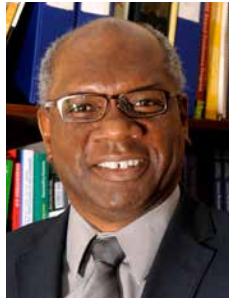




2017/18 ANNUAL REPORT

CELEBRATING 15 YEARS OF DELIVERING STEM

MESSAGE FROM THE CHAIR



This year ILA celebrated the 15th anniversary of its operation. The organization has grown from a one-school pilot project to one providing a suite of programs to benefit students of African heritage from junior high

school through to university, across Nova Scotia. This year, our program staff also presented science activities to elementary school students through our Science Outreach Program.

Partnerships have been key to ILA's longevity, and our success is due to the dedication of our university student staff who mentor our secondary school participants. This is key as our staff may be the only direct role model of a Black person engaged in STEM that many of ILA's participants experience throughout their secondary school education.

I have witnessed how ILA's programs have inspired African Nova Scotian students to study engineering, science, computer science and health professions at Dal. It will be a pleasure to see the continued growth of ILA's programs and to observe how our participants change the face of STEM studies in Atlantic Canada.

J. Pemberton Cyrus, PhD, PEng, FEC
*President, Imhotep's Legacy Academy, and
Associate Vice-President Academic (Acting),
Dalhousie University*

MESSAGE FROM THE EXECUTIVE DIRECTOR



It is always a great feeling to end the academic year with so many success stories. More than half of which come from the unique relationship between our Mentors and students across all our programs.

Through ILA's STEM activities, our students become inspired by the many people of African heritage who have made ground-breaking discoveries in STEM.

We celebrated our 15-year anniversary, we joined other organizations across Canada in celebrating Science Odyssey week, and we recognized the achievements of our students as they journey their way through a STEM education. This year, one of our After-School Program alumna and first ILA-TD Opportunity Scholarship recipient, graduated from Dalhousie University with an undergraduate degree in Nursing. In addition, we had 25 students graduating high school and 4 of them entering Dalhousie University as recipients of our ILA-TD Opportunity Scholarship.

We look forward to more success in the 2018–19 academic year as we occupy our new Learning Centre/Office space and Makerspace on Dalhousie University's Sexton campus. With the assistance of our funders, partners, and supporters, we are prepared to make a greater impact on learners of African heritage in the forth-coming year.

Mr. Sidney Idemudia, BEng
Executive Director, Imhotep's Legacy Academy

ABOUT US

Imhotep's Legacy Academy (ILA) is an effective and successful, province-wide outreach organization, established in 2003. Based at Dalhousie University, ILA is built on a strong university-community partnership. It aims to redress the underrepresentation of African Canadians in postsecondary Science, Technology, Engineering & Mathematics (STEM) studies.

ILA uniquely mobilizes university students, faculty and community leaders to help improve student success and bridge the achievement gap for Grades 6–12 African Nova Scotian (ANS) learners.

ILA provides its participants with an enriching blend of real-world learning projects, skill-building and leadership development activities, as well as tutoring support.

ILA, operating in more than half of Nova Scotia's regional centers for education, trains and supports university students to play powerful roles in the lives of its participants through the building of self-confidence, self-discipline and the mastery of concepts related to scientific, technical, engineering, and mathematics fields.

HISTORY

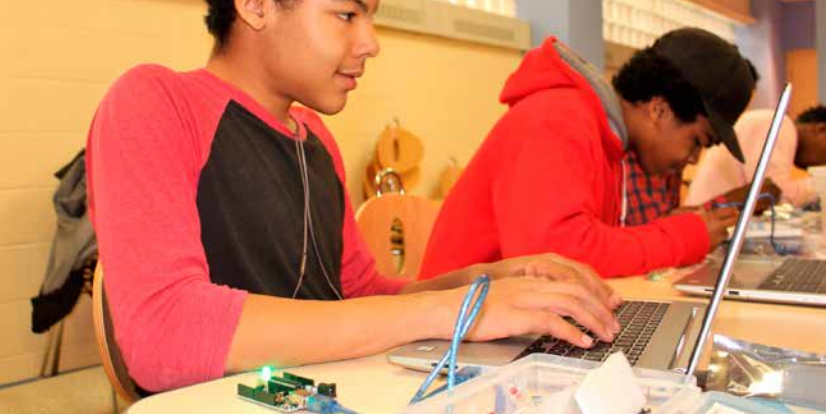
In 1999, a science outreach workshop dubbed “Imhotep's Legacy Project I” was organized in Vancouver by ILA's founder, Dr. Kevin Hewitt, for kindergarten to grade 8 African Canadian students. Dr. Hewitt's experiences led to a discussion with Mr. Wayn Hamilton and the conceptualization of a series of Imhotep's Legacy Projects. Mr. Hamilton identified Ms. Barb Hamilton-Hinch, at the time Dalhousie's Black Student Advisor, who came on board to lend her connections. Years later, with the dedication of many, Imhotep's Legacy Academy operates across Nova Scotia, making STEM subjects accessible and interesting while also supporting academic success.

EXPECTED OUTCOMES

- Involve members of the Dalhousie community, science teachers, African Nova Scotian learners and their parents, in STEM programs.
- Increase enrolment of African Nova Scotian learners in STEM programs at Dalhousie University and at other post-secondary institutions.

DID YOU KNOW?

Since 2003, Imhotep's Legacy Academy has successfully provided Science, Technology, Engineering & Mathematics (STEM) enrichment programs to thousands of secondary school learners.



ILA'S PROGRAMS

ILA's **After School Program (ASP)** introduces junior high school students of African heritage to curriculum-related science and math activities intended to develop their interest in, and increase awareness of, these subjects. Mentors visit junior high schools on a weekly basis and alternate between math and science activities. These sessions are an opportunity for students to develop an interest in STEM subjects and get extra assistance with their homework. The science activities are hands-on and interactive, using common household items familiar to students. The math activities are tailored to strengthen their skills in mathematics concepts. The university students who act as Mentors are essential to the success of the program. Our Mentors work to develop a relationship with their students and they are also role models, as they themselves are pursuing STEM-related fields in their post-secondary studies.

ILA's **Virtual School Program (VSP)** provides tutoring to students of African heritage in grades 9–12 throughout Nova Scotia. ILA Mentors interact with participants online, on-site at the ILA Learning Centre, and at select high schools. The program is designed such that every participant has access to a Tutor. In addition to receiving tutoring, VSP participants can participate in workshops and other fun activities that enhance their educational experience and prepare them for post-secondary studies.

