

## 2 0 1 3 – 2 0 1 4 A N N U A L R E P O R T



An agency of the Government of Ontario

# **Our Vision**

We will be the leader among science centres in providing inspirational, educational and entertaining science experiences.

# **Our Purpose**

We inspire people of all ages to be engaged with the science in the world around them.

# **Our Mandate**

- Offer a program of science learning across Northern Ontario
- Operate a science centre
- Operate a mining technology and earth sciences centre
- Sell consulting services, exhibits and media productions to support the centre's development

# **Our Professional Values**

We Are...Accountable, Innovative Leaders We Have...Respect, Integrity and Teamwork

# **Table of Contents**

- 4 Message from the Chair and Chief Executive Officer
- 7 Fast Facts
- 8 Meet Our Bluecoats
- 10 People We've Inspired
- 12 Future Scientists
- 14 Our 5-year Strategic Priorities
- 17 Strategic Priority 1: Great and Relevant Science Experiences
- 25 Strategic Priority 2: A Customer-Focused Culture of Operational Excellence
- 37 Strategic Priority 3: Long Term Financial Stability
- 48 Science North Funders, Donors and Sponsors
- 51 Science North Board of Trustees and Committee Members
- 52 Science North Staff
- 53 Appendix A: Audited Financial Statements

# **MESSAGE FROM THE CHAIR AND CHIEF EXECUTIVE OFFICER**

2013-14 marked the first year of Science North's new five-year Strategic Plan. Over the past 12 months we've made substantial progress in meeting our strategic priorities of great and relevant science experiences, a customer focused culture of operational excellence and long term financial stability. The following are a few of the highlights over the past year.

As part of our mandate to serve all of Northern Ontario, Science North outreach staff based at our permanent base of operations in Thunder Bay as well as staff based in Sudbury travelled throughout Northern Ontario to deliver ever expanding, high quality, hands-on science experiences. Science North delivered week-long interactive summer science camp programs to 2,047 youth in 26 Northern Ontario communities, a record high. Outreach staff visited schools in 51 Northern Ontario communities, engaging 18,132 students in science programs. Science North also delivered science experiences to the general public at festivals and fairs, libraries and provincial parks in 53 Northern Ontario communities to over 28,990 people. The Centre continues to expand its outreach program delivery to First Nations audiences, working closely with First Nations representatives to deliver science experiences that fit their needs.

Science North's great and relevant science experiences for audiences included special exhibits at both Science North and Dynamic Earth. *The Science of Ripley's Believe It or Not!*®, Science North's 9<sup>th</sup> travelling exhibition, was a strong draw with 78,300 visitors attending between April 1 – September 3, 5% above the target of 74,300. The exhibition is now on a successful North American tour and will be in 18 science museums in North America. At Dynamic Earth, the *Dinosaurs Unearthed* travelling exhibition, augmented by curriculum-linked school programs and special events including a first-ever family sleepover, was also a resounding success with our visitors.

Science North partnered with the Canadian Museum of Nature to create *Arctic Voices*, an exhibition about life and adaptation in the Arctic, which opened at Science North in March 2014 and will show until mid-October 2014, after which the exhibit goes on tour to other science centres and museums as Science North's 10<sup>th</sup> travelling exhibition. Science North's newest large format film *Wonders of the Arctic* had its world premiere at Science North on March 6<sup>th</sup> and is an excellent complement to the *Arctic Voices* special exhibition.

An important goal for Science North, as identified in our strategic plan, is to develop new and relevant science experiences to grow current and new audiences. A series of engaging science programs were created to appeal to varied audiences, including adult and teens, and engaged visitors with current science. These programs included Science Cafés in both Sudbury and Thunder Bay, a Science Speaker Series, adult workshops, *NIGHTLIFE on the Rocks* events and teen events attracting close to 5,000 participants.

On the people front, Science North continued to communicate a "change ready culture" and behavioural model in our workforce, leadership and service environments. An innovative, change ready workforce is at the heart of Science North's continued success.

2013-14 marked the inaugural year of the innovative Northern Leadership Project (NLP). This one-year pilot project, spearheaded by Science North, focused on accelerated leadership development in partnership with the City of Greater Sudbury, Laurentian University, and Health Sciences North. This is part of Science North's investment to address its succession planning, and also to play a leadership role in helping the community address succession planning and develop leaders who have key relationships in the North. In March 2014, 20 participants of the NLP graduated from the program. Cohort 2 of NLP will launch in May 2014.

As part of our strategic priority of financial stability, Science North continues to focus on philanthropy and increasing grant revenue. Science North's annual fundraising gala in April 2013 raised \$60,000 and exceeded budget expectations by 20%. With respect to government grants, Science North hired a Senior Manager of Grant Programs in June 2013. Having a full-time resource focused exclusively on this portfolio has already increased Science North's relationship, accountability and visibility with key granting agencies, and has generated grant revenue for both operating and capital priorities.

With the support from the Ministry of Tourism, Culture and Sport, Science North and the Ontario Science Centre have continued to work together on our joint International Market Development Initiative. This initiative facilitates business development in China and South East Asia and provides a greater market presence and market intelligence with the ultimate goal of increasing the overall sales of our respective products and services. To date Science North has secured \$743,757 in new revenue from this project.

As you'll see in this annual report, much has been accomplished over the past year in meeting the Centre's strategic priorities and goals. We would like to thank our staff and volunteers and all who have supported the successes of the last 12 months, including our largest stakeholder: the Ministry of Tourism, Culture and Sport.

Looking ahead, Science North will celebrate its 30<sup>th</sup> anniversary on June 19, 2014. We are proud of the accomplishments in serving our audiences over the past three decades and look forward to the future. Science North's longterm vision is to be the leader among science centres in providing inspirational, educational and entertaining science experiences. With the dedication, commitment and innovation of our workforce, and the support of our customers, partners, stakeholders and funders, we are optimistic about the future of Science North and we look forward to achieving this vision together.

# **Science North Board of Trustees**

Scott Lund, Chair Elyse Clements, Vice-Chair Dr. Jordi Cisa Lorraine Dupuis Richard Dupuis Manfred Herold Dr. Stephen Kosar Jeffrey Laberge Claude Lacroix John Macdonald Gordon Marrs Todd Miller Théo Noël de Tilly Diane Salo Murray Scott

Scott Lund, Chair, Board of Trustees

Juy Lahm

Guy Labine, *Chief Executive Officer* 





# **FAST FACTS**

## (April 1, 2013 -March 31, 2014)

## **Memberships**

General Memberships	3,908	
Corporate Memberships	68	
Total	3,976	
Admissions		
Science North Science Centre	138,114	
Special Exhibits Hall	93,818	
IMAX <sup>®</sup> Theatre	54,728	
Planetarium	20,545	
Dynamic Earth	40,005	
Total	347,210	
<b>Education Programs - School Groups</b>		

#### Science North Science Centre 24,013 students Special Exhibits Hall 12,052 students IMAX<sup>®</sup> Theatre 8,745 students Planetarium 2,100 students Dynamic Earth 5,119 students Special Science North Program - Overnight camp-ins 975 students - Roots & Shoots Conference 250 students - Science Olympics 136 students Total 53,390 students

## **Science Programs & Workshops**

Summer Science Camps	2,047	participants (26 communities)	
Specialty Programs/New Audiences	_,	F	
- Children	348	participants	
Northeastern Ontario (200), Northwestern Ontario (148)			
- Teens	1,024	participants	
(SatURday NIGHT Science Events)			
- Adults	3,919	participants	
(NIGHTLIFE on the Rocks events, Explore Science Speakers Series, iPad workshops and Science Cafés)			
Northeastern Ontario (3056), Northwestern Ontario (863)			
New Year's Eve Family Fun Day Event	861	participants	
Halloween Event	2,414	participants	
Teacher workshops	87	teachers	
After School Science Program	33	participants (189 days)	
E-Workshops	50	participants	
Public Outreach			
<ul> <li>Northeastern Ontario</li> </ul>	17,144	participants (40 communities)	
<ul> <li>Northwestern Ontario</li> </ul>	11,846	participants (13 communities)	
School Outreach			
<ul> <li>Northeastern Ontario</li> </ul>	8,330	participants (18 communities)	
<ul> <li>Northwestern Ontario</li> </ul>	9,802	participants (33 communities)	
Total	57,905		
Workforce			
Employees	91	full time salaried	
P - 3	140	casual, contract and hourly	
Total	231	employees	
Volunteers	259	volunteers	
Voluntooro	200		

20,547

volunteer hours

# Real scientists interact with visitors. We'd like you to meet some of our Science North Bluecoats.



# **JENNIFER BEAUDRY**

## Staff Scientist and Environmental Earth Scientist, Dynamic Earth

"Rocks and minerals are absolutely fascinating. My favourite quote by John McPhee explains my fascination best: "Rocks are records of events that took place at the time they formed. They are books. They have a different vocabulary, a different alphabet, but you learn how to read them." Not only am I fortunate enough to have been raised in Sudbury, I also attended both Collège Boréal, where I obtained a certificate as a Chemical Laboratory Technician, and Laurentian University, earning a bachelor's of science degree in Environmental Earth Sciences and a certificate in Environmental Biology."

# **NATALIE CRINKLAW**

## Staff Scientist and Mechanical Engineer, Science North, Thunder Bay

"I grew up in London, Ont., and went to Western University for Mechanical Engineering. For my entire university career I worked at Discovery Western. After completing my studies I decided to see the world. I moved to Edinburgh where I worked in a yoga shop. I returned to Canada to work as an engineer for a while before I decided I wanted to get my teaching qualifications. I moved to China where I taught English and then on to Auckland, New Zealand, where I became a physics and math teacher. When I returned to Canada, I moved to Thunder Bay and started working for Science North. I love the variety of my job, from playing with LEGO<sup>®</sup> and science toys to travelling across Northern Ontario delivering fun programs."



