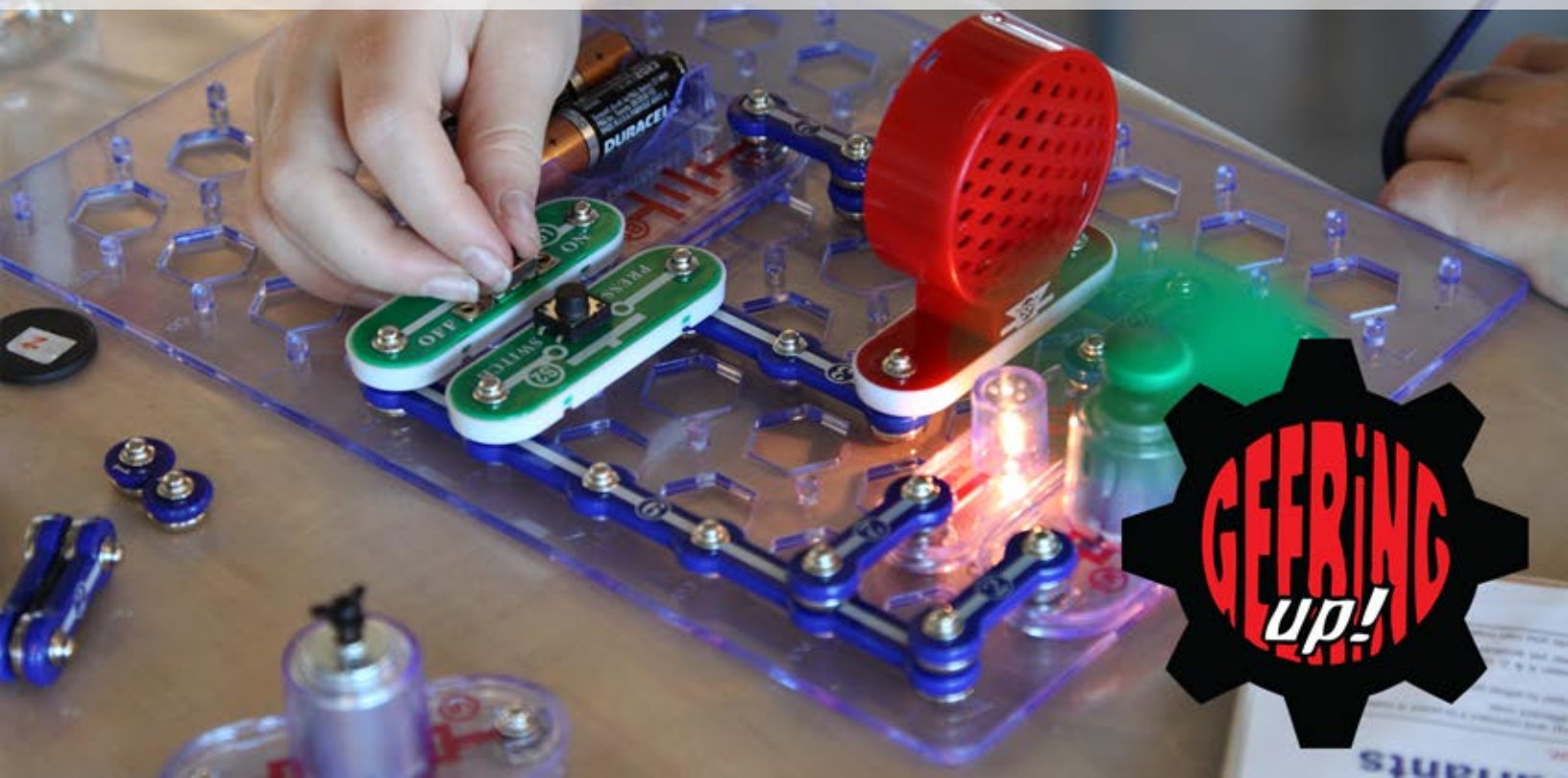




# Hands on Learning

## 2013 Annual Report





# Who we are

# 2013 Highlights

## Mission

To provide all of the children and youth of British Columbia with the opportunity to investigate engineering, science, and technology in a fun, educational, and safe environment.

