## **2013 Divisional Award Winners**

## Junior - Biotechnology

Gold Medallion (\$70 cash)

(070BTJR) Plants That Bug Superbugs Student: Emma Hoover School: John McCrae P.S.

## Intermediate - Biotechnology

#### Gold Medallion (\$100 cash)

(056BTIN) The Salty Solution Students: Fengyang Wang, Tom Chong School: Individual Entry

(214BTIN) How to help stressful plants Students: Devanshi Shukla, Chitta Chowdhury School: Centennial C. & V.I.

## Senior - Biotechnology

## Gold Medallion (\$100 cash)

(094BTSN) The Effect of Phytohormones on Genetic Expression

Student: Todd Brecher School: St. John's-Kilmarnock School

(062BTSN) Fluorescent Protein UV Protection Students: Tina Tang , Anisa Morava School: Centennial C. & V.I.

(140BTSN) Effects of Resveratrol/Rosiglitazone on metabolism Students: Nina Falak , Cristina Matei School: Centennial C. & V.I. (035BTSN) Functionalized CNCs: An Effective Antimicrobial Student: Janelle Tam School: Waterloo C.I.

## Junior - Earth and Environmental Science

#### Pewter Medallion (080ESJR) Tectonic Plates

Student: Urvashi Shelke School: Laurelwood P.S.

# Intermediate - Earth and Environmental Science

#### Silver Medallion (\$60 cash)

(064ESIN) Tempermental Twister Student: Kate Carter School: St. John's-Kilmarnock School

## **Junior - Engineering**

## **Pewter Medallion**

- (123NGJR) Can we make a water resistant sock ? Students: Amy Shaw , Christina Piruchta School: St. Agnes C.S.
- (047NGJR) Evaporation Energy Student: Adam Hellinga School: Guelph Community Christian School
- (039NGJR) Home Automation System Students: Dakota Leggett , Trevor Eady School: Individual Entry

(023NGJR) Efficient Water Boiling Appliances Student: Davis Zink School: Northlake Woods P.S.

- (013NGJR) Cell Phone Radiation Student: Katy Qi School: John McCrae P.S.
- (186NGJR) Deadliest Weapon Students: Jacob Isaac, Evan Rolleman School: Forest Glen P.S.

#### Bronze Medallion (\$30 cash)

(003NGJR) Perfect Pedi Students: Paula Bromby , Leanne Matthews School: St. John Brebeuf C.S. - Erin

(081NGJR) Reducing Light Pollution Student: Andy Skolseg School: John McCrae P.S.

(200NGJR) PLANT MAGNET Student: Nima Arefi School: Westheights P.S.

(019NGJR) Catchy Student: David Engel School: Westheights P.S.

(217NGJR) So Charge Me Maybe? Student: Emily Chambers School: Rockway Mennonite Collegiate

#### (071NGJR) Alpha Rex's Message Student: Lyndon Tang School: Laurelwood P.S.

Silver Medallion (\$40 cash) (149NGJR) Tubes! Water! Electricity! Student: David Thompson School: John McCrae P.S.

(215NGJR) What Angle Should You Be At? Students: Melanie Belzile, Emily Hawker School: Centennial P.S.

#### Gold Medallion (\$70 cash)

(127NGJR) En Garde! Student: Sherwood Marks School: Rockway Mennonite Collegiate

(168NGJR) GOSH MY HOUSE IS MOVING! Student: Nish Singh School: Centennial P.S.

## Intermediate - Engineering

#### Bronze Medallion (\$40 cash)

(027NGIN) Elmaglinator Student: Lyndsey Johnston School: St. John's-Kilmarnock School

(161NGIN) What a Drag Student: Marcus Engel School: St. John's-Kilmarnock School

#### Silver Medallion (\$60 cash)

(171NGIN) The Power of Heat Student: Erika McAndrews School: St. John's-Kilmarnock School

## **Senior - Engineering**

## Bronze Medallion (\$40 cash)

(207NGSN) The Effect of Additives on Ethanol Fuel Student: Darshan Parmar School: Cameron Heights C.I.

## Silver Medallion (\$60 cash)

(153NGSN) Zeolites: Nature's Solution to Airborne Pollutants Students: Chris Williams, Charles Zhao School: Centennial C. & V.I.

