VR Hand Tracking

Malek Hammoud – Thames Valley – ON

GreenGuardian: Automated Weed Detection and Elimination

Sammy Hawari – Waterloo-Wellington – ON

Sign Vocalizer: Elevating Non-Verbal Communication

Ben Kawa – Sudbury – ON

Driver Wake Up 2.0: A Compact Standalone Device

Visisht Kodali – South Fraser – BC

WoundSense

Solomon Kogan – Simcoe County – ON

Effect of a Cryohelmet on Memory and Attention

Alina Kotchetkov – Simcoe County – ON

Omega-3: the Building Blocks for Brain Health

Sreya Kurup – South Fraser – BC

Investigating the impact of natural antibiotics on bacteria

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Avalon Lively – Halifax – NS

Mycorrhizal Medicine: Do Mutualistic Fungi Enrich Forest Health?

Persephone Mills – Northwestern Ontario – ON

The Effectiveness of Honey and Bee Propolis as an Antibacterial Agent

Isabella Pozniak – Peace Country – AB

Do seed treatments matter?

Reuel Ramalingam – Durham – ON

Turmeric; the solution to CTE?: Reducing the production of amyloid plaques in the brain after TBIs

Melia Roberts – Cape Breton – NS

The Mould War: Chemical vs. Natural Mould Inhibitors

Raneem Salah – Ottawa – ON

The Eye Spy Scanner: The Window to Your Health

Rakshan Saravanan – Bay Area – ON

The Electrocorpulgraph: Can AI change auscultation?

Jiya Savsani – North Bay – ON

Highway Harvest: Determining Efficient Ways to Harness Renewable Energy on Highways

Seol So – Quinte – ON

The Third Eye - the new approach for Visually Impaired People to Navigate Websites

Katelynn Standell – Southeast Alberta – AB

Is Your Happiness Killing You?

Maiara Costa Telmer – Vancouver Island – BC

The Future of Composites

Daniil Tyurin – Calgary Youth – AB

On The Use of Micro-Scale Piezoelectric Crystals and Their Ultrasound Wave Backscatter in BCIs

Kavishi Udumullage – Manitoba Schools Science Symposium – MB

Battling the Beast: Biocontrol interventions against Fusarium graminearum to control FHB Disease

Prix d'excellence - bronze

Sénior

Sponsor: Prix d'excellence - bronze

Médaille et un certificat

Aahil Ansari – Edmonton – AB

CD36, Sex Differences, Microgravity, and Osteoarthritis

Braden Baumann, Tessa Todd – Saskatchewan Chinook – SK

Learning About Learning

Amani Kaur Bhullar – Ottawa – ON

Analysis of Toroidal Propeller Sound Characteristics & Efficiency

Kamryn Binns – Cape Breton – NS

Nutrient Solutions in Hydroponic Gardens

Anna Chen – Waterloo-Wellington – ON

Graphene Quantum Dots for Dendrite-Free Zinc-Ion Batteries

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Jason Cheng – Vancouver Island – BC
Cleaner Sponges, Greener Planet

Cooper Choi – Calgary Youth – AB
Effect of Repeated Concussions on Complement Protein Expression in Adolescent Brains

Dennis Golubev, Justin Yu – Fraser Valley – BC
A Novel Approach to Wastewater Treatment

Anqi Guan – Winnipeg Schools – MB
Can IL-17A help Maintain the Immune Privilege of Mesenchymal Stem Cells under Hypoxia?

Ava Haynes – Saskatchewan First Nations – SK
Observing and Culturing Cyanobacteria

Nuttanon Jarnpho, Chavapon Rungrittpanyo – Thailand – IN
Biodegradable Printed Circuit Board from Rice Straw Binding with Hyphae from Grey Oyster Mushroom

Tanya Jivani, Lalithya Raavi – Wood Buffalo – AB
Fuelling the Future: Investigating Cost Efficient Methods of Hydrogen Production

Khaleel Khaki, Mohammadmahdi Shahhaidari – York – ON
AutoShield 2.0: The Dual-Defense System For All Vehicles

Chia Yi Lee, Pei Jung Sung – Taiwan, R.O.C. – IN
Pollutant ThReader: Ramie Thread-based Microfluidic Reader of Common Pollutant Concentration

Richard Lee – Vancouver Island – BC
Is Bigger Better?

Jonathan Leung – Greater Vancouver – BC
Comparing Spider Diversity between 2 Farming Communities & Assessing Alpha, Beta & Gamma Diversities

Karys Littlejohns – Simcoe County – ON
Investigating trace drug prevalence in public recreational spaces using ion mobility spectrometry

Vincent Liu – Calgary Youth – AB
Can Bacteriophages Isolated from Municipal Wastewater Lyse Multi-drug Resistant E. coli ST131

Jialin Luo – Frontenac, Lennox & Addington – ON
Bioplastics: The Strength of Calcium Alginate

Mapalo Mushoriwa – Saskatchewan Chinook – SK
The Effect of Climate Conditions and Cadmium Uptake in Wheat

Hadiya Omer – Winnipeg Schools – MB
Examining Apical Area Dynamics in Distal Cell Development: Drosophila Model Approach

Stephanie Palma – Manitoba Schools Science Symposium – MB
Loss of SKP2 Induces Chromosome Instability in Tubo-Ovarian Context

Saeko Sakuraba – Ottawa – ON
Effects of low oxygen conditions during embryogenesis on growth in zebrafish

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Stoyan Sendov – Thames Valley – ON

Real-time American Sign Language Alphabet Interpreter

Parth Sheth – Calgary Youth – AB

From Pixels to Diagnosis: Neural Network-Based Malaria Detection

Cyrus Shobeir – Simcoe County – ON

A Smarter TV: Promoting Independent Living for Seniors Using Technology

Ella Strachan – Winnipeg Schools – MB

Dementia - Calculating Your Risk

Alexia Tomasello – Districts francophones du N.-B. – NB

Biomimétisme à la rescousse des océans, une filtration innovante inspirée du requin-pèlerin

Clare Wang, Bella Wang – Greater Vancouver – BC

A Substitute for Absorbent Layers in Menstrual Pads: Cocos Nucifera & Cannabis sativa L. Fiber

Flora Wang – Greater Vancouver – BC

Mass Spectrometry Imaging Metabolomics Reveals the Metabolic Spatial Heterogeneity in Gastric Cancer

Charlotte Woodhouse – Bluewater – ON

Dairy Dilemma: The Fertility Fallout of Inbreeding in Holsteins

Victor Xu – Toronto – ON

Hysteresis Inhibition for Performance Improvement via Halide Engineering in Perovskite Solar Cells

Prix d'excellence - argent

Junior

Sponsor: Prix d'excellence - argent

Médaille et un certificat

Yohann Abraham-Erhart – Réseau Technoscience – QC

Detecting Color-Blindness using Brain Signals

Ananth Arunkumar – Waterloo-Wellington – ON

RipeNet: Using Machine Learning to Help the Colourblind

Anne Bowman – Simcoe County – ON

The Battle for Our Lakes: Phosphorus vs. Activated Charcoal

Emmersyn da Mata, Hailee Marshall – Frontier Schools – MB

Weighting On Your Menstrual Cycle

Isaac Di Cresce – Winnipeg Schools – MB

Asparagus Pee Genetically

Riley Edmunds – Lambton County – ON

Breaking The Ice: Measuring the Environmental Impacts of Road Ice Removal Substances

Justin Guo – Greater Vancouver – BC

Plastic degradation through a novel Thermal Electro-Fenton System

Lilou Lefebvre, Olive Passmore – Yukon Stikine – YT

Faro Mine Disaster

Sourav Mandal – Manitoba Schools Science Symposium – MB

The Effects of the Repeated Exposure of Antibiotics on Microbial Resistance

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Ariel Mason, Ella McFarland – Calgary Youth – AB
Optimizing Crop Growth with Agrivoltaics

Emily Mineault – Northern British Columbia – BC
Can teachers differentiate AI writing from student writing?

Emma Murimboh – Annapolis Valley – NS
Dangerous Dust?

