## 2022 ANNUAL REPORT BOLD VISION













## Words from the Organization

From the Board Chair and CEO

As we reflect on the past year, we are proud to report that Visions of Science has continued to advance its bold new vision of **transforming communities**, **society**, **and the planet through equitable access to STEM.** Our new mission statement is not just words on paper, it is the foundation upon which we build all of our work.

In 2022, we made a significant shift from virtual programming back to in-person engagement with our communities. While the virtual space allowed us to reach new audiences and explore new ways of delivering STEM programming, our core mission has always been to engage with communities directly. By returning to in-person programming, we were able to deepen and build new relationships with the young people, families, educators, and partners who make our work possible.

As we move forward with our mission, we remain committed to tackling the systemic barriers that prevent equitable access to STEM. By working collaboratively with our partners and communities, we can make a lasting impact on the lives of young people and create a more just and equitable society. We hope that this annual report provides insight into the impact of our work and the progress we have made toward achieving our bold vision. We look forward to continuing our work and making even greater strides in the years to come.

We remain grateful for the consistent commitment and leadership of our staff team and board of directors who have boldly forged this path. Thank you to all of our partners, supporters, and stakeholders who share in our vision and continue to support us in making a difference in the lives of young people and communities. Thank you to the youth who embody our mission and vision. You encourage us everyday and together, we can create a better future for all.



**Dr. Eugenia Addy** CEO, Visions of Science

**Keddone Dias**Board Chair,
Visions of Science



Thank you to our 2022 Board of Directors and Staff Team who helped make this work possible! Learn more at vosnl.org/our-team

### Visions of Science

#### **OUR BOLD MISSION**

**Visions of Science** is a charitable organization on a mission to transform communities, society, and the planet through equitable access to STEM (Science, Technology, Engineering, and Math).

#### **OUR BOLD FOCUS**

We are committed to advancing STEM equity by engaging **Black** and other **racialized youth** from **low-income** communities across the Greater Toronto Area who experience significant barriers to participation. Our goal is to disrupt this systemic exclusion that ultimately results in chronic underrepresentation in STEM education and careers.

#### **OUR BOLD IMPACT**

A new STEM future, one community at a time

- → 16,000+ youth engaged to date
- 1,000+ youth impacted annually
- → **30**+ communities reached

Through our programming, we aim to develop youth who are:



**Curious -** with positive perceptions of STEM and interest in further learning



**Confident -** demonstrating an understanding of their strengths, a growth mindset, and the belief that they can pursue and be successful in STEM



**Competent -** with awareness, knowledge, and skills developed in both STEM as well as socio-emotionally, and



**Connected -** with strong relationships with their peers, community, and networks

With this foundation, youth are well-positioned to be bold and active contributors to STEM and society – both today and into the future.

Our work and focus will radically transform the STEM landscape by:

- Equipping youth to persist in STEM
- Fueling the future with more STEM graduates
- Breaking barriers to unlock STEM careers for all

