



ANNUAL REPORT 2015

OUR MISSION

To educate, inspire, and evoke a sense of wonder about the Universe, our planet and space exploration

Message from the Leadership

Turning Points



*H.R. MacMillan Space Centre's Board or Directors' Chair
Matt Anthony enjoys the successes of 2015.*



*H.R. MacMillan Space Centre's Executive Director
Raylene M. Marchand reflects on 2015.*

In a very real way, this year was another year of turning points for the H.R. MacMillan Space Centre. 2015 represents the second full year of alignment with the strategic plan that was adopted in 2014. The Board and senior management recognized that, in order to be sustainable for the future and relevant to Vancouver's vibrant and dynamic demographics, the H.R. MacMillan Space Centre had to focus on our goals, strategies and corporate priorities in recognition that our strength comes from the connections and interactions between them, not from any single commitment.

The Board of Directors continues to focus on positioning the H.R. MacMillan Space Centre as a new kind of educational centre. We will provide new ways for Vancouverites and visitors to engage with our staff and to share stories that are relevant, meaningful and fun. We will continue to bring exciting and unparalleled experiences and serve as a hub for scientific, social, and cultural initiatives, a situation in which we are uniquely positioned to provide to our community.

Three principles are guiding our direction: business sustainability and growth, visitor experience, and community engagement and relevance. We are already seeing new excitement and interest around the Space Centre's programs and star theatre shows.

We had another stellar year: we welcomed a public attendance of 115,348 and 24,364 students visiting us; we launched two new planetarium star theatre shows "Realm of Light" and "Black Holes: The Other Side of Infinity," and our new adult-themed public programming Cosmic Nights. Both the new shows and new public programming proved to be fabulously successful. We also ran several popular events that not only helped to increase attendance but helped to attract new visitors who do not normally visit the Space Centre. We have initiated some modest changes to our exhibition gallery with more significant changes planned for 2016 and onward.

At the same time, the board and senior management team have been charting a course for financial sustainability and growth. We have reviewed our operations and made some difficult decisions in order to lay the foundation for a stronger and more nimble organization in 2016. We continued to prioritize upgrades to business-related infrastructure and systems, supporting process change and improvement that support our plan for our future growth and sustainability. One way we are doing that is looking to have operating reserves for future years for re-investment into our programs and services so we can continually strengthen our future position and organizational flexibility.

Message from the Leadership **Turning Points**

In addition, we focused on understanding our customers and continued to implement new research tools and gather customer-focused intelligence, leading toward expanded customer relationship management (CRM) capabilities into the future. We also dedicated time to ensuring our accessibility so that we may continue to offer a range of community access programs. That approach will make certain the Space Centre is accessible to individuals and communities who may not otherwise be able to afford to visit the Space Centre. We have done this through corporate support from Chevron for our portable planetarium program. We are pleased that Chevron continued their sponsorship into 2016 so we are able to deliver programming to communities across British Columbia. All of this means that we have begun to develop and cultivate our attendance base and have grown our audience diversity by expanding our programs and services. This contributes to achieving our vision, mission and strategic objectives so that we guarantee our sustainability in the future.

Our activities are made possible by our many supporters: the City of Vancouver Cultural Services department provides an annual operating grant and provides support through professional development programs at Vantage Point, the British Columbia Ministry of Finance that provides an annual programming grant, our corporate and community sponsors, our individual donors and the participants in the Star Dedication fund development program. Thank you all for sharing our belief in the importance of science literacy and life-long learning.

In 2015, with the support of the community, the H.R. MacMillan Space Centre's overall financial position continued to improve with another surplus year. We still have much to do. We are looking ahead to our 50th anniversary in 2018; we have plans to refresh our building and our exhibitions; and we look forward to celebrating with the community the H.R. MacMillan Space Centre's role as an exciting and innovative organization.



Staff Member Raphael Kepinski brings an audience member onstage for a live science demonstration.

Matt Anthony
Chair, Board of Directors

Raylene M. Marchand
Executive Director

What the Community Helped us Achieve in 2015...



115,348

Annual Attendance



208

Corporate and Social Events

We did not do it alone...



