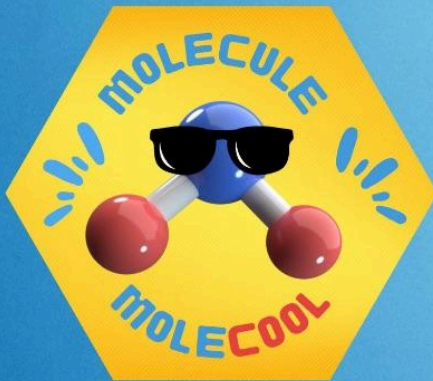


Ottawa Regional Science Fair

ORSF • ESRO

Expo-sciences régionale d'Ottawa



 [ORSF.CA](https://orsf.ca)

 [@OTTSCIFAIR](https://www.instagram.com/ottscifair)

April 5-6th, 2024
5-6 avril, 2024
Raven's Nest
Carleton University



Encouraging Students in STEM

The primary objective of the Ottawa Regional Science Fair (ORSF) is to encourage interest and learning in science, technology, engineering, and mathematics (STEM). Over the years, the ORSF has provided motivation, stimulation and recognition to science students in the Ottawa area. The ORSF gives students the opportunity to pursue and display their creative and scientific curiosity in a forum with their peers. The students' enthusiasm and abilities are an inspiration to us all!

We Welcome Your Support

The ORSF depends entirely on the financial support of local donors and sponsors, the work of volunteers, and the enthusiastic participation of students, teachers and parents.

If you feel that the ORSF is a worthwhile event, or if you or your children have benefited directly from ORSF activities and you would like to give back to the program, please [contact us](#). Your support can take many forms, including a financial donation or participation as a volunteer.

To donate, please contact the ORSF Chair (chair@orsf.ca). All donations to the ORSF are tax deductible, and you will be issued a tax receipt.

If you are a Science or Engineering professional, a teacher, or a parent and are interested in helping the ORSF by contributing your time or other resources, please [contact the ORSF Committee](#) and let us know how you would like to help!

The ORSF committee extends its thanks to all for their participation and assistance in making this a successful annual event!



Encourager les étudiants à poursuivre des études en STIM

L'objectif principal de l'Expo-sciences régionale d'Ottawa (ESRO) est d'encourager l'apprentissage et l'intérêt manifesté à l'égard des sciences, technologies, ingénierie et de la mathématique (STIM). Au fil des années, l'ESRO a stimulé, motivé et reconnu les étudiants en sciences de la région d'Ottawa. L'ESRO donne aux étudiants l'occasion de poursuivre et d'exprimer leur curiosité créative et scientifique dans le cadre d'un forum avec leurs pairs. L'enthousiasme et les capacités des élèves sont une source d'inspiration pour nous tous!

L'Expo-sciences régionale d'Ottawa a bénéficié amplement de l'aide de nombreux commanditaires et supporteurs locaux. Nous tenons à remercier ces vénérables partenaires pour leur contribution au succès de cet événement annuel pour la communauté d'Ottawa.

Votre soutien nous est précieux

L'ESRO dépend entièrement du soutien financier des commanditaires et supporteurs locaux, du travail des bénévoles et de la participation enthousiaste des élèves, des enseignants et des parents.

Si vous pensez que l'ESRO est un événement qui en vaut la peine, ou si vous ou vos enfants avez bénéficié directement de ses activités de l'ESRO et que vous souhaitez porter appui au programme, n'hésitez pas à nous [contacter](#). Votre soutien peut prendre plusieurs formes, y compris un don financier ou votre participation en tant que bénévole.

Pour faire un don, veuillez contacter le Président de l'ESRO (chair@orsf.ca). Tous les dons à l'ESRO sont déductibles des impôts et vous recevrez un reçu fiscal.

Si vous êtes un professionnel dans le domaine des sciences ou de l'ingénierie, un enseignant ou un parent et que vous souhaitez aider l'ESRO en contribuant votre temps ou en prêtant d'autres ressources, veuillez [contacter le comité ESRO](#) et nous faire savoir comment vous aimeriez aider !

Le comité ESRO remercie tous ceux qui ont participé et aidé à faire de cet événement annuel un succès!

Schedule | Horaire

Friday, April 5 | Vendredi, 5 avril

10:00am - 12:00pm	Check in, setting up of exhibits, and safety/ regulations inspection	10h00 - 12h00	Arrivée, installation et inspection relative aux règles et normes de sécurité
12:00pm - 1:00pm	Lunch Break Judging of exhibits without students	12h00 - 13h00	Pause pour le dîner Évaluation des projets sans les participants
1:00pm - 4:00pm	Category and Special Award judging	13h00 - 16h00	Évaluation des catégories et des prix spéciaux
2:00pm - 4:00pm	Open to Public	14h00 - 16h00	Session ouverte au public

Saturday, April 6 | Samedi, 6 avril

9:00am - 11:00am	Category and Special Award judging	9h00 - 11h00	Évaluation des catégories et des prix spéciaux
9:00am - 11:30am	Open to Public Science workshops, presentations and lab tours	9h00 - 11h30	Session ouverte au public Ateliers de sciences, présentations, et visites de laboratoire
11:30am - 12:00pm	Dismantle and clean up	11h30 - 12h00	Rangement et nettoyage
12:00pm - 1:00pm	Awards Ceremony	12h00 - 13h00	Cérémonie de remise des prix



Awards and Prizes

Age Categories

Participants are placed into one of the three age categories:

- Junior (grades 7 and 8)
- Intermediate (grades 9 and 10)
- Senior (grades 11 and 12)

Prizes are awarded to the first, second and third places in each age category.