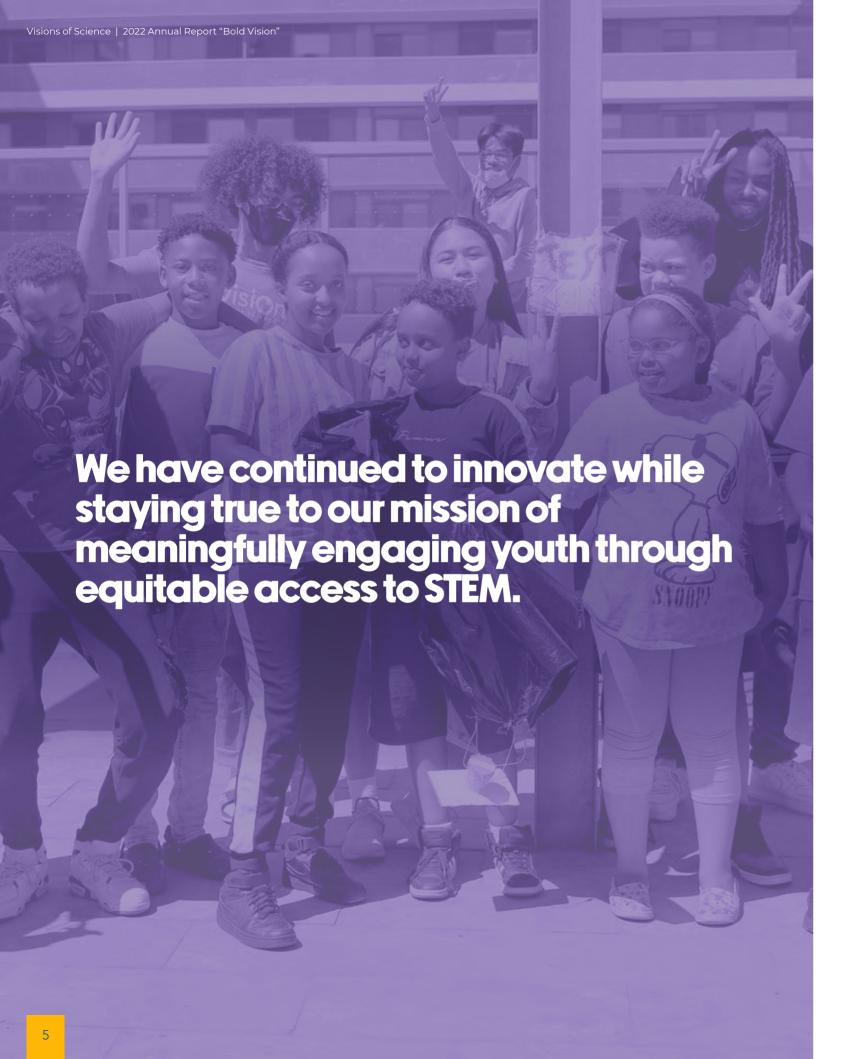
#### **OUR BOLD APPROACH**

Our strategic approach centers around delivering impactful and holistic STEM programming that supports youth at crucial stages of their educational journey. Our STEM Pathways initiatives provide wrap-around and community-based engagement to ensure that young people have the resources and support they need to excel in STEM fields.

Throughout 2022, we continued to develop and refine our STEM Pathways programming, with a full launch planned for 2023. By focusing on key points in youth development, we can help nurture the next generation of STEM leaders and build a more equitable and diverse STEM community. Stay tuned for updates on this exciting shift!







## Our 2022 Impact

In 2022, Visions of Science took a bold step forward by shifting away from virtual programming and returning to in-person engagement in communities. While our virtual programs allowed us to continue engaging youth during the pandemic, we recognized that in-person programming provides unparalleled opportunities for hands-on learning and building community connections. As such, we developed and implemented programs that focused on delivering our mission in a meaningful way. This included the

return of our "STEM Camps" program where we engaged youth across four different communities in week-long programs, as well as the launch of our "STEM Roadshow" initiative, where we hosted hands-on STEM activities and demonstrations in local communities. Through these initiatives, we have continued to innovate while staying true to our mission of meaningfully engaging youth through equitable access to STEM.

Across our programs in 2022:



750+

youth engaged in virtual and in-person programming



600+

community members & families engaged in workshops and events



100+

educators engaged in training and development

6

## VIRTUAL TRANSITION PROGRAMS: EQUITABLE DIGITAL ENGAGEMENT

Building off of the learning from our digital shifts in 2021, we piloted two new innovative virtual transition programs: Virtual STEM Sparks and STEM Leaders. Virtual STEM Sparks engaged youth in grades 3-7 from low-income communities across the GTA. Over eight bi-weekly sessions on Saturdays, youth were introduced to a range of STEM fields and careers through interactive workshops led by STEM professionals, as well as academic support. Our objective was to exemplify how STEM can be used for social change by introducing youth to representative role models, while also providing academic support.

