S C I E N C E RENDEZVOUS 2018 / 2019 ANNUAL REPORT





May 11, 2019, Science Rendezvous (SR) challenged 215,000 attendees to STEAM Big! at 25 free science festivals across Canada. SR events, hosted at leading research institutes across the country, invite the public to come get their hands on science, technology, engineering and math (STEM), experience the rush of creation, and have an opportunity to play and learn directly from Canada's top researchers.

2019 marked the 12th year for the grassroots event that is uniquely produced by scientists and those who do research for a living. Nearly 6,000 volunteers across the country were made up of scientists, engineers, mathematicians, technologists, innovators, and the next generation of graduate and undergraduate students. Together, these volunteers invested nearly 250,000 hours to share their passion for STEM with public.

SR creates a wonderful platform to showcase the world leading research being done at Canada's leading research institutions, and provides an opportunity to strengthen the science promotion activities within their surrounding communities. Over 285 partners from various college and university departments, as well as community STEM promoters and advocates, work in close collaboration to create these incredible events.

In 2019, the theme STEAM Big!, additionally challenged event sites to dream big, insert Art into the traditional STEM disciplines, and showcase science in a whole new and exciting way. SR events are a true rendezvous of STEAM, and we have earned our place as Canada's national science festival!

3



POWERED BY NSERC

A CELEBRATION OF DISCOVERY & INNOVATION

MAY 4 TO MAY 19, 2019

POWERED BY NSERC

Science Rendezvous is the marquee festival event of "Science Odyssey", the Natural Sciences and Engineering Research Council of Canada's (NSERC) national science and technology week. SR 2019 served as the largest one-day free science festival to invite the public to interact with NSERC funded researchers during Science Odyssey.

NSERC's partnership with SR provided administrative, promotional and technical support. This support to SR national was an incredible boost to all affiliate event sites and the not-for-profit organization, and will greatly enhance SR's national impact now and in years to come.

We are so happy to share in the great success of Science Odyssey and are looking forward to continuing to grow both events for 2020.

WHO, WHAT, WHERE?

Science Rendezvous is unique as the only event of its kind to invite the public to the places where innovation and discovery happens, to learn about current Canadian research and achievements directly from the scientists and other STEM professionals themselves.

SR events are often started by a handful of passionate researchers at a college or university looking to engage more directly and share their passion for what they do with the public. Through Science Rendezvous they find support, programming, a collaborative network of like-minded passionate scientists and researchers, and a large enough voice to reach beyond the typical science promotion audience.

Garnering institutional support and intentionally developing teams composed of the most passionate STEM advocates of all genders, races, religions and sexual orientations, SR provides a platform for the highest impact, one day, STEM event in the country. Who can do science? We aim to not only "say" anyone can do science, but also "show" that anyone can do science.

By inviting attendees to "get their hands on science" directly, and intentionally developing diverse volunteer teams, we hope that attendees are able to find someone they can relate to and see themselves in the role of a scientist. We embrace the philosophy expressed by the Minister of Science and Sport, The Honourable Kristy Duncan, "if you see her, you can be her" (@KirstyDuncanMP, JUNE 19, 2018, 5:25 PM).



ABOVE: Credit — Ben Ouyang

SR strives to tackle the very difficult science communication question, "what is science". What do we mean when we say, "science says...", or "because science". At Science Rendezvous we strive to demonstrate that "science" is not an answer. Science is not a noun it is a verb. It is a process of continual questioning, rigorous testing and continuous reshaping as more and more research occurs. Science can and is the best way to predict an outcome or result. Science works, but it is not final. Scientists often commit to very small narrow fields of study, and become experts in their field. This does not mean that they have an all encompassing understanding of "science". Science is collaborative as no one person can be an expert in all things science. Most importantly, science is fun and scientists at SR love to share their passion and expertise.

Hosting SR events at universities and colleges is another important and unique feature of Science Rendezvous. It provides an opportunity for the public to feel welcome in these spaces of learning, and provides an opportunity to see where science happens. While research institutions often host free and open events, activities and lecture series, feedback each year consistently shows that we are reaching a different audience than would normally attend these other outreach initiatives.