Challenge Awards

Each project is assigned to a Challenge category:

- Agriculture, Fisheries & Food
- Curiosity & Ingenuity
- Digital Technology
- Disease & Illness
- Energy
- Environment & Climate Change
- Health & Wellness
- Natural Resources

Prizes are awarded to the top projects in each Challenge category.

In the event of low numbers of projects in certain age or Challenge categories, award categories may be combined at the judges' discretion.

In addition, the ORSF awards Grand Prizes and Special Awards.

Prix et récompenses

Catégories d'âge

Les participants sont placés dans l'une des trois catégories d'âge :

- Junior (7e et 8e années)
- Intermédiaire (9e et 10e années)
- Sénior (11e et 12e années)

Des prix sont attribués aux premières, deuxièmes et troisièmes places de chaque catégorie d'âge.

Prix de Défis

Chaque projet est assigné à une catégorie de défi:

- Agriculture, pêche et alimentation
- Curiosité et ingéniosité
- Énergie
- Environnement et changement climatique
- Maladies et infections
- Ressources naturelles
- Santé et bien-être
- Technologie numérique

Des prix sont attribués aux meilleurs projets de chaque Défi.

En cas de faible nombre de projets dans certaines catégories d'âge ou de Défis, les catégories peuvent être combinées à la discrétion des juges.

En outre, l'ESRO décerne des grands prix et des prix spéciaux.

Grand Prizes

University of Ottawa Entrance Scholarship

Awarded to the best Grade 12 project

Carleton University Science and Engineering Entrance Award

Awarded to the best Grade 12 project.

Canada-Wide Science Fair

Outstanding projects from any Challenge/Age category (a maximum of 11 students) will be chosen to represent the Ottawa Region at the Canada Wide Science Fair (CWSF). The CWSF will be held in Ottawa ON on May 25 to June 1, 2024. The ORSF raises funds towards sending students to the CWSF through the generous support of its sponsors.

Best in Fair

Awarded to the best project at the 2024 ORSF.

Special Awards

Organizations provide special awards pertaining to the interests of the individual organizations. The awards are judged and presented by a representative of the organization.

Sanofi Biogenius Award

Awarded to an outstanding project related to biotechnology – the use of biological systems to produce goods and services – or life sciences.

Grand Prix

Bourse d'admission de l'Université d'Ottawa

Accordé au meilleur projet de 12e année

Bourse d'admission en Sciences et génie de l'Université de Carleton

Accordé au meilleur projet de 12e année

Expo-sciences pancanadienne

Des projets exceptionnels de n'importe quelle catégorie de Défi ou d'âge (un maximum de 11 élèves) seront choisis pour représenter la région d'Ottawa à l'Expo-sciences pancanadienne (ESPC). L'ESPC se tiendra à Ottawa, ON, du 25 mai au 1er juin 2024. L'ESRO recueille des fonds pour l'envoi des étudiants à l'ESPC grâce au soutien généreux de ses commanditaires.

Meilleur Projet

Ce prix est décerné au meilleur projet de l'ESRO 2024.

Prix spéciaux

Les organisations décernent des prix spéciaux en fonction de leurs intérêts. Les prix sont jugés et remis par un représentant de l'organisation.

Prix Sanofi Biogenius

Décerné à un projet exceptionnel lié à la biotechnologie - l'utilisation de systèmes biologiques pour produire des biens et des services - ou aux sciences de la vie.

The Ottawa Horticultural Society

Awarded to a project demonstrating understanding of factors of growth and reproduction of higher plants, whether they are grown for decorative purposes, for the production of food, or to modify their immediate environment.

Ottawa Valley ASHRAE (American Society of Heating, Refrigeration and Air Conditioning Engineers)

Awarded to a project that serves humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields.

Honeywell Aerospace

Awarded to a project that supports Honeywell's work in developing world-class engines, cockpits, cabin design, wireless connectivity and enterprise performance management.

Ontario Regional Chapter of the Society of Environmental and Toxicology And Chemistry

Awarded to a project that promotes or enhances communication, education and networking in environmental toxicology and chemistry.

Water Environment Association of Ontario (WEAO) Award

Awarded to a project that focuses on water and wastewater treatment, stormwater management, biosolids energy and resource recovery; water reuse/grey water systems and constructed wetlands; or the properties of water.

La Société d'horticulture d'Ottawa

Accordé à un projet un projet démontrant la compréhension des facteurs de croissance et de reproduction des plantes supérieures, qu'elles soient cultivées à des fins décoratives, pour la production d'aliments ou pour modifier leur environnement immédiat.

Ottawa Valley ASHRAE (American Society of Heating, Refrigeration and Air Conditioning Engineers)

Accordé à un projet qui sert l'humanité en contribuant à l'avancement des sciences dans le domaine du chauffage, de la ventilation, de la réfrigération, de la climatisation et dans les domaines connexes.