- 80% of participants cited increased knowledge of STEM careers
- 77% of participants reported transferability of their learnings into school
- 84% of participants found the post-session activities fun

**The virtual STEM Leaders** program, on the other hand, engaged youth in grades 7-12 and offered a variety of structured drop-in sessions throughout the week, including homework help, workshops, a STEM Professional Series, and peer connection days. The program was designed to provide youth-led academic support, facilitate meaningful conversations,

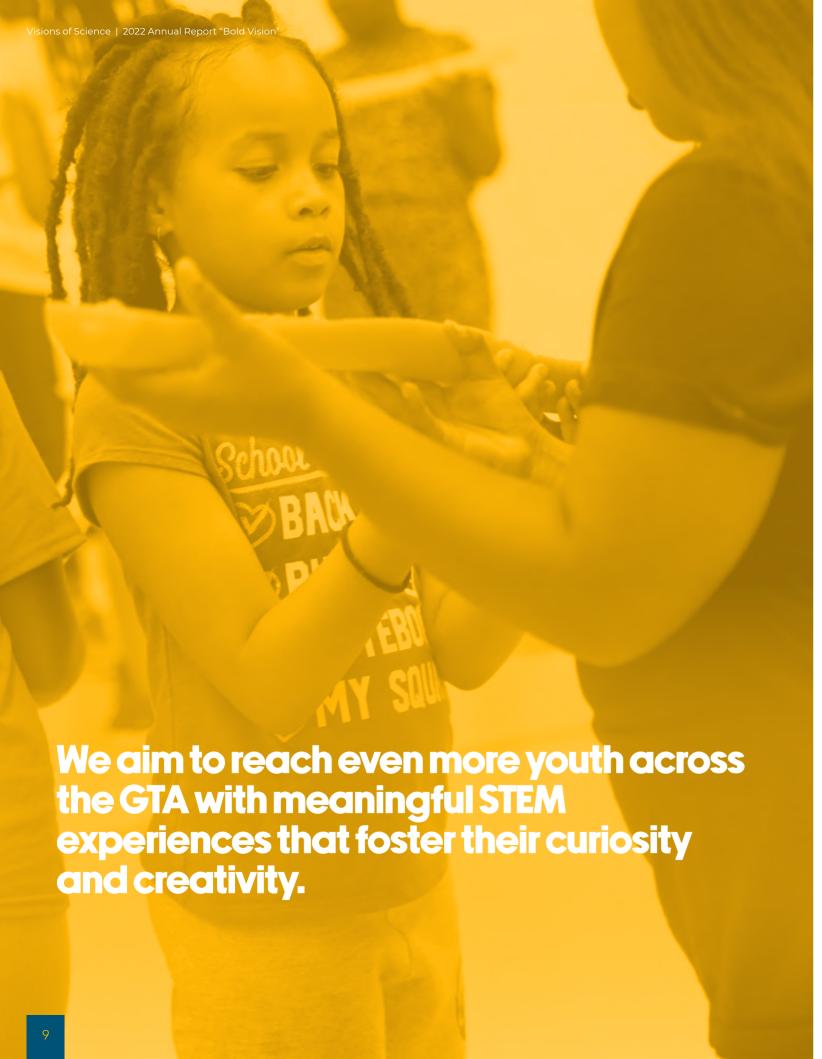
increase STEM awareness, introduce youth to representative role models, foster relationships and create community among youth participants.

"It helped me learn more about myself and my options. This allows me to build myself up, and have more resources to help my community. It also allows me to be more knowledgeable and be able to give better advice to others"

- 92% of youth felt that the STEM
  Professional Series helped them see STEM
  futures they could be a part of
- 77% of youth reported improved relationships with peers and adults

Through virtual STEM Sparks and STEM Leaders, we were able to provide a safe space for youth to learn, explore, and grow in their knowledge of STEM. We look forward to building on this success in the years to come.