35

Volunteers



2,125

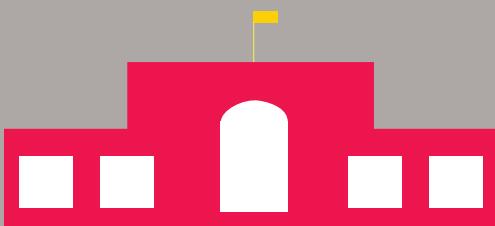
Volunteer Hours



458

Space Centre Friends and Members

Our programs and events engaged...



24,364

Students and Teachers Served



628

Staff led Group Visits



9,364

Community Outreach Participants

Our Values: Wow • Innovation • Collaboration • Community

2015 Highlights

WOW

We are passionate about adventurous, creative and eye-opening experiences.

In 2015 we prioritized enabling our team to grow their skills and education. Our goal is to embody a spirit of curiosity and exploration that will enhance experiences for our staff and guests.

Highlights from our efforts included:

New Shows

Planetarium Star Theatre

Realm of Light is a poetic and phenomenal adventure underscored with breathtaking music and sound effects.

Black Holes: The Other Side of Infinity explores one of the most intriguing and mysterious phenomena in the universe, places where time and space are warped to the extreme.

Stars takes you on a visually stunning journey through the life of a star, from its birth in a stellar nursery to the majestic pulse of a neutron star.

Extreme Environments is the latest addition to our school programming that showcases methods for studying extreme environments in space and here on Earth.

GroundStation Canada Theatre

Cosmic Glue keeps audiences glued to their seats by exploring two different perspectives on gravity from Einstein and Newton.



Premieres Saturday October 24, 2015
Planetarium Star Theatre

Black Holes: The Other Side of Infinity premiered October 24.

Special Programming

Galaxy's Greatest Hits: Just in time for the Oscar's, we took a journey to the stars set to our favourite classic sci-fi tunes.

Lunar Eclipse: To give our guests a unique viewing experience we showed a special pre-eclipse show followed by a group viewing of the eclipse in the Observatory.



Special programming for September's lunar eclipse.

Special Programming

International Astronomy Day: The Space Centre celebrated this annual event with special events and programming throughout the centre, and with solar viewing in our Observatory.

Asteroid Day Antiques Rock Show: Visitors had the opportunity to learn more about asteroids and meteors and bring in their own rocks (or meteorites!) to be identified by geologists from MineralsEd

Exhibits

Canadian Space Society: We treated visitors to two new exhibits from the Canadian Space Society; one contained beautiful works of space art and the second historical examples of Canada in Space.

Cosmic Courtyard: We also made changes to our Cosmic Courtyard gallery space including a lunar landscape enhancement to our popular astronaut suit, a new exhibit on asteroids and meteors, and improvements to our cloud chamber and meteorite exhibits.



Staff member Michael Unger introducing a guest lecturer.
Image by Lindsay Elliott.

INNOVATION

We always challenge ourselves to achieve the highest levels of curiosity, learning and performance.

Our focus in 2015 was to grow and expand our offering thereby integrating a variety of leisure and entertainment value that enhanced learning and began to extend the visitor experience beyond our doors.

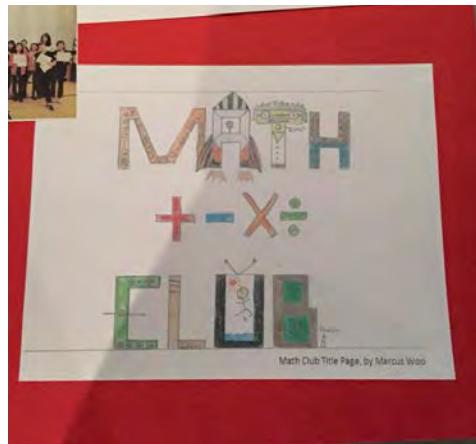
Our achievements were:

Spring Break

We featured special demonstrations and activities to help students explore the fun side of Math.

How did scientists and engineers land Philae on a comet that is over 510 km away? How do they make sure a rocket successfully launches? Everyday over the two week course of spring break we showed kids how much fun astronomers, or anyone, can have with math.

From building models of the Hubble Space Telescope, to learning the science behind sundials, to calculating the distances between planets, everyone was excited about math!