ILA's **FIRST LEGO League (FLL)** Program is a robotics program designed to get junior high school students of African heritage, aged 9–14, excited about science and technology. It teaches students the value of working together and of solving problems. Each year, ILA's FLL teams can compete in regional and provincial competitions. The challenge for each year has a central theme based on a real-world scientific topic (for example, the theme for 2017/18 was *Hydrodynamics*). Imhotep's Legacy Academy has participated in FLL competitions since 2011, and over the years our teams have received awards for "Presentation", "Mechanical Design", "Technical Design", "Robot Design" "Spirit and Enthusiasm" and "Project Innovative Solution" at the regional and provincial levels. In 2017, our *Legos 'R Us* team qualified as 1 of 20 worldwide teams to compete at the *Global Innovation Award* competition in Washington, DC.

In 2017, ILA partnered with the Black Business Initiative's Business is Jammin' (BIJ) society to launch the **RBC iCode+ Program** to teach coding to African Nova Scotian learners. This program is designed to engage learners with hands-on coding exercises, using open-source software to code robots, thus keeping the program exciting. At the early stage of the program, participants learn the fundamentals of coding, and as the modules advance, the level of coding increases. Participants are exposed to concepts such as: how to control current, voltage, and resistance



“Having ILA mentors of African Descent made me more confident and proud about my intelligence and helped me realize my potential. What I value the most about ILA’s programs is that it helped me grow as a person, strengthened my math, people and leadership skills.”

– Jasmin Desmond, Antigonish

using combinations of hardware and code; understanding 3D CAD drawing and printing; and building and coding an autonomous robot.

ILA’s **Summer Student Research Scholarships (SSRS)** are offered in partnership with Dalhousie University’s Faculties of Science, Engineering, Health, and Medicine to create research scholarships for African Canadians pursuing an undergraduate degree in those fields at any university in Nova Scotia. The scholarships, valued at \$6,500 each (\$5,000 for Medicine), are tenable at Dalhousie University over the summer months (May–August) to support university students as they conduct specialized research in their chosen field under the guidance of a Dalhousie faculty member whose primary appointment is in the Faculty of Science, Engineering, Health, or Medicine. Students will gain valuable experience in the design, execution, and evaluation of experiments.

In partnership with TD Bank, the **ILA-TD Bank Opportunity Scholarships** are four-year renewable scholarships for ILA program graduates entering Dalhousie University. Its purpose is to reduce the financial barrier for African Nova

Scotian students pursuing studies in STEM-related fields. The promise award is based on participation in ILA’s programs. Each year a student remains active in ILA, an additional amount can be added to their total to a maximum of \$5,000 renewable for four years of study at Dalhousie. The table below illustrates the award increments by grade:

GRADE	7–10	11	12
Future four-year renewable award at Dalhousie per year	\$500 per Grade	\$1000	\$2000

In partnership with the African Canadian Services Division (ACSD)’s community-based Summer Scholars Daycamps, ILA offers a two-day Summer Rocket activity. Elementary school-aged campers are taught how to build and launch rockets as a means to stimulate their interest in STEM. Also included are presentations on safety and space science.

ILA also has several programs under development, including: the Science Quiz Tournament; Science Activity Videos; the STEM Project Challenge; and Learning Skills Workshops.

DID YOU KNOW?

Since the establishment of the ILA-TD Opportunity Scholarship in 2011, 15 secondary school students have enrolled at Dalhousie University and have received funds totalling \$95,000. Another nine have earned \$41,000 in ILA-TD Opportunity Scholarship promises.




CHALLENGES FACING YOUTH

African Nova Scotians have a long history in Nova Scotia. Over the years, despite adverse conditions, African Nova Scotians have made meaningful contributions to Nova Scotian society and have always endeavoured to improve conditions for succeeding generations. Some young learners of African descent, however, continue to find it challenging to develop into academic achievers in science and math within educational institutions that may not value their heritage, their abilities, or their input. Some other factors include:

- The nature of classroom instruction and interaction.
- Insufficient exposure to science as it relates to the cultural context of the young learner.
- Failure to promote skills fundamental to the development of an appreciation for scientific inquiry.

By focusing on several subject areas in STEM, and adopting a mentoring scheme, Imhotep's Legacy Academy offers a unique approach to enhancing the quality of math and science education for young learners of African heritage.



In order to effect meaningful change, we can't just offer a "drop in a bucket" but, rather, we need to make sustained efforts in a way that works for the people involved.

– Dr. Kevin C. Hewitt, co-founder of ILA, Professor, Department of Physics & Atmospheric Science, and Senate Chair, Dalhousie University

I'm just trying to motivate people to see that life is a work-in-progress, but that no matter what your experience is, it can always be better. You should always believe that it's going to be better and work towards that.

– Ms. Bai Bintou Kaira, BEng (Chemical)'18, 2017 3M National Student Fellow, 2017 Dalhousie Governors' Awardee, ILA VSP Tutor

2017/18 PROGRAM OVERVIEW





ILA participants giving an activity demonstration to the Honourable Tony Ince at the 2018 Annual Closing Ceremony

In 2018, ILA celebrated its 15th anniversary of promoting science, technology, engineering and mathematics (STEM), while delivering fun, hands-on educational activities to learners of African heritage in Nova Scotia. During this celebration, we joined other STEM organizations across Canada in celebrating Science Odyssey Week, which is Canada's largest celebration of STEM. This year, ILA executed its core programs in various regions across Nova Scotia. The program year started with our SSRS poster presentation followed by the Black Student Advising Centre (BSAC)'s Reception for Black Student Scholars. This reception recognizes students of African heritage who are recipients of various Dalhousie scholarships (including recipients of the ILA-TD Opportunity Scholarship and the Summer Student Research Scholarships-SSRS). We started a new program called RBC iCode+, in partnership with the Black Business Initiative (BBI)'s Business is Jammin' (BIJ) society. This year, ILA made an impact on **757 learners** through all of its programs across Nova Scotia.

PROFESSIONAL DEVELOPMENT (PD) TRAINING

During the 2017/18 program year, we hired 33 part-time staff to serve as Mentors and Tutors at sites across Nova Scotia, and as Activity Developers during the summer months at the ILA Office. As delivering culturally-relevant material, providing effective classroom interaction, building healthy relationships with learners of African heritage, and disseminating knowledge of our programs remain important aspects of our organization, ILA held two Professional Development sessions during the year to keep program staff abreast of our practices. Drawing from the experience of our full-time staff, Board of Directors, and assisting professors, we engaged the Mentors and Tutors in series of team-building exercises, lectures, and science activities.