#### **STEM CAMPS: ENGAGING YOUTH IN STEM**

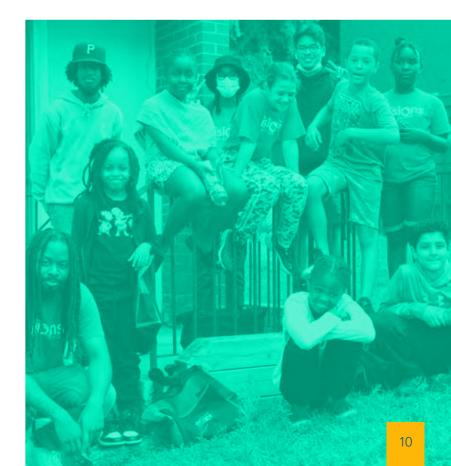
In summer 2022, Visions of Science was thrilled to bring back our in-person STEM Camps for the first time since 2019! We were privileged to engage with a dynamic group of youth, grades 5-8, in full-day week-long STEM Camps across four different communities in **Regent Park, Lawrence Heights, Danzig, and Falstaff.** The camps were packed with hands-on experiments, guest speaker workshops, daily team building challenges, and enriching trips to local institutions, including York University, University of Toronto Scarborough Campus, Dynacare, and BioZone (UofT).

The week-long program ended with a community showcase where youth demonstrated their skills to their families and peers. The main objective of STEM Camps was to advance STEM learning and social-emotional learning by improving youth's STEM knowledge and skills, enhancing their STEM interest, attitudes, and social capital, boosting their self-awareness and self-confidence, and supporting their relationship skills (inter/intrapersonal) and teamwork.

According to the facilitators, 85% of youth's STEM knowledge and skills improved, and we saw remarkable transformations in youth like "Janella":

"[Janella] was one of the more quiet kids to begin the program but as the week went on she began to be more comfortable and opening up to those who spoke with her. [Janella] learned and observed new STEM topics and was very curious"

As we reflect on this year's STEM camps, we are filled with excitement for the future. In the coming year, we aim to build on the successes of our 2022 STEM camps and expand the program, reaching even more youth across the GTA with meaningful STEM experiences that foster their curiosity and creativity.



