With the last of our outreach trips now wrapped up for the semester, Science Travels is pleased to celebrate. Not only does the 2015-2016 academic year mark our 10-year anniversary, but it has allowed us to reach out to some 6168 students, more than in any previous year. We are so proud of our volunteers for helping to make this happen!

This Spring 2016 newsletter provides a chance for you to share in our excitement. We will relay stories written by our volunteers, take you through the thrill of our most recent fundraiser, have a look at the statistics from this past year, and explore photographs along the way. We hope you enjoy the journey as much as we did!

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The 2015-2016 academic school year has proven to be an exciting time for Science Travels, filled with all kinds of new opportunities. We recruited a number of new, smart and eager volunteers, travelled to several new communities, tried new ways to improve how we engage our audiences, and made many new friends along the way! This year Science Travels sent 24 graduate student volunteers on 8 trips to 18 communities in Ontario, Quebec and Nunavut. Our volunteers worked tirelessly to ensure that we could achieve our mission of sharing our knowledge, science expertise, and providing hands-on learning experiences in remote locations in Canada. By sharing their passion of science to some 6168 students, we hope that this year, as every year, our volunteers continue to inspire curiosity. Thank you to all of those who embraced our presence in their schools and allowed us to do some exciting science with Canadian youth. As we move forward into the coming academic year, we hope to continue applying our efforts in many new ways, to many more new faces.

The incredible generosity of “strangers”

Barbara Vanderhyden, Program Director

The photo says it all – the cheer went up, arms raised, fists pumped, and smiles all around. The Chair of the Heads of Missions Spouses Association (HOMSA) had just announced the amount that their organization had raised for the University of Ottawa’s science outreach to indigenous youth – $22,000!!!

But let’s go back a few months. It all started when a Science Travels volunteer, Veronika Cencen, described her recent trip to Eastmain and Waskganish to her mom. She had also just joined the Aboriginal Mentorship Program (AMP) team, where she had volunteered to mentor indigenous high school students in the Ottawa region. Veronika’s mom, Lilijana, is a member of HOMSA, an organization whose members are the spouses of the foreign Ambassadors and High Commissioners to Canada. And so Ashley Leifso, coordinator of the AMP program and I visited the Slovenian Residence in early February. We were so excited, we arrived early and waited in the car. After all, it is not every day that someone gets invited to a foreign ambassador’s home for brunch. That visit was the first, but we learned very quickly that HOMSA is a dynamic and engaging group of women who
welcomed us warmly and were truly interested in the work we are doing with indigenous youth.

Their interest turned into two very notable events. Every year, the AMP program brings 24 high school students to Ottawa for its annual three-day science fair. This year, Day 1 was a pretty spectacular day, as it ended with an international potluck dinner at the home of the Ghana High Commissioner. His Excellency, Dr. Sulley Gariba, his wife Neo and daughter Ayisha very generously opened their home to the AMP students and mentors and we were fed with the most delicious array of hospitality and international cuisine!

And HOMSA had even bigger plans for us, selecting our program as their choice of charity for their annual fund-raising event. Hosted by Mrs. Patricia Bassett, wife of the Ambassador from Ireland, the event was an impressive blend of international colours and flavours, attended by people from around the world, but who currently call Ottawa home. In honour of our focus on indigenous youth, entertainment was provided by the soothing harmonies of Jaaji (an Inuit) and Chelsea (a Métis) of Twin Flames (www.twinflamesmusic.com). Behind the band scrolled photographs of the youth who participate in AMP and Science Travels, so the sounds and sights meshed perfectly. Afterwards, at the silent auction, 300 attendees bid on crafts from around the world. And when it came time to announce the final tally, well…. the picture says it all.

Thank you, HOMSA!
## Spring 2016, By the Numbers

- **135** activities delivered at **15** elementary and high schools
- **12** communities visited
- **14** volunteer graduate students

### Eastmain, QC
- Molly Hyde
- Victor Malkov
- Kaitlin Town
- Jonathan Weber

- Wabannutao Eeyou School
- Wiinibekuu School
- Annie Whiskeychan Memorial School

### Kejick, ON
- Alexander Foo
- Alexander Steeves
- Marina Torreblanca
- Maddison Turner

- New Prospect School
- Dryden High School
- Migisi Sahgaigan School
- Baibombeh Anishinabe School
- David Kejick School

### Migisi Sahgaigan, ON
- Colleen Cornett
- Hajra Mazhar
- Christina Thomsen

- Zhingwako Zaiganing School
- Mikinaak Onigaming School
- Windigo Island School
- Pegimigaabo School
- Fort Frances High School

### Lac La Croix, ON
- Maryam Kotait
- Renée Nelson
- Sara Trincao-Batra

- Paatsaali High School
- Nuiyak Elementary School

### Dryden, ON
- Pawitik, ON
- Migisi Sahgaigan, ON
- Dryden, ON

- Sanikiluaq, NU
- Lac La Croix, ON
- Onigaming First Nation, ON
- Northwest Angle 37, ON
- Big Grassy First Nation, ON
- Fort Frances, ON
We hope that the 3013 students we reached from 135 classrooms this Spring had as much fun learning about science as we did presenting it!