Amelia Pletsch – Waterloo-Wellington – ON
Life on Mars: Germinating Edible Plants in Mars Regolith

Daniyal Qazi, Zayn Qazi – Bay Area – ON
From Pixels to Predictions: A Deep Learning Method to Detect Pneumonia in Chest X-Ray Images

Cyndi Rayson – Lambton County – ON
Washing Away The Environment: An Environmental Analysis on Laundry Detergent

Annika Saini – Calgary Youth – AB
Outdoor respiratory protection “pod” equipped with Stationary & Mobile powered-air purifiers

Madhav Saravanan – Peel – ON
Fantastic Bioplastics

Brenden Sener – Thames Valley – ON
Effect of Common Beverages on Artificial Kidney Stone Growth and Hardness

Sehar Sidhu – Windsor – ON
Delving Deep Into SARS-CoV-2

Kate Thiessen-Clark, Kiah Thiessen-Clark – Central Interior BC – BC
Soap as a Moisture Loss Barrier

Prix d'excellence - argent

Intermédiaire

Sponsor: Prix d'excellence - argent

Médaille et un certificat

Ayesha Abubakr – Waterloo-Wellington – ON
AnaLung: A Novel Approach to Lung Cancer Diagnosis

Abdul Majeed Al Riahi – Windsor – ON
SmartSightStick

Bahaa Al Deen Alsaadi, Zena Alsaadi – Bay Area – ON
Bits to Bedside: An Ingenious Exploration of Machine Learning in Triage Assessments

Karen Attri – Calgary Youth – AB
The Gelatine Solution: An Environmentally Friendly Alternative to Surface Electrode Pads in ECGs

Abigail Chan – Waterloo-Wellington – ON
ThinkNet: Decoding Brain Waves using an Electroencephalogram controlled BCI

Audrey Cowen – Toronto – ON
Microbes and Molecules: The Key to Abolishing Drug Resistance

Aaron Dias, Esam Taher – Edmonton – AB
Wave to the Future: Sustainable Seawater to Freshwater

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Lianna Kruger – Thames Valley – ON
The Sound of Pathology

Dewey Liang – Greater Vancouver – BC
Gene Expression-Based Prediction of Chemotherapy Response with Machine Learning

Sarah Murimboh – Annapolis Valley – NS
Friend or Foe: Evaluating the Toxicity of Natural Pesticides on Springtails

Harry Nickerson – Halifax – NS
Screening for Retinitis Pigmentosa in the Blink of an AI

Nico Pacifici – Bay Area – ON
The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using AI

Anerie Patel – Ottawa – ON
Posture Perfect: Leveraging Machine Learning to Enhance Posture Awareness and Correction

Alpita Patro – Eastern Newfoundland – NL
Neem: A Novel Approach to Optimize Treatment for Psoriasis Through Bioinformatics

Jacklyn Saddler – Niagara – ON
The Effect of Keracyanin in Attenuating the Multifactorial Pathogenesis of Ulcerative Colitis

Mohamed Saleh – Windsor – ON
Pumpkin Waste to Vegan Chic: A Sustainable Journey In Cellulose Infused Bio-Based Films For Fashion

Ella Sehn – Peterborough – ON
Right On The Nose: Using a Super-Absorbent Polymer to Improve Treatment of Chronic Sinusitis

Zane Stewart – Vancouver Island – BC
Optimization of an Ionic Thruster

Misha van Anders – Frontenac, Lennox & Addington – ON
BioWing: Biomimetic Engineering Gets a Lift

Lillian Zhang – Calgary Youth – AB
Lower Limb Auxiliary Exoskeleton with Gait Management Feedback

Prix d'excellence - argent

Sénior

Sponsor: Prix d'excellence - argent
Médaille et un certificat

Nikita Artsimonia – Calgary Youth – AB
The "Helping Hand" Project

Ziya Bhayani – Calgary Youth – AB
Temporamental: The relationship between music tempo and calmness

Aliyan Boodhwani – Ottawa – ON
Greenifying Wastewater Treatment

Isabella Bu – Thames Valley – ON
A SEND-Based Imaging Approach to Track mRNA Delivery for Gene Therapy

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Jiayao Chen – York – ON

Research on Inchworm Robot Based on Folding PVC Structure

Jack D'Entremont, Onkit Saha – North-West New Brunswick – NB

Stratosync

Zachary Dostie, Mickael Plante – Réseau Technoscience – QC

Les algues sauvent les élèves!

Maya LeBlanc – Bay Area – ON

Analysis of CD16+, CD16- and CD4+ T Cells to Identify Novel Gene Signatures and Diagnostics for SLE

Jordan Montague – Labrador, Western and Central NL – NL

The Effects of Fidgeting on Neurotypical Versus Neurodivergent People

Kibo Nagasaki – Bay Area – ON

Bye-Bye Haber-Bosch

Artash Nath – Toronto – ON

Deep Learning for Marine Mammal Conservation: Multi-Species Detection and Underwater Noise Assessment

Justin Peng – Greater Vancouver – BC

Low-Cost AR-Enabled Eyewear for Dynamic 3D Spatial Speech Captioning for the Hearing-Impaired

Baljot Rai – Bison – MB

MopMussels: Development of a Carpet Mussel Shell-based Biosorbent for Phosphorus

Sohila Sidhu – Windsor – ON

From Liquid To Life: Reprogramming Urinary Stem Cells Into Beta Pancreatic Cells

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Hydroplaning Detection and Prevention Using an AI Neural Network

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Using Machine Learning to Quantify Pan-Cancer Immunotherapy Response and Optimizing Treatments

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Buzzicompteur

Errita Xu – Toronto – ON

An Evaluation of the Ice-Melting Capacity, Ecotoxicity, and Corrosivity of Agro-Based Deicers

Tara Zhan – Greater Vancouver – BC

Design of a Hemiplegic Exoskeleton with an Automatic Control Strategy

Sam Zhang – Bay Area – ON

A Two-Modal Robot for Adaptability in Diverse Environments With Rolling Locomotion and Walking Gait

Prix d'excellence - or

Junior

Sponsor: Prix d'excellence - or

Médaille et un certificat

Evan Budz – Bay Area – ON

Virtual Lifeguard: A Novel AI Approach to Drowning Prevention

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Sarah Bykewich – Edmonton – AB
Electroculture

Daisy Dong – Niagara – ON
DONKEY: A solution framework for Analysis Paralysis

Matt Fong, William Zhou – Toronto – ON
Extending Mileage on EV and Hybrid Vehicles using a Ratchet and Flywheel Regenerative Shock Absorber

Nara Harvey – Greater Vancouver – BC
Using Deep Learning to Understand Endangered Orca Pregnancies

Melrose Kinney – Annapolis Valley – NS
Screen Time Strain - The Potential Impact on Our Eyes

John Neilson – South-East New Brunswick – NB
Amelioration of Memory Through Musical Sensory Tagging

Aryan Sharma – Calgary Youth – AB
The MicroGuard Microplastic Collector

Abraham Tassi – Thames Valley – ON
The Dark Side of Energy Drinks

Oscar Weerasinghe – Bluewater – ON
Breakfast on the Brain

Prix d'excellence - or Intermédiaire

Sponsor: Prix d'excellence - or
Médaille et un certificat

Joy Akinkunmi – Canadian Black Scientists Network Youth – CA
Pill Smart 2.0

Tristan Butcher – Waterloo-Wellington – ON
ExoSeer: A Comprehensive Algorithm For Exoplanet Analysis

Caroline Chan – Toronto – ON
UTI-Alert: Harnessing AI Technology for Rapid Urinary Tract Infection Detection

Kathy Han – Saskatoon – SK
Designing Biomimetic Nanovesicles for Cancer Treatment

Tanvir Mundra – Greater Vancouver – BC
Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Jora Singh Nahal – Greater Vancouver – BC
DeviceABLE: A Novel Hands-Free Computing App for People with Disabilities

Thông Quách – Saskatoon – SK
Project PolyQuant: Quantifying Genomic DNA from Biofilms on Polyethylene in an Urban River Ecosystem

Bram St. Peters – Halifax – NS
How human biosolids can be used in lunar soils to optimize food production on the moon

Zhuola Sun – Vancouver Island – BC
Designing a More Efficient Wind Turbine

Récipiendaires des prix

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Sophia Zhang – Eastern Newfoundland – NL

Optimization of Novel Triboelectric Nanogenerators for Wind Energy Harvesting at Low Speeds

Prix d'excellence - or

Sénior

Sponsor: Prix d'excellence - or
Médaille et un certificat

Saras Agrawal, Rateb Ajamieh – Edmonton – AB

HeartHear: A Machine Learning Powered Ear-Wearable for Cardiovascular Disease Detection & Prediction

Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

Angela Cao – Greater Vancouver – BC

S2S: AI-Powered Translation Between Sign and Spoken Languages

Casper Dong – Waterloo-Wellington – ON

"Solving A Water Crisis" A Novel Device For Water Generation and Utilization in Desert Solar Arrays

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TouchTalk: A Novel Braille Communication Platform for the Deafblind

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Can We Trust AI Text Detectors? Exposing Limitations and Proposing Fixes

Roocha Shukla – Waterloo-Wellington – ON

Green-Armour: A Novel Plant Biostimulant

Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

Prix du défi - Aérospatiale

Junior

Sponsor: Prix du défi - Aérospatiale

Amelia Pletsch – Waterloo-Wellington – ON

Life on Mars: Germinating Edible Plants in Mars Regolith

Prix du défi - Aérospatiale

Intermédiaire

Sponsor: Prix du défi - Aérospatiale

Bram St. Peters – Halifax – NS

How human biosolids can be used in lunar soils to optimize food production on the moon

Prix du défi - Aérospatiale

Sénior

Sponsor: Prix du défi - Aérospatiale

Jack D'Entremont, Onkit Saha – North-West New Brunswick – NB

Stratosync

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Prix du défi - Agriculture, pêche et alimentation

Junior

Sponsor: Prix du défi - Agriculture, pêche et alimentation
certificat

Sarah Bykewich – Edmonton – AB

Electroculture

Prix du défi - Agriculture, pêche et alimentation

Intermédiaire

Sponsor: Prix du défi - Agriculture, pêche et alimentation
certificat

Isabella Pozniak – Peace Country – AB

Do seed treatments matter?