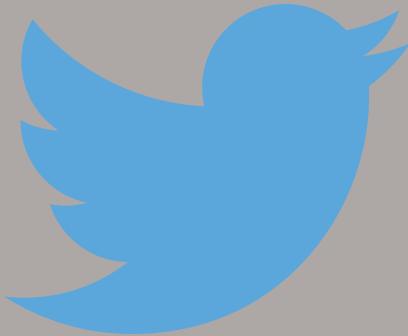


Math-centric activities created during Spring Break.

In addition to daily crafts and activities we also screened Space Jam and Space Chimps for our Martian Martinee series and Gravity for our Movie Under the Stars Series.

Our Digital Community

Twitter



Total Followers: 1,787
New Followers: 386
Impressions: 247,000
Mentions: 719

Facebook



Total Followers: 7,272
New Followers: 1,001
Reach: 527,036
Engagement: 12,064

YouTube



Total Subscribers: 125
Views: 170,081
Likes: 179
Shares: 305

Website



Google Analytics

Sessions: 223,347
Page Views: 657,509
Users: 171,634
New Sessions: 75.92%

Special Events

The Ultimate Pi Day

March 14, 2015 (or 3.1415) – our first celebration of this mathematical constant included a parade of over 100 people, each with their own digit of Pi, led into the planetarium theatre by our own Pi piper; a demonstration of memory as students competed to recite the most digits of Pi by memory; and the eating of very tasty pi(e) from our friends at Tartine Bakery.



Visitors grabbed a number for our Pi Parade Pi Sequence.



Pi(e) from sponsor Tartine Bread & Pies.

Black Holes: The Other Side of Infinity Premiere

We held a special premiere event for the launch of our Black Holes planetarium show. In addition to being among the first in the city to see the new show, audience members were treated to a special lecture by Dr. Nicholas McConnell from the Dominion Astrophysical Observatory (Victoria). Dr. McConnell wowed visitors with his take on massive galaxies and with his research on supermassive black holes.

Globe at Night

The Space Centre participated in an International citizen-science campaign to raise public awareness of the impact of light pollution by inviting citizens to measure & submit their night sky brightness observations.

Visitors were invited into the Observatory to take turns observing and documenting Vancouver's nighttime sky and discuss their favourite dark sky locations throughout BC.

"Compliments to the Cosmic Nights organizers. The guest lecturer, star show and all the games/activites were great. I would absolutely recommend a future adult night event to my friends"

-Katharine Boake
Cosmic Nights Attendee



A Cosmic Nights attendee enjoys Pluto-themed crafts.
Image by Lindsay Elliott.

Cosmic Nights

We launched our first adult-only evening series with Cosmic Nights: Pluto Palooza - an evening to celebrate NASA's New Horizons mission to Pluto. The event included a lecture by Dr. JJ Kavelaars, astronomer with the National Research Council's Herzberg Institute of Astrophysics (Victoria), special programming and trivia in GroundStation Canada Theatre, board games from Starlit Citadel, rocket launching and more.

Based on the positive feedback and sell-out success of our first event, we decided to expand for Cosmic Nights: Black Holes. Doing so allowed us to continue reaching new audiences and build our brand around evening public programming.



Special programming for Cosmic Nights: Black Holes.

COLLABORATION

We work and make decisions as a team and as such, we honour transparency and show respect for each and every opinion.

We were motivated to begin the journey to fully realize opportunities within the museum and science centre community as well as the larger creative industry in our region.

This endeavour resulted in:

Professional Development

Summer Institute

Partner: Science World at Telus World of Science, The Vancouver Aquarium, Canadian Science and Technology Museums Corporation

We co-hosted a summer institute professional development program for elementary teachers. 16 teachers from Manitoba, Alberta and BC attended.

Project-Based Learning Program

Partner: Vancouver Maritime Museum, Challenger Learning Centre, Carol O'Leary , David Brook

We hosted a teacher professional development workshop to introduce teachers to project-based learning program run by the Challenger Learning Center. This will become the first step in developing a Pavilion Lake themed program for schools. As part of the program we hosted educator Carol O'Leary and her class of grade 6/7 students from Sir William Van Horne Elementary. They worked together to save the islanders of Montserrat from the devastating effects of a volcanic eruption and a hurricane. We're pleased to say no one was hurt – although it was a challenge for the students.