Honeywell Aerospace

Accordé à un projet qui soutient le travail de Honeywell en développement de moteurs, de cockpits, de conception de cabines, de connectivité sans fil et de gestion des performances de l'entreprise de classe mondiale.

Ontario Regional Chapter of the Society of Environmental and Toxicology And Chemistry

Accordé à un projet favorise ou améliore la communication, l'éducation et le travail en réseau dans le domaine de l'écotoxicologie et de la chimie.

Water Environment Association of Ontario

Décerné à un projet axé sur le traitement de l'eau et des eaux usées, gestion des eaux pluviales, la récupération de l'énergie et des ressources des biosolides ; la réutilisation de l'eau, les systèmes d'eaux grises et les zones humides artificielles ; ou les propriétés de l'eau.

Indigenous Children's Wellness Award

Awarded to a project that explores ways in which science and technology can support and enhance the health and well-being of Indigenous children and/or their communities.

University of Ottawa Faculty of Medicine

Awarded to independent projects related to health science research.

Social Sciences Award

Awarded to a project that demonstrates an exceptionally well-developed methodology and that has implications for the social sciences or practical healthcare.

Trans Molecular Medicine

Awarded to an outstanding project presenting an innovative approach to addressing an emerging biomedical issue.

Canada Post Special Award

Awarded to a project that reflects Canada Post's commitment to innovation, community, integrity, and respect. Projects that have implications for the shipping industry including impacts on materials, manufacturing, packaging, transportation, storage, or recycling/disposal.

Carleton Chapter of Engineers Without Borders

Awarded to a project that increases awareness of sustainable engineering practices and sustainable technologies.

Canadian Nuclear Laboratories Physics Award

Awarded to an outstanding project in physics or chemistry.

Prix du bien-être des enfants autochtones

Attribué à un projet qui explore les moyens par lesquels la science et la technologie peuvent soutenir et améliorer la santé et le bien-être des enfants indigènes et/ou de leurs communautés.

Faculté de médecine - Université d'Ottawa

Accordé à un projet indépendant lié à la recherche en sciences de la santé.

Prix des sciences sociales

Décerné à un projet dont la méthodologie est exceptionnellement bien développée et qui a des implications pour les sciences sociales ou les soins de santé pratiques.

Médecine moléculaire et translationnelle

Accordé à un projet exceptionnel présentant une approche innovante d'une question biomédicale émergente.

Prix spécial de Postes Canada

Décerné à un projet qui reflète l'engagement de Postes Canada envers l'innovation, la communauté, l'intégrité et le respect. Les projets auront des répercussions sur l'industrie de l'expédition, y compris ceux qui ont une incidence sur les matériaux, la fabrication, l'emballage, le transport, l'entreposage ou le recyclage/la mise au rebut.

Carleton Chapter of Engineers Without Borders

Accordé à un projet qui sensibilise aux pratiques d'ingénierie durable et aux technologies durables.

Prix de physique des Laboratoires Nucléaires Canadiens

Accordé à un projet exceptionnel dans le domaine de la physique ou de la chimie.

Canadian Meteorological and Oceanographic Society

Awarded to a project related to weather, climate, oceans and/or environment.

Ottawa Field Naturalists Club

Awarded to a project with a focus on natural history.

Société canadienne de météorologie et d'océanographie

Accordé à un projet lié à la météo, au climat, aux océans et/ou à l'environnement.

Club des naturalistes d'Ottawa

Accordé à un projet avec un accent sur l'histoire naturelle.

Projects | Projets

Project No.	Age Category	Challenge Category	Title	Student	School
1101	Junior	Agriculture, Fisheries & Food	Éco oasis	Philippe Almond	College Catholique Franco-Ouest
1102	Junior	Agriculture, Fisheries & Food	Everyone LOVES Ice Cream! Until It Melts...	Sinead Shen Norah Redstone	Elmwood School
1103	Junior	Agriculture, Fisheries & Food	Water you thinking?	Madeleine Courville	Joan of Arc Academy
1104	Junior	Agriculture, Fisheries & Food	You Grow Girl: How the Right Type of Soil can Affect our Planet	Arizona McClelland	Joan of Arc Academy
1105	Junior	Agriculture, Fisheries & Food	Le mûrisseur	Stella Haering Camille Lefebvre	College Catholique Franco-Ouest
1106	Junior	Agriculture, Fisheries & Food	Grow and Glow	Vaishnavi Manoharan	Ashbury College
1107	Junior	Agriculture, Fisheries & Food	What Oil Cooks Chicken Nuggets the Fastest?	Jad Adra	Bishop Hamilton Montessori School
1108	Junior	Agriculture, Fisheries & Food	Why do people replace human milk with cow milk?	Navid Nazer	St. Joseph High School
1109	Junior	Agriculture, Fisheries & Food	La lumière naturelle vs artificielle	Nikki Forozandeh Jude Estabrooks	Macdonald-Cartier Academy
1110	Junior	Agriculture, Fisheries & Food	Sprouting in Space	Jet Kearns Millie Nolan	Elmwood School
1201	Intermediate	Agriculture, Fisheries & Food	Hydroponics vs Aquaponics: The Battle of E"fish"ency	Rohan Thukral	Academie De La Capitale