Prix du défi - Agriculture, pêche et alimentation

Sénior

Sponsor: Prix du défi - Agriculture, pêche et alimentation
certificat

Roocha Shukla – Waterloo-Wellington – ON

Green-Armour: A Novel Plant Biostimulant

Prix du défi - Curiosité et ingéniosité

Junior

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Intermédiaire

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Jora Singh Nahal – Greater Vancouver – BC

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Ottawa (Ontario)



Prix du défi - Technologie numérique

Sénior

Sponsor: Prix du défi - Technologie numérique

Angela Cao – Greater Vancouver – BC

S2S: AI-Powered Translation Between Sign and Spoken Languages

Prix du défi - Maladies et infections

Junior

Sponsor: Prix du défi - Maladies et infections

Sehar Sidhu – Windsor – ON

Delving Deep Into SARS-CoV-2

Prix du défi - Maladies et infections

Intermédiaire

Sponsor: Prix du défi - Maladies et infections

Kathy Han – Saskatoon – SK

Designing Biomimetic Nanovesicles for Cancer Treatment

Prix du défi - Maladies et infections

Sénior

Sponsor: Prix du défi - Maladies et infections

Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

Prix du défi - Énergie

Junior

Sponsor: Prix du défi - Énergie

Matt Fong, William Zhou – Toronto – ON

Extending Mileage on EV and Hybrid Vehicles using a Ratchet and Flywheel Regenerative Shock Absorber

Prix du défi - Énergie

Intermédiaire

Sponsor: Prix du défi - Énergie

Zhuola Sun – Vancouver Island – BC

Designing a More Efficient Wind Turbine

Prix du défi - Énergie

Sénior

Sponsor: Prix du défi - Énergie

Veronica Guo – Greater Vancouver – BC

A Novel, Cost-Effective Biological Photovoltaic for Wastewater Treatment

Prix du défi - Environnement et changement climatique

Junior

Sponsor: Prix du défi - Environnement et changement climatique

Aryan Sharma – Calgary Youth – AB

The MicroGuard Microplastic Collector

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Ottawa (Ontario)



Prix du défi - Environnement et changement climatique

Intermédiaire

Sponsor: Prix du défi - Environnement et changement climatique

Sarah Murimboh – Annapolis Valley – NS

Friend or Foe: Evaluating the Toxicity of Natural Pesticides on Springtails

Prix du défi - Environnement et changement climatique

Sénior

Sponsor: Prix du défi - Environnement et changement climatique

Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

Prix du défi - Santé ou bien être

Junior

Sponsor: Prix du défi - Santé ou bien être

Oscar Weerasinghe – Bluewater – ON

Breakfast on the Brain

Prix du défi - Santé ou bien être

Intermédiaire

Sponsor: Prix du défi - Santé ou bien être

Joy Akinkunmi – Canadian Black Scientists Network Youth – CA

Pill Smart 2.0

Prix du défi - Santé ou bien être

Sénior

Sponsor: Prix du défi - Santé ou bien être

Joti Gokaraju – Saskatoon – SK

TouchTalk: A Novel Braille Communication Platform for the Deafblind

Prix du défi - Ressources naturelles

Junior

Sponsor: Prix du défi - Ressources naturelles

Justin Guo – Greater Vancouver – BC

Plastic degradation through a novel Thermal Electro-Fenton System

Prix du défi - Ressources naturelles

Intermédiaire

Sponsor: Prix du défi - Ressources naturelles

Tanvir Mundra – Greater Vancouver – BC

Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Prix du défi - Ressources naturelles

Sénior

Sponsor: Prix du défi - Ressources naturelles

Casper Dong – Waterloo-Wellington – ON

“Solving A Water Crisis” A Novel Device For Water Generation and Utilization in Desert Solar Arrays

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Prix Sanofi Biogenius Canada

Junior

Sponsor: Prix Sanofi Biogenius Canada

Trois projets recevront chacun un prix de 500 \$ en argent comptant et un certificat

Sarah Bykewich – Edmonton – AB

Electroculture

Sehar Sidhu – Windsor – ON

Delving Deep Into SARS-CoV-2

Kristina Tannert – Central Interior BC – BC

From Oil Spills to Algae Thrills

Prix Sanofi Biogenius Canada

Intermédiaire

Sponsor: Prix Sanofi Biogenius Canada

Trois projets recevront chacun un prix de 750 \$ en argent comptant et un certificat

Audrey Cowen – Toronto – ON

Microbes and Molecules: The Key to Abolishing Drug Resistance

Jacklyn Saddler – Niagara – ON

The Effect of Keracyanin in Attenuating the Multifactorial Pathogenesis of Ulcerative Colitis

Ella Sehn – Peterborough – ON

Right On The Nose: Using a Super-Absorbent Polymer to Improve Treatment of Chronic Sinusitis

Prix Sanofi Biogenius Canada

Sénior

Sponsor: Prix Sanofi Biogenius Canada

Trois projets reçoivent chacun un prix de 1 000 \$ en argent comptant et un certificat

Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

Baljot Rai – Bison – MB

MopMussels: Development of a Carpet Mussel Shell-based Biosorbent for Phosphorus

Viduni Siriwardana – Greater Vancouver – BC

Novel Nanoparticle Drug Treatment for Adult BCP-ALL Using In-Silico Modeling

Prix Jeunesse innovante

Junior

Sponsor: Prix Jeunesse innovante

500 \$ en argent comptant, prix de présentation et un certificat

Evan Budz – Bay Area – ON

Virtual Lifeguard: A Novel AI Approach to Drowning Prevention

Matt Fong, William Zhou – Toronto – ON

Extending Mileage on EV and Hybrid Vehicles using a Ratchet and Flywheel Regenerative Shock Absorber

Isabella Guan – Quinte – ON

The Sound Catcher 2.0: A new and improved innovative device harvesting energy from sound

Aryan Sharma – Calgary Youth – AB

The MicroGuard Microplastic Collector

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Prix Jeunesse innovante

Intermédiaire

Sponsor: Prix Jeunesse innovante

750 \$ en argent comptant, prix de présentation et un certificat

Karen Attri – Calgary Youth – AB

The Gelatine Solution: An Environmentally Friendly Alternative to Surface Electrode Pads in ECGs

Abigail Chan – Waterloo-Wellington – ON

ThinkNet: Decoding Brain Waves using an Electroencephalogram controlled BCI

Jora Singh Nahal – Greater Vancouver – BC

DeviceABLE: A Novel Hands-Free Computing App for People with Disabilities

Thông Quách – Saskatoon – SK

Project PolyQuant: Quantifying Genomic DNA from Biofilms on Polyethylene in an Urban River Ecosystem

Prix Jeunesse innovante

Sénior

Sponsor: Prix Jeunesse innovante

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HeartHear: A Machine Learning Powered Ear-Wearable for Cardiovascular Disease Detection & Prediction

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Sohila Sidhu – Windsor – ON

From Liquid To Life: Reprogramming Urinary Stem Cells Into Beta Pancreatic Cells

Tara Zhan – Greater Vancouver – BC

Design of a Hemiplegic Exoskeleton with an Automatic Control Strategy

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Sénior

Sponsor: Prix Jeunesse innovante

En plus une bourse de 7 000 \$ en argent comptant

Saras Agrawal, Rateb Ajamieh – Edmonton – AB

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Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Artash Nath – Toronto – ON

Deep Learning for Marine Mammal Conservation: Multi-Species Detection and Underwater Noise Assessment

Roocha Shukla – Waterloo-Wellington – ON

Green-Armour: A Novel Plant Biostimulant

Prix platine - découverte

Junior

Sponsor: Prix platine - découverte
prix en cristal

Sarah Bykewich – Edmonton – AB

Electroculture

Prix platine - découverte

Intermédiaire

Sponsor: Prix platine - découverte
prix en cristal

Tanvir Mundra – Greater Vancouver – BC

Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Prix platine - innovation

Junior

Sponsor: Prix platine - innovation
prix en cristal

Evan Budz – Bay Area – ON

Virtual Lifeguard: A Novel AI Approach to Drowning Prevention

Prix platine - innovation

Intermédiaire

Sponsor: Prix platine - innovation
prix en cristal

Kathy Han – Saskatoon – SK

Designing Biomimetic Nanovesicles for Cancer Treatment

Expo-sciences internationale de Taïwan

Ouvert

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Kathy Han – Saskatoon – SK

Designing Biomimetic Nanovesicles for Cancer Treatment

Tanvir Mundra – Greater Vancouver – BC

Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Prix du meilleur projet - découverte