Activity Summary

135 workshops
38 unique science activities in topics including conservation, astronomy, zoology, optics

This Spring we aimed to diversify our workshop presentations, trying new activities that demonstrated natural selection, greenhouse gases, and magnets. We even held a panel on science careers, and further explored science through student-made creations at the local science fair.
On April 9th, after a marathon of packing with Kit Coordinator, Ana Gargaun, and chemistry guru, Alex Foo, I boarded a bus to Montreal along with my teammates Molly, Victor, and Jonathan. This would be the first trip for all of us to Northern Quebec, and the first Science Travels trip for the other three. After a quick night near the airport, we boarded a plane that would take us to the two Cree communities that we were visiting: Eastmain and Waskaganish.

We were greeted in Eastmain by Lisa Oliver, one of the teachers at the Wabannutaoo Eeyou School, and tried to perform luggage-tetris to fit everything inside her vehicle. We failed — it didn’t fit (we had a lot of presentation material with us)! Luckily, Eastmain is such a friendly and tight-knit community, that it didn’t take long to find additional help to transport our gear to the hotel. From there we ventured to the infamous Northern store to pick up a few extra supplies, and spent the rest of the day preparing presentations and exploring the town.

It does a disservice to say that the students and teachers that we visited in Eastmain blur together, but our time in the town was a whirlwind of building bridges, exploring electronics, chemistry “magic” and big smiles. It was sad to leave Eastmain after such a short time, but we were also excited to meet the students in Waskaganish. Victor and I were also interested in visiting the trapper’s lodge, and we were all hoping for a clear night and a chance to see the Northern lights!

Upon arrival in Waskaganish we were taken on a tour of the town by Min Min Tong and Nick Scopis, one of the teachers and the vice-principal at Wiinibekuu High School, respectively. They pointed out the trapper’s lodge and also a building where geese would be roasted following the community’s Goose Breaks.

During our presentations at both Annie Whiskeychan Memorial School and Wiinibekuu High School, it was obvious that the students were looking forward to their upcoming Goose Break. Talks on the different diets of dinosaurs turned into discussions about students’ love of goose, and everyone recognized that the propane torch we used to light our hands on fire in our chemistry demonstrations was the same one used to sear goose skin.

At the end of the week, and after an amazing experience, we returned to Ottawa. I know the four of us feel extremely grateful for the ability to go on this trip and excite students about science. I also feel very fortunate that I had such terrific, dependable travel companions and excellent help coordinating everything for our trip back to Ottawa.
On April 17, Alex S., Marina, Maddison and I embarked on a 4,000 mile journey to deliver science activities to First Nations and rural communities across Northwestern Ontario.

Upon touching down in Winnipeg, we made our way to the town of Kenora on the shores of the gorgeous Lake of the Woods and in the middle of cottage country. We quickly set about preparing for the week ahead, but not before we embraced our inner tourists by taking pictures by the waterfront with Husky the Muskie and enjoying the local microbrewery.

The next day we set off bright and early for David Kejick School where we were quickly welcomed into their lovely community of 100 students and staff. We promptly returned the favour by setting a teacher on fire (to demonstrate the chemistry of heat and energy), while other students explored the polarizing attraction of magnets with Maddison, or let their creativity run wild designing their own animals using natural selection with Marina.

The next two days saw us visiting Baibombhe Anishinabe School and Migisi Sahgaigan School, each with their own unique culture and history. A common theme across all of these communities, however, was the warmth and kindness of the school staff, and the seemingly endless enthusiasm and curiosity of students — many of whom flocked to hear Marina’s stories on farming insects, or conspired to keep Alex S. over lunch to discuss the future of space travel and exploration. One class even managed to persuade us to open an Instagram account so that they could continue to discuss their science questions and investigations with us after we had left.

One of the main challenges (or charm, depending on your point of view) of Science Travels is its dynamic and unpredictable nature, both inside and outside of the classroom. Our trip was no exception — at one point we even had one activity for 20 students eventually turn into an activity for the entire student body after students poured in from the halls. Despite having barely met prior to our Science Travels adventures, our little team quickly pulled together, adapting our activities and presentation styles.