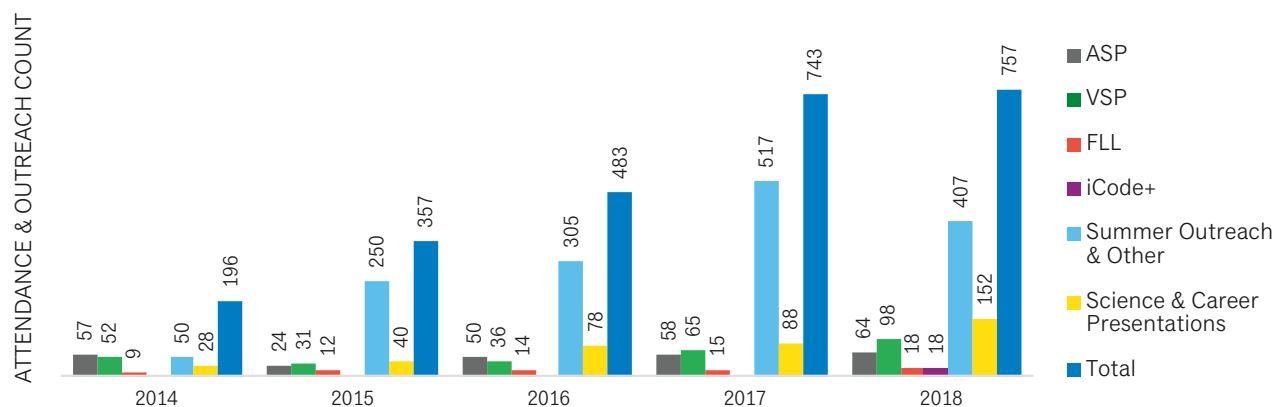
This year, the **After-School Program (ASP)** operated on a weekly basis at 6 locations across Nova Scotia. The ASP had a smooth progression at most sites, thanks to our partners at: Oxford Jr.

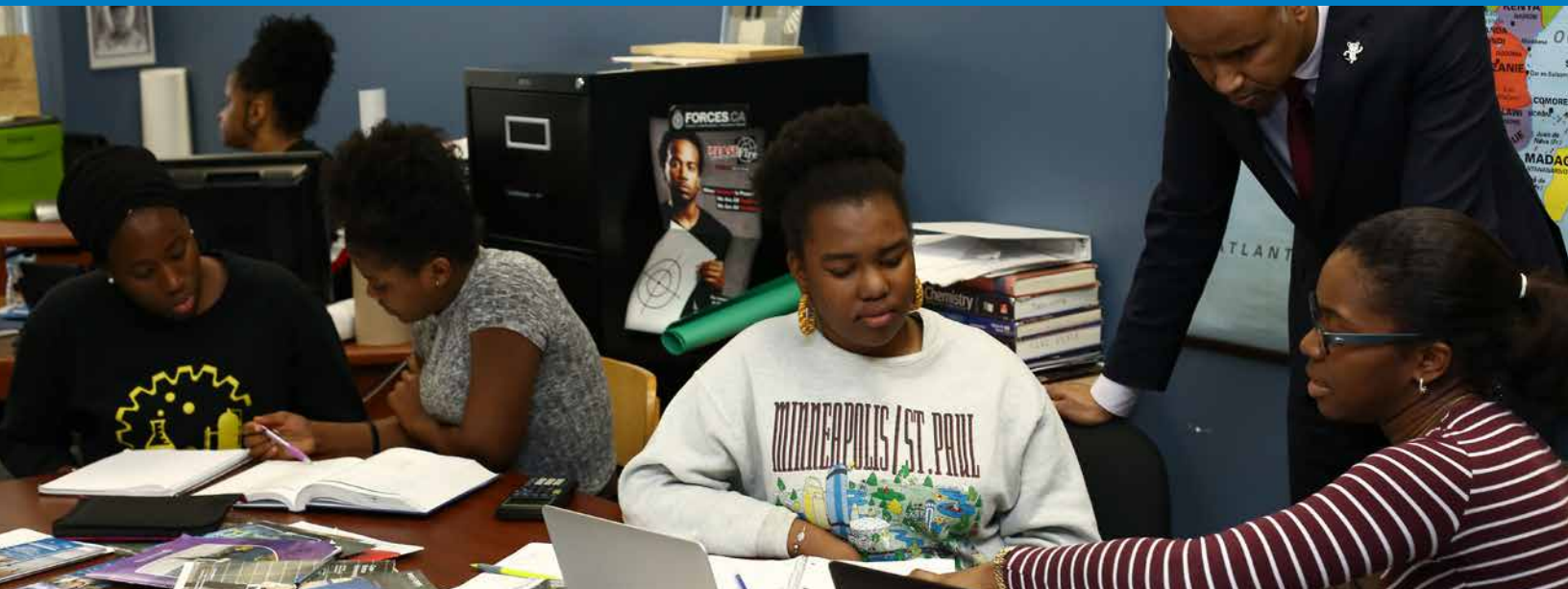
High School in Halifax; New Beginnings Ministries in Dartmouth; Truro Jr. High School in Truro; Whitney Pier Memorial Jr. High School in Sydney, Kings County Academy in Kentville and Northeast Kings Education Centre in Canning. We performed ad hoc science “magic show” demonstrations at Caledonia Jr. High School in Dartmouth and at Saint Andrew Jr. School in Antigonish in lieu of being able to hold weekly sessions there. The success of our ASP this year is credited to the great work from our 13 part-time After-School Program Mentors, and also to the contributions and support of the African Nova Scotian Student Support Workers, school administration and various community members. ILA’s program staff engaged 64 students through hands-on weekly science activities. We promoted the ASP at our partner locations at the start of the school year with science “magic show” demonstrations at each site. The first ASP sessions started on October 25th, 2017 and operated weekly until June 22nd, 2018. On June 29th, 2018, the Mentors from our New Beginnings Ministries site and Oxford Jr. High School site organized a joint science play to close their sessions. At this performance, parents and community members had an opportunity to see the student-participants act as Mentors and teach an ASP science activity. During the weekly After-School Program, students benefited from curriculum-based hands-on activities and were able to take home something created or discussed during the sessions. There were **64 secondary**

school students who participated in regular weekly ASP sessions while 407 students took part in the science “magic show” demonstrations. Refer to Figure 1 for a graphical comparison of the ASP statistics over the last five years.

This year, our teams from the **FIRST LEGO League (FLL) Program** were engaged in robot design, robot assembly (using LEGO), hands-on coding and project research. Students from our Oxford Jr. High School and Truro Jr. High School were more than excited to continue with the program. Our *Imhotep Aquabots* team from Oxford Jr. High made it to the regional competition. At the conclusion of the FLL season, the *Imhotep Aquabots* attended an Acadia Fun Day competition on May 17th, 2018, at which they received an Acadia Robotics *Judges Award*. The FLL theme for 2017/18 was **Hydro Dynamics** and each ILA team worked collectively on a project that required them to consider the challenges relating to how water is used in our daily lives. These projects were reviewed and judged as part of the FLL competition during the regional qualifiers. In addition, teams had to program their robots to complete a series of tasks on a challenge mat. They studied the game rules and challenge guide, identified the challenges they wished to embark on and then built their robot in a way to tackle those challenges. The FLL program not only exposes students to real-life challenges but also encourages the development of soft skills such as teamwork, team-building, friendly competitiveness,

Figure 1: Distribution of ILA program participation from 2014 to 2018.