SR attendees often have no affiliation with the institution, no background in STEM, and have not attended another event on campus during the year. Being present on campus, along with lab tours, participating in demonstrations and interacting with researchers in all STEM fields, goes a long way to ensure attendees feel welcome and included in the places science and research happen every day.

CORE PROGRAMMING

STUDENT EXECUTIVE TEAM

Science Rendezvous has developed programming to develop student executive teams who are capable of coordinating an SR event with limited campus and administrative support. Working collaboratively as a team and with the national SR steering committee these student executive teams are able to take the lead on the event planning requirements of Science Rendezvous. Roles and responsibilities for each member of the executive team are clearly defined and students are given an opportunity to gain valuable project management experience for career development.

This relieves the burden on the administration and faculty and provides the students with an opportunity to build a strong community with other passionate and involved STEM students from their institution. Feedback from student executive team members consistently shows SR executive team experiences to be hugely beneficial for student's mental health and overall feelings of community and well-being.

Additionally, the national SR network and collaborative event coordinating model ensures that event planning practices continue to improve each year. Executive teams feel supported and are able to develop a sense of community both institutionally and nationally. Feedback each year shows that involvement with Science Rendezvous inspires our student volunteers to continue pursuing their higher education aspirations.

RENDEZVOUS

SCIENCE CARNIVAL

The Science Carnival aims to create the most fun with STEM possible. It is an outdoor (or indoor) carnival atmosphere with large-scale demonstrations, stage shows, science buskers and 1,000s of hands on activities.

Often food trucks, and other fun foods are brought to the science carnival, and can even become a fun and interactive demonstration on their own (the science of cotton candy, and liquid nitrogen ice cream are always fan favourites!). The Science Carnival creates excitement and fosters a sense of play that we want people to remember long after the day is done.

INVENTours

INVENTours opens the door to over \$5 billion dollars of premier laboratories to the public so they can experience a behind-the-scenes look into the career of a scientist.

Organized by the scientists themselves, these tours allow participants to tour labs and to see and hear about current research directly from the researcher. Scientists can develop the tour specifically geared towards adults if they choose, and can require registration before hand to limit capacity. This allows scientists to communicate their research at the appropriate level for all participants directly.

SCIENCE CHASE

Based on the television series "The Amazing Race", the Science Chase is a super popular scavenger huntstyle challenge that engages participants, and helps direct them around the event site. Science Chase takes advantage of the recent geocaching and urban adventure racing trends to engage participants in STEM-based challenges while moving through the challenge course.

Science Chase is a great program designed to encourage participants to travel to various activity stations throughout the event, where individuals learn about various scientific topics and can complete activities in the Science Chase Passport for a chance to win.

CANADA WIDE EXPERIMENT and NORTHERN PROGRAM

In 2017, the Canada Wide Experiment (CWE) was developed in partnership with indigenous community leaders and SR's Northern Program. It is a water quality assessment kit that travels across Canada throughout the year. The CWE is a self-contained experiment kit that provides an educational experience that is easily transportable to remote communities. Local youth and schools receive the kit with all the necessary materials

and equipment to perform water experiments that allow teachers and community leaders to provide hands-on water science activities, and connect these activities with Traditional Knowledge.

> In 2018 and 2019, the CWE travelled across the arctic and through remote communities. It was used at the Durham Children's Watershed Festival, the National First Nations and Inuit Youth Science camp, along with many other sites in Manitoba and British Columbia. Over 4,500 youth in remote and indigenous communities have participated since the launch of these programs. In 2020, the CWE is being redeveloped, stay tuned!

INNOVATION SHOWCASE

The Science Rendezvous Innovation Showcase launched in 2017 in partnership with NSERC, as an exciting way to showcase current Canadian research and industrial partnerships to the general public. In 2018 and 2019, Science Rendezvous expanded the program to reach new partners and continue to demonstrate the exciting innovation happening across the country. Showcase stories are shared through social media and are included at various Science Rendezvous event sites.