# **AMY HENSON**

## Staff Scientist and Marine Biologist, Science North

"Originally from Pembroke, Ont., I spent my childhood summers at my family's cabin on the Nova Scotia coast, endlessly exploring shoreline life among the barnacle and seaweed encrusted rocks at low tide. It was there I developed my love for the ocean and water creatures, which led to my bachelor's degree in Marine Biology from Dalhousie University. I speak fluent "whale" and am an adopted member of a harbour seal family."





# SIMON MCMILLAN

## Staff Scientist and Astronomer, Science North

"My journey that brought me to this position started in the Swiss Alps where I grew up. Every night I saw the beautiful dark skies there and admired the thousands of stars above me. I dreamed of becoming an astronomer. This eventually led me to go to the University of Western Ontario. I graduated in 2000 and then went on to study the neutral hydrogen gas in our Milky Way Galaxy as a masters and PhD student in Calgary and Minnesota."

# **FRANCO MARIOTTI**

## Staff Scientist and Biologist, Science North

"I've been at Science North since its inception, over 30 years ago. During that time, I've worked on many exciting projects, including the development of numerous special exhibitions. The research that we've had to do for these projects has taken me to some pretty farflung places, from the vast cold beauty of the Arctic to the hot jungles of Borneo. Closer to home, I'm active in various community groups that help protect and restore the environment."



# **MEET PEOPLE** WE'VE INSPIRED

# **MEAGAN MCGRATH**

## **Adventurer**

"I remember running up the ramps of Science North – eager to experience the latest that Science North had to offer. What fun it was to "play" in sand, learning about flood plains; going out on to the shores of Ramsey Lake, panning for gold; getting face to face with interesting animals and insects that I was only able to see from a distance at home. The variety of scientific experiences at Science North kept me interested – encouraged me to be curious and ultimately led to my employment in the field of engineering. Being exposed to speakers who had embarked on exciting life journeys at such a young age instilled in me the belief that anything was possible – and that the world is truly a fascinating place. I have Science North to thank for opening my imagination and my heart to the world of exploration and science."





# **DR. NATALIE GOODALE**

## **Family Physician**

"I have been practising for the past 11 years in Sudbury. My connection with Science North started as a volunteer in Grade 9 and progressed to an eight-year career in various areas including the exhibit floor, IMAX<sup>®</sup> Theatre and as a summer camp counsellor. As a science demonstrator or Bluecoat, I learned valuable lessons in communication, specifically the ability to connect with people of all ages and backgrounds, which are skills I use on a daily basis. I learned how much I enjoyed working with people. Many members of the management team became mentors who encouraged me to pursue my dreams and continue to reach further than I thought possible. I am grateful for the time I spent at Science North and for the people I met. It certainly contributed to the person I am today."





# **JENNIFER MARTIN**

## **President and CEO TELUS Spark, Calgary, Alberta**

"Science North was that interesting construction project at the end of the road when I was finishing my science degree at Laurentian University in the early 1980s. Little did I realize that a summer job catching snakes and frogs, would lead to a lifetime career in science centres. We had humble objectives then, to try and support a small menagerie of Northern Ontario wildlife. Along the way I led the whale skeleton expedition to Anticosti Island, we opened Science North, and I helped build the foundation for the Nature Exchange program. All along I was given the support and vision from a fabulous leadership team back then, and am so proud of the growth and development that has happened over 30 years of commitment by so many talented people."

# FUTURE Scientists

# **SOPHIA**

"There is a species of jellyfish right off the west coast of North America, and they grow a fluorescent bluish-green underwater because some of their cells create a protein that reacts with sunlight. Your DNA doesn't have this gene, and that's why you don't glow like a jellyfish!"





# **JACK**

"In school you just sit and watch a SMART Board video of them taking you through a mine, but at Dynamic Earth, you get to walk around through a mine. When I grow up I want to be an architect. Dynamic Earth has helped me think of a kind of structure I'd like to make."

# CORBETT

"The flying squirrels...to aim, they shake their heads up and down. Snakes, they smell with their tongues and their tongues are 'splitted' apart."





# Our 5-Year Strategic Priorities (2013-18)

- 1. Great and Relevant Science Experiences
- 2. A Customer-Focused Culture of Operational Excellence
- **3. Long Term Financial** Stability





# Strategic Priority 1 Great and Relevant Science Experiences

# **Goals:**

- 1. Develop new and relevant science experiences to grow current and new audiences
- 2. Grow our reach in all of Northern Ontario
- 3. Offer high quality interactive science learning experiences online

# **GOAL 1**

# Develop new and relevant science experiences to grow current and new audiences

- The Science of Ripley's Believe It or Not!<sup>®</sup>, Science North's 9<sup>th</sup> travelling exhibition was staged from March 3 to September 3, 2013. The exhibition performed very well with 78,300 visitors attending between April 1 September 3, 5% above the target of 74,300. The exhibition is now on a successful North American tour.
- Science North partnered with the Canadian Museum of Nature to create Arctic Voices, an exhibition about life and adaptation in the Arctic. Arctic Voices opened at Science North on March 1, 2014 and will show until mid-October 2014, after which the exhibit goes on tour to other science centres and museums as Science North's 10<sup>th</sup> travelling exhibition. Science North's newest large format (IMAX) film, Wonders of the Arctic, had its world premiere at Science North on March 6<sup>th</sup> and is an excellent complement to the Arctic Voices special exhibition.
- The *Dinosaurs Unearthed* travelling exhibition headlined in the MacLean Engineering Gallery at Dynamic Earth from March 3 to September 3, 2013, augmented by curriculum-linked school programs and special events including a first-ever family sleepover. On March 1, 2014 the *In the Money* travelling exhibit opened and was also enhanced by special events and programs. These two travelling exhibits were successful at driving local and school attendance, with an increase of 9% in local attendance and overachievement of school attendance targets. 40,005 visitors visited Dynamic Earth during 2013-14 on a goal of 38,242.
- Three new exhibit renewal projects including a renovation to the Rockhound Lab, the Current Science Wall and the Projection Globe were implemented. These visitor experiences have augmented the content experience with new and enhanced exhibits.
- A series of engaging science programs were created to appeal to varied audiences, including adult and teens, and engaged visitors with current science. These programs included Science Cafés, a Science Speaker Series, adult workshops, *NIGHTLIFE on the Rocks* events and teen events.
  - Science North's annual series of Science Cafés are monthly science discussion events that draw an adult audience. Events staged in 2013-2014 engaged adults in great science discussions and debates with topics such as *The CSI Effect: What is fact and fiction in forensic science?* and *Thinking Extinction: Should we try to save all species (and maybe bring some back?).* Science Cafés feature a panel of scientists and other specialists who engage attendees in participatory discussion.
  - During 2013-2014, Science North hosted a variety of speakers. A very successful summer speaker lineup linked to Science North's *The Science of*

*Ripley's Believe It or Not!*<sup>®</sup> special exhibit engaged visitors of all ages. This included Ripley's Knotty Bits, Jill & Tyler Fyre and the Bizarre Buying Bazaar.

- Science North, in partnership with the City of Greater Sudbury, delivered iPad workshops to an older adult audience. Science North staff, in varied locations throughout the City, delivered a total of 12 workshops to approximately 200 older adults.
- *NIGHTLIFE on the Rocks*, a series of themed program evenings for adults in the science centres, engaged new and varied adult audiences with hot science topics and live experts in a comfortable socializing setting. According to audience research, these events attract "explorers", "rechargers" and "experience seekers" visitor types that are very different from the "facilitator" visitor type who visit the science centres during the day. Events staged in 2013-2014 included themes such as *Under Pressure, Weird & Spectacular, Wine* and *Sex + Love + Chocolate.* Attendance exceeded the targets set and the reviews from visitors were very positive.
- Science North hosted 10 engaging events designed by teens for teens, with varied topics from *Extreme Rock Climbing* to *Critical Finds*. Attendance for 2013-2014 was nearly double that of 2012-2013.
- Science North enhanced the visitor experience with new exhibits in the Space Place, the BodyZone, and the Nature Exchange areas of the science centre. As well, the handson Meteor Impact and Mars Rover exhibits appealed to older children and adults. The addition of exhibits on the migration of the Monarch complemented the experience in the F. Jean MacLeod Butterfly Gallery.
- Science North launched a partnership with Experimentarium, the Danish science centre in Copenhagen, Denmark, to develop and produce a new multi-media theatre on healthy living and movement. This new show will be in development for two years and will open at both Science North and the Experimentarium in 2016.







## **GOAL 2** Grow our reach in all of Northern Ontario

Delivering science experiences to First Nations

- Involving First Nation audiences in science experiences is an important priority for Science North. Building relationships and offering the right programs to match needs is very important. During 2013-14, Science North delivered programs in 19 First Nations communities in Northern Ontario and looks forward to reaching more communities in upcoming years with more customized programs.
- During the 2013-14 fiscal year, Science North delivered educational hands-on science experiences in 13 First Nations schools. Visits to four remote communities, Wunnumin Lake, Kingfisher Lake, Big Trout Lake and Sachigo Lake via chartered plane were made possible through a partnership with the Northern Nishnawbe Education Council. Science North visits to nine reserve schools in the Kenora area were organized by the Bimose Tribal Council. Science North also visited the First Nations schools in Constance Lake, located close to Hearst.
- Overall, Science North delivered programs to 1,376 First Nations students. This included, for the fourth year in a row, special customized programs for 180 students at Pelican Falls First Nations High School where students participated in a Science Olympics challenge, did hands-on science with tabletop science activities and were immersed in astronomy through digital planetarium presentations.
- Based on a new relationship with the Seine River First Nations in Northwestern Ontario, Science North was invited to deliver science activities for a day at their summer camp in August 2013. The First Nations participants took part in activities such as an egg drop challenge, learning about local animals and mixing solutions to get physical and chemical changes.
- The Science North outreach team in Northeastern Ontario delivered 6 public science program experiences in First Nations communities of the Wahnapitae, Wikwemikong, M'Chigeeng and Serpent River First Nations and at a special event organized for youth in Timmins by the Nishnawbe Aski Nation during March Break 2013. Programs at all First Nations locations included Science North hands-on exhibits.