Ouvert

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prix en cristal

Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Prix du meilleur projet - innovation

Ouvert

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Dolev Klein Harari – United Counties – ON
The Schizophrenia Software Solution

Jonathan Li – Frontenac, Lennox & Addington – ON
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Nikita Artsimenia – Calgary Youth – AB
The "Helping Hand" Project

Ziya Bhayani – Calgary Youth – AB
Temporamental: The relationship between music tempo and calmness

Aliyan Boodhwani – Ottawa – ON
Greenifying Wastewater Treatment

Isabella Bu – Thames Valley – ON
A SEND-Based Imaging Approach to Track mRNA Delivery for Gene Therapy

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Jiayao Chen – York – ON

Research on Inchworm Robot Based on Folding PVC Structure

Jack D'Entremont, Onkit Saha – North-West New Brunswick – NB

Stratosync

Zachary Dostie, Mickael Plante – Réseau Technoscience – QC

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A Two-Modal Robot for Adaptability in Diverse Environments With Rolling Locomotion and Walking Gait

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Médaille de bronze, sénior – Bourse d'admission de 1 500 \$

Aahil Ansari – Edmonton – AB

CD36, Sex Differences, Microgravity, and Osteoarthritis

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Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Braden Baumann, Tessa Todd – Saskatchewan Chinook – SK
Learning About Learning

Amani Kaur Bhullar – Ottawa – ON
Analysis of Toroidal Propeller Sound Characteristics & Efficiency

Kamryn Binns – Cape Breton – NS
Nutrient Solutions in Hydroponic Gardens

Anna Chen – Waterloo-Wellington – ON
Graphene Quantum Dots for Dendrite-Free Zinc-Ion Batteries

Jason Cheng – Vancouver Island – BC
Cleaner Sponges, Greener Planet

Cooper Choi – Calgary Youth – AB
Effect of Repeated Concussions on Complement Protein Expression in Adolescent Brains

Dennis Golubev, Justin Yu – Fraser Valley – BC
A Novel Approach to Wastewater Treatment

Anqi Guan – Winnipeg Schools – MB
Can IL-17A help Maintain the Immune Privilege of Mesenchymal Stem Cells under Hypoxia?

Ava Haynes – Saskatchewan First Nations – SK
Observing and Culturing Cyanobacteria

Tanya Jivani, Lalithya Raavi – Wood Buffalo – AB
Fuelling the Future: Investigating Cost Efficient Methods of Hydrogen Production

Khaleel Khaki, Mohammadmahdi Shahhaidari – York – ON
AutoShield 2.0: The Dual-Defense System For All Vehicles

Richard Lee – Vancouver Island – BC
Is Bigger Better?

Jonathan Leung – Greater Vancouver – BC
Comparing Spider Diversity between 2 Farming Communities & Assessing Alpha, Beta & Gamma Diversities

Karys Littlejohns – Simcoe County – ON
Investigating trace drug prevalence in public recreational spaces using ion mobility spectrometry

Vincent Liu – Calgary Youth – AB
Can Bacteriophages Isolated from Municipal Wastewater Lyse Multi-drug Resistant E. coli ST131

Jialin Luo – Frontenac, Lennox & Addington – ON
Bioplastics: The Strength of Calcium Alginate

Mapalo Mushoriwa – Saskatchewan Chinook – SK
The Effect of Climate Conditions and Cadmium Uptake in Wheat

Hadiya Omer – Winnipeg Schools – MB
Examining Apical Area Dynamics in Distal Cell Development: Drosophila Model Approach

Stephanie Palma – Manitoba Schools Science Symposium – MB
Loss of SKP2 Induces Chromosome Instability in Tubo-Ovarian Context

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Saeko Sakuraba – Ottawa – ON

Effects of low oxygen conditions during embryogenesis on growth in zebrafish

Stoyan Sendov – Thames Valley – ON

Real-time American Sign Language Alphabet Interpreter

Parth Sheth – Calgary Youth – AB

From Pixels to Diagnosis: Neural Network-Based Malaria Detection

Cyrus Shobeir – Simcoe County – ON

A Smarter TV: Promoting Independent Living for Seniors Using Technology

Ella Strachan – Winnipeg Schools – MB

Dementia - Calculating Your Risk

Alexia Tomasello – Districts francophones du N.-B. – NB

Biomimétisme à la rescousse des océans, une filtration innovante inspirée du requin-pèlerin

Clare Wang, Bella Wang – Greater Vancouver – BC

A Substitute for Absorbent Layers in Menstrual Pads: Cocos Nucifera & Cannabis sativa L. Fiber

Flora Wang – Greater Vancouver – BC

Mass Spectrometry Imaging Metabolomics Reveals the Metabolic Spatial Heterogeneity in Gastric Cancer

Charlotte Woodhouse – Bluewater – ON

Dairy Dilemma: The Fertility Fallout of Inbreeding in Holsteins

Victor Xu – Toronto – ON

Hysteresis Inhibition for Performance Improvement via Halide Engineering in Perovskite Solar Cells

Bourse de début d'études de la Faculté des sciences de l'Université Dalhousie

Sénior

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Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

Bourse de début d'études de la Faculté des sciences de l'Université Dalhousie

Sénior

Sponsor: Bourse de début d'études de la Faculté des sciences de l'Université Dalhousie

Médaille d'argent, sénior - Bourse d'admission de 2 500 \$

Nikita Artsimonia – Calgary Youth – AB

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Ziya Bhayani – Calgary Youth – AB

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Stratosync

Zachary Dostie, Mickael Plante – Réseau Technoscience – QC

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Bye-Bye Haber-Bosch

Artash Nath – Toronto – ON

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Justin Peng – Greater Vancouver – BC

Low-Cost AR-Enabled Eyewear for Dynamic 3D Spatial Speech Captioning for the Hearing-Impaired

Baljot Rai – Bison – MB

MopMussels: Development of a Carpet Mussel Shell-based Biosorbent for Phosphorus

Sohila Sidhu – Windsor – ON

From Liquid To Life: Reprogramming Urinary Stem Cells Into Beta Pancreatic Cells

Cordelia Simmons – Bay Area – ON

Hydroplaning Detection and Prevention Using an AI Neural Network

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Arjun Virk – Peel – ON

Using Machine Learning to Quantify Pan-Cancer Immunotherapy Response and Optimizing Treatments

Danielle Vrignon – Western Manitoba – MB

Buzzicompteur

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Sam Zhang – Bay Area – ON

A Two-Modal Robot for Adaptability in Diverse Environments With Rolling Locomotion and Walking Gait

Bourses de début d'études de l'université Mount Allison

Ouvert

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Médaille d'or - Bourse de début d'études de 5 000 \$

Saras Agrawal, Rateb Ajamieh – Edmonton – AB

HearHear: A Machine Learning Powered Ear-Wearable for Cardiovascular Disease Detection & Prediction

Joy Akinkunmi – Canadian Black Scientists Network Youth – CA

Pill Smart 2.0

Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

Tristan Butcher – Waterloo-Wellington – ON

ExoSeer: A Comprehensive Algorithm For Exoplanet Analysis

Angela Cao – Greater Vancouver – BC

S2S: AI-Powered Translation Between Sign and Spoken Languages

Caroline Chan – Toronto – ON

UTI-Alert: Harnessing AI Technology for Rapid Urinary Tract Infection Detection

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Joti Gokaraju – Saskatoon – SK

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The Schizophrenia Software Solution

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Can We Trust AI Text Detectors? Exposing Limitations and Proposing Fixes

Tanvir Mundra – Greater Vancouver – BC

Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Jora Singh Nahal – Greater Vancouver – BC

DeviceABLE: A Novel Hands-Free Computing App for People with Disabilities

Thông Quách – Saskatoon – SK

Project PolyQuant: Quantifying Genomic DNA from Biofilms on Polyethylene in an Urban River Ecosystem

Roocha Shukla – Waterloo-Wellington – ON

Green-Armour: A Novel Plant Biostimulant

Bram St. Peters – Halifax – NS

How human biosolids can be used in lunar soils to optimize food production on the moon

Zhuola Sun – Vancouver Island – BC

Designing a More Efficient Wind Turbine

Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

Sophia Zhang – Eastern Newfoundland – NL

Optimization of Novel Triboelectric Nanogenerators for Wind Energy Harvesting at Low Speeds

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Médaille d'argent - Bourse de début d'études de 4 000 \$

Ayesha Abubakr – Waterloo-Wellington – ON

AnaLung: A Novel Approach to Lung Cancer Diagnosis

Abdul Majeed Al Riahi – Windsor – ON

SmartSightStick

Bahaa Al Deen Alsaadi, Zena Alsaadi – Bay Area – ON

Bits to Bedside: An Ingenious Exploration of Machine Learning in Triage Assessments

Nikita Artsimonia – Calgary Youth – AB

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ThinkNet: Decoding Brain Waves using an Electroencephalogram controlled BCI

Jiayao Chen – York – ON

Research on Inchworm Robot Based on Folding PVC Structure

Audrey Cowen – Toronto – ON

Microbes and Molecules: The Key to Abolishing Drug Resistance

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Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Jack D'Entremont, Onkit Saha – North-West New Brunswick – NB
Stratosync

Aaron Dias, Esam Taher – Edmonton – AB
Wave to the Future: Sustainable Seawater to Freshwater

Zachary Dostie, Mickael Plante – Réseau Technoscience – QC
Les algues sauvent les élèves!