SCHOOL DAYS

Science Rendezvous recognizes that even as a free event, there are invisible barriers that prevent many of Canada's youth from accessing SR events. School Day programs were initially developed at the SR Winnipeg site to reach directly to youth at schools from underprivileged and remote communities and literally bring them to SR. This program has been shared

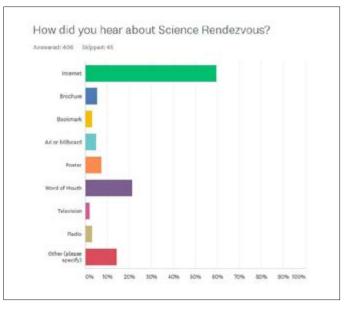
nationally, and several other sites will be implementing School Days in 2020.



REACHING THE PUBLIC

Science Rendezvous' goal has always been to garner enough media buzz and attention to reach beyond the traditional scientific community to the general public. Therefore, a huge communication campaign is coordinated each year which includes printed promotional materials, outdoor advertising, and connecting to all major media outlets.

This year was one of the most successful years to date for SR's communications campaign. Over 88 million media impressions were generated for SR in 2019, and are detailed below by category.



PRINTED PROMOTIONAL MATERIALS

Science Rendezvous designed and localized over 100,000 pieces of printed promotional items including bookmarks, brochures, and posters. This year a teacher package was created for grades K-12 to encourage teachers and schools to promote their local SR events. Affiliate sites were given the opportunity to customize,



```
ABOVE: Credit — Garrett Eliott
```

and place an unlimited print order to help spread awareness of their events in their local communities. Impressions and impact from this is difficult to measure and thus are not included in our totals.

OUTDOOR ADVERTISING

Science Rendezvous creates an outdoor advertising campaign that includes billboards, transit ads, and paid print advertisements. In 2019, 36 installations with Pattison Outdoor Advertising were distributed across the country, and had third-party verified circulation of over 18 Million.

BROADCAST

Science Rendezvous national worked hard to get broadcast coverage for event sites across the country. The SR team worked closely with event planners and affiliate institutions communications teams to maximize quality broadcast appearances. Breakfast television appearances were booked in nearly all locations, spots on TVO Kids were arranged, pre-event and event day News pick-ups (Global News, CTV News, CBC Tonight) at most major event sites, and radio interviews and event plugs went out across the country.

Event sites were all well represented and had ample opportunity to reach people through broadcast in 2019. Together there were 162 broadcast pick-ups leading up to and on the event day from major television and radio stations. Although we are unable to get exact third party estimates for reach numbers, Meltwater estimates a potential reach for this to be around 5 Million. Feedback on event day continues to show that



broadcast is very valuable in contributing to public awareness of these amazing FREE events.

TRADITIONAL NEWS SOURCES

Newspaper articles and online newspaper posts totalled 99 articles in the weeks leading up to and following SR in 2019.

Science Rendezvous was represented in most major news sources in Canada, including The Free Press, The Globe and Mail, The Star, National Post, CBC online, and many local and campus newspapers.

The potential circulation for traditional news sources in 2019, was over 51 Million.



ABOVE TOP / ABOVE LOWER: Credit — Kira Koop



ABOVE: Credit — Garrett Eliott

SOCIAL MEDIA

Science Rendezvous had it largest social media campaign to date. The conversation about the national festival was overwhelmingly positive across all social media platforms. Affiliate sites, participating partners, bloggers, journalists, and science promoters everywhere got behind Science Rendezvous and helped spread and share the details of the national festival across Canada and throughout the world.

In 2019, "Science Rendezvous", @sci_rendezvous, and #SciRen were included in 5065 posts on facebook (and Instagram), Youtube, and Twitter, more than doubling the 2121 posts done in 2018. The potential reach number of social media impressions was over 13 Million.

Science Odyssey during that period there were 7696 posts on all social platforms from the thousands of partners participating in Science Odyssey. Thus, SR contributes to more than half the posts for all of Science Odyssey demonstrating the enormous influence Science Rendezvous affiliates have in promoting both Science Rendezvous and Science Odyssey events.

Reach numbers are third party verified, and links and clippings are available. Connect with the Executive Director at **kathleen.miller@sciencerendezvous.org** for more information.