Digital Media Catalogue

Partner: Centre for Digital Media

We provided support and perspective on a graduate student venture project. The project focused on developing a platform to help people archive and catalogue their digital media.

Partnered Events

Space Art and Canada in Space Launch Event

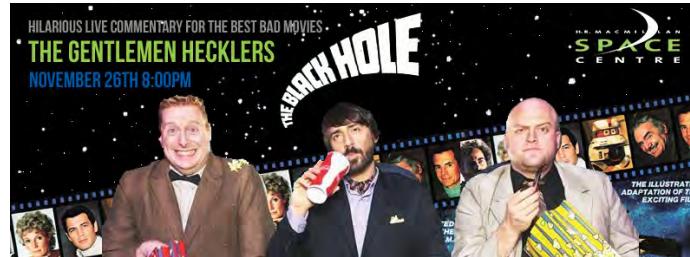
Partner: Canadian Space Society (CSS)

We hosted an event for CSS which included a lecture by Dr. Jaymie Matthews and an opportunity to view two temporary exhibitions: Space Art and Canada in Space.

Cosmic Love Connections

Partner - The Georgia Straight

Another great hit, this year's event focused on a new angle with astrologer Rose Marcus discussing each planet and astronomer Derek Kief providing an overview of what a date on each planet might be like.



The Gentlemen Hecklers provided their hilarious brand of comedy in the planetarium.

The Gentlemen Hecklers Present: The Black Hole

Partner: The Gentlemen Hecklers

We partnered with these well known, local comedians to bring their act to a new venue: the planetarium! They provided hilarious live commentary on Disney's 1979 movie The Black Hole as part of our black hole programming.

COMMUNITY

We are all about sharing our love of space with the community, aiming to serve, teach and inspire them.

Our primary goal in 2015 was to establish partnerships that built mutually beneficial results for all involved and that engaged the community to assist us in realizing our ongoing goals.

Our success stories were:

Accessible Programming

Sticks and Stars

Partner - Surrey School District, SFU Faculty of Applied Sciences

We received an additional two years of funding from NSERC Promoscience to support our Sticks and Stars program. This program provides much needed programming for at-risk boys in grades 5 – 7, by providing the opportunity to participate in science activities in an inclusive, supportive environment with positive male role models.

Science 101

Partner: UBC Outreach

We had a great turn out for this annual event for residents of the Downtown East Side.

Community Outreach

Student Co-op Placement

Partner: Surrey School District

Working with a very diligent student from the Surrey School District, we prototyped a system to continue the digitization and cataloguing of our slide library originally used in our planetarium theatre.

BC Rotary Conference:

Space Centre astronomer Derek Kief presented a keynote talk about the Rosetta Mission to delegates at the BC Rotary Conference.

BC Mining Week:

We participated in this annual mining event by bringing our own unique look at the topic, including mining on other planets and how to identify meteorites.

TechUp Kids

We helped inspire the kids at TechUp by introducing a group of young coders to how astronomers use computers and the types of coding they do.

Surrey Museum

We provided our expertise and offered training sessions for educators and volunteers at the Surrey Museum.

Mid-Autumn Moon Festival

Our interpretive staff helped celebrate this lunar events at Dr. Sun Yat Sen Classical Chinese Gardens. Armed with an assortment of telescopes, we gave guests a special view of the lunar eclipse.

Field Trip Fair

Partner: BC Field Trips, Museum of Vancouver

We cohosted the annual Field Trip Fair for Teachers with the Museum of Vancouver and BC Field Trips. 50 teachers visited with educators from 60 field trip sites from around Metro Vancouver and Vancouver Island.





COMMUNITY PARTNER - CHEVRON CANADA LTD.

Portable Planetarium Outreach Project

As a long time sponsor of the Space Centre, Chevron Canada Ltd. has played an integral role in supporting new educational programming. Through this, they have had the opportunity to see the impacts of this programming on the community and the growth of the Space Centre within it.