Maximizing educational experiences in Sudbury and Northern Ontario

- 53,390 students participated in Science North's school experiences during 2013-14. This included science experiences delivered to 29,132 students at Science North's science centre and Dynamic Earth, 2,100 students who experienced a live Planetarium show, and 8,745 students who viewed IMAX films. The total of students also includes 975 participants in the overnight *Unbelievable Sunrise to Sunset Camp-in* programs offered at Science North, 12,052 students who visited *The Science of Ripley's Believe It or Not!*<sup>®</sup> in the centre's Special Exhibits Hall, 386 participants at the *Roots and Shoots* conference in partnership with the Jane Goodall Institute, and a high school Science Olympics conference.
- To enhance the educational experience for teachers and students, a series of educational lab activities as well as a scavenger hunt were offered to students visiting the special exhibit *The Science of Ripley's Believe It or Not!*<sup>®</sup>.
- Science North offers school memberships that provide students with unlimited visits to Science North and Dynamic Earth between September and mid-May. In 2013-14, the Rainbow District School Board (Sudbury's public school board) purchased a Science North school membership for their elementary schools (8,358 students) and Le Conseil scolaire public du Grand Nord de l'Ontario purchased a board-wide membership for their 1,570 students. This undoubtedly encouraged additional visits by local schools.
- Curriculum-based science teacher workshops were delivered to 87 educators during 2013-14. Science North also delivered a customized teacher workshop on financial literacy at a training day for teachers organized by the Ontario Ministry of Education.
- ASK (After-School Science Kids), Science North's fulltime after school program, engaged 33 students between the ages of 4 and 12 in science activities. In this unique program, participants visited the science centre weekly, engaged with the lab scientists, participated in hands on science activities and even got to meet special guests such as Olympic rower Adam Kreek and Dr. Mary Weber, who was a NASA astronaut in the 1990's.
- The Science North Science En Route travelling program visited schools in 51 Northern Ontario communities and

involved 18,132 students in school outreach science programs. Through one-hour curriculum-linked school programs and/or live hands-on science shows, Science North staff reached 8,330 elementary school students in 18 Northeastern Ontario communities and 9,802 elementary students in 33 Northwestern Ontario communities.

 Family Science Nights were presented in schools to provide opportunities for students and parents to engage together in science activities. These evening programs were delivered in 23 schools throughout Northern Ontario, supported by a grant from the Ontario Ministry of Education.

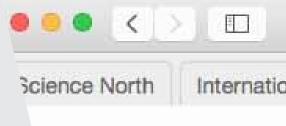
## *Offering current, new and varied experiences throughout Northern Ontario*

- The Science En Route program offered special science experiences to the general public at festivals and fairs, libraries and provincial parks in 53 Northern Ontario communities to over 28,990 people: 17,144 people in 40 Northeastern Ontario communities and 11,846 people in 13 Northwestern Ontario communities.
- Science North delivered science camp programs in 26 Northern Ontario communities during summer 2013 (14 communities in Northeastern Ontario and 12 in Northwestern Ontario). Nearly 2,050 children between the ages of 4 and 12 experienced these interactive science camps with themes including nature, the human body, science discovery, robotix and media. Comments from parents and participants showed a very high level of satisfaction with these weeklong experiences.
- Six Science Cafés were delivered in Thunder Bay, where Science North has a permanent outreach base. Science Cafés are an opportunity for adults to hear a panel of experts present their views on a science topic, then engage in the discussion of the topic. This year's topics included Fad Diets, Toxins in Our Everyday Life, Love, Sex and Attraction, Arctic Science and Oil Pipelines and engaged 320 adults. Funding from the Canadian Association of Science Centres supported one of the cafés focused on Arctic science.
- A science festival was held in Thunder Bay in late February 2014. The week included a series of events to involve people of all ages in science. Events included:
  - A Science Café;
  - An iPad workshop for adults;
  - A Family Science Fun Day held at the Lakehead School of Education facility. Activities included building simple machines, catapults, mazes and structures;
  - A parent and tot program was held at Connect The Dots, a local nature based play centre.









# **GOAL 3** Offer high quality interactive science learning experiences online

- Science North launched a new site for cool-science.ca. Science staff developed specialized content targeted to this site, which resulted in increased visitor engagement. Science North also partnered with a local television station that enabled the centre to develop high quality, web ready, science videos.
- Science North developed a mobile application to complement *The Science of Ripley's Believe It or Not!*<sup>®</sup> travelling exhibit and the app achieved 2,500 downloads.
- Science North extended the science centre experiences online. Science North Bluecoats used social media to highlight interesting daily activities such as walks with the porcupine, a fledgling on the Science North grounds and fun experiments in the science labs.
- Science North created three new micro-sites on sciencenorth.ca geared to target audiences: The exhibits micro-site enables visitors to discover specific topics that interest them to help plan their on-site visit. The teens micro-site (sciencenorth. ca/teens) and adults micro-site (sciencenorth.ca/adults) provide each of these audiences with a direct url to see what programs and events are planned specifically for them.



"Unbelievable Science" app icon



## What's black and white but lives in the Arctic?

What's black and white, but lives in the Arctic? A thick-billed murre of course!



Meghan, Science Communicator



## Oxytocin: the "comforting hormone"?

Hormones. We think of them as body chemicals that agitate us or cloud our judgment...but is there a comfort hormone?

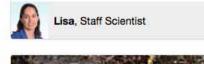


Dana, Staff Scientist



### The Science of Fireworks Colours

Fireworks are awesome. But what makes them so colourful? A bunch of minerals, metals and chemical compounds help to make the "wow".



## Ask a Scientist

Got a science question? We've got answers.



### **Recent Answers:**

- What's black and white but lives in the Arctic?
- Oxytocin: the "comforting hormone"?
- How do you de-groundhog?
- · Fish Out of Water
- · What laid these eggs?



# Strategic Priority 2 A Customer priority 2 Focused <pFocused</p> Focused Focused Focused <p

# **Goals:**

- 1. Build a change ready culture
- 2. Ensure world-class facilities and fully operational experiences
- 3. Optimize processes, systems and technology to maximize ROI (return on investment)
- 4. Practice environmental responsibility

## **GOAL 1** Build a change ready culture

- Science North has clearly defined, developed and communicated the characteristics of a change ready culture, identifying innovation, agility and customer focus as key elements in the achievement of the Centre's vision. Areas of focus within each of these have been identified as key elements of culture change within the workforce's behavioural model.
- "Spot Awards", a program designed to motivate and reward great performance aligned with our Science North's change ready culture was introduced and focuses on front line employees and volunteers. The success of the program moved it from pilot program to full implementation as a regular part of Science North's operations during the busy summer season.
- Sciencents, a program designed to support innovation and continuous improvement, was successfully launched workforce-wide, supporting the prototyping and development of low cost innovative ideas that result in increased capability and capacity while supporting the Centre's change ready efforts and ultimately the achievement of Science North's strategic priorities.
- The Northern Leadership Project (NLP), a pilot program designed, spearheaded and launched by Science North in March 2013, combined executive coaching, action learning projects, 360 degree feedback and other leadership tools and mentoring opportunities. The first Cohort of emerging leaders in this accelerated development program included participants from 4 partner organizations: Science North, the City of Greater Sudbury, Health Sciences North and Laurentian University. The 20 participants in Cohort 1 graduated in March 2014. Cohort 2 will launch in May 2014.
- Partnership development was a key focus of the Centre's volunteer program, with Science North creating opportunities for seniors to become involved in their community science centre through knowledge sharing, involvement in large scale exhibit development, on-call volunteering opportunities, and through the provision of space and amenities for groups in exchange for "idea sharing" to gain their perspective on programming at Science North.





# **GOAL 2** Ensure world-class facilities and fully operational experiences

- Science North developed and implemented an exhibit and show maintenance management system that allows for proactive maintenance and reduces the number of hours for unscheduled down time. This system also decreased the time required for reactive response for all exhibits at Science North and Dynamic Earth.
- Science North continued to implement a cleaning/maintenance management system to ensure our buildings and grounds are reflective of being a world-class facility. Science North's cleaning company conducts intensive bi-weekly inspections and meets with Science North to review these inspections and take action on any improvement areas identified. In addition, Science North has developed and implemented a daily, weekly, monthly, and seasonal grounds and site maintenance plan, with identified tasks, dates, and actions, improving aesthetics and cleanliness for our visitors.
- Science North continued to work collaboratively with the Ministry of Tourism, Culture and Sport to further develop and map out Science North's capital infrastructure needs processes and provide input as the Centre continues the implementation of the Ministry's Asset Management system.
- During 2013-14 Science North received \$950,000 in funding from the Ministry of Tourism, Culture and Sport to address high priority repair and capital rehabilitation projects. These projects included: upgrading the F. Jean MacLeod Butterfly Gallery's Argus system; implementing fall protection systems in areas of concern; upgrading hard surfaces and ramping outside of the third floor of the science centre to ensure the safety of visitors and improve accessibility; upgrading areas of the Dynamic Earth site to ensure safe and accessible areas to our outdoor areas; expanding Northern programs storage and staging area to allow for safe and efficient service to the North; preparing the site at Science North for the implementation of PV arrays which is part of a large green initiative project to be implemented in 2014-15; and replacing Science North's point-of-sale system for improved efficiency and better customer service and relationship management.
- Science North secured \$50,000 in funding from Employment and Social Development Canada for improving accessibility in the customer service centre.
- Science North continued to develop its capital priority list using the asset management system and business plan and has sent out proposals to the Ministry of Tourism, Culture and Sport, as well as to other possible funders.

## **GOAL 3** Optimize processes, systems and technology to maximize ROI (return on investment)

 Science North continued to undertake the research necessary to implement the Information Management Strategy and Framework especially as it relates to new upcoming projects such as point-of-sale, document management, Human Resource Information System (HRIS), project portfolio management and account structures.