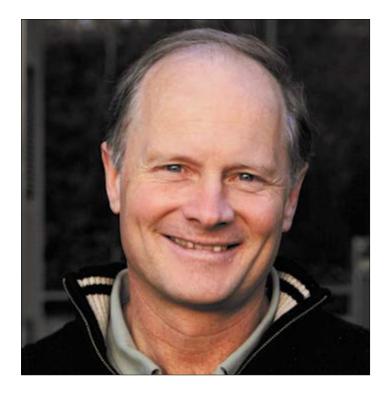


MESSAGE FROM THE CHAIR

STEAM Big! What an exciting year to be a part of Science Rendezvous (SR). First, let me thank all of you for your courage and enthusiasm. You were challenged to STEAM Big! this year, and you certainly did just that.

Dinosaurs, fireworks, astronauts, explosive stage shows, and new and exciting STEAM demonstrations and collaborations across the country. Your passion and dedication to promoting the importance of science to the general public is extraordinary and we are so lucky to have you as a part of our team.

We all share the view that science is an essential component to a civil society. We need to ensure that people are able to continue to



think critically about the often now confusing flurry of information we are all bombarded with on a daily basis. Who would ever believe we live in an era where the best marketing can create "truth", and that there is a resurgence of people who believe the Earth is flat. We need science more than ever to ensure people can learn how to process information and make informed decisions.

We need people to be curious, and driven to learn. If we wish to safeguard our planet we need people to develop a lifelong love of nature and wonder about the world. We need to be in awe of its beauty. Science Rendezvous is a great platform for this to happen, to connect with people directly, and share our passion for what we do as researchers.

SR's first event was in 2008, in which we had approximately 15,000 attendees at 4 sites with only marginal support from the institutions involved – until they saw the level of interest of the general public and the degree of volunteerism and community spirit SR instilled in the researchers and students. We have now grown to over

25 institutions with over 350 events happening all across the country. The whole country is coming together to celebrate science with last year's event drawing again over 215,000 attendees and nearly 6,000 volunteers.

By continuing to partner with NSERC, we have greatly extended our impact. Science Rendezvous is now the marquee event of NSERC's "Science Odyssey", and is seen as a national priority to raise scientific literacy. NSERC continues to be an important partner for SR, and we look forward to continuing to grow the impact for both events.

Science Rendezvous is created by researchers for researchers and as such is the only festival of its kind. Reaching beyond the typical science outreach community SR creates a national platform for public engagement directly with scientists through hands-on activities, interactive demonstrations, and explosive experiments. We hope to light the spark of curiosity and create a lasting interest in science, and excitement for the future.

Science Rendezvous has exceeded all expectations once again, and we cannot wait to do it all again next year!

JoyAl

R. J. DWAYNE MILLER, FRSC (Fellow of the Royal Society of Canada) Director of Atomically Resolved Dynamics The Max Planck Institute for the Structure and Dynamics of Matter / Hamburg Chair Science Rendezvous



BOARD OF DIRECTORS

PROF. R. J. DWAYNE MILLER, FRSC, FCIC

Chair of Science Rendezvous Director of Atomically Resolved Dynamics, The Max Planck Institute for the Structure and Dynamics of Matter / Hamburg

DR. ELISSA M. STROME

Vice Chair of Science Rendezvous Executive Director, Pan-Canadian AI Strategy CIFAR

DR. JOANNA YU

Senior Project Manager BrainHealth Databank Initiative, Krembil Centre for Neuroinformatics, CAMH

DON ALDRIDGE

Executive Director, Centre for Advanced Computing Senior Advisor Advanced Computing and Data Analytics, Office of the VP (Research) Queen's University

MATTHEW MACKENZIE

Manager of Government and Community Relations Ontario Tech University

JULIE ANN MAY

President The Reddington Communications Company

ANGEL MORALES

Co-Founder Spotliite Inc.