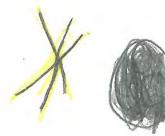
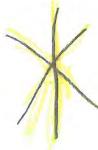
As such, Chevron wanted the opportunity to support the Space Centre's work in a larger way. In 2014 Chevron supported a multi-year project that would see our portable planetarium and staff expertise engaging students, educators, and community members across Northern BC. The project and the fantastic success it saw in 2015 were in thanks to Chevron's ongoing support of the Space Centre's work and their commitment to STEM education.

Over 6000 students and families participated in our school and community programming. The project also presented an opportunity to work with other community organizations such as local museums and libraries for community events.





March 15th, 2016



Dear Mr Jamie

Thank you for inviting us to see your Starlab. It was so cool and a bit scary. Some of us got dizzy but we remembered that you told us to count to 3. It worked!

We really liked the planets and the Milky Way and the moon, and the earth and the storm on Mars.

The Satellite was really cool.

We learned we should never go in a Black Hole.

We learned about how a moon dances.

We liked the poodle (Pluto) and the little planets and stars.

We liked learning about the solar system and we really liked your starlab and how you taught us!

We think you are kind and cool and super smart and handsome.

Love the Kanaka Kindergartners Div 24

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VOE
Asst

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NAOMI

GRACE

GRIffin

Summer

Kitly

Karen

TRACEH

OBSTANIC

COMMUNITY PARTNER - AINSWORTH COMMUNICATIONS

Black Holes Campaign

Everything Gets Sucked in

In early 2015 we began the search for a creative agency to support our work on large advertising campaigns and strategic marketing objectives.

Ainsworth Communications was selected based on their founder, Hagan Ainsworth's, involvement in key campaigns in previous years. Campaigns like the UFO Hoax and Planetary PSAs helped to elevated the Space Centre's brand in a playful and innovative way that aligned with the organization's long-term positioning strategy.

Building from the success of these campaigns, in 2015 we focused on re-imagining our advertising approach for new programming in the Planetarium Star Theatre. After selecting Black Holes: the Other Side of Infinity as our new show for fall, we engaged Ainsworth Communications in the creation of a multi-channel, integrated campaign that capitalized on the mysterious and captivating nature of the subject.

Working with the tagline of "everything gets sucked in" radio ads, digital components, skytrain posters, wild postings, and a newspaper cover takeover were created with strategic theme. Radio featured local ads being drawn into and distorted by our own Space Centre ad; digital saw a series of display ads on Vancouver is Awesome that drew their homepage into our digital display ads; wild posting saw previous advertisements being transformed overnight by our ad placement.

The campaign, which was possible in thanks to Ainsworth's generous support, was a creative success and furthered the brand recognition and innovative reputation of the Space Centre.

AINSWORTH



Black holes takeover of The Province newspaper.
Image supplied by Ainsworth Communications.



Advertisements getting sucked in by our black holes poster ad.
Image supplied by Ainsworth Communications.



Audience members enjoy a live science show.
Image by Lindsay Elliott.

Financial Summary

REVENUES	2015	2014	EXPENDITURES	2015	2014
OPERATING REVENUE	\$	\$		\$	\$
Public Admissions	564,496	506,468	Learning Services	547,608	449,976
School Admissions	241,746	179,971	Administration	342,473	351,708
Rentals and Corporate Sales	97,199	84,073	Guest Services	169,614	182,076
Outreach Programs	20,300	30,252	Marketing	276,934	173,186
Other	15,122	13,715	Technical Services	124,007	107,622
Memberships	9,858	5,144	Director's Office	135,389	68,942
	<u>948,721</u>	<u>819,623</u>	TOTAL EXPENDITURES	1,596,025	1,333,510
OPERATING GRANT	519,400	519,400			
City of Vancouver	75,000	75,000			
Gaming and Direct Access	<u>594,400</u>	<u>594,400</u>			
FUNDRAISING AND DONATIONS	134,273	78,522			
Interest			Excess (deficiency) of revenue over expenditures before amortization	102,676	179,125
Vancouver Foundation	20,718	19,739	Amortization of deferred capital contributions	109,469	94,954
Other	589	351	Amortization of property and equipment	(94,235)	(96,433)
	<u>21,307</u>	<u>20,090</u>	Excess of revenue over expenditures	177,910	177,646
TOTAL REVENUES	1,698,701	1,512,635			

The financial statements presented here (for the year ended December 31, 2015) are based on the audited financial statements of the Society.