Lianna Kruger – Thames Valley – ON
The Sound of Pathology

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Gene Expression-Based Prediction of Chemotherapy Response with Machine Learning

Jordan Montague – Labrador, Western and Central NL – NL
The Effects of Fidgeting on Neurotypical Versus Neurodivergent People

Sarah Murimboh – Annapolis Valley – NS
Friend or Foe: Evaluating the Toxicity of Natural Pesticides on Springtails

Kibo Nagasaki – Bay Area – ON
Bye-Bye Haber-Bosch

Artash Nath – Toronto – ON
Deep Learning for Marine Mammal Conservation: Multi-Species Detection and Underwater Noise Assessment

Harry Nickerson – Halifax – NS
Screening for Retinitis Pigmentosa in the Blink of an AI

Nico Pacifici – Bay Area – ON
The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using AI

Anerie Patel – Ottawa – ON
Posture Perfect: Leveraging Machine Learning to Enhance Posture Awareness and Correction

Alpita Patro – Eastern Newfoundland – NL
Neem: A Novel Approach to Optimize Treatment for Psoriasis Through Bioinformatics

Justin Peng – Greater Vancouver – BC
Low-Cost AR-Enabled Eyewear for Dynamic 3D Spatial Speech Captioning for the Hearing-Impaired

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MopMussels: Development of a Carpet Mussel Shell-based Biosorbent for Phosphorus

Jacklyn Saddler – Niagara – ON
The Effect of Keracyanin in Attenuating the Multifactorial Pathogenesis of Ulcerative Colitis

Mohamed Saleh – Windsor – ON
Pumpkin Waste to Vegan Chic: A Sustainable Journey In Cellulose Infused Bio-Based Films For Fashion

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Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Ella Sehn – Peterborough – ON

Right On The Nose: Using a Super-Absorbent Polymer to Improve Treatment of Chronic Sinusitis

Sohila Sidhu – Windsor – ON

From Liquid To Life: Reprogramming Urinary Stem Cells Into Beta Pancreatic Cells

Cordelia Simmons – Bay Area – ON

Hydroplaning Detection and Prevention Using an AI Neural Network

Zane Stewart – Vancouver Island – BC

Optimization of an Ionic Thruster

Misha van Anders – Frontenac, Lennox & Addington – ON

BioWing: Biomimetic Engineering Gets a Lift

Arjun Virk – Peel – ON

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Médaille de bronze - Bourse de début d'études de 3 000 \$

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Pain Science and the Peak-End Rule

Joel Amaldas – Calgary Youth – AB

The Skin Screener: an AI Detector for Melanoma Skin Cancer

Aahil Ansari – Edmonton – AB

CD36, Sex Differences, Microgravity, and Osteoarthritis

Shayan Awan – Wood Buffalo – AB

NeuroSpectrum: A Brainwave-Powered Vision Enhancement Device

Braden Baumann, Tessa Todd – Saskatchewan Chinook – SK

Learning About Learning

Amani Kaur Bhullar – Ottawa – ON

Analysis of Toroidal Propeller Sound Characteristics & Efficiency

Kamryn Binns – Cape Breton – NS

Nutrient Solutions in Hydroponic Gardens

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Kaitlyn Chan – Vancouver Island – BC

Predicting Surgical Patient Outcomes

Brian Chang – Saskatoon – SK

Conversion of Food Waste to Energy: Scaled Up from Saskatoon to Canada

Anna Chen – Waterloo-Wellington – ON

Graphene Quantum Dots for Dendrite-Free Zinc-Ion Batteries

Jason Cheng – Vancouver Island – BC

Cleaner Sponges, Greener Planet

Lyla Chiasson – Rideau-St. Lawrence – ON

Seep and Destroy

Cooper Choi – Calgary Youth – AB

Effect of Repeated Concussions on Complement Protein Expression in Adolescent Brains

Kevin Cornell – South-East New Brunswick – NB

Carbon-Negative Electricity: Generating Electricity from the Combustion of Scrap Metal

Kylie Dysart, Claire Linklater – Frontier Schools – MB

Human Impacts on the South Indian Lake Ecosystem

Shanika-Skye Einish-Nattawappio, Alyson Einish-Tooma – Aboriginal Québec Autochtone – QC

The Effect of Consuming Nicotine Vapes on Human Health and Lifestyle: An Investigative Study

Annaliese Froehler – East Kootenay – BC

Hands-On Healing: Exploring Sustainable Rehabilitation Possibilities Using VR Hand Tracking

Dennis Golubev, Justin Yu – Fraser Valley – BC

A Novel Approach to Wastewater Treatment

Anqi Guan – Winnipeg Schools – MB

Can IL-17A help Maintain the Immune Privilege of Mesenchymal Stem Cells under Hypoxia?

Malek Hammoud – Thames Valley – ON

GreenGuardian: Automated Weed Detection and Elimination

Sammy Hawari – Waterloo-Wellington – ON

Sign Vocalizer: Elevating Non-Verbal Communication

Ava Haynes – Saskatchewan First Nations – SK

Observing and Culturing Cyanobacteria

Tanya Jivani, Lalithya Raavi – Wood Buffalo – AB

Fuelling the Future: Investigating Cost Efficient Methods of Hydrogen Production

Ben Kawa – Sudbury – ON

Driver Wake Up 2.0: A Compact Standalone Device

Khaleel Khaki, Mohammadmahdi Shahhaidari – York – ON

AutoShield 2.0: The Dual-Defense System For All Vehicles

Visisht Kodali – South Fraser – BC

WoundSense

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Solomon Kogan – Simcoe County – ON <i>Effect of a Cryohelmet on Memory and Attention</i>
Alina Kotchetkov – Simcoe County – ON <i>Omega-3: the Building Blocks for Brain Health</i>
Sreya Kurup – South Fraser – BC <i>Investigating the impact of natural antibiotics on bacteria</i>
Richard Lee – Vancouver Island – BC <i>Is Bigger Better?</i>
Jonathan Leung – Greater Vancouver – BC <i>Comparing Spider Diversity between 2 Farming Communities & Assessing Alpha, Beta & Gamma Diversities</i>
Karys Littlejohns – Simcoe County – ON <i>Investigating trace drug prevalence in public recreational spaces using ion mobility spectrometry</i>
Vincent Liu – Calgary Youth – AB <i>Can Bacteriophages Isolated from Municipal Wastewater Lyse Multi-drug Resistant E. coli ST131</i>
Avalon Lively – Halifax – NS <i>Mycorrhizal Medicine: Do Mutualistic Fungi Enrich Forest Health?</i>
Jialin Luo – Frontenac, Lennox & Addington – ON <i>Bioplastics: The Strength of Calcium Alginate</i>
Persephone Mills – Northwestern Ontario – ON <i>The Effectiveness of Honey and Bee Propolis as an Antibacterial Agent</i>
Mapalo Mushoriwa – Saskatchewan Chinook – SK <i>The Effect of Climate Conditions and Cadmium Uptake in Wheat</i>
Hadiya Omer – Winnipeg Schools – MB <i>Examining Apical Area Dynamics in Distal Cell Development: Drosophila Model Approach</i>
Stephanie Palma – Manitoba Schools Science Symposium – MB <i>Loss of SKP2 Induces Chromosome Instability in Tubo-Ovarian Context</i>
Isabella Pozniak – Peace Country – AB <i>Do seed treatments matter?</i>
Reuel Ramalingam – Durham – ON <i>Turmeric; the solution to CTE?: Reducing the production of amyloid plaques in the brain after TBIs</i>
Melia Roberts – Cape Breton – NS <i>The Mould War: Chemical vs. Natural Mould Inhibitors</i>
Saeko Sakuraba – Ottawa – ON <i>Effects of low oxygen conditions during embryogenesis on growth in zebrafish</i>
Raneem Salah – Ottawa – ON <i>The Eye Spy Scanner; The Window to Your Health</i>
Rakshan Saravanan – Bay Area – ON <i>The Electrocorpulgraph: Can AI change auscultation?</i>

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Jiya Savsani – North Bay – ON

Highway Harvest: Determining Efficient Ways to Harness Renewable Energy on Highways

Stoyan Sendov – Thames Valley – ON

Real-time American Sign Language Alphabet Interpreter

Parth Sheth – Calgary Youth – AB

From Pixels to Diagnosis: Neural Network-Based Malaria Detection

Cyrus Shobeir – Simcoe County – ON

A Smarter TV: Promoting Independent Living for Seniors Using Technology

Seol So – Quinte – ON

The Third Eye - the new approach for Visually Impaired People to Navigate Websites

Katelynn Standell – Southeast Alberta – AB

Is Your Happiness Killing You?