## Gold Medallion (\$100 cash)

(191NGSN) Rigid and Soft body Simulation in N-Dimensions Student: Jake Bian School: Individual Entry

## **Junior - Life Science**

## **Pewter Medallion**

- (112LSJR) The effects of electrical radiation on plants Student: Isha Govind School: Edna Staebler P.S.
- (100LSJR) Questions versus Statements Student: Ioana David School: Centennial P.S. - Congregated Class
- (164LSJR) Rumor Has It Students: Sophia Briskin , Katie McLay School: Centennial P.S.
- (076LSJR) The Effect of Powdered Detergent on Plant Growth Student: Tabassum Khan School: Edna Staebler P.S.

(030LSJR) Exploring Inattentional Blindness Students: James Dorfman, Jonathan Tjong School: Centennial P.S.

- (082LSJR) Who Is Better at Spatial Abilities, Boys or Girls? Student: Samantha Cranston School: Centennial P.S.
- (148LSJR) Proxemics Students: Sydney Buck , Meghan Henderson School: Centennial P.S.
- (074LSJR) The Beanstalk Race Student: Silvia George School: Centennial P.S.
- (102LSJR) Reflexes of the Sexes Student: Jillian Hofstee School: Guelph Community Christian School
- (194LSJR) Whether the Weather Affects Migraine Student: Abby Saunders School: K.W. Bilingual School
- (020LSJR) Suck it up Students: Nicole Meyer , Charlotte Lauryssen School: St. John Brebeuf C.S. - Erin
- (044LSJR) Be Active Be Smart Student: Katarina Sacka School: Hespeler P.S.
- (208LSJR) Smartcebo Student: Amanda Hope School: Hespeler P.S.

(142LSJR) Project Plant Student: Ben Hetherington School: Hespeler P.S.

- (122LSJR) To seed or not to seed? That is the question! Student: Mia Falak School: John McCrae P.S.
- (190LSJR) Which, out of two food kinds, does my dog prefer? Student: Jacob Harvey School: John McCrae P.S.
- (124LSJR) Did you hear that? Students: Narges Jamali, Avery McCorkindale School: Centennial P.S.
- (012LSJR) Berry Fresh Student: Anna Whitehead School: Forest Glen P.S.
- (046LSJR) Beat to the Beat Students: Garrett Reitzel , Johnny DeGanis School: St. Jacobs P.S.

#### Bronze Medallion (\$30 cash)

(212LSJR) The Prisoner's Dilemma Students: Logan Ingalls, Kyle Davis School: Centennial P.S. - Congregated Class

(198LSJR) How distractions affect different learning styles Students: Zach Chapman, Ethan Guo School: Centennial P.S. - Congregated Class

(060LSJR) Greywater: Can Plants Tolerate It? Student: Matea Ceric School: Centennial P.S. (002LSJR) Can You Hear It or Not? Student: Matthew Amer-Forster School: St. John's-Kilmarnock School

- (006LSJR) Brain Beats Student: Julia Zinn School: Centennial P.S.
- (008LSJR) Can You See It Now? Students: Cali Robbins , Halle Kleine School: Forest Glen P.S.
- (222LSJR) What Do Your Plants Listen To? Student: Bryce Hanna School: Hespeler P.S.
- (034LSJR) Corpus Callosum Comparison Student: Thomas Watson School: John McCrae P.S.
- (052LSJR) Following Food or Pheromones? Student: Nathanael Willms School: John McCrae P.S.
- (218LSJR) Optical Illusions Students: Tanisha Hasan , Jessica Zhang School: Laurelwood P.S.
- (054LSJR) pH Levels of Various Diets Student: Tanaeem Rehman School: Forest Glen P.S.
- (026LSJR) Feelin' Hot, Hot, Hot Students: Luke Donovan, Michael Emiljanowicz School: Christ The King C.S.