OUR VISION

**AN INSPIRED AND IMAGINATIVE
COMMUNITY CONNECTING SOCIETY,
CULTURE, AND SCIENCE TO FACILITATE
EXPERIENCES THAT ARE... LIKE
NOTHING ON EARTH.**

GOVERNMENT PARTNERS

NSERC
Province of British Columbia
City of Vancouver

PROGRAM PARTNERS

Banyen Books & Sound
Bard on the Beach
Canadian Museum Association
The Cinematheque
City of Vancouver Archives
City of Surrey
Dr. Linda Strubbe
Dr. Nicholas McConnell
The Gentlemen Hecklers
Lindsay Elliott (lindsayelliott.com)
MineralsEd
Museum of Vancouver
NASA
Pacific Institute for the
Mathematical Sciences (PIMS)
Planetarium Laupheim
The Planetary Society
Port Metro Vancouver
Rocky Mountain Flatbread Co.
Rose Marcus
SCISS
Simon Fraser University
Starlit Citadel
University of British Columbia
Vancouver Academy of Music
Vancouver Heritage Foundation
Vancouver Maritime Museum
White Spot Restaurants

CORPORATE PARTNERS

Chevron Canada Ltd.
Ainsworth Communications
Red Truck Beer Co.
Tartine Bread and Pies
MacLaren McCann

DONORS

Matthew Anthony
Raylene Marchand
Lisa McIntosh
Deborah Parente
John Reid
Lawrence Reeves
Maryalice Schaffer
Andrew Woo

*Anonymous and
Point of Light (87)*

FOUNDER

H.R. MacMillan

PATRON

Mrs. G.T. (Jean) Southam, C.M.

ENDOWMENT FUND

Vancouver Foundation



*Our staff offered telescope views of the moon
from Dr. Sun Yat Sen Gardens*

MEDIA SPONSORS

City TV
Corus Radio Vancouver
The Georgia Straight
The Province
Vancouver is Awesome
Yelp Vancouver



*Staff member Erin Green showcases an activity she's leading.
Image by Lindsay Elliott.*

OUR TEAM

THE SPACE CENTRE IS PRIVILEGED TO WORK WITH A DEDICATED AND ENGAGED GROUP OF BOARD MEMBERS, VOLUNTEERS AND STAFF MEMBERS WHO MAKE ALL OUR WORK POSSIBLE.

BOARD OF DIRECTORS

Matthew Anthony, Chair
Tony Fogarassy
Vern Kasdorf
Deborah Louvier
Dr. Jaymie Matthews
David J. Miller
Trish Pekoles
Eric Pringle, Past Chair
Greg Stanway
Andrew Woo