## Vision

GEERing Up! UBC Engineering & Science for Kids is a non-profit, student-run organization dedicated to promoting science, engineering, and technology to the children and youth of British Columbia through fun, innovative, and hands-on experiments and projects. GEERing Up! strives to reach all children and youth, regardless of gender, ethnicity, culture, or socio-economic status, with special outreach for those groups traditionally underrepresented in the sciences.

## National Network

Actua provides training, resources and support to a national network of member organizations offering science, technology, engineering and mathematics (STEM) education programs. Actua members reach over 225,000 youth per year in 500 communities nationwide. Please visit Actua on the web at [www.actua.ca](http://www.actua.ca)



4595 students reached

\$7209 in bursaries

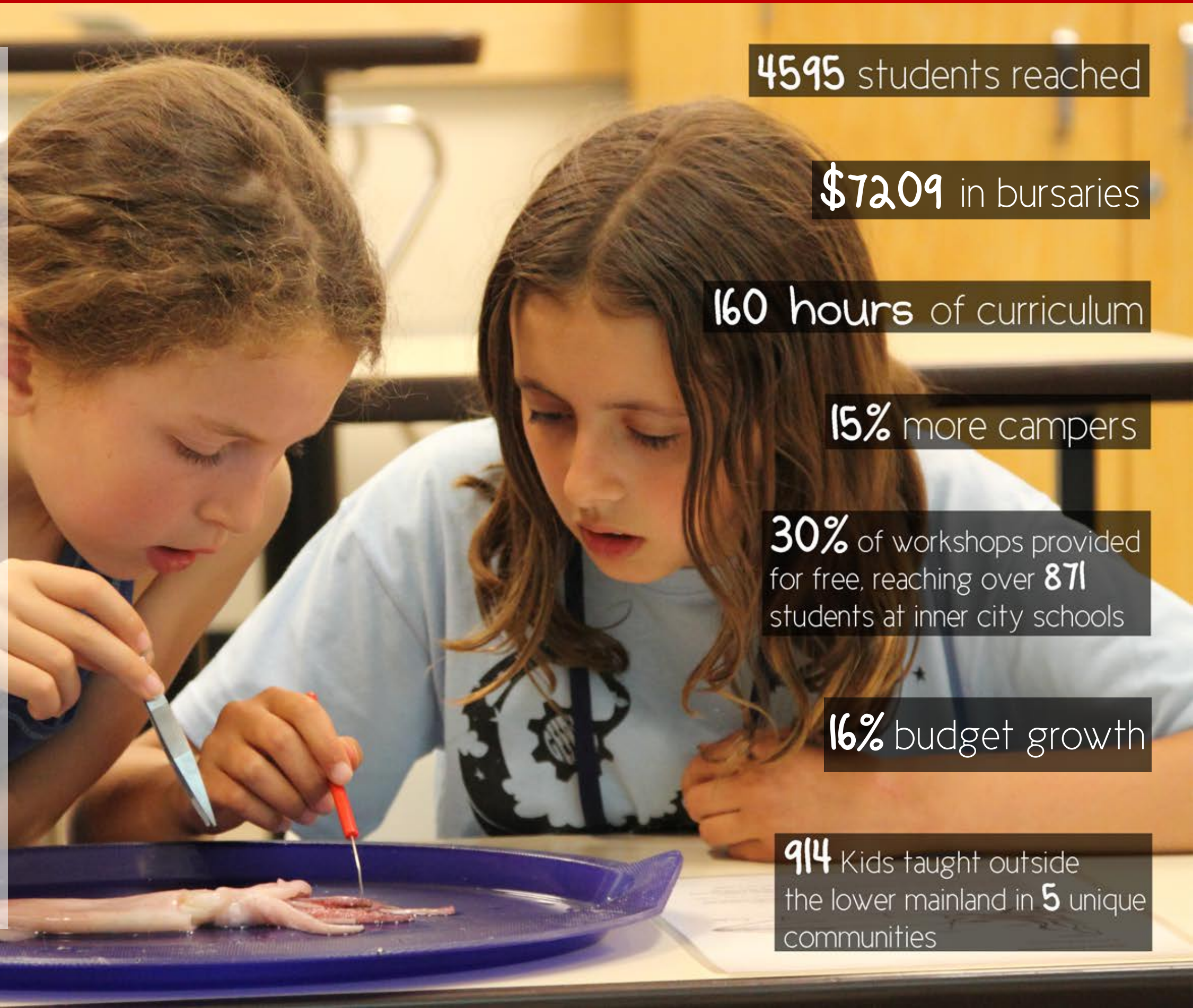
160 hours of curriculum

15% more campers

30% of workshops provided for free, reaching over 871 students at inner city schools

16% budget growth

914 Kids taught outside the lower mainland in 5 unique communities





# A Word from the Directors



# Year in Review

## Workshops

In May and June, we delivered 141 workshops to elementary schools and after school programs across the Metro Vancouver area. 39 workshops were offered in French to Francophone and French-immersion schools.

Four Workshop Topics were offered this year:

- Ecosystems Everywhere
- Use the Force
- The Meaning of Life
- Out of This World

## Summer Day Camps

We hosted 35 on-campus camps in Vancouver, over 7 weeks in July and August, for campers aged 6 to 18. Our weeklong programs were developed by our Instructors and covered a wide breadth of science and engineering topics. Some of the highlights this year included:

- The weekly chemistry show
- Programming Lego Mindstorm NXT robots
- Squid dissections
- Motorized Submarines
- Wii Nunchuck controlled marble mazes
- Strawberry DNA extractions

## Outreach

With the newly added Outreach Coordinator position, GEER-ing Up! has made a long-term investment in making science and engineering accessible to youth, regardless of where they live. This year we ran 6 weeks of outreach, including a first time visit to the community of Takla Lake. We are eager to continue this partnership and have plans for expanding our Outreach scope, including developing an additional Girls Only! week in Kelowna, as well as reaching more students along Highway 3 and Highway 97.