Implementing an integrated portfolio project and resource management system to evaluate ROI and deploy resources effectively for events, projects, programs

- Science North made progress on the planning, evaluation and execution of capital projects through a system of prioritization and integration.
- Science North also began process mapping for event planning which includes a tool to facilitate better decisions and more effectively plan resources.
- The Centre made changes in its technical teams and improved the integrated scheduling process to become more efficient and effective.

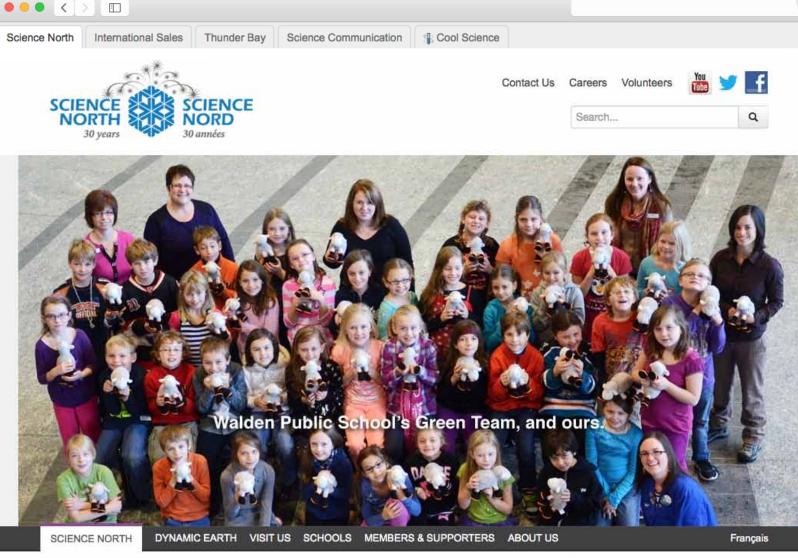
Implementing an efficient customer focused program for bookings (functions, groups, schools) and registration (camps, programs).

- The Customer Relationship Management (CRM) system was identified as part of the specific critieria for the new POS system and reviewed and determined further research and due diligence was required before making a final decision.
- Science North made improvements to the existing registration system, increasing the number of online camp and program registrations and improving customer satisfaction. There were 250 more registrations online in 2013-14 than the previous year. 95% customer satisfaction was achieved on a goal of 85%.

#### Continuous improvement to operational processes

- The upgrading of the new phone system in 2012-13 enabled Science North to implement changes to long distance and conference call procedures that resulted in \$15,000 in savings annually.
- Science North restructured the Visitor Services and Sales daily work routines and staff to improve efficiency resulting in \$5,000 savings annually.
- Science North identified continuous improvement processes to be implemented in 2014-15 that will result in staff efficiencies and an additional \$5,000 net impact annually.





Summer fun Calendar Exhibits IMAX® Theatre Planetarium Shop & Eat Camps Programs Facility Rentals Kids' Parties

## **Our green initiatives**





## **GOAL 4** Practice environmental responsibility

Identifying and implementing environmentally responsible operational practices

Science North implemented an internal battery and printer cartridge recycling
program; upgraded its recycling program to reduce waste and encourage
conservation; and saved over 58,000 bottles with the completion of the water refill
stations throughout both Science North and Dynamic Earth, in 2013-2014. In addition,
there has been a high level of employee participation in Science North's new Green
Pledge Program in which staff pledged what they will do to be "greener".

Identifying and implementing large projects based on environmental audits and/or metering with identified ROI as determined by initiative

 Based on its energy audit recommendations, Science North installed new LED parking lot lighting, and completed a boiler retrofit in the F. Jean MacLeod Butterfly Gallery.

Researching, identifying and funding highly visible renewable energy projects with acceptable ROI as identified by initiative

• The final stages of creating a business plan and identifying funding for the Smart Grid renewable energy project were completed. Science North is working with Greater Sudbury Utilities Inc., eCamion and Opus One Solutions on this initiative. The business plan was developed to ensure a successful, highly visible and fully funded green energy project on site.



# SCIENCE NORTH IN THE NORTH

#### **By Todd Miller**

In 2010 Science North re-established a permanent physical presence in northwestern Ontario with the opening of the Thunder Bay base. It was especially exciting for me as a former Science North employee, an educator, and as a father.

The first Science North satellite operation in Thunder Bay opened in 1993. As a locally hired staff scientist, I was part of a dedicated team bringing the unique Science North experience to people all over northwestern Ontario – logging thousands of kilometres each year for school visits, community presentations, summer camps, and so much more.

Unfortunately, changes in funding meant the end of a dedicated northwestern Ontario presence in the late 1990s. Despite this setback, Science North continued to offer high impact science experiences in the northwest, with staff travelling from Sudbury to Thunder Bay in order to deliver programs. With more than 1,000 kilometres between both cities, the situation was not ideal, to say the least.

It was a thrill to learn in 2010 that Science North had successfully secured stable funding and would again be setting up shop in our region.

Using Thunder Bay as a central location, the organization is in a much stronger position to bring science to the entire region, from Marathon to Kenora, Fort Frances to Greenstone, and up to Kitchenuhmaykoosib Inniugwug, Sandy Lake, and other remote First Nations communities. It's exciting to once again see Science North at local festivals, offering summer camps, and in the local media.

As an educator, the opening of the Thunder Bay office has helped to get our students excited about science and thinking about the world from a scientific point of view. Over the past four years, at the two elementary schools where I am principal, hundreds of students have gone home at the end of a "Science North Day" to share with their families discoveries from a workshop or a "wow!" moment from a whole-school assembly.

Science North is one of the few opportunities as well for our French Immersion students to have a presentation "en français." It is truly one of the highlights of the school year for our students.

I've also been able to experience Science North's positive impact as a parent, as my own children are now able to participate in Science North workshops and events in our city. My daughter has become a Science North volunteer, wearing a Bluecoat just like I did 20 years ago. It's helped to spark her career aspirations in the health sciences field.

Northern Ontario is a big place, and while Science North has worked hard over the past 30 years to honour its mandate to bring science to all of the north, a regional presence in the northwest is the perfect way to ensure people here can benefit from the one of-a-kind Science North experience.

Happy 30<sup>th</sup> to Science North. In 2040, I hope to be celebrating 30 years of Science North right here in the northwest too.

To learn more about Science North in Thunder Bay visit: sciencenorth.ca/ thunderbay.

Todd Miller is a school principal in Thunder Bay and a member of the Science North Board of Trustees.



## "

My daughter has become a Science North volunteer, wearing a Bluecoat just like I did 20 years ago. It has even helped to spark her career aspirations in the health sciences field."

# FAMILY SCIENCE NIGHT POPULAR AT NIPIGON SCHOOL

#### **By Peter Kutok**

The subject of science and technology is probably the subject that is most benefitted by the hands-on experience. Science North has been delivering programs to St. Edward's School students in Nipigon for many years.

Their hands-on approach to science education, offers students an experience that they may not get in a regular classroom setting. Science North programs complement the curriculum and are delivered by passionate, dedicated presenters. Our students have experienced presentations such as DNA extraction procedures, working with gears, and building a healthy body.

Our school also hosted a family night event where families were able to experience a Planetarium show that was also put on for the students of our school. The feedback was extremely positive and helped to foster connections between parents and the school.

Our world is increasingly affected by new scientific breakthroughs and their effects are wide-ranging. Science North plays an important role in portraying science in a light that is both appealing and engaging to children. Their unique approach highlights the scientific field in a manner that may help to bring more students into this area of study.

Peter Kutok is acting principal at St. Edward's School in Nipigon.

# **INSPIRING STUDENTS ON THE SHORES OF PELICAN LAKE**

## Science North's Thunder Bay team provides attention-grabbing workshops.

#### **By Nathan Hunter**

Science North's Thunder Bay team of Bluecoats have become regular visitors to Pelican Falls First Nations High School and have been delivering interesting and engaging hands-on science-themed workshops and activities for the past few years.

The school, located on the shores of Pelican Lake in Sioux Lookout, has a population of approximately 200 students. It is a boarding school operated by the Northern Nishnawbe Education Council and it provides secondary school programs to students from 26 remote First Nations communities in northwestern Ontario.

Working together with school staff, Science North's team has been instrumental in planning and delivering, what has grown to be, an annual school-wide science day. Through this event, Science North staff are able to provide attention-grabbing and hands-on science workshops, challenges, and investigations to students who may not otherwise have the opportunity to take part in, due to the distances they live from Sudbury or even Thunder Bay.

It is important to be able to provide a day like this for our students. Science can be a ton of fun and it is just amazing to have Science North staff come here, to us, to deliver an engaging program.

Nathan Hunter is a teacher at Pelican Falls First Nations High School.



# Strategic Priority 3 Long Term Financial Stability

# **Goals:**

- 1. Grow and diversify our external sales revenue
- 2. Grow philanthropic revenue streams
- 3. Increase and maximize grant revenue
- 4. Explore and maximize all other potential revenue streams

# **GOAL 1** Grow and diversify our external sales revenue

- With the support from the Ontario Ministry of Tourism, Culture and Sport, Science North and the Ontario Science Centre have continued to work together on our joint International Market Development Initiative. This initiative facilitates business development in China and South East Asia and provides a greater market presence and market intelligence with the ultimate goal of increasing the overall sales of our respective products and services.
- In 2013-2014, Science North continued to identify and develop relationships with
  potential strategic partners and sponsors for our products and services in the Asian
  market. As a part of this relationship development, Science North delivered multiple
  presentations to a variety of potential sponsors and partners, including the Hong
  Kong Chamber of Commerce.
- Science North's travelling exhibit *Creatures of the Abyss* was showcased at one of China's largest science centers, the Guangdong Science Center in Guanzhou, China, from Summer 2013 to February 2014. Subsequent to its showing in Guangzhou, Science North finalized a contract with Trans Studio, a theme park in Bandung, Indonesia for the outright sale of the *Creatures of the Abyss* exhibit.
- Science North worked with the Ontario Ministry of Economic Development and Trade to develop an analysis document of the Culture market feasibility in Brazil.
- Science North signed an agreement with the Singapore Science Centre to install *The Changing Climate Show* Object Theatre in Fall 2014.
- Science North signed a partnership agreement with Experimentarium, a science centre in Cophehagen, Denmark, for the development of a health-related multimedia theatre experience that will be at both science centres.
- 76% of the tour slots for *The Science of Ripley's Believe It or Not!®* special exhibition were secured during 2013-14. Science North was contracted to deliver the tour management of *Genome: Unlocking Life's Code*, an exhibition developed by the Smithsonian Museum of Natural History. Science North was also contracted by Excellent Exhibitions of Malmo, Sweden to deliver the tour management of the *Rivals of the Renaissance* travelling exhibition.