MANAGEMENT

Raylene M. Marchand
Executive Director

Lyndsey Barton
Director of Community Engagement

Lisa McIntosh
Director of Learning

Samaneh Badiei
Finance Consultant

VOLUNTEERS

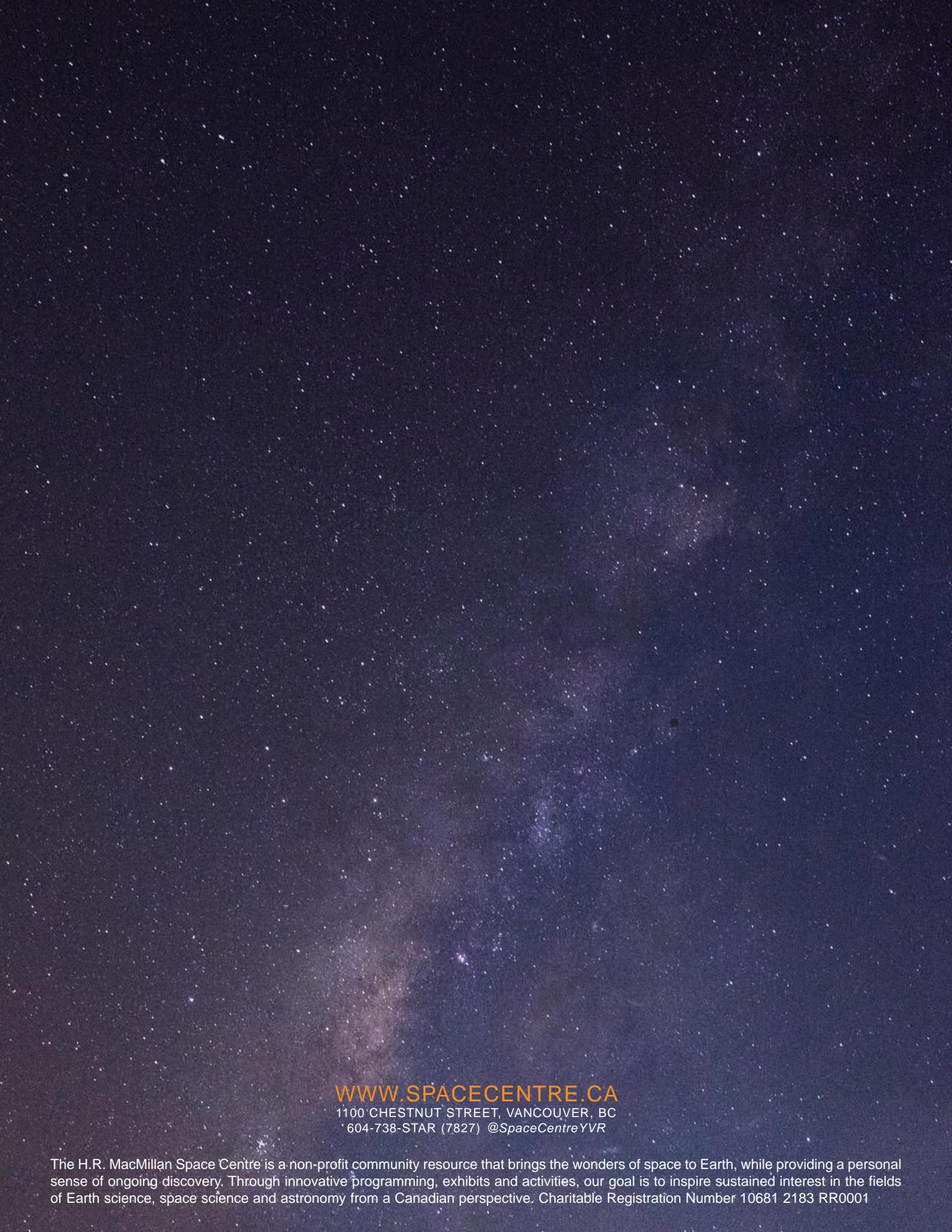
Elin Aasen
Christine Berka
Cameron Hardisty
Jacqueline Lambert
Jasper Lau
Jeff Law
Karen Lee
Rob Lo
Andrew Lui
Shannon MacFarlene
Andrea Magrath
Susette Matusiak
Jackie Neal
Kyle Payne
Martin McNish
Nicole-Ann Poitras
Kaitlin Pozer
Alisa Rasputna
Eric Swanlund
Veronica Woo
Claire Woodbridge
Carol Wong
Norton Wong

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Kenneth Lui
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Sonya Neilson
Trish Pattison
Valentina Pinzon-Duran
Shelley Preston
Jamie Purves
John Reid
Matt Reznek
Skeerat Sahota
Gayle Seaman
Allan Soone
Terry Soone
Michelle Sz
John Tanner
Jeff Taylor
Jonathan Teague
Fern Truong
Michael Unger
Jennifer Zhen



A family enjoys time in our Cosmic Courtyard exhibit space.



WWW.SPACECENTRE.CA
1100 CHESTNUT STREET, VANCOUVER, BC
604-738-STAR (7827) @SpaceCentreYVR

The H.R. MacMillan Space Centre is a non-profit community resource that brings the wonders of space to Earth, while providing a personal sense of ongoing discovery. Through innovative programming, exhibits and activities, our goal is to inspire sustained interest in the fields of Earth science, space science and astronomy from a Canadian perspective. Charitable Registration Number 10681 2183 RR0001