### 2013 Outreach Workshop Locations

- Prince George
- Kelowna

### 2013 Outreach Camp Locations

- Prince George – New Caledonia College
- Kelowna – UBCO
- K'omoks – First Nations Band
- Takla Lake – Community School



"I loved how nice all the JI's and instructors were and how they made very complex things easy."

–Grade 5 Camper

"My favourite activity was the DNA extraction from strawberries because I've never seen DNA!"

–Grade 2 Camper



"I liked my Instructors because they helped me learn more about science and engineering which I liked"

–Grade 3 Camper

"At the end of the week, my child declared "I love engineering!" If he could have a second week this year, we would definitely re-enrol him!"

–Parent



"It was a wonderful experience. I can't wait till next summer and for multiple weeks with different curriculum."

–Parent

18 years ago, GEERing Up! set out to deliver fun, hands-on activities to encourage youth across BC to consider careers in Science, Engineering and Technology. Thanks to the commitment and dedication of our supporters, we have since impacted over 80,000 youth. With an average growth rate of 13% in the past 4 years, 2013 marks a time of enriched programming, increased exposure and continuity. With the introduction of the new Outreach Coordinator position, we have made a long-term investment in engaging underrepresented youth in rural communities around BC. 2013 marks the first year for delivering camp in the community of Takla Lake, and we hope to reach 6 additional communities along Highway 97 and Highway 3 next year. With another two sold-out camps in Prince George and Kelowna, we are taking steps to increase the number of camps offered next year.

At the University of British Columbia, we were delighted to offer camp at the inspiring new Wayne and William Wright Engineering Design Centre this year. Increased space for camper activities and a centralized office greatly enhanced the experience. This year's 10% camp increase would not have been possible without our enthusiastic and hardworking team of Instructors, including 3 additional Instructors who were hired to meet the increased demand for Explorers (grades 2-3) and Imagineers (grades 4-5) space. We are excited to continue and further develop this year's successful Tech Innovators PLUS pilot program aimed at students in grades 11-12 with increased ties to the university experience.