Project No.	Age Category	Challenge Category	Title	Student	School
1202	Intermediate	Agriculture, Fisheries & Food	Les OGM et les allergies aux arachides	Alexandra Bertrand	College Catholique Samuel Genest
2101	Junior	Curiosity & Ingenuity	Building Strength: The Role of Design, Materials, and Construction in Structural Stability	Rayan Ali	St. Joseph High School
2101	Junior	Curiosity & Ingenuity	Minecraft Machines	Jay Kumar Collin	Academie Westboro Academy
2102	Junior	Curiosity & Ingenuity	In the Clear	Emet Chen-Melzer	Ottawa Jewish Community School
2103	Junior	Curiosity & Ingenuity	Le ProtecGlace: au secours des toitures en hiver	Ayana Torres	College Catholique Franco-Ouest
2104	Junior	Curiosity & Ingenuity	Ride@utomatique	Cole Kim Vincent Salmon	College Catholique Franco-Ouest
2105	Junior	Curiosity & Ingenuity	Antcicles	Isaac Armijo-Chan	Academie Westboro Academy
2106	Junior	Curiosity & Ingenuity	How colour effects memory	Sara Taha	St. Joseph High School
2107	Junior	Curiosity & Ingenuity	Rose - STEM Fair Project 2024 - Batter Up!	Rose Artelle	Joan of Arc Academy
2108	Junior	Curiosity & Ingenuity	Hair Hygrometer!	Serena Sheriff	Joan of Arc Academy
2109	Junior	Curiosity & Ingenuity	Impact of Color	Elizabeth Barber	Joan of Arc Academy
2110	Junior	Curiosity & Ingenuity	Remember me?	Lola Munier	Joan of Arc Academy
2111	Junior	Curiosity & Ingenuity	Are dogs mouths that dirty?	Stella Cauchi	Joan of Arc Academy
2112	Junior	Curiosity & Ingenuity	Yeast Artiste	Elly Pergant Johnson	Turnbull School
2113	Junior	Curiosity & Ingenuity	Dyeing to Know	Nicholas Ott	Turnbull School

Project No.	Age Category	Challenge Category	Title	Student	School
2114	Junior	Curiosity & Ingenuity	Model Rockets: Fin Size Effect on Stability	Mason Slobodin	Turnbull School
2115	Junior	Curiosity & Ingenuity	On the track	Cristiana saghbini	Academie De La Capitale
2116	Junior	Curiosity & Ingenuity	Quels secrets se cachent derrière les empreintes digitales?	Sierra Mandino Kiara Charbel	Ecole Secondaire Pierre Savard
2117	Junior	Curiosity & Ingenuity	EXPLORING THE MAGIC SALT AND WATER	Myriam Winant anjolaoluwa adeyemi-dotun	Lester B. Pearson Catholic High School
2118	Junior	Curiosity & Ingenuity	Motion Sensors (How they work)	Janna Ibrahim	St. Joseph High School
2119	Junior	Curiosity & Ingenuity	Science Makes Magic	Naya Haddad	St. Joseph High School
2120	Junior	Curiosity & Ingenuity	L'étoile quasi: existe, existait ou n'existe pas de tout	Kinzie Trottier	College Catholique Samuel Genest
2121	Junior	Curiosity & Ingenuity	Sticky Kicks, Improved Traction for Indoor Basketball Shoes.	Finn Nelson	Ashbury College
2122	Junior	Curiosity & Ingenuity	Gant Électromagnétique	Mats Marion	College Catholique Samuel Genest
2123	Junior	Curiosity & Ingenuity	The Effect of different coloured wavelenghts on plant growth	Julia Ngo-Minh	Academie Westboro Academy
2124	Junior	Curiosity & Ingenuity	Glossing Over Bacteria	Olivia Fincham Dinsdale Hannah Kuriakose	Elmwood School
2125	Junior	Curiosity & Ingenuity	The Brightest Glow In The Darkest Scene	Luoling Cao	Elmwood School
2126	Junior	Curiosity & Ingenuity	Double Slit Experiment in Quantum Mechanics	Faisal Alhomoud mohammed aboujassoum	Tarbiyah Learning Academy
2127	Junior	Curiosity & Ingenuity	Le son en électricité	Jérémie Côté Lincoln Tang	College Catholique Samuel Genest
2128	Junior	Curiosity & Ingenuity	Imagine Eating Moldy Food	Madeleine Tyson	Academie Westboro Academy