Guests enjoy the Unbelievable Gala

e

# **GOAL 2** Grow philanthropic revenue streams

- Science North's target was to achieve 40% awareness in the City of Greater Sudbury regarding its charitable status. The result from an independent survey in March 2014 was 42% Science North charitable status awareness on a local level, an increase of 23% as measured in 2013.
- The Mary Toppazzini-Bernardi Fund was established in 2013 due to Mary Bernardi's legacy gift of \$100,000. This Fund covers admission for guests from the Northeast Ontario Regional Cancer Centre who visit Science North, and more particularly in the F. Jean MacLeod Butterfly Gallery, as a respite while they are undergoing treatment.
- Science North hosted its third annual fundraising Gala. The theme of *The Unbelievable Gala* was inspired by *The Science* of *Ripley's Believe It or Not!*® exhibit and raised almost \$60,000 to create new experiences for visitors.
- Sponsors for teen events at Science North and school programs at Dynamic Earth were secured at \$20,000 and \$25,000 respectively.
- Science North's Corporate Membership goal was exceeded with 68 members as of March 31, 2014.
- Science North engaged with key individuals and corporations in the community for support of the Capital Campaign, which is currently in the pre-launch phase.



Mary Toppazzini-Bernardi



Extreme Rock Climbing teen event

# **GOAL 3** Increase and maximize grant revenue

- The Northern Ontario Heritage Fund Corporation invested \$970,890 into Science North's latest IMAX film *Wonders of the Arctic* which included a skill-share mentorship program with Music & Film In Motion. This initiative paired aspiring Northern Ontario filmmakers with professionals from the large format film industry, and offered immersive, rewarding learning opportunities through the use of professional equipment and hands-on participation in producing the film.
- FedNor confirmed a \$1 million investment, and the City of Greater Sudbury confirmed a \$250,000 investment, into the Dynamic Earth expansion initiative. This project includes an alliance with six other Northern Ontario attractions and the addition of a new Northern Nature Traders experience for their respective facilities.
- A combined investment of \$750,000 \$500,000 from the Northern Ontario Heritage Fund Corporation and \$250,000 from FedNor – supported the development and production of the *Arctic Voices* travelling exhibit and a partnership with the Cochrane Polar Bear Habitat for new experiences at that facility and shared experiences for Science North visitors and Cochrane Polar Bear Habitat visitors through 'live-link' programming.
- The Ontario Ministry of Education made a \$376,600 investment in Science North for developing and delivering Financial Literacy and Science & Innovation programs for English and French-language schools, in Sudbury and across Northern Ontario. It also includes the delivery of teacher workshops in Sudbury and designated communities across the North.
- A grant of \$150,000 (over three years) from Natural Sciences and Engineering Research Council of Canada through their PromoScience initiative was made in support of new outreach programs across Northern Ontario, including an increased delivery to First Nations school students and their teachers.
- Employment and Social Development Canada made two investments in Science North in 2013-14: \$24,900 through the New Horizons for Seniors funding program to enhance programs, social participation, and volunteer opportunities for Seniors, and \$50,000 through the Enabling Accessibility in the Workplace program to build a new, accessible sales centre for current and future employees working in this area.
- A total of \$93,000 in Employment Grants provided rewarding employment and skill development opportunities for summer students and interns, while increasing Science North's capacity to pursue its goals.













loyment and Emploi et al Development Canada Développement social Canada





# **GOAL 4** Explore and maximize all other potential revenue streams

Science North developed a cross-organizational team that conducted extensive research and identified and implemented the following new initiatives, generating a combined revenue of \$23,400: a coin-operated Tornado Simulator – a unique visitor experience in the Science North lobby; a portable digital photo booth – customizable for special events and programs, coin operated for visitors to purchase souvenir photos, and available to rent for special functions; and VISA Cash Rewards Rebate – a new program that provided Science North with a cash rebate on purchases over \$200.



# A TRAVELLING WE WILL GO...

The vice-president of exhibits and archives, and curator of the Ripley Collection, Ripley Entertainment Inc. shares his experiences.

#### **By Edward Meyer**

I live in Florida but I grew up in Ontario; the best of both worlds. I was very fortunate to have a father who loved to camp, fish, and drive. In 1972, Dad packed us into a conservative car, dragging a first-generation tent trailer for a month-long adventure to Vancouver, B.C. On the return trip, we stopped in Sudbury. I caught a six-pound pike on a dock in a nearby provincial park and was hooked. For the next three summers, Sudbury and Northern Ontario called me back. I thought I was in paradise.

Fast forward to 2011 – 36 years later. I'd been in Florida for nearly 20 years but the land of my youth, the land of "silver birch, home of the beaver" was calling. A long-time work associate at Ripley's Believe It or Not!<sup>®</sup>, John Corcoran, informed me he was working on a deal with Science North, a science centre in Sudbury.

"Have you ever heard of it? Have you been there?" he asked.

"Have I! Yes, and it is the single best science museum I have ever been in - bar none!" I responded.

"How would you like to curate a travelling show with them? We are thinking of calling it *The Science of Ripley's Believe It or Not!*<sup>®</sup>. We'll give them about 100 of our best exhibits, they'll create a great show aimed at explaining the unexplainable, and it will travel North America for several years."

"It sounds like a dream come true," I said. "Count me in and when do we start?"

The words were barely out of my mouth and I was recruited to stand in a booth, hosted by Science North, at the American Alliance of Museums conference in Baltimore, Maryland. I couldn't have been more excited. The team players I met there are now dear friends – some of the most gifted, driven, intelligent and fun scientists I have met.

Very quickly I became part of the team – a team that would choose the exhibits, make movies, create world-class graphics and hands-on interactive displays, and sell the Ripley's brand in a dozen places we have never been before.

As part of the "development team," I visited Sudbury in August 2012 for a brainstorming session with Science North staff. It was my first visit in about 25 years. Boy, things have changed. I couldn't believe the lunar landscape was now lush parkland.

Six months later, I was back for opening day of the exhibition and my first snowstorm in more than 20 years.

I was impressed that in less than two years, the dream of producing our first Ripley's travelling exhibition was a reality. I lectured on Ripley's to staff and citizen groups and came back two more times during the show's stay in Sudbury, each time falling more in love with the north and the most dedicated staff of people I have ever worked with. A staff farewell corn roast/fish fry and the presentation of a much-coveted Science North Bluecoat capped off my best summer in over 35 years. I love my coat and brag about it regularly.

I didn't get a chance to see the show in its first stop, Santa Ana, California, but was very impressed by the phenomenal attendance numbers they racked up in three short months. I knew we were on to a good thing. Ripley's and our partner, Science North, can be very proud of this blockbuster exhibit. I am confident that travelling shows and partnerships with the science centre world will become a big part of my future, at least for the next six years.

Since its world premiere at Science North in February 2013, and its first stop in California, *The Science of Ripley's Believe It or Not!*® has also been to Phoenix, Arizona. At every stop on the tour, I am impressed with the Science North logistics team who works to get everything there safe and sound, on time, and ready to roll.

Going forward, I am already booked into Peoria, Illinois, in August, and I am working nearly a year ahead with curatorial staffs in Seattle, Washington, and Houston, Texas, the next two stops on this wonderful journey.

My world at Ripley Entertainment Inc. is a lot different than the world of science centres and museums (but note, I didn't say better).

Working with such wonderful brilliant people: web designers, marketing gurus, sales staff, videographers, publicists, promotional wizards and, of course, *real* scientists, has been a joy from start to finish. Believe It or Not!

The Science of Ripley's Believe It or Not!<sup>®</sup> is a joint production between Science North and Ripley Entertainment Inc. The exhibition was funded in part by the Northern Ontario Heritage Fund Corporation and supported by the Ministry of Tourism, Culture and Sport through the Ontario Tourism Event Marketing Partnership Program.



# THE WONDERS OF FILMING WONDERS OF THE ARCTIC 3D

A month with the underwater camera unit at Baffin Island.

#### **By Dave Clement**

If someone had told me two years earlier I would spend a month of 2013 on the frozen ocean north of the most northern point of Baffin Island, I wouldn't have believed it.

A friend of mine at Music and Film in Motion (MFM) told me about the job.

"What are they looking for?" I asked.

The response was something like, "Well, someone who can work as a camera assistant, wrangle some data, maybe shoot some BTS (behind the scenes), help out with safety and logistics and you know...cook, maybe."

Now this might intimidate some, but I'm from Northern Ontario. Pretty much everything we do as northerners we do outside. Inevitably, this will involve cooking. In fact, the more remote the location of a meal prepared, the greater the glory to the northern chef. Intrigued, I threw my hat in the ring and landed the gig.

Fortunately, my skill-set from a former life as a field scientist also includes remote expedition logistics.

"I guess it is time to learn about underwater cinematography," I said to myself.

*Wonders of the Arctic 3D* was supported in part by the Northern Ontario Heritage Fund (NOHFC). Part of the mandate for the funding involved creating mentorship opportunities for filmmakers from Northern Ontario.

I am a shooter, director, editor and producer who owns a film company called Thunderstone Pictures.

Living and working from my home in Thunder Bay means I have to be a jack-of-all-trades and maybe a master of two (or three). It also means the opportunities that present themselves to work with dedicated professionals can be few and far between.