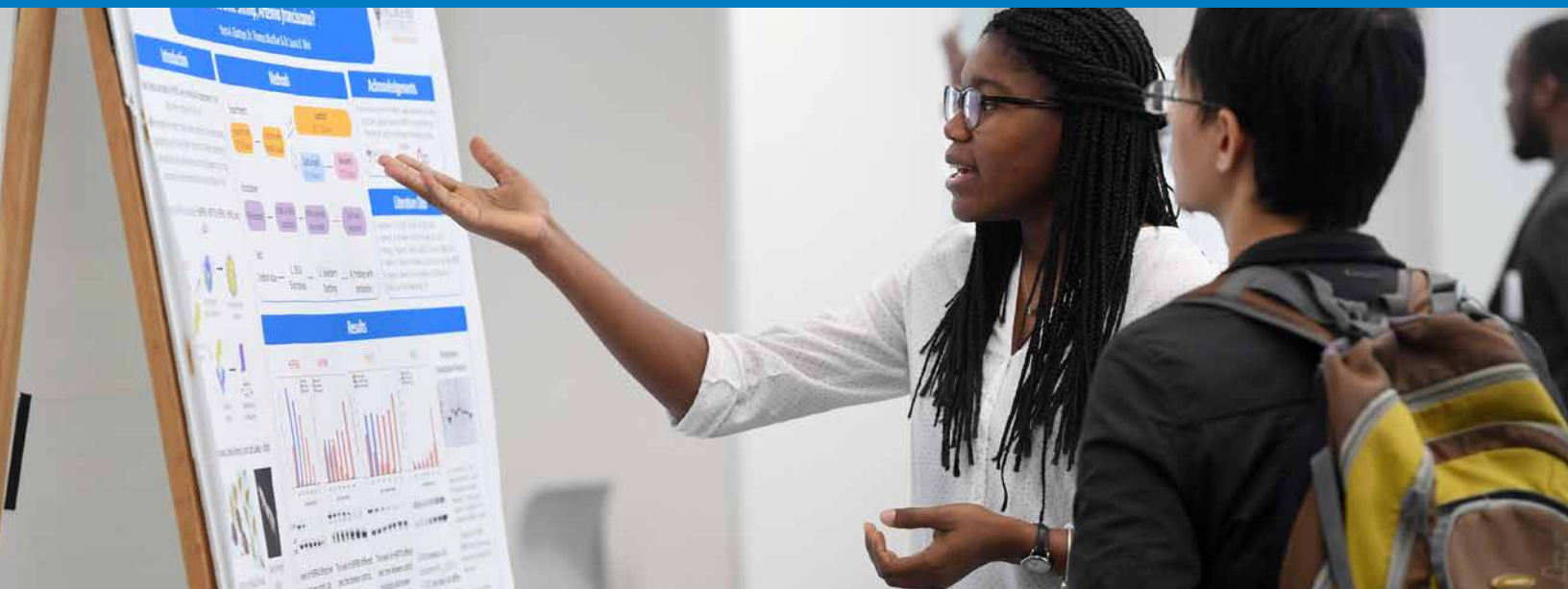
The Honourable Ahmed Hussen visits an ILA Virtual School Program site at Citadel High School

and working cooperatively to complete various tasks. This year the FLL program impacted **18 students** from our Oxford Junior High and Truro Junior High school sites. Refer to Figure 1 for a graphical comparison of the FLL program over the last five years.

The student attendance at our **Virtual School Program (VSP)** increased by 66 percent from last year. This year, **98 students** from various high schools across Nova Scotia benefited from one-on-one and group tutoring, which was delivered by tutors of African heritage via in-person sessions and, in some cases, online via Skype. Building on our success from the previous year, we continued our regular visits with high school students at select schools in Dartmouth and Halifax. During the year, our Tutors had regular daily sessions with students at the ILA Learning Centre and had weekly on-site sessions at Auburn Drive High School, Prince Andrew High School, Citadel High School, J.L. Isley High School and Chebucto Connections. Our Tutors serve as mentors to the high school students. With the help of school administrative staff, we promoted the program to students at various schools in September. Due to early demand, we began tutoring students in September. The VSP ended in June after the high school exams were over. However, two of our Tutors volunteered to provide continued tutoring support on Mondays

and Wednesdays throughout the summer. Refer to Figure 1 for a graphical comparison of the VSP over the last five years.

The **iCode+ Program** was launched at two locations on March 24th and ended on August 25th. We launched the iCode+ Program at the North Branch Memorial Library and the Captain William Spry Public Library in Halifax and Spryfield, respectively. Through the financial support of BJJ, ILA purchased 20 computers and robotic kits for participants to use during the program. In the early stage of the program, there were **18 African Nova Scotian learners** who participated in the weekly iCode+ Program. The program ran for 25 weeks and had 22 learning modules and three individual project modules. There was a drop in attendance attributable to summer employment opportunities obtained by some students. As the attendance declined at the Captain William Spry Public Library, ILA moved the program to the Keshen Goodman Library. Those Spryfield students who were interested in continuing the iCode+ Program were invited to join the North Branch Memorial Library site or the Keshen Goodman Library site. For future program planning, ILA conducted a focus group with the participants on July 20, 2018. Participants provided valuable feedback regarding: preferred topics, scheduling, preferred locations for the sessions, and their own personal



Yayra Gbotsyo presenting her research at the ILA 2017 Summer Student Research Scholarship poster presentation

challenges to learning coding. On September 17th, 2018, ILA hosted a reception to acknowledge the nine students who completed the inaugural iCode+ Program. The top students (Kya Newbold and Miracle Sodje) from each location were awarded a laptop. Another student (Jesimiel Ugbebor) from the program was awarded a 3D printing pen for her dedication to the program.

The **Summer Student Research Scholarship (SSRS)** year starts with poster presentations by the previous year's SSRS awardees. This year, four students presented their results on September 8, 2017 to members of the university community, stakeholders, and the public. Our partnership with the Faculties of Engineering, Science, Health and Medicine enabled four undergraduate students of African heritage to conduct research in topics within those faculties, under the supervision of university professors. Through this partnership, we

are proud to sponsor scholarships of \$6,500 each (\$5,000 for the Faculty of Medicine). The research students receive monthly stipends from May to August. In April 2018, new undergraduate students were selected to conduct research during summer 2018 and these 2017/18 SSRS awardees presented their research posters publicly on September 7, 2018.