Project No.	Age Category	Challenge Category	Title	Student	School
2129	Junior	Curiosity & Ingenuity	Sock Matcher	Hayden MacDonald Guillaume Herry	St. Francis Xavier Catholic High School
2130	Junior	Curiosity & Ingenuity	Does a Turing Tumble Truly Compute Like a Real Computer?	Awad Elahi Karam Jarrar	Tarbiyah Learning Academy
2201	Intermediate	Curiosity & Ingenuity	Comparison of Natural vs Synthetic Dye Colour-Fast Properties	Vicky Zhang Grace Moriarity	0
2202	Intermediate	Curiosity & Ingenuity	Exoplanet Statistics and Biosignature Analysis to Predict the Relative Probabilities of Life	Amol Sriprasadh Akshit Manikanta Erukulla	Merivale High School
2203	Intermediate	Curiosity & Ingenuity	Measuring the Presence Quantum Entangled Particles	Nico Riel	Academie De La Capitale
2204	Intermediate	Curiosity & Ingenuity	Carbon Monoxide Levels in the Cockpit of a Single Engine Aircraft	Safal Kaur Bhullar	Elmwood School
2301	Senior	Curiosity & Ingenuity	Does low oxygen before hatching affect zebrafish growth?	Saeko Sakuraba	Ashbury College
2302	Senior	Curiosity & Ingenuity	Obtaining Astrophysical Parameters by Solving Geodesic Equations in Plebański-Demiański Space-Times	Alexander Abesteh	Lisgar Collegiate Institute
2303	Senior	Curiosity & Ingenuity	Développement d'une micro-radiosonde	Aria Olszewski Stefan Teodorescu	Ecole Paul-Desmarais
2304	Senior	Curiosity & Ingenuity	Predictive Mineral Spectrophotometry with Machine Learning	Samantha Adams Jaden Zhang	Sacred Heart High School
2305	Senior	Curiosity & Ingenuity	Sweeter Oranges?	Zhongqi Yuan	Earl of March Secondary School
2306	Senior	Curiosity & Ingenuity	Analysis of Toroidal Propeller Sound Characteristics & Efficiency	Amani Kaur Bhullar	Elmwood School
3101	Junior	Digital Technology	L'oeil humain vs L'algorithme	Aïda Ndjom Malaïka Koloko	Ecole Paul-Desmarais
3102	Junior	Digital Technology	How Does Coding Work?	Isa Khan	Tarbiyah Learning Academy
3103	Junior	Digital Technology	Testing: 1, 2, 3	Qayim Kanji	Academie Westboro Academy

Project No.	Age Category	Challenge Category	Title	Student	School
3104	Junior	Digital Technology	Evolution of PC performance	Julien Chouaib	Academie Westboro Academy
3105	Junior	Digital Technology	RéparDOS	Maxim Engelke	College Catholique Franco-Ouest
3106	Junior	Digital Technology	Les jeux vidéos par rapport au jeunes	Antoine Michaud Evan Iyizire Ikuzwe	Ecole Paul-Desmarais
3107	Junior	Digital Technology	Blocking Radio Wave Emissions	Jacob Lee	Turnbull School
3108	Junior	Digital Technology	L'effet de la musique sur la mémoire	Neela Ramachandran	Macdonald-Cartier Academy
3109	Junior	Digital Technology	Aerodynamics	Anson Lin	Academie De La Capitale
3110	Junior	Digital Technology	ChatGPT vs Teachers: Can AI in school be used to help teachers?	Kiran Lalu	Turnbull School
3111	Junior	Digital Technology	Can we guess your passcode	Finley Thomason Megan Hughes	Elmwood School
3112	Junior	Digital Technology	Lilzie's Plants	Kenzie Maxwell Lilah Emerson	St. Francis Xavier Catholic High School
3113	Junior	Digital Technology	"Empowering Accessibility: A Smart Home Solution For The Future"	Mahmoud Salah	College Catholique Franco-Ouest
3201	Intermediate	Digital Technology	A Novel Approach to Real-Time Visual Information Retrieval and Translation via Augmented Reality	Aisha Baliyan	Merivale High School
3202	Intermediate	Digital Technology	Posture Perfect: Leveraging Machine Learning to Enhance Posture Awareness and Correction	Anerie Patel	Merivale High School
3301	Senior	Digital Technology	The quantum k-nearest neighbor algorithm: varied benefits depending on specific datasets and attributes	Su Huang	Merivale High School
4101	Junior	Disease & Illness	Would metal alloy help treat gastroesophageal reflux disease?	Ahmed Ellaithy	Tarbiyah Learning Academy
4102	Junior	Disease & Illness	Title	Quinn Moriarity	Academie De La Capitale

Project No.	Age Category	Challenge Category	Title	Student	School
4103	Junior	Disease & Illness	What is the best way to Lower Someone's Body temperature if they have a Fever?	Tessa Birch	St. Joseph High School
4104	Junior	Disease & Illness	Effective? Autism Treatment and Diagnostic	Kahlan Duff Jaina Kullur	St. Joseph High School
4105	Junior	Disease & Illness	Pathogens in Laundromats? A Public Health Issue	Lily Giorno	Joan of Arc Academy
4106	Junior	Disease & Illness	Gel Electrophoresis	Nabiha Syeda	Tarbiyah Learning Academy
4107	Junior	Disease & Illness	A comparative study of Beeswax, Carnauba wax and rice bran wax as protective enteric coatings on pills	Aalaa Gribi	Academie De La Capitale
4108	Junior	Disease & Illness	Efficacité des produits naturels antibiotiques	Penelope Ryan	Macdonald-Cartier Academy
4109	Junior	Disease & Illness	Sugar Rush: Determining the Best Carbohydrate Aid for Patients with Type 1 Diabetes	Sarvin Panu-Metsaranta	Turnbull School
4110	Junior	Disease & Illness	Glycemic Index vs Glycemic Load	Khadija Ahmed	Tarbiyah Learning Academy
4201	Intermediate	Disease & Illness	Les légumes crucifères et le cancer	Anjali Daswani Gabrielle Carson	College Catholique Samuel Genest
4202	Intermediate	Disease & Illness	La maladie du VIH/SIDA et ses pistes de solution	Kelsey Kisenga Annabelle Boushey	College Catholique Samuel Genest
4203	Intermediate	Disease & Illness	Finding Needles in Haystacks: Quantum Dot Microneedle Strategy to Counter Toxicity in Drug Delivery	Karan Kirpalani	Merivale High School
4204	Intermediate	Disease & Illness	The Eye Spy Scanner; The Window to Your Health	Raneem Salah	Colonel By Secondary School
4205	Intermediate	Disease & Illness	2024 Niyati Thondapu Project Board	Niyati Thondapu	John McCrae Secondary School
4301	Senior	Disease & Illness	Integration of Ranibizumab and a Modified HDL Complex in Drug-Eluting Contact Lenses to Treat DR	Angelyn Joseph Kevin Joseph	Merivale High School