Ella Strachan – Winnipeg Schools – MB

Dementia - Calculating Your Risk

Maiara Costa Telmer – Vancouver Island – BC

The Future of Composites

Alexia Tomasello – Districts francophones du N.-B. – NB

Biomimétisme à la rescousse des océans, une filtration innovante inspirée du requin-pèlerin

Daniil Tyurin – Calgary Youth – AB

On The Use of Micro-Scale Piezoelectric Crystals and Their Ultrasound Wave Backscatter in BCIs

Kavishi Udumullage – Manitoba Schools Science Symposium – MB

Battling the Beast: Biocontrol interventions against Fusarium graminearum to control FHB Disease

Clare Wang, Bella Wang – Greater Vancouver – BC

A Substitute for Absorbent Layers in Menstrual Pads: Cocos Nucifera & Cannabis sativa L. Fiber

Flora Wang – Greater Vancouver – BC

Mass Spectrometry Imaging Metabolomics Reveals the Metabolic Spatial Heterogeneity in Gastric Cancer

Charlotte Woodhouse – Bluewater – ON

Dairy Dilemma: The Fertility Fallout of Inbreeding in Holsteins

Victor Xu – Toronto – ON

Hysteresis Inhibition for Performance Improvement via Halide Engineering in Perovskite Solar Cells

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Sénior

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Saras Agrawal, Rateb Ajamieh – Edmonton – AB

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Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

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Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Angela Cao – Greater Vancouver – BC <i>S2S: AI-Powered Translation Between Sign and Spoken Languages</i>
Casper Dong – Waterloo-Wellington – ON <i>“Solving A Water Crisis” A Novel Device For Water Generation and Utilization in Desert Solar Arrays</i>
Joti Gokaraju – Saskatoon – SK <i>TouchTalk: A Novel Braille Communication Platform for the Deafblind</i>
Veronica Guo – Greater Vancouver – BC <i>A Novel, Cost-Effective Biological Photovoltaic for Wastewater Treatment</i>
Dolev Klein Harari – United Counties – ON <i>The Schizophrenia Software Solution</i>
Jonathan Li – Frontenac, Lennox & Addington – ON <i>Can We Trust AI Text Detectors? Exposing Limitations and Proposing Fixes</i>
Roocha Shukla – Waterloo-Wellington – ON <i>Green-Armour: A Novel Plant Biostimulant</i>
Ann Wang – Greater Vancouver – BC <i>Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy</i>

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Saras Agrawal, Rateb Ajamieh – Edmonton – AB <i>HearHear: A Machine Learning Powered Ear-Wearable for Cardiovascular Disease Detection & Prediction</i>
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Bourse d'études de l'expo-sciences pancanadienne de l'Université du Nouveau-Brunswick

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Médaille d'argent – Bourse d'admission de 2 500 \$

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Examining Apical Area Dynamics in Distal Cell Development: Drosophila Model Approach

Stephanie Palma – Manitoba Schools Science Symposium – MB

Loss of SKP2 Induces Chromosome Instability in Tubo-Ovarian Context

Saeko Sakuraba – Ottawa – ON

Effects of low oxygen conditions during embryogenesis on growth in zebrafish

Stoyan Sendov – Thames Valley – ON

Real-time American Sign Language Alphabet Interpreter

Parth Sheth – Calgary Youth – AB

From Pixels to Diagnosis: Neural Network-Based Malaria Detection

Cyrus Shobeir – Simcoe County – ON

A Smarter TV: Promoting Independent Living for Seniors Using Technology

Ella Strachan – Winnipeg Schools – MB

Dementia - Calculating Your Risk

Alexia Tomasello – Districts francophones du N.-B. – NB

Biomimétisme à la rescousse des océans, une filtration innovante inspirée du requin-pèlerin

Clare Wang, Bella Wang – Greater Vancouver – BC

A Substitute for Absorbent Layers in Menstrual Pads: Cocos Nucifera & Cannabis sativa L. Fiber

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Flora Wang – Greater Vancouver – BC

Mass Spectrometry Imaging Metabolomics Reveals the Metabolic Spatial Heterogeneity in Gastric Cancer

Charlotte Woodhouse – Bluewater – ON

Dairy Dilemma: The Fertility Fallout of Inbreeding in Holsteins

Victor Xu – Toronto – ON

Hysteresis Inhibition for Performance Improvement via Halide Engineering in Perovskite Solar Cells

Bourse de début d'études de l'Université Western Ontario

Ouvert

Sponsor: Bourse de début d'études de l'Université Western Ontario

Médaille d'or - Bourse de début d'études de 4 000 \$

Saras Agrawal, Rateb Ajamieh – Edmonton – AB

HeartHear: A Machine Learning Powered Ear-Wearable for Cardiovascular Disease Detection & Prediction

Joy Akinkunmi – Canadian Black Scientists Network Youth – CA

Pill Smart 2.0

Noah Bryan – Canadian Black Scientists Network Youth – CA

Is the water safe to drink? The rapid test is the missing link!

Evan Budz – Bay Area – ON

Virtual Lifeguard: A Novel AI Approach to Drowning Prevention

Tristan Butcher – Waterloo-Wellington – ON

ExoSeer: A Comprehensive Algorithm For Exoplanet Analysis

Sarah Bykewich – Edmonton – AB

Electroculture

Angela Cao – Greater Vancouver – BC

S2S: AI-Powered Translation Between Sign and Spoken Languages

Caroline Chan – Toronto – ON

UTI-Alert: Harnessing AI Technology for Rapid Urinary Tract Infection Detection

Casper Dong – Waterloo-Wellington – ON

"Solving A Water Crisis" A Novel Device For Water Generation and Utilization in Desert Solar Arrays

Daisy Dong – Niagara – ON

DONKEY: A solution framework for Analysis Paralysis

Matt Fong, William Zhou – Toronto – ON

Extending Mileage on EV and Hybrid Vehicles using a Ratchet and Flywheel Regenerative Shock Absorber

Joti Gokaraju – Saskatoon – SK

TouchTalk: A Novel Braille Communication Platform for the Deafblind

Veronica Guo – Greater Vancouver – BC

A Novel, Cost-Effective Biological Photovoltaic for Wastewater Treatment

Kathy Han – Saskatoon – SK

Designing Biomimetic Nanovesicles for Cancer Treatment

Nara Harvey – Greater Vancouver – BC

Using Deep Learning to Understand Endangered Orca Pregnancies

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Melrose Kinney – Annapolis Valley – NS

Screen Time Strain - The Potential Impact on Our Eyes

Dolev Klein Harari – United Counties – ON

The Schizophrenia Software Solution

Jonathan Li – Frontenac, Lennox & Addington – ON

Can We Trust AI Text Detectors? Exposing Limitations and Proposing Fixes

Tanvir Mundra – Greater Vancouver – BC

Reviving Resources: Harnessing Soap Nut Greywater for Sustainable Plant Growth

Jora Singh Nahal – Greater Vancouver – BC

DeviceABLE: A Novel Hands-Free Computing App for People with Disabilities

John Neilson – South-East New Brunswick – NB

Amelioration of Memory Through Musical Sensory Tagging

Thông Quách – Saskatoon – SK

Project PolyQuant: Quantifying Genomic DNA from Biofilms on Polyethylene in an Urban River Ecosystem

Aryan Sharma – Calgary Youth – AB

The MicroGuard Microplastic Collector

Roocha Shukla – Waterloo-Wellington – ON

Green-Armour: A Novel Plant Biostimulant

Bram St. Peters – Halifax – NS

How human biosolids can be used in lunar soils to optimize food production on the moon

Zhuola Sun – Vancouver Island – BC

Designing a More Efficient Wind Turbine

Abraham Tassi – Thames Valley – ON

The Dark Side of Energy Drinks

Ann Wang – Greater Vancouver – BC

Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

Oscar Weerasinghe – Bluewater – ON

Breakfast on the Brain

Sophia Zhang – Eastern Newfoundland – NL

Optimization of Novel Triboelectric Nanogenerators for Wind Energy Harvesting at Low Speeds

Bourse de début d'études de l'Université Western Ontario

Ouvert

Sponsor: Bourse de début d'études de l'Université Western Ontario

Médaille d'argent - Bourse de début d'études de 2 000 \$

Yohann Abraham-Erhart – Réseau Technoscience – QC

Detecting Color-Blindness using Brain Signals

Ayesha Abubakr – Waterloo-Wellington – ON

AnaLung: A Novel Approach to Lung Cancer Diagnosis

Abdul Majeed Al Riahi – Windsor – ON

SmartSightStick

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Bahaa Al Deen Alsaadi, Zena Alsaadi – Bay Area – ON

Bits to Bedside: An Ingenious Exploration of Machine Learning in Triage Assessments