#### Silver Medallion (\$40 cash)

(108LSJR) Effect of Ambient Colours on Risky Decision Making Student: Eric Kim School: Centennial P.S. - Congregated Class

- (160LSJR) What's On Your Hands Student: Lydia Choong School: Guelph Community Christian School
- (090LSJR) Carnation Sensation Students: Silvia Blanco, Roseline Yang School: Centennial P.S.
- (024LSJR) Cockroaches on Drugs Student: Ethan Kroetsch School: John McCrae P.S.
- (110LSJR) Plant Hydration Student: Taylor Okum School: Forest Glen P.S.
- (004LSJR) Brain Vs. Brain Student: Aastha Goyal School: Westheights P.S.
- (146LSJR) Are You Paying Attention?! Students: Eric Schiebel, Kane Nguyen School: Westheights P.S.
- (098LSJR) Write Neat Look Smart Student: Idris Farid School: Westheights P.S.

(018LSJR) Are Fingerprint Patterns Inherited Student: Saman Rashid School: Islamic School Of Cambridge (180LSJR) The Stroop Effect Student: Meghan Hanton-Fong School: K.W. Bilingual School

- (118LSJR) You Are What You Eat, So Know What You Eat Student: Adam Beaupre School: Westheights P.S.
- (132LSJR) Work That Brain Students: Marlee Allen, Teagan Thomas School: Westheights P.S.
- (220LSJR) Eye Black! Students: Alain Manjgo , Sean Barbato School: Westheights P.S.

#### Gold Medallion (\$70 cash)

(156LSJR) Subliminal Stimuli-Can you be subliminally misled? Student: Nikhil Patil School: Centennial P.S. - Congregated Class

- (144LSJR) The Effects of Obesity on Nocturnal Blood Pressure Student: Arjun Pandey School: K.W. Bilingual School
- (210LSJR) Who's Smarter? Students: Rachel Sargeson, Vivian Versluis School: Westheights P.S.
- (078LSJR) PERFORMANCE ENHANCING LUNGS! Student: Jill Jackson School: Northlake Woods P.S.
- (182LSJR) Forget This! Students: Katrina Watson , Meghan MacIsaac School: Westheights P.S.

(040LSJR) Effect of Population Size on Economic Systems Student: Isaac Morrison School: Centennial P.S. - Congregated Class

## **Intermediate - Life Science**

## **Pewter Medallion**

(206LSIN) Think Pink Students: Lydia Kuhl , Kaitlyn Leis School: Waterloo C.I.

(116LSIN) Audio Retention in Grade Ten Academic Students Students: Wennie Zhang , Melinda Zhou School: Waterloo C.I.

(130LSIN) Musical Minds Students: Gavin Gao, Amitan Pope School: Waterloo C.I.

(188LSIN) The Effect of Cell Phone Use on Human Memory Recal Students: Austin Jabari , Keyan Raahemifar School: Waterloo C.I.

## Bronze Medallion (\$40 cash)

(158LSIN) Rorschach Attack Students: Sonja Katanic , Laura Sulston School: Waterloo C.I.

(022LSIN) External Factors Affecting Blood Glucose Readings Student: Amelia Danzinger School: Waterloo C.I.

## Silver Medallion (\$60 cash)

(104LSIN) Factors Affecting Enzyme Kinetics Student: Veeral Desai School: Cameron Heights C.I.

## Gold Medallion (\$100 cash)

(058LSIN) Improving Long-term Compliance to Life-saving Meds Student: Avinash Pandey School: Waterloo C.I.

## Senior - Life Science

## Gold Medallion (\$100 cash)

(196LSSN) The Effects of Hypoxia on Embryonic Development Students: Kelly Dong , Maximilian Reed School: Centennial C. & V.I.

#### (010LSSN) Antioxidants Can Be Very Bad Student: Linda Lu School: Waterloo C.I.

(126LSSN) Can You See the Light? Student: Jamie Kim School: St. John's-Kilmarnock School

(204LSSN) Who Domesticates Whom? Student: Saarah Hussain School: St. John's-Kilmarnock School

## Junior - Physical and Mathematical Science

## **Pewter Medallion**

(203PSJR) Physics of Sound : Constrained Layer Daming Student: Max Cohen School: Centennial P.S. - Congregated Class

(005PSJR) Cold Pack Chemistry Student: Ben Klassen School: Guelph Community Christian School (105PSJR) Bone Breaker Student: Maja Brajkovich School: St. John Brebeuf C.S. - Erin