## Partner Highlight:

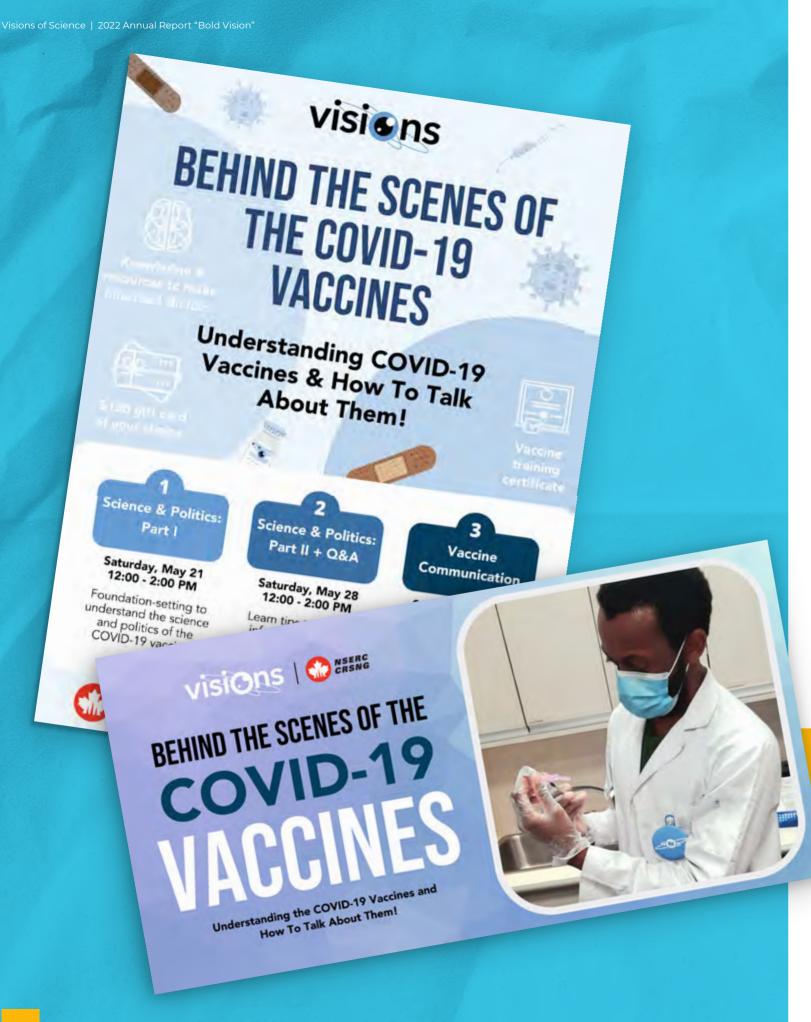
#### Dynacare<sup>1</sup>

Exciting news! Visions of Science was named Dyncare's lead charitable partner for 2022, allowing us to increase access to STEM programming for youth. Here are some of our favourite moments from the summer:

- Two VOS interns received hands-on experience in Dyncare's Genetics, Cytology and Hematology labs, using state-of-the-art equipment
- Four Dynacare leaders delivered a 90-minute virtual STEM program to a summer camp group, teaching about phlebotomy, blood components, and clinical lab testing
- ☑ Dynacare hosted one of our STEM Summer Camps at their Brampton laboratory, where youth enjoyed a tour of the lab and hands-on learning with microscopes.

Thank you to all the dedicated employees at Dynacare who helped make this partnership a success. We look forward to continuing to inspire and train the next generation of STEM leaders together!





## VACCINE CONFIDENCE PROJECT: DEVELOPING SCIENCE LITERACY

In 2022, we launched our first science literacy training series through the Vaccine Confidence Project. Our goal was to increase vaccine confidence amongst low-income and racialized communities in the Greater Toronto Area, which have been disproportionately impacted by COVID-19. Our project centered on peer knowledge-sharing, equipping community members with the knowledge and tools to root out vaccine misinformation and have effective vaccine conversations amongst their networks. Through a series of training sessions and materials, we covered critical topics including identifying misinformation, vaccine accessibility policies, and the science behind mRNA vaccine technology. Our results were remarkable, with 100% of participants reporting increased knowledge and 90% feeling confident in talking to others about vaccines.

"I now know a lot more about how the vaccine works because of the session about the science behind it. It helped me understand how it's helping my body fight the virus."

Participant Trainee

"My communication style before the sessions wasn't really conducive to helping people make an informed decision, it was more so just advocating for getting the vaccine as the only 'right' option. Now I feel like I have some concrete tools that I can use to hear and validate people's concerns from a more informed and nuanced perspective, which I imagine is helpful for combating that burnout feeling." Participant Trainee

With this success in mind, we look forward to developing and expanding our scientific literacy initiatives in the years to come.

BEFORE

100%

**AFTER** 

Vaccines knowledge

30%



Confidence in discussing the topic

 $^{-13}$ 

#### VISIONARY TALKS: SHARING SCIENCE WITH THE COMMUNITY!

We had a blast this summer hosting our first-ever free community science event in Regent Park, with over 200 people in attendance and 150 tuning in online! Our event was jam-packed with outdoor activities, food, and tons of STEM fun for the entire community.

But that's not all: this event was also the culmination of our science communication training project that engaged over 100 post-secondary students. Trainees learned about essential concepts in science communication and how to communicate science with authenticity. After practicing and perfecting their skills, 11 trainees presented their research in a pitch-style competition for cash prizes at the event.

We're thrilled to congratulate all the participants and extend a massive thank you to our funder NSERC for supporting this science literacy initiative, as well as our event sponsors eOne and AMD!