Project No.	Age Category	Challenge Category	Title	Student	School
4302	Senior	Disease & Illness	Acétylcholine: Que marque-t-elle dans les coulisses de notre cerveau?	Micheline Selfani Joude Salameh	College Catholique Samuel Genest
5101	Junior	Energy	L'Illuminateur	Audrey Campbell Nowlan Naomi Carleton	College Catholique Franco-Ouest
5102	Junior	Energy	Ampo-Piles	Stella Folz	College Catholique Franco-Ouest
5103	Junior	Energy	L'ÉLECTRICITÉ AVEC LES PILES À COMBUSTIBLES MICROBIENNES	Reve Joseph Kingstone	Macdonald-Cartier Academy
5104	Junior	Energy	Big Fan of Wind Energy	Shea Radcliffe Jack Cochlin	Ashbury College
5105	Junior	Energy	Nuclear Batteries - No Recharge Required	Alyssa Morena	St. Jude Catholic School
5106	Junior	Energy	Générateur à main	Jonathan Power James Noble	College Catholique Samuel Genest
5107	Junior	Energy	Hydrogen Generator using old batteries	Othman Tareki zayd hasan	Tarbiyah Learning Academy
5108	Junior	Energy	Solar City	Tulin Salah	St. Joseph High School
5201	Intermediate	Energy	Le carburant à la résine d'abre	Bryanis Akerey	College Catholique Samuel Genest
5202	Intermediate	Energy	EcoTraQ (carbon footprint calculator)	Hasan Ahmed Cameron Lemoine	Longfields Davidson Heights Secondary School
6101	Junior	Environment & Climate Change	Eco-friendly house	Jay Patel	Kanata Montessori School
6102	Junior	Environment & Climate Change	Flash Flood Fix	Mary Chafe	Joan of Arc Academy
6103	Junior	Environment & Climate Change	Don't panic! Romaine calm: How pharmaceutical pollution affects plants	Stella Waldolf	Joan of Arc Academy

Project No.	Age Category	Challenge Category	Title	Student	School
6104	Junior	Environment & Climate Change	Keep it Fresh	Nadia Golah-Rusnak	Turnbull School
6105	Junior	Environment & Climate Change	Defying Drought	Zayn Boodhwani	Turnbull School
6106	Junior	Environment & Climate Change	Pantyhose Powerhouse	Kalia Harris	Turnbull School
6107	Junior	Environment & Climate Change	The Use of Alum and the Effect it has on Aquatic Plants	Zara Saxe	Turnbull School
6108	Junior	Environment & Climate Change	Ça fond à fond!	Charlotte Hutchison	Macdonald-Cartier Academy
6109	Junior	Environment & Climate Change	Plant Whisperer	Megan Kearney Charlotte Dufort	Elmwood School
6110	Junior	Environment & Climate Change	Ready Set Grow	Annabel Cheam-Zhan	Ashbury College
6111	Junior	Environment & Climate Change	Secrets Of The Spill: Finding the Ultimate Oil Absorbent	Lea Coletti	Ashbury College
6112	Junior	Environment & Climate Change	Biodégradable c'est incroyable! (Macdonald-Cartier Academy)	Brooklyn Reesal Anne Satoh	Macdonald-Cartier Academy
6113	Junior	Environment & Climate Change	Spoonfuls of Sustainability!	Paul Lahaie-Boivin Fraser Redpath	Ashbury College
6114	Junior	Environment & Climate Change	Ottawa Regional Science Fair: Cricket Musical	Samantha Brister-Burgoyne Leticia Darevic	Elmwood School
6115	Junior	Environment & Climate Change	Le Cracheur de Neige	Sebastian Colman	Ecole Secondaire Pierre Savard