DR. IMOGEN COE

Professor, Department of Chemistry & Biology Ryerson University

DR. TABITHA WOOD

Associate Dean of Science, Associate Professor Department of Chemistry University of Winnipeg



EXECUTIVE LEADERSHIP

KATIE MILLER

Executive Director kathleen.miller@sciencerendezvous.org

MEGHAN LYSKO

Director of Community Engagement and Strategic Initiatives meghan.lysko@sciencerendezvous.org

LAURA MORRIS

Media Relations laura.morris@sciencerendezvous.org

STEPHANIE DORNER

Media Officer info@sciencerendezvous.org

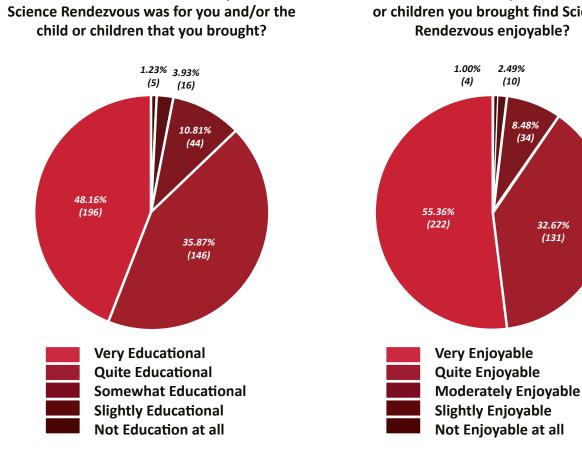


IMPACT: SURVEY RESULTS

Q. Overall, how educational do you think

Science Rendezvous has utilized an online survey at all event sites since 2012. The information gathered through this survey provides valuable information about how to improve SR's reach in the communities around event sites, the individuals who come to SR events, what events are doing well, and how SR can improve each year. In 2019, nearly 500 individuals took the time to fill out the Impact Survey, and there was representation from nearly all event sites. Below we review some of the important findings from the 2019 Impact survey.

Over 84% of attendees found Science Rendezvous to be guite or very educational and over 88% of attendees reported that their children found SR to be quite or very enjoyable.

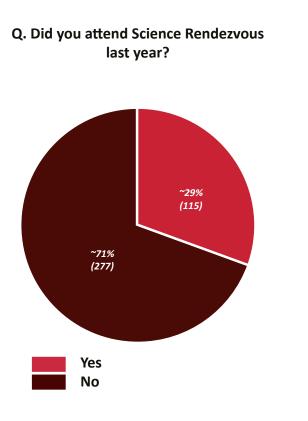


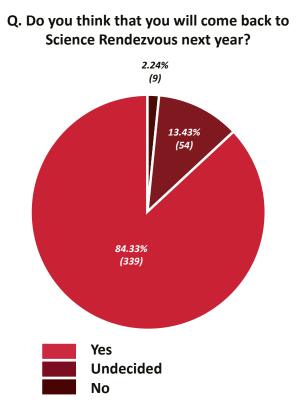
Q. To what extent did you and the child or children you brought find Science **Rendezvous enjoyable?**

Nearly 95% of student participants were happy with their institutions' Science Rendezvous event, and we know many students who attend an SR event, volunteer in the following year's event.



Over 70% of attendees did not attend the event the previous year, and over 84% plan to return to the next event again the following year, showing great promise for SR events to continue to grow each year.







STEAM Big! AWARD

FOR OUTSTANDING CONTRIBUTION TO SCIENCE RENDEZVOUS 2019

The 2019 STEAM Big Award recognizes the individuals and groups who make up the coordinating team responsible for creating an outstanding Science Rendezvous event. The coordinating team's vision and leadership were essential for developing a Science Rendezvous event that went above and beyond, creating a truly world class science festival that successfully ignites an interest in science, technology, engineering, art and math (STEAM), in their community.

The enormous effort and dedication required to bring such an event to fruition cannot be understated. Science Rendezvous is honoured to have such dedicated individuals and groups share our vision and mission. As a part of a collaborative national model, event coordinating teams across the country will benefit and grow from these exceptional coordinating teams.

Nominations for this first year were made by the executive branch of Science Rendezvous, and the winner was chosen by the board of directors and members of Science Rendezvous. Nominations for 2020 awards will be received until June 30, 2020.