We finished our trip with a spectacular chemistry show for the students of Dryden High, complete with a thermite reaction spewing fire and molten metal — a suitable send-off for a week of inspiring interest in science for nearly 800 students, producing countless smiles and a set of four lifelong friends in the process.
Our 10-seater float plane had just taken off out of the water, and we were already rising above the treetops. In our plane, we sat grinning at one another and with the friends we had met from the Seven Generations Educational Institute (SGEI), a local Aboriginal support program. Meanwhile, our full-days-worth of fun, hands-on science activities bumped along with us in the back. We were more than ready to start another amazing day amongst the Lake of the Woods. On this day, however, our destination was a little bit out of the ordinary: a small island of just over 100 people.

The landing onto the water was seamless, and before we knew it, Hajra, Colleen, and myself were pulling our workshop baggage across a wooden dock, across the island, and into a beautiful little classroom with seven fresh, smiling faces. We warmed up our day of science adventures by showing the power of electricity: static electricity, electrons, polarity, before eventually learning how to power a lightbulb with a lemon battery. Then we moved on to the Chemistry Show — as soon as we demonstrated how fireworks get their colour and how fireflies light up in a neon glow, they knew they were in for an interesting afternoon!

Observing the students quickly warm up to us and become engaged in our activities was the most memorable moment of a trip filled with many. We were fortunate enough to have had the guidance of Kim Kirk and her colleagues from SGEI, who oriented us within each community that we visited, and made sure our visits were valuable to both us and the students alike.

“The activity was really fun and I learned new things that I can show my family.”

— Student in Fort Frances
As Maryam, Renee, and I settled into our seats aboard the 10 passenger plane, the pilots turned to us and said, “If we all of a sudden turn the plane around, it’s because we have spotted a polar bear...” We looked at them and laughed; all thinking they were telling us a joke.

We ascended into the air and immediately took notice of the cracking ice terrain of Nunavut; it was beautiful, different from anything we had seen. The plane swayed in the air and we all felt excitement and at ease; the next stop would finally be Sanikiluaq!

Suddenly the plane turned around and the pilots excitedly pointed at the ice below. We looked out the window and surely enough, there it was — a beautiful polar bear, live in the flesh, looking up at our plane as we flew over it. We all looked at each other flushed from the excitement that had just ensued; a moment marking the beginning of our wonderful adventure in Northern Canada.

Once we arrived in Sanikiluaq, we visited Paatsaali High School where we were warmly greeted by the students and staff. We were immediately taken aback by the hospitality and kindness of the community. Over the couple of days that we were there, the students were mesmerized by how we could create a model of our digestive system by simply using pantyhose and crackers, that our lungs are just like balloons, how we can be just like paleontologists by digging chocolate chips out of cookies, and that bees really are not so scary after all! While visiting Paatsaali, we also spent a whole day at the Science Fair where we had the opportunity to continue spreading our love for science by meeting both students and members of the community.

Towards the end of the week we turned our attention towards Nuiyak Elementary School. Upon entering the foyer we noticed that the beautiful entrance was filled with different artifacts from the Sanikiluaq region; there were incredible sculptures and different animal furs. After admiring the amazing displays we were again received with open arms by the children and staff. Throughout the day we shared a lot of excitement when we made raisins float, created lava lamps, buzzed like bees, and learned all about oral hygiene!

As our visit to Sanikiluaq came to an end, we reflected upon our time there. We immensely enjoyed the unique opportunity we had to share our love and passion for science with the Sanikiluaq community. During our stay, the friendships we made and the people we met all made an everlasting impression. We are very grateful for the opportunity we had to teach but also for the very special opportunity we had to learn from the people of Sanikiluaq; they shared their culture, traditions, and language with us: Nakurmiik!!

“The volunteers did a great job covering a challenging topic!” – Teacher in Sanikiluaq
Who Are We?

Dr. Barbara Vanderhyden
Barb is the founder and director of Science Travels. She provides guidance to the program through a veritable wealth of experience in science outreach.

Ana Gargaun
Ana is the Kits Coordinator. Ana ensures that all volunteers are trained on their activities and that they leave with all the supplies needed for a successful voyage.

Christina Thomsen
Christina is the Science Travels Program Manager. She takes care of travel arrangements, communications, staffing the trips, and day-to-day operations.

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Science Travels is funded by an NSERC PromoScience grant, and support from AirCreebec, Airlnuit, Seven Generations Educational Institute and the following uOttawa programs:
Student Academic Success Services, Aboriginal Resource Centre, Administration Committee, and the Faculties of Science, Engineering, Medicine and the Center for Global and Community Engagement.

Science Travels