I found myself working with two pros who are at the top of their craft. David Lickley, another scientist-turned-filmmaker, was directing the film. Adam Ravetch was brought on as the underwater



cinematographer. Ravetch had worked on some of the greatest nature productions, such as *Planet Earth, Arctic Tale,* and *National Geographic Explorer.* 

To say I learned a lot from this experience is an understatement. For one, working on a frozen ocean presented no shortage of challenges. In addition to the great distances, we had to travel by snow machines pulling Qamutiqs (large Inuk sleds) loaded with gear and fuel, as the ice moved, breathed, heaved and occasionally broke up altogether.

Scuba diving under ice, hours, if not days from rescue was also tricky, even if I was the guy left on the surface. Ice diving first involved cutting an 8' x 10' hole with augers, then removing the ice – six feet thick in our case. Now, this was the only way in and the only way out, so it had to be done right. One also had to contend with -20 C temperatures where batteries die, cameras fog and wet gear freezes solid, even in May.

Once below the surface, concerns included finding the wildlife, getting the shot and, of course, finding one's way back to the hole. At anytime, the ice floe edge could break away and float off to Greenland, so I had to be on my toes.

The key to all of this was our lnuk guides, Simon, Quaaq and Adrian. Without these three extraordinary men, we wouldn't have got very far at all. Their skill with machines, ability to read the weather, knowledge of animal behavioral patterns and general fieldcraft fell second only to their humour.

This was the highlight for me. It was the cultural exchange, the chance to interact with these skilled hunters and catch a glimpse of just the-tip-of-the-iceberg of their world that will remain the most valued take-away for me. Our adventures together as a crew out there capturing footage of Narwhals, Beluga Whales, Greenland Sharks and Thick-Billed Murres will be something I get to carry with me my entire life.

Dave Clement is a geomorphologist turned filmmaker. He has worked on all kinds of productions from drama to documentary in camera, editing, writing, directing and producing. He has recently taken on a professorship at Canadore College's new Digital Cinematography and Applied Filmmaking Program in North Bay, where he is training a new generation of northern filmmakers.

Wonders of the Arctic 3D is presented by Fednav, with major funding provided by Raglan Mine - A Glencore Company, and the Northern Ontario Heritage Fund Corporation.

# Science North Funders, Donors and Sponsors\*

Science North's successes have been possible with the generous support of funders, donors and sponsors. Sincere thanks are extended to each and every one of them.

#### **Government Supporters**

**Canadian Heritage** City of Greater Sudbury FedNor **Employment and Social Development Canada Employment Ontario** Ministry of Education Ministry of Northern Development and Mines Ministry of Tourism, Culture and Sport Ministry of Training, Colleges, and Universities Natural Resources Canada Natural Sciences and Engineering Research Council of Canada Northern Ontario Heritage Fund Corporation Nuclear Waste Management Organization **Ontario Tourism Event Marketing Program** Service Canada Sudbury Vocational Resource Centre

## **Media Supporters**

CBC Radio One CJTK - KFM CTV Northern Ontario Eastlink TV Hot 93.5 FM KICX 91.7 KiSS 105.3 Le Loup Le Voyageur Northern Life Q92 Radio-Canada Rewind 103.9 FM Sudbury Living The Sudbury Star

#### **Corporate, Foundation and Individual Supporters**

**Agilis Network** Aquacade Pools & Spas Shannon Armitage Atlas Copco Canada Baffinland Stephanie Baker **Chantal Barriault BeaverTails Bell Aliant** Mary Bernardi Laurie Bissonette Mia Boiridy and Chris Graves David Boyce Chelsee Bradbury **Dale Bursey** Calm Air International LP Cambrian Ford Carol Cameletti **Canadian Association of Science** Centres Canadian North Churchill Wild Dr. Jordi Cisa and Martine Cisa **Elyse Clements** Collège Boréal **Corby Distilleries Limited** Svlvain Cote Natalie Crinklaw **Curious Thymes Bistro** D & A Fine Meats Ltd. Glen and Paula Davidge Stephanie Deschenes Desjardins/Caisse Populaires du Grand Sudbury Francisco Diaz-Mitoma **DiBrina Sure Group Dolinar Van Allen** Double Cross Vodka Peter Dow Epsilon Medical Reem Fattouh Fednav Denise Fera **FIRST Robotics Canada** Mike and Karen Franklyn **Frontiers North Adventures** Frosted Bakerv **Furniture World** 

Terrance and Rebecca Galvin Giant Tiger Stores Limited Golder Associates Ltd. Great Slave Helicopters Great Wolf Lodge, Niagara Falls Jeremy Guild Hatch Nancy Heale Manfred Herold Bill Jackson Nadim Kara Dave Kelly and Eileen Kotila KGHM International Ltd. Dr. Stephen E. Kosar and Nancy Kosar Brenda Koziol KPMG Mark and Sirkka Laberge Guy Labine Claude Lacroix Kristal Lafantaisie Phil and Nicole Lafreniere Lake of Bays Brewing Company Laurentian University Lyne Giroux and Paul Lefebvre Limestone Technologies Inc. Little Caesars Scott Lund James and Hope Marchbank Gordon Marrs and Joanne MacLellan Bryen McGuire Wendy Miller Andy and Heather Mollison Tina Montgomery Julie and Kirk Moskalyk Nana's Kettle Corn Dr. Chris Nash and Dr. Roger Nash Neighbourhood Dominion Lending Centres **BMO Nesbitt Burns** New Orleans Pizza Newalta Corporation Nexus Nuclear Waste Management Organization OJ Graphix **Ontario Power Generation** 

**Ontrak Control Systems** Palatine Hills Estate Winery **Derek Parsons** Jim Pattison, Jr. Joanne Peer Penguin Automated Systems Inc. PepsiCo Canada Pete's Rentall Photo Captiva Jennifer Pink **Pricked Tattoos** Raglan Mine – A Glencore Company **Reco Productions International Ripley's Entertainment** Carey Roy Jacqueline Savoie Scotiabank John Scott Murray Scott Sign City Nancy Somers Keri St. Louis Sudbury Hyundai Sudbury Integrated Nickel Operations – A Glencore Company Talos Steel Ltd. TD Canada Trust TD Friends of the Environment Foundation Technica Group Inc. The McLean Foundation Tim Hortons TNT Auctions Travelway Inn Brenda Tremblay and Glenn Graham **UP** Theatre Vale **Rick Van Oort** Verdicchio - Ristorante | Enoteca Versatruss Nicole Vézina Danielle Waltenbury W. Garfield Weston Foundation Wildeboer Dellelce LLP Mireille Wright Xeneca Power Development **XPS Consulting & Testwork** Services – A Glencore Company

#### **Corporate Plus Members**

Atlas Copco Canada **Bell Aliant Cambrian College Carman Construction** Cementation ClaimSecure Coldwell Banker Charles Marsh **Real Estate Brokerage Coleman Mine Employee** Association **Collins Barrow Creighton Mine Employee Association** Desjardins/Caisse Populaires du Grand Sudbury **DiBrina Sure Group Duplicators Finlandia Village** Freedom 55 Financial **HLS Hard-Line Solutions** Jubilee Heritage Family Resources KGHM International Ltd. Local 598 Lopes Ltd. Lougheed Financial Planning Lyne Giroux & Paul Lefebvre Manitoulin Transport Maslack Supply Ltd. Miller Maki LLP Ministry of Northern Development and Mines Money In Motion

Newalta Newcap Inc. Northern Life **Ontario March of Dimes** Patrick Mechanical Ltd. **Pioneer Construction** Plan A Health Care Staffing Solutions Rastall Corp **RBC Dominion Securities Realty Executives Rogers Broadcasting** Royal Lepage North Heritage Realty Scotiabank SCR Mines Technology Inc. **SNOLAB** Sudbury Community Service Centre Inc. Sudbury Credit Union Limited Sudbury Hyundai Sudbury Integrated Nickel **Operations**, a Glencore Company Sudbury Police Association Superior Auto Technica Group Inc. Travelodge Hotel Vale Wahnapitae First Nation Wallbridge Mining Company Limited WorleyParsons Canada Yallowega Bélanger Architecture

### Regular Corporate Members

Centre for Excellence in Mining Innovation (CEMI) Contact North Dr. Sloan and Associates Ethier Sand & Gravel Ltd. Gougeon Insurance Brokers Greater Sudbury Development Corp. Health Sciences North, Acute Inpatient Psychiatry Unit Lasalle Animal Clinic Perry & Perry Architects Inc. Ruberto Painting

#### Science North Board of Trustees (as of March 31, 2014)

#### Name

Scott Lund, Chair Elyse Clements, Vice-Chair Dr. Jordi Cisa Lorraine Dupuis Richard Dupuis Manfred Herold Dr. Stephen Kosar Jeffrey Laberge Claude Lacroix John Macdonald Gordon Marrs Todd Miller Théo Noël de Tilly Diane Salo Murray Scott

#### **Date Appointed**

June 29, 1998 June 29, 1998 March 24, 2004 March 24, 2004 February 11, 2009 May 25, 2004 January 27, 2010 February 11, 2009 July 15, 2009 June 11, 2008 June 22, 2005 December 17, 2013 January 29, 2014 February 11, 2009 January 23, 2013

#### **Term Expiry Date**

June 27, 2016 August 25, 2016 June 2, 2016 February 11, 2015 June 2, 2016 January 27, 2016 February 11, 2015 July 15, 2015 June 11, 2014 January 19, 2015 December 17, 2016 January 29, 2017 February 11, 2015 August 25, 2016

#### Science North Committee Members (as of March 31, 2014)

#### **Audit Committee**

Richard Dupuis – Chair Claude Lacroix Diane Salo *Bruce Hennessy* 

#### **Business Affairs Committee**

Jeffrey Laberge – Chair Richard Dupuis Manfred Herold Diane Salo *Cathy Bailey Doug Craig Greg Seguin* 

#### **Executive Committee**

Scott Lund – Chair Elyse Clements Jeffrey Laberge Claude Lacroix (member at large) Gordon Marrs

#### **Science Program Committee**

Gordon Marrs – Chair Dr. Jordi Cisa Lorraine Dupuis John Macdonald Diane Abols Céline Larivière Nels Conroy Liane Villano David Wood