2018 SSRS scholar Rafeeda Khashmelmous' research in Dr. Marcato's Lab (Department of Pathology, 11C1 Tupper).

Summer 2018 Summer Student Research Scholars

Student Name	Faculty	Project Title	Supervisor
Tarmy Abbot	Engineering	Engineering of Lead-Halide Perovskites for Photovoltaic Applications	Dr. Ghada Koleilat
Olufolakemi Akpan	Health	Ergonomic evaluation of an orthosis used to improve cervical posture during cell phone use	Dr. Janice Moreside Dr. John Kozey
Jennifer Kpolu	Medicine	Retinal Scan Analysis	Dr. Alon Friedman
Rafeeda Khashmelmous	Science	The role of the long non-coding RNA <i>PART1</i> and its transcript variants on triple-negative breast cancer	Dr. Paola Marcato

MY ILA STORY



Evelyn (Eve) Rose Wedderburn is a grade 7 student at Oxford Junior High School and has been involved with ILA's After School Program (ASP) for a year. She became interested in our ASP after we presented our science “magic show” demonstration at her school to recruit students to our STEM programs. She is interested in STEM education and hopes to become a better student in math and science through ILA's programs.

Eve said “My mentors have added so much to my knowledge and they are always giving me pointers on ways of improvement. For example, in Science, I learned about polymers and monomers, and in Math, I learned a lot about different types of triangles. Imhotep has made me more interested in STEM because there are so many interesting things that you can do with Science! For example, Alice Augusta Ball was an African American chemist who developed an injectable oil extract that was the most effective treatment for leprosy. Many Scientists of African descent have gone down in history and it makes me feel like I can too, and that's the impact of Imhotep.”

Eve acclaims the highlight of her year with us involved a presentation to Emera in which she demonstrated how lemons may be used to power an LED. She learned how citric acid from lemons can generate current given the right electrodes and how to measure the generated current and voltage with a multimeter. Eve is involved with various sporting activities, plays many musical instruments and wants to become a dentist or a psychiatrist.



Kardeisha Provo, a grade 12 student at Cole Harbour District High School, has been involved with ILA for 3 years, and is starting university in 2018. She was interested in enrolling for the International Baccalaureate (IB) program at her school and knew the challenges of this program. Her Student Support Worker recommended that she join our Virtual School Program to get extra help for her classes from Tutors that share a similar interest as she.

Kardeisha said “Imhotep has truly played a large role in my IB studies and I probably wouldn't have been able to get through this rigorous program without the help of ILA. My tutor Rufus has been one of the main contributing factors towards my understanding of IB Math. Working closely with Rufus every week over the past 2 years has been extremely helpful because he is able to enhance my understanding while challenging me to be better.”

ILA has created an environment for Kardeisha to be inspired, by surrounding her with students and mentors with similar interests. She says that the most important thing she has learned from ILA is to know that people of African heritage can be successful, and success is attainable for her and others like her. Kardeisha is a Student Council Communications Executive, she creates video content on YouTube and aspires to become a sports medicine physician or a psychologist.



OUTREACH AND PARTNERSHIPS





SUMMER PROGRAMS

The summer started with our Annual Closing Ceremony which brought our stakeholders, family, and friends together to witness the successes of the year and recognize our students, staff and funders. The 2017/18 program year marked our 15th anniversary and our first year to join science promoters nationwide in celebrating NSERC's **Science Odyssey** event. The Virtual School tutoring Program was operational on Mondays and Wednesdays through the summer for students wishing to gain extra support with their studies and prepare for the upcoming academic year. Our Summer Studentship program grew this year and thanks to our partners and funders, we hired four full-time summer staff to review and update old activities, and to develop new activities and initiatives. Two undergraduate co-op Engineering students were hired to create engineering activities for ILA. An undergraduate science student was hired to create science activities and assist with the video recording of ILA's science activities, and a graduate student in geology and was hired to create geological activities and to develop the content for our upcoming Science Literacy event scheduled for the following program year. ILA also hired two part-time summer staff

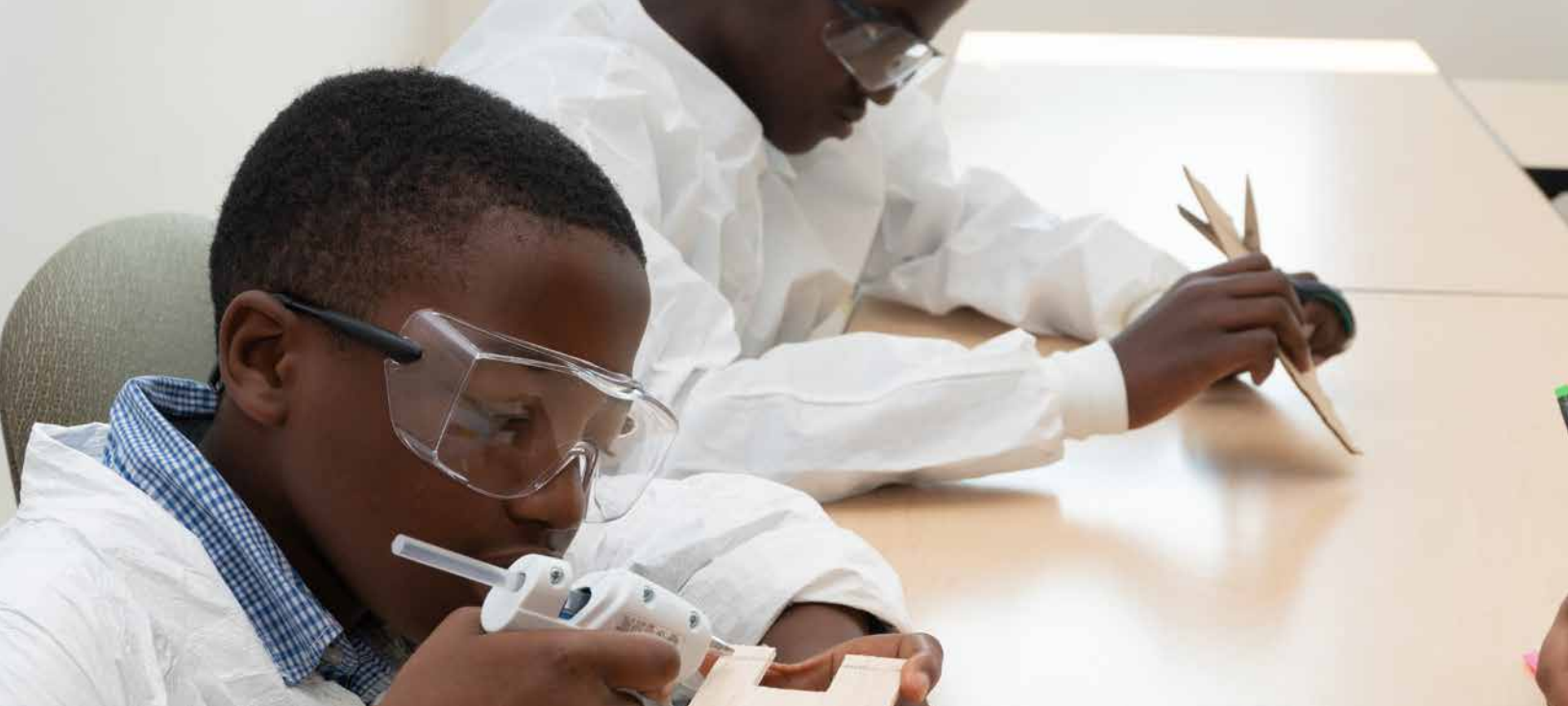
to join our Program Manager in delivering our rocket and drone activities at the African Canadian Services Division (ACSD) Summer Scholar day camps across Nova Scotia. One of the part-time students also served as a Program Assistant and was tasked to take inventory of program materials across ILA's sites, develop a tools inventory required for ILA's new Makerspace, and provide as-needed program support. ILA also benefited from the volunteer service of a professional photographer/videographer to work with our summer staff in capturing various moments of our summer activities and to develop science videos to complement our ASP science activities. When completed, the science videos will be posted and catalogued on the Imhotep's Legacy Academy YouTube channel for reference by ILA Mentors, ILA participants and the public. For the 6th consecutive year, we visited the African Canadian Services Division's Summer Scholar day camps to deliver our rocket-building activities. This year, we visited all five of the Summer Scholar camps and delivered a rocket-building activity or a drone-building activity. Through this program, we reached 79 African Nova Scotian learners. ILA delivered the drone-building activity at the