#### **SPORT + STEM: SPORTS, STEM AND LIFE SKILLS!**

After two years online, we were back in the gym with our Sport and STEM program in collaboration with MLSE Launchpad! Over **350 youth** from **13 classrooms** got to experience STEM on the court this fall. Our program integrates physical sports activities with STEM concepts for grades 7 to 8. This year, we leveled

up our curriculum with the help of two Indigenous consultants, deepening our integration of Indigenous Ways of Knowing. We're excited to continue growing this inspiring project and innovative collaboration!

## **Impact Highlight**

## STEM ROADSHOWS: BRINGING STEM TO THE COMMUNITY!

In October, we took our STEM learning on the road with our pop-up "STEM Roadshow" workshops, bringing exciting, hands-on activities directly to communities across the city. The response was overwhelming with over **300 youth** and their families engaging with us in **11 different communities.** We're thrilled to

have made a positive impact and can't wait to continue reaching even more communities in the future!"





## THE CANADIAN SCIENCE POLICY CONFERENCE: ADVANCING STEM EQUITY

In our continued efforts to advance STEM equity and raise public awareness of the issues and barriers facing underrepresented communities, we presented at the prestigious Canadian Science Policy Conference in Ottawa. Our panel discussion explored the impact of the pandemic and digital shifts on science and technology at the community level, and how to drive meaningful engagement of underrepresented communities in STEM.

Our panel's insights and recommendations were well-received, and we are proud to have contributed to the important conversation around advancing equity in STEM. We invite you to listen to the conference proceedings, and to read more in the published editorial, 'Community-Centered Innovation and Practice: What will it take to make science and technology truly equitable?'. We remain committed to our advocacy work and look forward to continuing to champion STEM equity for all.

Session Panelists Included: Dr. Lisa Richardson, Associate Dean for Inclusion & Diversity at the Temerty Faculty of Medicine, University of Toronto; Dr. Kevin Hewitt, Professor of Physics and Atmospheric Science at Dalhousie University; Dr. André McDonald, Associate Vice President at the University of Alberta; Dr. Krishana, Science Advisor and Community Partnership Lead at ScienceUpFirst; and our very own Dr. Eugenia Addy and Dina Alkhooly.

# Expenses Revenue **2022** \$ 1,573,806 **2022** \$ 1,620,551

## Our Financial Statements

All financial data presented is from our 2022 financial statements audited by Pennylegion Chung LLP for the period January 1, 2022 to

December 31, 2022. For a full copy of our 2022 audited financial statements please visit: www.vosnl.org/finance-andtransparency.

#### STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2022

	2022	2021
REVENUE  • Contributions  • Interest and other  • Canada Emergency Wage Subsidy  • Events	\$ 1,566,485 7,321 - - - 1,573,806	\$ 2,211,136 4,064 208,965 4,328 2,428,493
<ul> <li>EXPENSES</li> <li>Personnel</li> <li>Program</li> <li>Occupancy</li> <li>Office and general</li> <li>Professional fees</li> <li>Insurance</li> <li>Fundraising</li> <li>Amortization</li> </ul>	1,343,048 97,455 61,101 55,910 55,901 5,328 1,808	906,935 128,107 63,016 44,858 44,898 6,123 78,508 11,587
EXCESS OF REVENUE OVER EXPENSES FOR THE YEAR  Net assets, beginning of year	1,620,551 (46,745) 1,656,465	1,284,032 1,144,461 512,004
NET ASSETS, END OF YEAR	\$ 1,609,720	\$ 1,656,465



## **Our Supporters**

Visions of Science gratefully acknowledges gifts received between January to December 2022. We would like to thank our numerous individual donors, many of whom support us monthly. We also acknowledge those who gave to the organization anonymously.

#### **VISIONARIES**



THE READY COMMITMENT



#### **CHAMPIONS**

Heather Sheehan Foundation

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#### **BUILDERS**



The Charles H. Ivey Foundation

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## Support a New STEM Future

Developing Leaders. Dismantling Barriers. Inspiring Agents of Change.

Visions of Science is committed to transforming communities, society and the planet through equitable access to STEM.

Help us advance STEM equity, and build a BOLD new STEM future for all.

Make a donation today.





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Visions of Science