- (015PSJR) Fruity Preservatives Student: Edward Southward School: St. John's-Kilmarnock School
- (073PSJR) Fuel Efficiency Factors Student: Emma Blakemore School: Guelph Community Christian School
- (099PSJR) Hot Topic Students: Lindsey Patterson, Victoria Marshall School: St. John Brebeuf C.S. - Erin
- (157PSJR) Which Wax? Students: Riley Sauer , Jakob VandeSande School: Rockway Mennonite Collegiate
- (055PSJR) Why is the Titanic Still There? Student: Grant Meger School: Rockway Mennonite Collegiate
- (033PSJR) IRON OUT! Student: Zak Lienhart School: St. Jacobs P.S.
- (089PSJR) The Exothermic Theory Student: Chris Charman School: Hespeler P.S.
- (185PSJR) True Colour (a paint comparison) Students: Eula Carreon, Zoe Hoyte School: Hespeler P.S.

(111PSJR) Electric Sencor Student: Aaron Cooper School: Hespeler P.S.

- (053PSJR) Magnetic Coin Pull Student: Prateek Bansal School: Westheights P.S.
- (137PSJR) LED Wavelengths! Students: Yousuf Ramahi, Scott Parker School: Centennial P.S.
- (135PSJR) Traveling Down Young's Double Slit Memory Lane Student: Linda (Jingwen) Mao School: Edna Staebler P.S.
- (134PSJR) Slapshot Students: Jackson Gerber , Greg Yeoman School: Forest Glen P.S.
- (067PSJR) Stretch it to the limit Student: Michael Dawe School: Westheights P.S.
- (075PSJR) Apple Mummy Students: Rachel Raymond , Chelsea Moura School: Christ The King C.S.
- (103PSJR) Which Brand of AA Batteries Lasts The Longest? Student: Alex Gruhl School: Forest Glen P.S.

#### Bronze Medallion (\$30 cash)

(195PSJR) Two Anti-Bacterial Agents and Bacterial Growth Students: Noah Meyer, Rylan Ledgley School: Centennial P.S. (169PSJR) Which Type of Baking Powder Raises a Cake More?Student: Tarannum Khan School: Edna Staebler P.S.

- (097PSJR) Fizz Pop Ouch Students: Megan Kish , Megan Shaw School: Centennial P.S.
- (113PSJR) Rock, Paper......Plastic? Student: Jessica Bronsveld School: Guelph Community Christian School
- (129PSJR) Catastrophic Craters Students: Maddie MacLean, Miranda Elliott School: St. Jacobs P.S.
- (063PSJR) fRUSTration Student: Nate Albrecht School: Hespeler P.S.
- (079PSJR) Don't Grow in there! Exploring Bacteria and Filter Student: Rita Zamzam School: Centennial P.S. - Congregated Class
- (115PSJR) Which Solution Conducts the Most Electricity? Student: Muhammed Chaudhry School: Islamic School Of Cambridge
- (059PSJR) Flex It Students: Zach Mark , Matt Morrisey School: Forest Glen P.S.
- (066PSJR) Paper Towels Student: Neil Bilton School: Taylor Evans P.S.

(083PSJR) Converting Chemicals Students: Katie Kroeze, Sarah Griffith School: Northlake Woods P.S.

(205PSJR) Properties Of Oobleck Students: Christina Ma, Alana Machaffie School: Northlake Woods P.S.

#### Silver Medallion (\$40 cash)

(141PSJR) Uphill rollers Student: Neien Wei School: Edna Staebler P.S.

- (061PSJR) Extraordinary Dairy Student: Antonia Levak School: Guelph Community Christian School
- (025PSJR) Is Coral the Truffula Tree of the ocean? Students: Charlotte Clifford , Marina Grekoff-Hunt School: Individual Entry
- (117PSJR) The Energy Bracelet: A scam or a miracle Student: Lucy Matulis School: John McCrae P.S.
- (093PSJR) That's Gotta Hurt! Student: Owen LeBlanc School: John McCrae P.S.
- (211PSJR) Are My Hands Still Dirty? I Just Washed... Students: Jessica Wassens , Libby Alger School: John McCrae P.S.
- (183PSJR) What's On That Spout ? Student: Seungmin Yu School: John McCrae P.S.