Nikita Artsimenia – Calgary Youth – AB

The “Helping Hand” Project

Ananth Arunkumar – Waterloo-Wellington – ON

RipeNet: Using Machine Learning to Help the Colourblind

Karen Attri – Calgary Youth – AB

The Gelatine Solution: An Environmentally Friendly Alternative to Surface Electrode Pads in ECGs

Ziya Bhayani – Calgary Youth – AB

Temporamental: The relationship between music tempo and calmness

Aliyan Boodhwani – Ottawa – ON

Greenifying Wastewater Treatment

Anne Bowman – Simcoe County – ON

The Battle for Our Lakes: Phosphorus vs. Activated Charcoal

Isabella Bu – Thames Valley – ON

A SEND-Based Imaging Approach to Track mRNA Delivery for Gene Therapy

Abigail Chan – Waterloo-Wellington – ON

ThinkNet: Decoding Brain Waves using an Electroencephalogram controlled BCI

Jiayao Chen – York – ON

Research on Inchworm Robot Based on Folding PVC Structure

Audrey Cowen – Toronto – ON

Microbes and Molecules: The Key to Abolishing Drug Resistance

Jack D'Entremont, Onkit Saha – North-West New Brunswick – NB

Stratosync

Emmersyn da Mata, Hailee Marshall – Frontier Schools – MB

Weighting On Your Menstrual Cycle

Isaac Di Cresce – Winnipeg Schools – MB

Asparagus Pee Genetically

Aaron Dias, Esam Taher – Edmonton – AB

Wave to the Future: Sustainable Seawater to Freshwater

Zachary Dostie, Mickael Plante – Réseau Technoscience – QC

Les algues sauvent les élèves!

Riley Edmunds – Lambton County – ON

Breaking The Ice: Measuring the Environmental Impacts of Road Ice Removal Substances

Justin Guo – Greater Vancouver – BC

Plastic degradation through a novel Thermal Electro-Fenton System

Lianna Kruger – Thames Valley – ON

The Sound of Pathology

Maya LeBlanc – Bay Area – ON

Analysis of CD16+, CD16- and CD4+ T Cells to Identify Novel Gene Signatures and Diagnostics for SLE

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



-
- Lilou Lefebvre, Olive Passmore** – Yukon Stikine – YT
Faro Mine Disaster
-
- Dewey Liang** – Greater Vancouver – BC
Gene Expression-Based Prediction of Chemotherapy Response with Machine Learning
-
- Sourav Mandal** – Manitoba Schools Science Symposium – MB
The Effects of the Repeated Exposure of Antibiotics on Microbial Resistance
-
- Ariel Mason, Ella McFarland** – Calgary Youth – AB
Optimizing Crop Growth with Agrivoltaics
-
- Emily Mineault** – Northern British Columbia – BC
Can teachers differentiate AI writing from student writing?
-
- Jordan Montague** – Labrador, Western and Central NL – NL
The Effects of Fidgeting on Neurotypical Versus Neurodivergent People
-
- Emma Murimboh** – Annapolis Valley – NS
Dangerous Dust?
-
- Sarah Murimboh** – Annapolis Valley – NS
Friend or Foe: Evaluating the Toxicity of Natural Pesticides on Springtails
-
- Kibo Nagasaki** – Bay Area – ON
Bye-Bye Haber-Bosch
-
- Artash Nath** – Toronto – ON
Deep Learning for Marine Mammal Conservation: Multi-Species Detection and Underwater Noise Assessment
-
- Harry Nickerson** – Halifax – NS
Screening for Retinitis Pigmentosa in the Blink of an AI
-
- Nico Pacifici** – Bay Area – ON
The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using AI
-
- Anerie Patel** – Ottawa – ON
Posture Perfect: Leveraging Machine Learning to Enhance Posture Awareness and Correction
-
- Alpita Patro** – Eastern Newfoundland – NL
Neem: A Novel Approach to Optimize Treatment for Psoriasis Through Bioinformatics
-
- Justin Peng** – Greater Vancouver – BC
Low-Cost AR-Enabled Eyewear for Dynamic 3D Spatial Speech Captioning for the Hearing-Impaired
-
- Amelia Pletsch** – Waterloo-Wellington – ON
Life on Mars: Germinating Edible Plants in Mars Regolith
-
- Daniyal Qazi, Zayn Qazi** – Bay Area – ON
From Pixels to Predictions: A Deep Learning Method to Detect Pneumonia in Chest X-Ray Images
-
- Baljot Rai** – Bison – MB
MopMussels: Development of a Carpet Mussel Shell-based Biosorbent for Phosphorus
-
- Cyndi Rayson** – Lambton County – ON
Washing Away The Environment: An Environmental Analysis on Laundry Detergent

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Jacklyn Saddler – Niagara – ON

The Effect of Keracyanin in Attenuating the Multifactorial Pathogenesis of Ulcerative Colitis

Annika Saini – Calgary Youth – AB

Outdoor respiratory protection “pod” equipped with Stationary & Mobile powered-air purifiers

Mohamed Saleh – Windsor – ON

Pumpkin Waste to Vegan Chic: A Sustainable Journey In Cellulose Infused Bio-Based Films For Fashion

Madhav Saravanan – Peel – ON

Fantastic Bioplastics

Ella Sehn – Peterborough – ON

Right On The Nose: Using a Super-Absorbent Polymer to Improve Treatment of Chronic Sinusitis

Brenden Sener – Thames Valley – ON

Effect of Common Beverages on Artificial Kidney Stone Growth and Hardness

Sehar Sidhu – Windsor – ON

Delving Deep Into SARS-CoV-2

Sohila Sidhu – Windsor – ON

From Liquid To Life: Reprogramming Urinary Stem Cells Into Beta Pancreatic Cells

Cordelia Simmons – Bay Area – ON

Hydroplaning Detection and Prevention Using an AI Neural Network

Zane Stewart – Vancouver Island – BC

Optimization of an Ionic Thruster

Kate Thiessen-Clark, Kiah Thiessen-Clark – Central Interior BC – BC

Soap as a Moisture Loss Barrier

Misha van Anders – Frontenac, Lennox & Addington – ON

BioWing: Biomimetic Engineering Gets a Lift

Arjun Virk – Peel – ON

Using Machine Learning to Quantify Pan-Cancer Immunotherapy Response and Optimizing Treatments

Danielle Vrignon – Western Manitoba – MB

Buzzicompteur

Errita Xu – Toronto – ON

An Evaluation of the Ice-Melting Capacity, Ecotoxicity, and Corrosivity of Agro-Based Deicers

Tara Zhan – Greater Vancouver – BC

Design of a Hemiplegic Exoskeleton with an Automatic Control Strategy

Lillian Zhang – Calgary Youth – AB

Lower Limb Auxiliary Exoskeleton with Gait Management Feedback

Sam Zhang – Bay Area – ON

A Two-Modal Robot for Adaptability in Diverse Environments With Rolling Locomotion and Walking Gait

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Bourse de début d'études de l'Université Western Ontario

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Médaille de bronze - Bourse de début d'études de 1 000 \$

Eden Abols – Sudbury – ON

Metallurgical Mushrooms

Finn Adamson – Vancouver Island – BC

Pain Science and the Peak-End Rule

Imran Allarakhia, Mithru Narayan Naidu – Bay Area – ON

LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

Joel Amaldas – Calgary Youth – AB

The Skin Screener: an AI Detector for Melanoma Skin Cancer

Aahil Ansari – Edmonton – AB

CD36, Sex Differences, Microgravity, and Osteoarthritis

Muhammad Mustafa Arif – Lambton County – ON

Thoughts-To-Text: A Novel Approach To BCIs

Shayan Awan – Wood Buffalo – AB

NeuroSpectrum: A Brainwave-Powered Vision Enhancement Device

Aaron Bai – Greater Vancouver – BC

ChromaSight: Traffic Signal Assistant - A novel machine learning model to detect traffic signals

Braden Baumann, Tessa Todd – Saskatchewan Chinook – SK

Learning About Learning

Amani Kaur Bhullar – Ottawa – ON

Analysis of Toroidal Propeller Sound Characteristics & Efficiency

Kamryn Binns – Cape Breton – NS

Nutrient Solutions in Hydroponic Gardens

Charlotte Campbell, Leila Djelouah – Prince Edward Island – PE

The Root of the Problem

Kayley Carter Phillips – Peterborough – ON

The Addition of Triz-EDTA to Topical Antibiotics

Kaitlyn Chan – Vancouver Island – BC

Predicting Surgical Patient Outcomes

Aadhi Chandrasekaran – Manitoba Schools Science Symposium – MB

A Novel Approach to Optimize the Concentration of Flocculants in Water Purification

Brian Chang – Saskatoon – SK

Conversion of Food Waste to Energy: Scaled Up from Saskatoon to Canada

Mohammad Chaudhry – Toronto – ON

MobiMate: Low-Cost Intelligent Collision-Avoidance and Auto-Steering for Mobility Devices