Project No.	Age Category	Challenge Category	Title	Student	School
6116	Junior	Environment & Climate Change	Bateau à moteur avec élastique	Maya Walker Senna Nesrallah	Ecole Secondaire Pierre Savard
6117	Junior	Environment & Climate Change	Protège-t-il?	Neave O'Hanlon Camille Lalonde	College Catholique Samuel Genest
6118	Junior	Environment & Climate Change	Impurities found in several water samples using electrolysis.	Aahil Ashar	Ashbury College
6119	Junior	Environment & Climate Change	Les humaines et l'eau	Junior Beckman John Marsland	Macdonald-Cartier Academy
6120	Junior	Environment & Climate Change	La carbone et la plante - nicholas	Nicholas Moroz	Macdonald-Cartier Academy
6121	Junior	Environment & Climate Change	La voiture hybride	Edrick Yong	Ecole Secondaire Pierre Savard
6122	Junior	Environment & Climate Change	Comment rationaliser dans la culture des plantes ?	Annelise Takam Talon	College Catholique Samuel Genest
6123	Junior	Environment & Climate Change	La fin des feux de forêt	Luca Vats	Macdonald-Cartier Academy
6201	Intermediate	Environment & Climate Change	Using Artificial Intelligence (Machine Learning Model) to Detect Drought Risk from Satellite Imagery	Vihaan Nair	Colonel By Secondary School
6202	Intermediate	Environment & Climate Change	Mapping Noise Pollution and Assessing the Effectiveness of Highway Traffic Sound Barriers in Ottawa	Tamsen Taylor	Elmwood School
6203	Intermediate	Environment & Climate Change	Croissendre	Pablo Pantieras William House	Ecole Secondaire Franco Ouest
6301	Senior	Environment & Climate Change	From Dairy to Durable: Transforming Milk into Bioplastic	Fatima Ali	Ottawa Islamic School

Project No.	Age Category	Challenge Category	Title	Student	School
7101	Junior	Health & Wellness		Dylan Carson	Goulbourn Middle School
7101	Junior	Health & Wellness	Sucra-Lose or Win?	Navid Rowhani	Emily Carr Middle School
7102	Junior	Health & Wellness	Sauvont l'ouïe, une oreille a la foie. Reduire la degradation de l'ouïe parla science.	Elliott Bernier Evan Theriault	Ecole Paul-Desmarais
7103	Junior	Health & Wellness	L'effet des breuvages sur tes dents	Amalia Farah Kaitlyn Barnes	Ecole Paul-Desmarais
7104	Junior	Health & Wellness	The Science of Sleep	Haley Shah	Goulbourn Middle School
7105	Junior	Health & Wellness	L'alarme muette	Elliott Holmes	College Catholique Franco-Ouest
7106	Junior	Health & Wellness	Verson	Lily Achkar Nora Salam	College Catholique Franco-Ouest
7107	Junior	Health & Wellness	Divide and Conquer?	Georgia Glinski	Elmwood School
7108	Junior	Health & Wellness	Getting Under My Skin	Alexandra Jiline Lekha Villeneuve	Ashbury College
7109	Junior	Health & Wellness	Le Niveau pH des Fruits	Chloe Chai Grace Sinclair	Ecole Secondaire Pierre Savard
7110	Junior	Health & Wellness	Performance Sportive	Christopher Bédard Liam Perreault	Ecole Secondaire Pierre Savard
7111	Junior	Health & Wellness	Stances Toward Vaping on Social Media	Anna Lalu	Turnbull School
7112	Junior	Health & Wellness	La Croissance Bactérienne	Natasha Buffone Katie Todd	Macdonald-Cartier Academy
7113	Junior	Health & Wellness	Musical Homework	Disansa Ranaweera	St. Joseph High School
7114	Junior	Health & Wellness	Riding The Waves Of Glucose Spikes	Annabelle Nehme Moira Dodge Miller	Elmwood School

Project No.	Age Category	Challenge Category	Title	Student	School
7115	Junior	Health & Wellness	Probiotics' efficiency	Ania Khurram	Tarbiyah Learning Academy
7116	Junior	Health & Wellness	Shiver Me Timbers	Adeline Thompson Kianna Thawer	Elmwood School
7117	Junior	Health & Wellness	Espresso Expectations	Noah Mayman-Rodkin Joel Tupitsyn	Ottawa Jewish Community School
7118	Junior	Health & Wellness	ADHD	Samantha Bright Cailyn Matear	St. Joseph High School
7119	Junior	Health & Wellness	Growing Bacteria.	Gavin Calow	Mackenzie Community School
7120	Junior	Health & Wellness	Les réflexes ralentissent ils avec l'âge ou le sexe?	Rohan Dust Kalina Ghie	College Catholique Samuel Genest
7121	Junior	Health & Wellness	Élégance parfumée	Jennifer Dossou Justine Ng	College Catholique Samuel Genest
7122	Junior	Health & Wellness	Dirty Secrets	Salma Aly Ayisha Zazay	Tarbiyah Learning Academy
7123	Junior	Health & Wellness	Social Conformity In Children aged 6 - 11	Ayana Baig Hajar Ajaj	Tarbiyah Learning Academy
7124	Junior	Health & Wellness	STEM Fair Project: Caffeine extraction from coffee	atticus siguenza Logan Harvey	St. Francis Xavier High School
7125	Junior	Health & Wellness	antibiotics vs essential oils	oyumandal borkhuu	Glashan Public School
7201	Intermediate	Health & Wellness	Green Synthesis of Silver and Copper Nanoparticles: Multifaceted Healthcare - Wound Dressings	Sophie (Sin Lam) Kong	Holy Trinity Catholic High School
7202	Intermediate	Health & Wellness	Les Acariens Demodex	Chanelle Roukoz Naya Helal	College Catholique Samuel Genest
7203	Intermediate	Health & Wellness	Les interactions entre le microbiome intestinal et le système immunitaire	Celina Azzi Bladia Inagajo	College Catholique Samuel Genest