Names in italics represent non-trustee members

#### Science North Staff (as of March 31, 2014)

Guy Labine Chief Executive Officer

Chloe Gordon *Executive Manager, CEO's Office* Eileen Kotila *Administrative Assistant* 

Audrey Dugas Senior Manager, Grant Programs

Jennifer Pink Director, Science Programs

Chantal Barriault Senior Scientist Research and Evaluation & Co-Director, Science Communication Program (on leave)

Julie Moskalyk Senior Manager, Dynamic Earth Jennifer Beaudry Lisa Léger Staff Scientists

Robert Gagne Senior Producer Richard Wildeman Animator Amy Wilson Associate Producer/Editor Beverly Pugliese Production Coordinator

Brenda Koziol Senior Scientist, Travelling Exhibits Kirsti Kivinen-Newman Franco Mariotti Staff Scientists

Nancy Somers Senior Scientist, Science Operations **Roger Brouillette Daniel Chaput** Sarah Chisnell Bruce Doran Jenny Fortier Amy Henson Simon McMillan Dana Murchison Melissa Radey Stephen Smith Staff Scientists Alain De Chevigny Science Communicator Jacqueline Bertrand

Dale Myslik Science Technicians Russell Jensen Michel Tremblay *Technical Specialist* Ronald Bradley *Technician* 

Carey Roy Assistant to the Directors, Science and Education Initiatives

Nicole Chiasson Director, Education and Northern Programs Cathy Stadder Wise Senior Scientist, Education Programs Lora Clausen Staff Scientist Cassandra Bélanger Science Communicator Danielle Waltenburv Senior Scientist, Education Natalie Crinklaw Tina Hache Emily Kerton (on leave) Bryen McGuire Staff Scientists Justine Van Esbroek Science Communicator

Brenda Tremblay Chief Operating Officer

Jennifer Booth Senior Manager Finance and Accountability Angela McCandless Senior Accountant Michelle Ciulini Valerie Lefebvre Accountants Diane Rossi Pay & Benefits Officer Janine Pigozzo Procurement & Contracts Officer Dave Kelly IT Services Manager Brian Wright IT Technician Mark Gibson Senior Manager Facilities – Science North Dale Bursey Facilities Manager – Dynamic Earth Paul Loiselle Kevin McArthur Shawn McNamara **Renaud Marquis** Technical Specialists Vince Murphy Project Manager – Capital Projects

Stephanie Deschenes Senior Manager - Marketing **Christine Catt** Brendan Shand Pamela Therrien Marketing Specialists Sarah Roy (on leave) Marketing and Communications Officer Kim Lavigne **Mireille Wright** Graphic Designers Reem Fattouh Web Editor Mario Parisé Web Developer

Ashley Larose Senior Manager, International Sales Catherine Cranmer Exhibit Sales & Marketing Leader Vern Gran PMO Technical Project Manager Tasio Gregorini Senior Technologist Andrea Martin Project Manager, PMO Norma Henry Manager, Travelling Exhibits Touring Operations Don Greco Technical Specialist

Renee LePera Senior Manager, Sales & Visitor Services Michelle Lalonde Kimberly Parkhill Kathryn Huneault Sales Leaders Crystal Craig Special Functions Lead Ron Pinard Technical Specialist

Kristal Lafantaisie Acting Manager of Development

Nadim Kara Director, Organizational Development Denise Fera Senior Manager, Organizational Development Rebecca Wilson Organizational Development Specialist Tasha Denis Organizational Development Officer Appendix: Science North Audited Financial Statements (as of March 31, 2014) Financial Statements of

# **SCIENCE NORTH**

Year ended March 31, 2014



KPMG LLP Chartered Accountants Claridge Executive Centre 144 Pine Street, PO Box 700 Sudbury ON P3E 4R6 
 Telephone
 (705) 675-8500

 Fax
 (705) 675-7586

 In Watts
 (1-800) 461-3551

 Internet
 www.kpmg.ca

#### **INDEPENDENT AUDITORS' REPORT**

To the Honourable Minister of Tourism, Culture and Sport of the Province of Ontario and the Board of Trustees of Science North

We have audited the accompanying financial statements of Science North, which comprise the statement of financial position as at March 31, 2014, the statements of operations and changes in fund balances and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



#### Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Science North as at March 31, 2014, its results of operations, its remeasurement gains and losses, its changes in fund balances and its cash flows for the year then ended, in accordance with Canadian public sector accounting standards.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

June 18, 2014 Sudbury, Canada

Statement of Financial Position

March 31, 2014, with comparative information for 2013

		2014		2013
Assets				
Current Assets:				
Cash	\$	2,960,397	\$	2,622,952
Short-term investments		3,383,804		3,899,031
Accounts receivable		2,398,480		1,004,715
Prepayments and inventory		909,665		747,468
		9,652,346		8,274,166
Restricted investments		6,910,788		6,106,197
Capital assets (note 2)		40,838,038		41,055,642
	\$	57,401,172	\$	55,436,005
Current liabilities:	¢	2 762 904	¢	2 404 259
Accounts payable and accrued liabilities (note 4)	\$	2,763,894	\$	2,491,358
Deferred revenue	Ŧ	1,761,567	•	1,074,933
Current portion of loans payable (note 3)		52,971		236,482
		4,578,432		3,802,773
Loans payable (note 3)		1,434,278		1,844,761
		6,012,710		5,647,534
Fund balances:				
		2,998,251		2,192,502
General		39,789,228		39,652,897
Capital asset				
		8,600,983		7,943,072
Capital asset				

See accompanying notes to financial statements.

On behalf of the Board:

Chair

Director

Statement of Operations and Changes in Fund Balances

Year ended March 31, 2014, with comparative information for 2013

	General		Capital Asset		Restricted and Endowment		Total	
	2014	2013	2014	2013	2014	2013	2014	2013
Revenue:								
Province of Ontario grants:								
Operating \$	6,828,900	6,896,600	-	-	-	-	6,828,900	6,896,600
Specific	219,533	368,228	3,072,289	1,995,395	-	-	3,291,822	2,363,623
Government of Canada grants	127,115	153,355	235,261	-	-	-	362,376	153,355
Admissions:								
Science Centre	1,104,754	1,576,069	-	-	-	-	1,104,754	1,576,069
Dynamic Earth	385,513	406,739	-	-	-	-	385,513	406,739
IMAX Theatre	453,924	452,475	-	-	-	-	453,924	452,475
Planetarium	110,329	121,052	-	-	-	-	110,329	121,052
Workshops and events	1,050,802	788,681	-	-	-	-	1,050,802	788,681
Memberships	548,531	418,210	-	-	-	-	548,531	418,210
Business operations:	,	,						,
Food services	647,984	665,721	-	-	-	-	647,984	665.721
Exhibit and theatre production sales	1,995,595	2,072,511		64,255	_	-	1,995,595	2,136,766
Film production services	90,491	36,096	-	-	_	_	90,491	36,096
Retail	741,695	778.878	_	_	_	_	741,695	778.878
Parking	83,233	99,105	_	_	_	_	83,233	99,105
Fundraising and donations	287,403	276,156	658,865	743,009	107.077	42,733	1,053,345	1,061,898
Interest earned	183,106	150,301	030,003	743,009	226,817	235,628	409,923	385,929
Other	50,948	39,228	1,468,600	444,980	220,017	233,020	1,519,548	484,208
Other	14,909,856	15,299,405	5,435,015	3,247,639	333,894	278,361	20,678,765	18,825,405
	14,909,650	15,299,405	5,435,015	3,247,039	333,094	270,301	20,070,705	10,025,405
Expenses:								
Science program:								
Science Centre operations	2,573,398	3,019,670	-	-	-	-	2,573,398	3,019,670
Education and Northern programs	1,362,539	1,404,306	-	-	-	-	1,362,539	1,404,306
Dynamic Earth operations	502,345	506,194	-	-	-	-	502,345	506,194
Business operations:								
IMAX Theatre	624,575	619,664	-	-	-	-	624,575	619,664
Planetarium	125,244	134,076	-	-	-	-	125,244	134,076
Food service	479,405	460,611	-	-	-	-	479,405	460,611
Cost of exhibit sales Cost of film services	2,075,250 67.500	1,914,872	-	-	-	-	2,075,250 67,500	1,914,872 57.831
Retail	530,331	57,831 545,224	-	-	-	-	530,331	545,224
Box office and sales	443,361	377,001					443,361	377,001
Maintenance and building	1,796,833	1,572,620			-		1,796,833	1,572,620
Administrative operations	2,652,852	2,238,312	-	-	-	-	2,652,852	2,238,312
Marketing and development	1,287,628	1,178,741	-	-	-	-	1,287,628	1,178,741
Program technical support	309,772	430,318	-	-	-	-	309.772	430.318
Amortization of capital assets	-	-	4,247,741	4,412,889	-	-	4,247,741	4,412,889
	14,831,033	14,459,440	4,247,741	4,412,889	-	-	19,078,774	18,872,329
France (definioner) of more								
Excess (deficiency) of revenue	70.000	820.005	4 407 074	(4.405.050)	222.004	070 004	1 500 001	(40.004)
over expenses	78,823	839,965	1,187,274	(1,165,250)	333,894	278,361	1,599,991	(46,924)
Fund balances, beginning of year	2,192,502	2,332,267	39,652,897	40,488,400	7,943,072	7,014,728	49,788,471	49,835,395
Transfers for capital	644,249	(232,854)	(1,050,943)	329,747	406,694	(96,893)	-	-
Interfund transfers (note 5)	82,677	(746,876)	-	-	(82,677)	746,876	-	-
Fund balances, end of year \$	2,998,251	2,192,502	39,789,228	39,652,897	8,600,983	7,943,072	51,388,462	49,788,471

See accompanying notes to financial statements.