After a financially healthy year, we are eagerly preparing for next year. We look forward to growing both our Outreach programs and our Vancouver-based camps. By offering increased camp capacity, hiring additional camp-only Instructors, and introducing a 2-week rather than 1-week curriculum we anticipate a 23% increase in the number of camps offered at UBC.

A big thank you to our sponsors and University partners for ensuring that GEERing Up! programs remain accessible while motivating youth across BC to explore the opportunities in Science, Engineering and Technology.



# By the Numbers

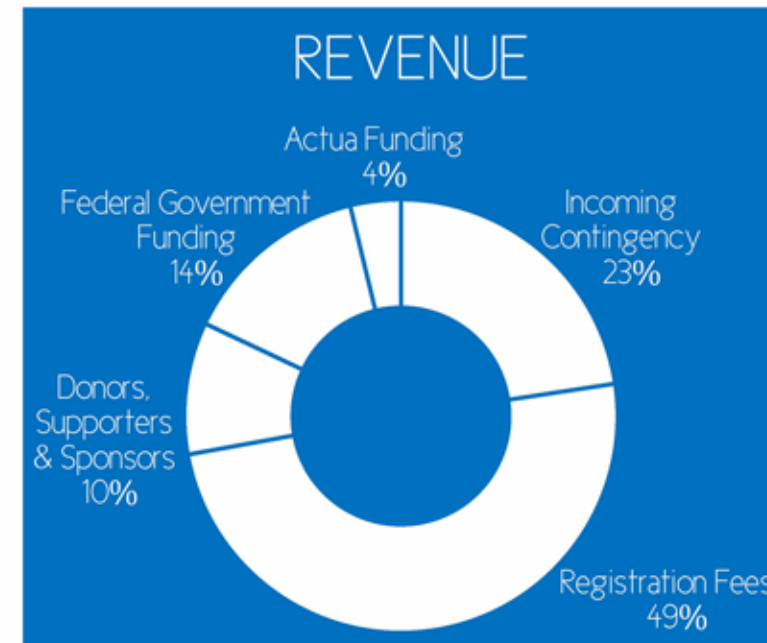
# Financial Highlights

**3842** Workshop Participants  
**171** Workshops Taught  
**4** Topics

**11** Instructors  
**1** Integration Support Instructor  
**1** Outreach Coordinator  
**44** Junior Instructors  
**40** Mentor Events  
**3080** Volunteer Hours

**706** Campers  
**272** Girls  
**47** Bursaries worth **\$7209**

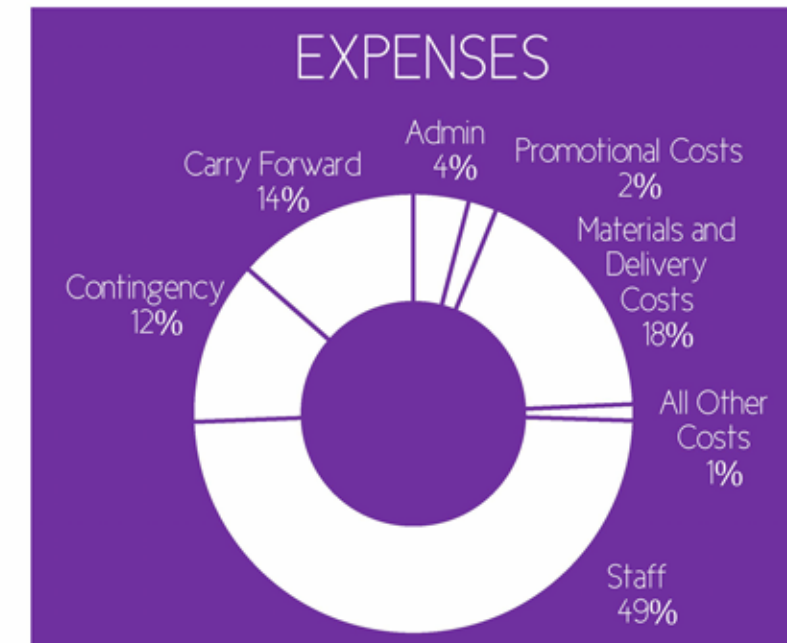
**97%** of campers are considering returning next year  
**77%** of campers say they are more interested in science, engineering, and technology because of camp