Summer Scholar sites in Beechville and Digby, and facilitated the rocket-building activity at the Dartmouth North, Antigonish and Whitney Pier sites. On the first day of this activity, students learned about rocket components and what role rockets play in transporting living and inanimate objects to space. They then assembled their rockets with the help of our Mentors. On the second day, campers integrated the final components of the rockets and the group launched them in a nearby open field. On the

first day of the drone-building sites, day campers learned the fundamentals of drone technology and its various applications in real-life scenarios, followed by drone-assembly with the help of ILA Mentors. On the second day, the students flew their drones through an obstacle course erected in a nearby open area. At the end of the sessions, all students were gifted their individual rocket or drone for continued enjoyment at home.





FIELD TRIP AND COLLABORATIONS

This year, we completed our two-phase visit to Dal's **Innovation and Design in Engineering and Architecture (IDEA)** building construction site. Last year, we took our students to visit the IDEA building as the foundation of the building was being laid; the group also visited various engineering labs. This year, we took a group of students (many of whom attended the previous year's field trip) to visit the nearly-completed IDEA building and tour the engineering labs. As with last year, Dal Engineering, Lindsay Construction, and Pomerleau Construction supported the field trip by making sure everyone had protective gear and providing meals for the students. We were delighted to have ILA's Annapolis Valley After-School Program sites participate in this field trip again this year. Next year, we plan on taking the students on another field trip to tour the IDEA building in its completed state.

At the start of the year, we worked with the Nova Scotia Association of Architects (NSAA) to encourage African Nova Scotian learners from Caledonia Jr. High School and Oxford Jr. High School to study architecture. Architects volunteered to do a presentation about the industry and what

it means to be an architect. After the presentation, Bricks4Kids and ILA Mentors engaged the students in a design and building activity using LEGO bricks. By the end of the session, the students developed architectural ideas and structures using LEGO bricks and placed their work on a map of downtown Halifax to simulate a city.

ILA participated in the Black Educators Association's (BEA's) parent/student information night, where we provided information to community youth on the strategies and resources to utilize before entering university. We collaborated with the Generation 1 Leadership Initiative (G1LI) to deliver our After-School Program to 15 of their African Nova Scotian learners. We also sent a few of our high school student-learners to participate in the **Brain Wars** event hosted by the Discovery Centre. At this event, our students competed against students and STEM professionals to identify the most versatile, creative, and knowledgeable teams of thinkers.

For the first time, ILA partnered with the Faculty of Medicine's **Service Learning Program (SLP)**. The SLP was established by Dalhousie Medicine to encourage medical education students to participate



Architectural structures designed by students from Caledonia Junior High Schools using LEGO bricks

in service learning activities to gain knowledge of community needs. ILA's assigned medical student was able to develop a new activity to encourage ILA participants to pursue medical careers.

As ILA is currently unable to deliver its After-School Program sessions in every school, we strive to at least present a science "magic show" demonstration at requesting schools. In 2017/18, ILA worked with Admiral Westphal Elementary, Brookhouse Elementary, Ellenvale Jr. High School, and Saint Andrew Junior School to deliver these dynamic sessions to eager students.

ILA strives to engage our students with innovative programs that will prepare them for future jobs. To this end, we were committed to delivering a program that taught our African Nova Scotian

learners how to code, thus we, in partnership with the Black Business Initiative's (BBI's) Business is Jammin' (BIJ) society, implemented the RBC iCode+ Program in 2017/18.

For the 6th consecutive year, we partnered with the ACSD to deliver our summer rocket-building activities to engage elementary and junior high school learners in STEM activities. This year, our partnership extended to all five ACSD Summer Scholar daycamps across Nova Scotia, and we worked with daycamp educators across the province to reach over 79 African Nova Scotian learners with our rocket and drone activities. Also, during summer 2018, ILA collaborated with Brilliant Labs to deliver a 3D-printing and coding session to interested program participants.



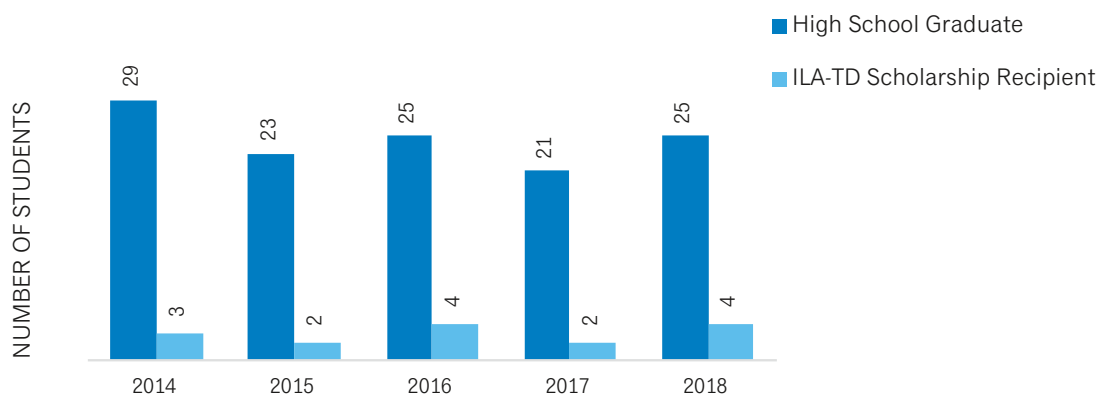


Participants and staff with TD Bank's representative Ms. Keisha Campbell (middle front row)