Statement of Cash Flows

Year ended March 31, 2014, with comparative information for 2013

	2014	2013
Cash provided by (used in):		
Operating activities:		
Excess (deficiency) of revenue over expenses	\$ 1,599,991 \$	(46,924)
Adjustments for:		
Amortization of capital assets	4,247,741	4,412,889
Debt discount	8,670	13,252
Loan forgiveness	(360,000)	-
	5,496,402	4,379,217
Changes in non-cash working capital (note 8)	(596,792)	914,975
	4,899,610	5,294,192
Financing activities:		
Principal repayment of loans payable	(242,664)	(543,870)
Additions to loans payable	-	8,087
	(242,664)	(535,783)
Capital activities:		
Purchase of capital assets	(4,030,137)	(3,577,164)
Investing activities:		
Decrease (increase) in other restricted investments	(804,591)	29,651
Decrease (increase) in short-term investments	515,227	(356,964)
	(289,364)	(327,313)
Net increase in cash	337,445	853,932
Cash, beginning of year	2,622,952	1,769,020
Cash, end of year	\$ 2,960,397 \$	2,622,952

See accompanying notes to financial statements.

Notes to Financial Statements

Year ended March 31, 2014

Science North (the "Organization") is an Ontario Organization established as a Science Centre Organization under the Science North Act of the Province of Ontario. The Organization is a registered charity and is exempt from income taxes under the Income Tax Act.

#### 1. Significant accounting policies:

(a) Basis of presentation:

These financial statements reflect the assets, liabilities, revenues and expenses of the unrestricted, capital and restricted and endowed funds of Science North.

The financial statements have been prepared by management in accordance with Canadian public sector accounting standards including the 4200 standards for government not-for-profit organizations. A statement of remeasurement gains and losses has not been included as there are no matters to report therein.

(b) Revenue recognition:

The Organization follows the restricted fund method of accounting. Under this method, the following principles have been applied:

- Contributions are recorded as revenue in the respective funds based on their nature, source and the restrictions stipulated by the donor.
- Contributions including pledges and donations are recognized as revenue when received or receivable if the amounts can be reasonably estimated and collection is reasonably assured.
- Revenue on contracts is recognized using the percentage-of-completion method. The percentage is determined by relating the actual cost of work performed to date to the current estimated total cost for each contract. Unearned advances are deferred. Projected losses, if any, are recognized immediately for accounting purposes.
- Revenue from film distribution and license / lease arrangements is recognized only when
  persuasive evidence of a sale or arrangement with a customer exists, the film is complete
  and the contractual delivery arrangements have been satisfied, the arrangement fee is
  fixed or determinable, collection of the arrangement fee is reasonably assured and other
  conditions as specified in the respective agreements have been met.
- Cash received in advance of meeting the revenue recognition criteria described above is recorded as deferred revenue.
- (c) Investments:

Short-term investments consist of bonds and coupons and are recorded at fair value.

Restricted investments consist of bonds and coupons and are recorded at amortized cost.

Notes to Financial Statements

#### 1. Significant accounting policies (continued):

(d) Capital assets:

With the exception of the Bell Grove land, which is recorded at nominal value, capital assets are stated at cost or fair market value if donated.

Amortization on buildings is provided on the declining-balance basis at an annual rate of 5%.

Amortization on exhibits and equipment is provided on the straight-line basis at annual rates ranging from 5% to 20%.

Amortization on large format films, when available for use, is provided in proportion that current revenue bears to management's estimate of revenue expected from the film.

(e) Financial instruments:

All financial instruments are initially recorded on the statement of financial position at fair value.

All investments held in equity instruments that trade in an active market are recorded at fair value. Management has elected to record investments at fair value as they are managed and evaluated on a fair value basis. Freestanding derivative instruments that are not equity instruments that are quoted in an active market are subsequently measured at fair value.

Transaction costs incurred on the acquisition of financial instruments measured subsequently at fair value are expensed as incurred.

Financial instruments are classified into fair value hierarchy Levels 1, 2 or 3 for the purposes of describing the basis of the inputs used to determine the fair market value of those amounts recorded a fair value, as described below:

- Level 1 Fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2 Fair value measurements are those derived market-based inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly
- Level 3 Fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data
- (f) Employee future benefits:

The Organization has defined contribution plans providing pension benefits. The cost of the defined contribution plans is recognized based on the contributions required to be made during each year.

Notes to Financial Statements

Year ended March 31, 2014

#### 1. Significant accounting policies (continued):

(g) Use of estimates:

The preparation of financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the periods specified. Items subject to such estimates and assumptions include the carrying value of capital assets and loans payable and valuation allowances for accounts receivable and inventory. Actual results could differ from those estimates. These estimates are reviewed periodically, and, as adjustments become necessary, they are reported in earnings in the year in which they become known.

#### 2. Capital assets:

March 31, 2014	Cost	Accumulated Amortization	Net Book Value
Land and buildings:			
Bell Grove	\$ 51,363,284	30.450.297	20,912,987
Dynamic Earth	13,725,213	4,870,428	8,854,785
Exhibits and equipment:			
Bell Grove	15,197,365	10,647,648	4,549,717
Dynamic Earth	5,140,099	4,528,102	611,997
Travelling exhibits	9,862,204	7,431,167	2,431,037
Large format film	7,829,774	4,352,259	3,477,515
	\$103,117,939	62,279,901	40,838,038

March 31, 2013	Cost	Accumulated Amortization	Net Book Value
Land and buildings:			
Bell Grove	\$ 50,558,056	29,349,613	21,208,443
Dynamic Earth	13,719,726	4,466,492	9,253,234
Exhibits and equipment:			
Bell Grove	15,039,746	9,369,717	5,670,029
Dynamic Earth	4,972,083	4,360,852	611,231
Travelling exhibits	8,815,605	6,172,874	2,642,731
Large format film	5,982,585	4,312,611	1,669,974
	\$ 99,087,801	58,032,159	41,055,642

Notes to Financial Statements

#### 3. Loans payable:

Reduced or non-interest bearing loans are payable as follows:

	Principal O	utstanding			
	2014	2013	Payment Terms		
Province of Ontario:					
IMAX Theatre	\$ 75,837	435,837	50% of average annual IMAX Theatre profits, if any, for previous two fiscal years. During the year, \$360,000 of the outstanding loan balance was forgiven by the funding agency.		
Wings Over the North	1,000,000	1,000,000	One third of remaining distribution profits received by Science North once a third party contributor has recouped its investment against such profits.		
Travelling Exhibits 2	50,000	191,330	Loan bearing no interest, repayable in annual installments with two annual payments of \$150,000 and one payment of \$50,000. Loan has been discounted to reflect the fair value. The discount has been calculated at \$1,641 (2013 - \$8,670)		
Government of Canada:					
Large Format Films Distribution	361,412	362,682	This loan is repayable at 4% of gross revenues from film distribution and its derivatives.		
Ends of the Earth	_	91,394	Repayable at 50% of lease revenue for the Exhibit in excess of a specified balance. The first payment is due within three months of year-end.		
Total	1,487,249	2,081,243			
Less current portion of loans payable	52,971	236,482			
	\$ 1,434,278	1,844,761			

The Federal loans payable reflect management's current estimates of its obligation given the plans and results to date. The balances have not been discounted given the indeterminable repayment schedule.

Notes to Financial Statements

#### 4. Restricted and endowment funds:

The restricted and endowment funds are comprised of the following:

	2014	2013
Externally restricted:		
Capital renewal fund	\$ 2,660,094	2,620,273
Program and exhibit funds	619,255	500,805
Endowment fund	27,912	25,054
	3,307,261	3,146,132
Internally restricted:		
Funds:		
Operating reserve fund	3,107,127	3,301,222
Waterfront development	220,387	193,515
Other	197,502	30,287
Reserves:		
Replacement of capital assets	1,032,370	582,558
Human resources	736,336	689,358
	5,293,722	4,796,940
	\$ 8,600,983	7,943,072

#### 5. Interfund transfers:

The interfund transfers are comprised of:

- (a) net assets of \$77,391 (2013 \$189,776) which were internally allocated between the General Fund and the Restricted Fund, to cover certain general fund purchases;
- (b) net assets of \$182,882 (2013 \$185,364) which were internally allocated between the General Fund and the Restricted Fund for capital acquisitions (future capital acquisitions); and
- (c) net assets of \$188,168 (2013 \$751,288) which were internally allocated between the General Fund and the Restricted Fund to cover future operational expenditures.

Notes to Financial Statements

Year ended March 31, 2014

#### 6. Financial instruments:

(a) Credit risk and market risk:

The Organization has no significant exposure to credit or market risks.

(b) Liquidity risk:

Liquidity risk is the risk that the Organization will be unable to fulfill its obligations on a timely basis or at a reasonable cost. The Organization manages its liquidity risk by monitoring its operating requirements. The Organization prepares budget and cash forecasts to ensure it has sufficient funds to fulfill its obligations.

(c) Interest rate risk:

Interest rate risk is the potential for financial loss caused by fluctuations in fair value or future cash flows of financial instruments because of changes in market interest rates.

The Organization is exposed to this risk through its interest bearing investments.

The Organization's bond portfolio has interest rates ranging from 2.2% to 6.0% with maturities ranging from July 7, 2014 to February 15, 2023.

At March 31, 2014, a 1% fluctuation in interest rates, with all other variables held constant, would have an estimated impact on the fair value of bonds of \$102,946.

#### 7. Employee future benefits:

The contributions to the defined contribution pension plans were \$537,502 (2013 - \$548,081).

#### 8. Change in non-cash operating working capital:

		2014	2013
Cash provided by (used in):			
Decrease (increase) in accounts receivable	\$	(1,393,765)	1,045,084
Decrease (increase) in prepayments and inventory		(162,197)	94,621
Increase (decrease) in accounts payable			
and accrued liabilities		272,536	(464,966)
Increase in deferred revenue	686,634	240,236	
	\$	(596,792)	914,975



# sciencenorth.ca

Science North is an agency of the Government of Ontario. Dynamic Earth is a Science North attraction. IMAX<sup>®</sup> is registered trademark of IMAX Corporation. Science North is a not-for-profit and a registered charity. *The Science of Ripley's Believe It or Not!*<sup>®</sup> is a joint production between Science North and Ripley Entertainment Inc.