Revenue	2012 Actual	2013 Projected	2014 Suggested
Contingency	\$44,302	\$67,372	\$75,495
Camp Registration	\$124,020	\$139,000	\$165,000
Workshops	\$8,116	\$6,065	\$6,000
Local Funders	\$14,436	\$15,520	\$15,000
University Donors	\$17,375	\$14,000	\$14,000
Fed Gov't Funds	\$35,082	\$42,326	\$42,000
Actua Funding	\$11,050	\$11,250	\$12,000
<b>TOTAL REVENUE</b>	<b>\$254,381</b>	<b>\$295,533</b>	<b>\$329,495</b>

## 2013:

With 6 additional camps at the Vancouver campus, a new camp at Takla Lake, and increased federal funding, GEERing Up! experienced a 16% revenue growth overall since 2012. Although expenses rose with the hiring of additional Instructors, a new registration system and Outreach Coordinator position, we are building a stable foundation for future growth. Of the material costs, 43% was spent on non-consumable items including: LEGO Mindstorms NXTs, Snap-Circuits, laptops, Snap-Rovers, metal detectors, Vernier LabQuests, Vernier probes etc.



Expenses	2012 Actual	2013 Projected	2014 Suggested
Administration	\$663	\$7,900	\$11,000
Promotion	\$6,296	\$6,000	\$10,000
Materials	\$18,427	\$21,700	\$27,000
Camper Lunches	\$9,523	\$13,500	\$15,000
Program Delivery	\$14,867	\$18,900	\$25,000
Salary	\$127,566	\$146,738	\$180,000
Awards	\$2,142	\$2,800	\$3,000
Other	\$6,365	\$2,500	
Contingency	\$67,372	\$75,495	\$58,495
<b>TOTAL EXPENSES</b>	<b>\$254,381</b>	<b>\$295,533</b>	<b>\$329,495</b>

## 2014:

Entering 2014 with a forwarding contingency of \$75,495 puts us in a great position for expansion. As the majority of our revenue comes from camp registration, the contingency funds will support the rise in program delivery costs that will occur when we offer increased outreach along Highway 3 and Highway 97. We continue to rely on the generous support of sponsors and donors to accommodate the rise in administration, material and salary costs that will occur in correlation to the 40% anticipated growth in camp capacity.



## Our Local Sponsors



**Engineering**  
FACULTY OF APPLIED SCIENCE



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CRSNG**



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engineering**



Electrical and  
Computer  
Engineering

**URBAN**  
systems



**FORTIS BC™**

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Professional Engineers  
and Geoscientists of BC

**UBC Chemical and  
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**FLUOR®**



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THE UNIVERSITY OF BRITISH COLUMBIA

**Faculty of Science**

**UBC Biology**



**TETRA TECH  
FRANSEN**



Mineral Resources Education Program of BC

## 2013 Actua National Funders



SUNCOR  
ENERGY  
FOUNDATION



imagination at work



**NSERC  
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CIHR IRSC



## Staff

This year would not have been possible without the the amazing work of: Anthony Emmott, Dan Jin, Dennis Wong, Gina Neumann, Jakob Manning, Jeanie Malone, Jian Lik Ng, Jill Barnett, Luke deBruijn, Meagan McKeen, Rebekah Glum, Robyn Choi, Shin Young Pyo, Stephanie Duncombe, Tessa Bartz, and Verena Facundo.

## Supporters

ACEC BC  
Action Athletic  
Alice Lam  
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Wendy McHardy