CLOSING CEREMONY

At this year's Closing Ceremony, ILA celebrated its 15th anniversary of engaging African Nova Scotian learners. We also joined other organizations across Canada in celebrating NSERC'S Science Odyssey, which is the nation's largest celebration for STEM. As with previous years, we used this as an opportunity to recognize our students, Mentors, staff, Board of Directors, funders and other stakeholders. The Closing Ceremony was held earlier this year on May 12th, 2018 at the Collaborative Health Education Building. We were delighted to have Mr. Andy Fillmore, Member of Parliament (Halifax) open the ceremony with greetings. We also had the honour of hosting two guest speakers: Mr. Bryan Darrell, the Director of Infrastructure Management for the Province of Nova Scotia (and past President of the Association of Professional Engineers of Nova Scotia), and Ms. Bai Bintou Kaira, a recent chemical engineering graduate and former ILA Tutor, who was one of ten students selected as a 2017 3M National Student Fellow. As a tribute to our 15th anniversary, we received congratulatory videos, letters and remarks from our friends across the country such as Ms. Leanne Lucas (the first African Nova Scotian to obtain a Masters degree in Physics from Dalhousie University), Dr. David Gray (Dean of the Dalhousie University Faculty of Agriculture), the Honourable Dr. Mayann Francis (the first African Nova Scotian Lieutenant Governor), the Honourable Tony Ince (Minister of African Nova Scotian Affairs), Dr. Rustum Southwell (CEO of the Black Business Initiative), and the Honourable Ahmed Hussen (Minister of Immigration, Refugees and Citizenship). The ceremony ended with closing remarks from the Honourable Tony Ince and our President, Dr. J. Pemberton Cyrus.

Figure 2: Number of ILA participants graduating high school and number of participants graduating with an ILA-TD Scholarship



AWARDS AND RECOGNITIONS

ILA-TD OPPORTUNITY SCHOLARSHIPS

This year, we awarded six new **ILA-TD Opportunity Scholarships**. The ILA-TD Opportunity Scholarship, a four-year renewable scholarship valued at up to \$5,000, is payable to students upon enrolment in a STEM-related undergraduate program at Dalhousie University. The amount of the scholarship awarded depends upon the student's grade; the amount accumulates for every year the student participates in an ILA program. For the 2017/18 program year, ILA incremented nine promise scholarships for secondary school students and renewed six ILA-TD Opportunity Scholarship payments for university scholars who are currently attending Dalhousie University and are enrolled in STEM-related studies. Also, four secondary school awardees are expected to enter Dalhousie University in the fall of 2018 to obtain undergraduate degrees in Nursing, Science, Medical Science and Engineering. This year, we also recognize Latisha Reynolds, for graduating with a Bachelor of Nursing degree. Latisha, originally from Truro, was one of the first recipients of the ILA-TD Opportunity Scholarship.

2017–18 ILA-TD Opportunity Scholars

Student Name	School/Grade	Amount Awarded
Kardeisha Provo	Cole Harbour District High School, Gr. 12	\$2,000
Jesmiel Ugbebor	Citadel High School, Gr. 12	\$2,000
Mary Lukindo	Citadel High School, Gr. 12	\$2,000
Jasmin Desmond	Dr. John H. Gillis High School, Gr. 12	\$2,000
Eve Wedderburn	Oxford Jr. High School, Gr. 7	\$500 promise
Omolola Oshikoya	Truro Jr. High School, Gr. 7	\$500 promise



2018 ILA-TD scholarship Recipient
Jasmin Desmond from Antigonish.

STUDENTS OF THE YEAR

The *Student of the Year* award is another way of honouring ILA's exceptional student-participants. This award is designated for students who have demonstrated (1) exemplary attendance (online or in-person), (2) an overall positive attitude, and (3) a commitment to the program and a love for STEM subjects. This year five students were given awards and gifts as *Students of the Year* for their respective sites.



2018 Student of the Year & ILA-TD Scholarship recipient Eve Wedderburn from Halifax.

2017–18 Students of the Year

Student Name	School/Grade	ILA Program
Sochima Ngenegbo	Sir Robert Borden Jr. High School, Gr. 7	After-School Program
Eve Wedderburn	Oxford Jr. High School, Gr. 7	After-School Program
Rachel Osha Lavers	Truro Jr. High School, Gr. 8	FIRST LEGO League and After-School Program
Michael Amoako	Whitney Pier Memorial Jr. High School, Gr. 8	After-School Program
Janiah Flynn Noble	Northeast Kings Education, Centre, Gr. 9	After-School Program

PROGRAM SUSTAINABILITY

To ensure ILA's growth and sustainability, we plan to move in November 2018 into a state-of-the-art Learning Centre/Office space, including a Makerspace workshop for executing our programs. Through the ongoing support of Dalhousie University, our new Learning Centre will feature more staff offices, and a larger common area for students to study and to obtain tutoring. In addition, we will have a separate Makerspace room for the ASP, FLL, and iCode+ programs and new initiatives that will include 3D printers, soldering stations, tool kits, and other equipment for teaching hands-on STEM activities to secondary school learners.

During the 2017/18 academic year, ILA was awarded the prestigious **President's Award for the Advancement of Equity, Diversity and Inclusion** at the inaugural 2018 Dalhousie Legacy Award ceremony. The Legacy Awards were introduced in 2018 as part of Dalhousie University's 200th-anniversary celebration and were established to recognize excellence in academia and to laud entities on campus that practice a culture of diversity and respect. Through this award, Dalhousie recognized the outstanding efforts of Imhotep's Legacy Academy in advancing equity, diversity, and inclusiveness through its programs.

We were also privileged to host Minister Ahmed Hussen, Minister of Immigration, Refugees and Citizenship, who was interested in learning more about the interplay between the university Tutors and high school participants involved in ILA's Virtual School tutoring Program. Minister Hussen visited our Virtual School tutoring Program at Citadel High School in Halifax, where he witnessed the tutoring process and had opportunity to ask questions of both the Tutors and the participants.

With the help of our federal (Canada Summer Jobs) and provincial (Co-operative Education Incentive) funders, we secured summer funding for the review and upgrade of ILA's After-School Program activities. Our summer 2018 staff, reviewed 39 activities, developed 19 new activities, and developed 7 new After-School Program videos.

Through our long-term partnership with Dalhousie University and the scholarship endowment generously provided by TD Bank, ILA can provide future scholarships to deserving African Nova Scotian secondary-school learners. In addition, our mutually-supportive relationships with Dalhousie University's STEM faculties facilitate the provision of the Summer Student Research Scholarships for post-secondary learners of African heritage.

Our partnerships and collaborations support ILA's growth and the implementation of innovative initiatives--our iCode+ partnership with BBI's Business Is Jammin' is a perfect example of this. Ongoing partnerships with the African Canadian Service Division of the Nova Scotia Department of Education and Early Childhood Development and collaborations with community organizations such as the Delmore "Buddy" Daye Learning Institute, and others, ensures the sustainability of our programs.

Executive Director, Mr. Sidney Idemudia (left) receiving the President's Award for the Advancement of Equity, Diversity and Inclusion, from DAL President Richard Florizone (right)

GOVERNANCE

ILA is governed by a Board of Directors who volunteer their time for the greater good of the organization's mandate.