Anna Chen – Waterloo-Wellington – ON

Graphene Quantum Dots for Dendrite-Free Zinc-Ion Batteries

Récipiendaires des prix

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Ottawa (Ontario)



Jason Cheng – Vancouver Island – BC
Cleaner Sponges, Greener Planet

Lyla Chiasson – Rideau-St. Lawrence – ON
Seep and Destroy

Cooper Choi – Calgary Youth – AB
Effect of Repeated Concussions on Complement Protein Expression in Adolescent Brains

Kevin Cornell – South-East New Brunswick – NB
Carbon-Negative Electricity: Generating Electricity from the Combustion of Scrap Metal

Kylie Dysart, Claire Linklater – Frontier Schools – MB
Human Impacts on the South Indian Lake Ecosystem

Shanika-Skye Einish-Nattawappio, Alyson Einish-Tooma – Aboriginal Québec Autochtone – QC
The Effect of Consuming Nicotine Vapes on Human Health and Lifestyle: An Investigative Study

Story Fitzgerald – Mi'kmaq Schools – NS
Teen Mental Health due to the COVID Lockdown

Claire Friesen – Central Alberta Rotary – AB
Preventing Flow Separation Using Known and Novel Methods

Annaliese Froehler – East Kootenay – BC
Hands-On Healing: Exploring Sustainable Rehabilitation Possibilities Using VR Hand Tracking

Genevieve Gagnon – Pacific Northwest – BC
To Glide or Not to Glide

Dennis Golubev, Justin Yu – Fraser Valley – BC
A Novel Approach to Wastewater Treatment

Anqi Guan – Winnipeg Schools – MB
Can IL-17A help Maintain the Immune Privilege of Mesenchymal Stem Cells under Hypoxia?

Isabella Guan – Quinte – ON
The Sound Catcher 2.0: A new and improved innovative device harvesting energy from sound

Kanav Gulati – Regina – SK
B.I.D.S. (Black Ice Detection System) - A system to detect an invisible threat - Black Ice!

Malek Hammoud – Thames Valley – ON
GreenGuardian: Automated Weed Detection and Elimination

Sammy Hawari – Waterloo-Wellington – ON
Sign Vocalizer: Elevating Non-Verbal Communication

Ava Haynes – Saskatchewan First Nations – SK
Observing and Culturing Cyanobacteria

Yui Jennings – Tri-County – NS
The Ideal Locker

Tanya Jivani, Lalithya Raavi – Wood Buffalo – AB
Fuelling the Future: Investigating Cost Efficient Methods of Hydrogen Production

Récipiendaires des prix

Expo-sciences pancanadienne 2024 Ottawa (Ontario)



Ben Kawa – Sudbury – ON

Driver Wake Up 2.0: A Compact Standalone Device

Khaleel Khaki, Mohammadmahdi Shahhaidari – York – ON

AutoShield 2.0: The Dual-Defense System For All Vehicles

Visisht Kodali – South Fraser – BC

WoundSense

Gunnar Koehn – Cariboo Mainline – BC

Exploring Thermal Paste Alternatives

Solomon Kogan – Simcoe County – ON

Effect of a Cryohelmet on Memory and Attention

Alina Kotchetkov – Simcoe County – ON

Omega-3: the Building Blocks for Brain Health

Sreya Kurup – South Fraser – BC

Investigating the impact of natural antibiotics on bacteria

Richard Lee – Vancouver Island – BC

Is Bigger Better?

Jonathan Leung – Greater Vancouver – BC

Comparing Spider Diversity between 2 Farming Communities & Assessing Alpha, Beta & Gamma Diversities

Yuewen Li, Siqi Tan – Bay Area – ON

CRISPR-Mediated Knockout to Improve PDAC Prognosis through TME Disruption

Karys Littlejohns – Simcoe County – ON

Investigating trace drug prevalence in public recreational spaces using ion mobility spectrometry

Vincent Liu – Calgary Youth – AB

Can Bacteriophages Isolated from Municipal Wastewater Lyse Multi-drug Resistant E. coli ST131

Avalon Lively – Halifax – NS

Mycorrhizal Medicine: Do Mutualistic Fungi Enrich Forest Health?

Jialin Luo – Frontenac, Lennox & Addington – ON

Bioplastics: The Strength of Calcium Alginate

Chloe MacLeod, Briyanna Wilberforce – Rideau-St. Lawrence – ON

Stick It To The Bacteria

Dexter Rocky Roy Mentuck – MFNERC Schools – MB

Testing the Hydrating Power of Bear Grease Bath Bombs

Persephone Mills – Northwestern Ontario – ON

The Effectiveness of Honey and Bee Propolis as an Antibacterial Agent

Abereham Moges – Western Manitoba – MB

Mood Foods: Testing the Impact of Nutrients on Cognitive Function and Reversing Neurodegeneration

Mapalo Mushoriwa – Saskatchewan Chinook – SK

The Effect of Climate Conditions and Cadmium Uptake in Wheat

Felix Naghi – Sudbury – ON

Plastic Purge: Marine Debris Eliminator

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Ryan Noel – Lakeland – AB

Vaping in Youth: Why are kids starting to vape?

Jack O'Connell – Sudbury – ON

Are Adults Dirtier Than Kids?

Hadiya Omer – Winnipeg Schools – MB

Examining Apical Area Dynamics in Distal Cell Development: Drosophila Model Approach

Stephanie Palma – Manitoba Schools Science Symposium – MB

Loss of SKP2 Induces Chromosome Instability in Tubo-Ovarian Context

Isabella Pozniak – Peace Country – AB

Do seed treatments matter?

Reuel Ramalingam – Durham – ON

Turmeric; the solution to CTE?: Reducing the production of amyloid plaques in the brain after TBIs

Aditi Ramanarayan – Edmonton – AB

Separation of Pigments from Spinach Leaves and Kiwi Fruit by Thin Layer Chromatography

Melia Roberts – Cape Breton – NS

The Mould War: Chemical vs. Natural Mould Inhibitors

Saeko Sakuraba – Ottawa – ON

Effects of low oxygen conditions during embryogenesis on growth in zebrafish

Raneem Salah – Ottawa – ON

The Eye Spy Scanner; The Window to Your Health

Rakshan Saravanan – Bay Area – ON

The Electrocorpulgraph: Can AI change auscultation?

Jiya Savsani – North Bay – ON

Highway Harvest: Determining Efficient Ways to Harness Renewable Energy on Highways

Stoyan Sendov – Thames Valley – ON

Real-time American Sign Language Alphabet Interpreter

Parth Sheth – Calgary Youth – AB

From Pixels to Diagnosis: Neural Network-Based Malaria Detection

Cyrus Shobeir – Simcoe County – ON

A Smarter TV: Promoting Independent Living for Seniors Using Technology

Zavier Simard – Sudbury – ON

VAWT to WATT: Capturing Wind Energy on Cars

Seol So – Quinte – ON

The Third Eye - the new approach for Visually Impaired People to Navigate Websites

Katelynn Standell – Southeast Alberta – AB

Is Your Happiness Killing You?

Ella Strachan – Winnipeg Schools – MB

Dementia - Calculating Your Risk

Kristina Tannert – Central Interior BC – BC

From Oil Spills to Algae Thrills

Récipiendaires des prix

Expo-sciences pancanadienne 2024

Ottawa (Ontario)



Maiara Costa Telmer – Vancouver Island – BC
The Future of Composites

Suhandan Thangadurai – Calgary Youth – AB
Now You See Me Too

Alexia Tomasello – Districts francophones du N.-B. – NB
Biomimétisme à la rescousse des océans, une filtration innovante inspirée du requin-pèlerin

Daniil Tyurin – Calgary Youth – AB
On The Use of Micro-Scale Piezoelectric Crystals and Their Ultrasound Wave Backscatter in BCIs

Kavishi Udumullage – Manitoba Schools Science Symposium – MB
Battling the Beast: Biocontrol interventions against Fusarium graminearum to control FHB Disease

Saanvi Vishwakarma – Strait – NS
Microscopic Investigation of Indigenous Food Preservation Technique

Clare Wang, Bella Wang – Greater Vancouver – BC
A Substitute for Absorbent Layers in Menstrual Pads: Cocos Nucifera & Cannabis sativa L. Fiber

Flora Wang – Greater Vancouver – BC
Mass Spectrometry Imaging Metabolomics Reveals the Metabolic Spatial Heterogeneity in Gastric Cancer

Wesley Wilding – Niagara – ON
Lettuce Compost Together: Exploring Alternatives to Hydroponics Pots

Makenna Wilson – Bluewater – ON
Body Temperature

Charlotte Woodhouse – Bluewater – ON
Dairy Dilemma: The Fertility Fallout of Inbreeding in Holsteins

Victor Xu – Toronto – ON
Hysteresis Inhibition for Performance Improvement via Halide Engineering in Perovskite Solar Cells

Sylvan Zheng – Calgary Youth – AB
Soaring With the Birds: Biomimicking the Avian Wing to Improve the Performance of Modern Aircraft