Project No.	Age Category	Challenge Category	Title	Student	School
7204	Intermediate	Health & Wellness	The Rhythm of Innovation: Assessing Advantages and Limitations Across Artificial Heart Models	Tianyi Liang Armita Asgharpour	Earl of March Secondary School
7205	Intermediate	Health & Wellness	Higher Priced Sunscreens – Are They More Effective?	Supichada Mekwatana	Brookfield High School
7206	Intermediate	Health & Wellness	A Novel Approach to Predicting Post-operative Complications through a Machine Learning Model	Misgana Biniam	Merivale High School
7207	Intermediate	Health & Wellness	Dents en Danger	Ruby Folz Anne Mister	College Catholique Franco-Ouest
7208	Intermediate	Health & Wellness	AU COEUR DU SON!	Emma Lefebvre Annabelle Tasset-Scherer	College Catholique Franco-Ouest
7301	Senior	Health & Wellness	MiThRAS: A Novel Systematic Approach to Neuroprosthetics	Jamie Drysdale Tristan Scarlett	Lisgar Collegiate Institute
7302	Senior	Health & Wellness	SAVE, système automatique de ventilation externe	Lucia M'Voukani Carla Rodriguez-Ramirez	College Catholique Samuel Genest
7303	Senior	Health & Wellness	Nature vs. Nurture	Diya Shah	South Carleton High School
8101	Junior	Natural Resources	The Frigeau	Emily Krause E'lise Nguyen	College Catholique Franco-Ouest
8102	Junior	Natural Resources	STEM Project: Hydraulic Crane	Yaseen Salah	St. Joseph High School
8103	Junior	Natural Resources	Bagging Up the Future	Emma Ollinger Reena Mehta	Ashbury College
8104	Junior	Natural Resources	Can You Handle the Heat?	Madeline Trainor Raina Smith	Ashbury College
8105	Junior	Natural Resources	Mushrooms	Charlotte Barnes	Academie Westboro Academy
8106	Junior	Natural Resources	Happy Planet, Happy Cats - Which Litter is Best for Both?	Lucca Choquette	0

Project No.	Age Category	Challenge Category	Title	Student	School
8107	Junior	Natural Resources	Un pas vers un avenir durable: La purification de l'eau à l'énergie solaire	Vincent Fono Nolan Astles	College Catholique Samuel Genest
8201	Intermediate	Natural Resources	Packaging Optimization: A Closer Look Into Resource Consumption	Kyle Cheng	Merivale High School
8202	Intermediate	Natural Resources	Coffee Power: Utilizing Waste Coffee Grinds as an Electrolyte in Batteries	Natalia Wesolkowski	Colonel By Secondary School
8301	Senior	Natural Resources	Greenifying wastewater treatment	Aliyan Boodhwani	Colonel By Secondary School
8302	Senior	Natural Resources	Waste for Waste: The Valorization of Waste Cotton Textiles into Cellulose for Pollution Remediation	Emilia Wesolkowski	Colonel By Secondary School

Committee Members | Membres du comité

Simon McMillan

Chair | Président

Richard Morin

Chief Judge | Juge en chef

Pamela Li

Judging | Évaluation des projets

Wayne Sawtell

Treasurer | Trésorière

Arash Marzi

Sponsorship | Commandites

Rodney McInnis

Sponsorship | Commandites

Sonia Patenaude

Registration | Inscription

David MacDonald

Logistics | Logistiques

Wish Yen

Safety & Ethics | Sécurité et éthique

Michelle Chaulk

Ceremonies | Cérémonies

Ibtissem Zahzam

Social Media | Médias sociaux

Kyle Beaulieu

Website | Site web

Makeda McLean

Graphic Design | Conception graphique

Hannah Sheridan

Carleton University Liaison | Relation avec l'Université Carleton

Justin Whitaker

CWSF Coordinator | Coordinateur ESPC

Jennifer Gauthier

OCSB Representative | Représentatif OCSB

Dana Hall

Special Awards and OCDSB Representative | Prix spéciaux et représentatif OCDSB

Reni Barlow

Member-at-large | Membre non désigné

James Grant

Member-at-large | Membre non désigné

Helen Kolodziejczyk

Member-at-large | Membre non désigné

Clinton Li

Member-at-large | Membre non désigné

Noor Hameed

Member-at-large | Membre non désigné

Thank you to our sponsors | Merci à nos commanditaires



Canadian Nuclear Laboratories

Honeywell Aerospace

John the Plumber

Lightbox Technologies

**Ottawa Catholic School
board**

Ottawa Horticultural Society

Turnbull School Ltd.

Donors | Donateurs

**Canadian Meteorological and Oceanic
Society**

W.R. Davis Engineering

Chez Lili Party Rentals

The Tony Graham Family Foundation