(021PSJR) Comparing Test Analysis Methods Student: Alana Eliasmith School: Centennial P.S. - Congregated Class

- (201PSJR) Toilet Paper: Mush When You Flush Students: Rachel Kehl , Josilin Timmons School: Forest Glen P.S.
- (107PSJR) The Effects of Common Beverages on Tooth Structure Students: Juliana Marini , Sofya Hudson School: Rockway Mennonite Collegiate
- (163PSJR) Egg Elimination Students: Sierra Erb , Laila Ghrear School: Westheights P.S.
- (167PSJR) What's Lurking Inside Walls: Mould On Insulation Student: Spencer Gerwin School: John McCrae P.S.
- (119PSJR) Equine Equitation Students: Bethany Baltus , Caitlyn Hillar School: Forest Glen P.S.

## Gold Medallion (\$70 cash)

- (139PSJR) Elasticity of a Bouncing Ball Student: Hannah Judelson-Kelly School: Centennial P.S. - Congregated Class
- (173PSJR) Macroscopic Efficiency of Quantum Mechanics in Oil Student: John Fish School: Centennial P.S. - Congregated Class
- (001PSJR) Electromagnetism And Conductivity Students: Zachary Trefler, Alexander Kitaev School: Centennial P.S. - Congregated Class

(037PSJR) Ammonia Beware! Student: Rachel Ropp School: Rockway Mennonite Collegiate

- (087PSJR) Which Oil Is Poppin'? Student: Michelle McLeod School: Westheights P.S.
- (038PSJR) Marble Madness! Student: Jayden Lam School: Westheights P.S.
- (145PSJR) Is Expensive Shampoo Needed to Keep Red Highlights Students: Joselyn Polanic, Emily Simmons School: Forest Glen P.S.

# Intermediate - Physical and Mathematical Science

#### **Pewter Medallion**

- (165PSIN) Foot Length... Height... Golden Ratio? Students: Emily Campbell , Taylor Heimbecker School: Cameron Heights C.I.
- (151PSIN) Race for Relief Students: Zarina Mamoukhova , Jasmine Starks School: Waterloo C.I.

## Silver Medallion (\$60 cash)

- (069PSIN) Newton's Problem Student: Michael O'Donovan School: St. John's-Kilmarnock School
- (221PSIN) Using Waste Liquids to Produce Electricity Students: Erik Bumbulis , Yota Ohashi School: Waterloo C.I.

#### Gold Medallion (\$100 cash)

(177PSIN) War on Weeds Student: Anne Vandrus School: St. John's-Kilmarnock School

- (213PSIN) What Do The Ears Hear? Student: Laurel Buchanan School: St. John's-Kilmarnock School
- (043PSIN) Fuel of the Future Student: Emily Newton School: St. John's-Kilmarnock School

(065PSIN) Soundmosis - The effects of sound on osmosis Student: George Utsin School: Waterloo C.I.

## **Senior - Physical and Mathematical Science**

### **Pewter Medallion**

(199PSSN) A Charged Debate: Natural vs. Artificial Electroly Student: Ross Cunningham School: St. John's-Kilmarnock School

## Bronze Medallion (\$40 cash)

(143PSSN) Phosphorus and Calcium: The Lifelong Balancing Act Student: Tyler Watson School: St. John's-Kilmarnock School

## Silver Medallion (\$60 cash)

(101PSSN) Frontiers of Our Universe: Quasar Spectra Students: Kevin Dong , Derek Holzscherer School: Waterloo C.I.

#### Gold Medallion (\$100 cash)

(223PSSN) Recycled Energy: Firearm Muzzle Heat Student: Nicholas Svaikauskas School: Individual Entry

(029PSSN) Computational Analysis of Halo-Organic Compounds Students: Alex Inglis , Bailey Robison School: Centennial C. & V.I.

(175PSSN) The Spots in Lots Students: Daniel Penner , Aaron Buckley School: Waterloo C.I.

## **Best in Division - Biotechnology**

#### Plaque

(070BTJR) Plants That Bug Superbugs Student: Emma Hoover School: John McCrae P.S.

## Best in Division - Earth and Environmental Science

## Plaque

(064ESIN) Tempermental Twister Student: Kate Carter School: St. John's-Kilmarnock School

## **Best in Division - Engineering**

#### Plaque

(168NGJR) GOSH MY HOUSE IS MOVING! Student: Nish Singh School: Centennial P.S.