ILA'S BOARD OF DIRECTORS

Dr. J. Pemberton Cyrus (President/Chair)

Associate Vice President Academic (acting),
Dalhousie University

Dr. Barb Hamilton-Hinch

Assistant Professor, Leisure Studies, School of
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Adrienne Glasgow-Slawter

Guidance Counsellor, Prince Andrew High School,
Halifax Regional School Board

Dr. Wilber Menéndez Sánchez

Faculty, Nova Scotia Community College,
Academics & Career Connections





FUTURE PLANS

As interest in our After-School Program science video catalogue grows, ILA plans to continue development of the videos and to promote their use at various locations.

In November 2018, ILA will move into a new, expansive Learning Centre/Office space situated on Dalhousie University's Sexton campus. ILA is a unique organization that supports a diversity of learners who have a variety of learning styles, so our space must be learner-centric and flexible enough to enable a diversity of teaching methods to accommodate those students. The new Learning Centre/Office space can accommodate five full-time staff and support participant growth within ILA's Virtual School tutoring Program. Students will be able to use the space to study, to decompress, and to re-energize. There is also a new Makerspace area for use by ILA program staff and participants, and by groups interested in promoting STEM education to under-represented youth. The ILA Makerspace will provide a practice and creative

development space for ILA Mentors and student-participants, offering 3-D printing stations and special project areas for soldering and wood work. There will be wireless integration of devices between the Makerspace and the new Learning Centre/Office space. ILA plans to use our new resources to engage learners of African heritage in STEM on a larger scale.

We look forward to developing new partnerships with science promoters and youth advocates from various local, national, and international communities. While our goal remains to increase the number of African Nova Scotians in STEM careers, the success of that endeavor can only be achieved by empowering students through science programs delivered in a manner that reinforces students' capabilities and their self-worth. ILA is up to the challenge and we are excited to connect with African Nova Scotian communities across the province to accomplish this worthwhile goal.

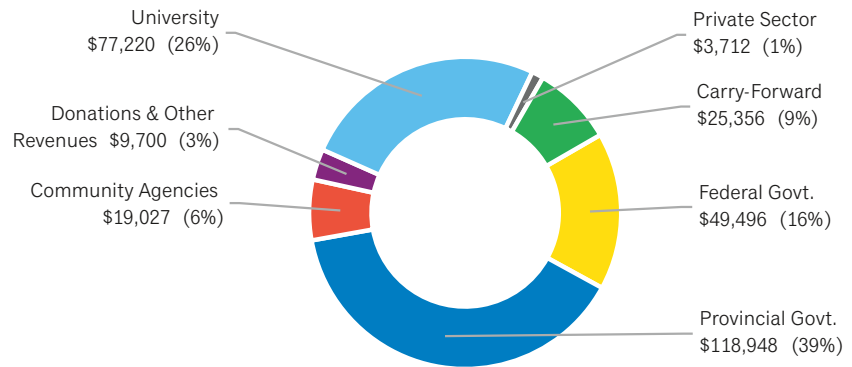
FINANCIAL SUMMARY

ILA's financial transactions are processed on a cash basis through the Dalhousie University financial system (BANNER) and are tracked through Special Purpose Funds. The financial statements of Dalhousie University are subject to an annual audit by an external accounting firm; reporting to the audit committee of the Board of Governors.

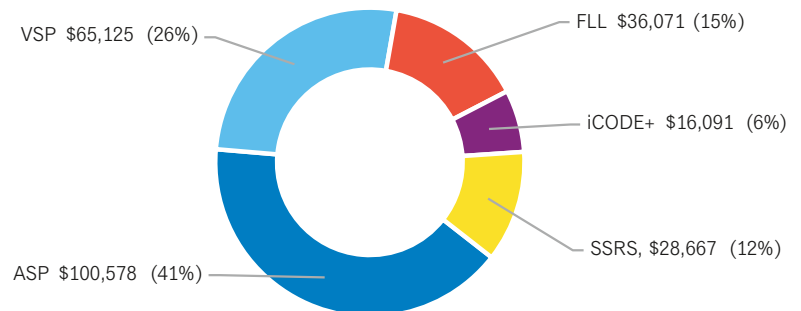
Dalhousie does not undertake to provide external audits of specific research and special purpose projects unless it is expressly required by the contract and specific funds are provided for this purpose. The federal Tri-Council Agency and other funding agencies periodically review Dalhousie University research accounts.

Dalhousie University maintains extensive financial policies which in conjunction with the Internal Audit Department leads to a strong control environment.

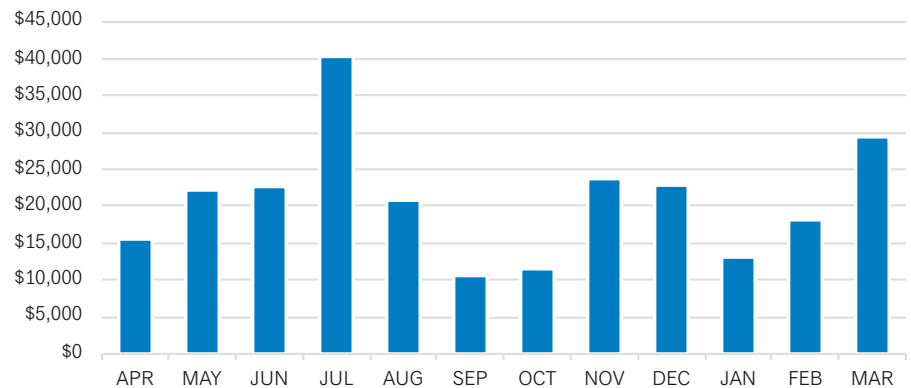
ILA 2017/18 REVENUE SOURCES



ILA 2017/18 EXPENSES BY PROGRAM



ILA 2017/18 EXPENSES BY MONTH



SPONSORS



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DONORS AND SUPPORTERS

Advanced Screen Printing	Dalhousie University, Promoting Leadership in Health for African Nova Scotians (PLANS)	Pomerleau Construction
Atlantic Superstore (Barrington St.)	Dalhousie University, Registrar's Office	Saint Mary's University, Faculty of Science
Dalhousie University, Black Student Advising Centre (BSAC)	Eastlink	Sara Simpson Photography and Graphic Design
Dalhousie University Bookstore	Ellenvale Junior High School	Shell Canada
Dalhousie University Libraries	Engineers Nova Scotia	Space Telescope Science Institute (STScI)
Dalhousie University, Faculty of Agriculture	Lindsay Construction	The Westin Nova Scotian Hotel
Dalhousie University, Faculty of Architecture and Planning	Maritime Hobbies & Crafts	Anonymous Donations
	McGill University, Faculty of Engineering	

FOR MORE INFORMATION CONTACT

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