For more information about this award winning event and the supporters, sponsors and volunteers who made it all possible, go to *sciencerendezvous.ca/hall_of_fame/2019-steam-big-award/*

2019 STEAM BIG AWARD WINNER SCIENCE RENDEZVOUS KINGSTON



Entering their 9th year, Science Rendezvous Kingston's team embraced the challenge to STEAM Big! in 2019. Coordinating one of the largest Science Rendezvous events in the country, Science Rendezvous Kingston is full of exciting, hands-on and interactive science, technology, engineering, art and math (STEAM) demonstrations that are run by enthusiastic STEAM champions, excited to share their passion.

In 2019, coordinators Lynda Colgan and Kim Garrett took this event to the next level, bringing in Dippy, a full size diplodocus fossil cast in partnership with Research Casting International (RCI), and Drew Feustel, the NASA astronaut, to inspire children of all ages to STEAM Big! at the Leon's Centre in Kingston. The excitement in the community for this event is contagious and the line-up to get into the event literally stretched around the block!

Thank you for being true leaders and a part of the Science Rendezvous community. We are looking forward to seeing what you will come up with for the 10th edition of Science Rendezvous Kingston in 2020!



AFFILIATE SITES

Science Rendezvous supports the efforts of 35 affiliate sites made up of Canada's top research institutions, industry and community partners. These affiliates share the belief that our voice is strongest together. The collaborative effort of sharing best practices, logistical coordination, marketing efforts and program development ensures that Science Rendezvous events continue to improve and reach farther into the general public each year. Together we are a true Science Rendezvous!

Ryerson University	University of Winnipeg	OCAD University
University of Toronto — St. George	York University	Ocean Tracking Network
University of Toronto —	CAN-BIND	STEM Minds
Scarborough	Kwantlen Polytechnic University	SuperNOVA at Dalhousie University
University of Toronto — Mississauga	Memorial University	The Toronto Zoo
University of Ontario Institute of	Sinai Health System	The University of British Columbia
Technology	Simon Fraser University	Bridgepoint Active Healthcare
Durham College	University of Guelph Humber	Aurora Research Institute
Let's Talk Science	Carleton University	University of Saskatchewan
Queen's University	Western University	Guelph University
University of Manitoba	George Brown College	
University of Windsor	Main Street Markham	



SPONSORS



23



WHAT PEOPLE ARE SAYING

"This is hands down the most fun, interactive and engaging free event we have ever attended. It really is for anyone who will allow themselves to be curious and have fun. We loved how literally every station allowed us to participate. I wish there had been something like this when I was growing up! Keep up the great work, we can't wait for next year!!!"

> "We had such a great time and were so impressed with how well the event was organized. There were so many interesting learning opportunities that we didn't even manage to get to every one. We participated in the bacteria workshop and my daughter was thrilled to be able to see a real lab and wore her lab coat around the rest of the day. We are so grateful to everyone who worked so hard to organize such a fun day and for all the enthusiastic and patient student volunteers. Thank you!"

"I was blown away for a free event! Very well organized and informative. The students/volunteers were extremely knowledgeable and able to speak/explain to children with excitement. I did find that 4hrs was not enough time....SO much to see and do! We will just have to come back next year to experience what we missed this year! Well done!"

> "It was utterly marvelous. So educational, exciting and an incredible array of stations from which to choose. Wonderful activities. Thanks for making it free of charge. It was a highlight of 2019. "

"My kids really enjoyed the "scavenger hunt" style setup and the activities at the different stations. From building a DNA strand from twizzlers and marshmallows to making ice cream with liquid nitrogen to watching a supercooled magnet float around a track and much more. They were amazed and awed! The experience really sparked their interest in science and the world around them. The questions keeping coming and I love it. Looking forward to this years experience with them."



WHERE PEOPLE & SCIENCE MEET

TOGETHER WE ARE INSPIRING THE NEXT GENERATION OF GREAT CANADIAN INNOVATORS AT SCIENCE RENDEZVOUS.

> SCIENCE ODYSSEY PRESENTS

> > SCIENCE RENDEZVOUS

SCIENCERENDEZVOUS.CA