## **Best in Division - Life Science**

## Plaque

(156LSJR) Subliminal Stimuli-Can you be subliminally misled? Student: Nikhil Patil School: Centennial P.S. - Congregated Class

# **Best in Division - Physical and Mathematical Science**

## Plaque

(175PSSN) The Spots in Lots Students: Daniel Penner, Aaron Buckley School: Waterloo C.I.

## **2013 Special Award Winners**

## **Best Written Report**

## Junior - Trophy

(195PSJR) Two Anti-Bacterial Agents and Bacterial Growth Students: Noah Meyer, Rylan Ledgley School: Centennial P.S.

## **Intermediate - Trophy**

(171NGIN) The Power of Heat Student: Erika McAndrews School: St. John's-Kilmarnock School

## Senior - Trophy

(042BTSN) Can Bacteriophage Preserve Meat Student: Mac Billings School: Centennial C. & V.I.

# Stephen J. Little Award for Science Presentation

## **Trophy and Chapters Gift Card**

(177PSIN) War on Weeds Student: Anne Vandrus School: St. John's-Kilmarnock School

## Purdue Pharma Canada Award

## Cash and Certificate (\$50 cash)

(062BTSN) Fluorescent Protein UV Protection Students: Tina Tang , Anisa Morava School: Centennial C. & V.I.

## Sir Isaac Newton Award - Junior

## **Chapters Gift Certificate**

(139PSJR) Elasticity of a Bouncing Ball Student: Hannah Judelson-Kelly School: Centennial P.S. - Congregated Class

## Sir Isaac Newton Award - Intermediate

## **Chapters Gift Certificate**

(177PSIN) War on Weeds Student: Anne Vandrus School: St. John's-Kilmarnock School

## Sir Isaac Newton Award - Senior

## **Chapters Gift Certificate**

(175PSSN) The Spots in Lots Students: Daniel Penner, Aaron Buckley School: Waterloo C.I.

## Chem 13 Award

One year subscription to Scientific American or another scientific journal deemed suitable for the level of the recipient.

(037PSJR) Ammonia Beware! Student: Rachel Ropp School: Rockway Mennonite Collegiate

(104LSIN) Factors Affecting Enzyme Kinetics Student: Veeral Desai School: Cameron Heights C.I.

## **2013 Other Award Winners**

## **Google Young Researcher Award**

(\$500 cash)

(196LSSN) The Effects of Hypoxia on Embryonic Development Students: Kelly Dong , Maximilian Reed School: Centennial C. & V.I.

## **Catalyst Leadership Award**

## Top engineering project which demonstrates creativity and leadership (\$600 scholarship)

(161NGIN) What a Drag Student: Marcus Engel School: St. John's-Kilmarnock School

## **Engineering Science Quest Award**

#### Summer science camp (\$300 scholarship) (168NGJR) GOSH MY HOUSE IS MOVING! Student: Nish Singh School: Centennial P.S.

## **REAL Summer Scholarship**

### Summer research experience (\$2800 scholarship)

(101PSSN) Frontiers of Our Universe: Quasar Spectra Students: Kevin Dong , Derek Holzscherer School: Waterloo C.I.

## 2013 Grand Award Winners

## Award of Merit

## All expense paid trip to the Canada-Wide Science Fair

(156LSJR) Subliminal Stimuli-Can you be subliminally misled? Student: Nikhil Patil School: Centennial P.S. - Congregated Class

(196LSSN) The Effects of Hypoxia on Embryonic Development Students: Kelly Dong , Maximilian Reed School: Centennial C. & V.I.

#### (010LSSN) Antioxidants Can Be Very Bad Student: Linda Lu School: Waterloo C.I.

- (127NGJR) En Garde! Student: Sherwood Marks School: Rockway Mennonite Collegiate
- (175PSSN) The Spots in Lots Students: Daniel Penner , Aaron Buckley School: Waterloo C.I.
- (070BTJR) Plants That Bug Superbugs Student: Emma Hoover School: John McCrae P.S.

#### (168NGJR) GOSH MY HOUSE IS MOVING! Student: Nish Singh School: Centennial P.S.

## The Award of Excellence

#### Cash, Certificate, Medallion and Admission Scholarship to University of Ottawa (\$250 cash / \$1000 scholarship)

(156LSJR) Subliminal Stimuli-Can you be subliminally misled? Student: Nikhil Patil School: Centennial P.S. - Congregated Class