TECHNIONEWS

tter of Technion Canada Fall 2017





Technion Unlimited®

CONTRIBUTE TO TOMORROW'S IN NOVATION



Message from

DOREEN GREEN

National Chair

I know you may be saying, "here she goes again bragging about Technion" but the truth, is I can't help it. The Israeli Tech Miracle has come to NYC!

Just a few weeks ago Cornell University and the Technion-Israel Institute of Technology cut the ribbon on their jointly developed, entrepreneurship-based university in New York City.

Located on Roosevelt Island, Cornell Tech puts innovation front and centre, even in its own design — there are no faculty offices, and the campus is not divided according to discipline. The idea is to make the university as open and collaborative as any great start-up incubator.

It started in 2011 with the vision of Mayor Michael Bloomberg, who saw the promise for a new university in New York City that could jumpstart the city's high-tech economy. He launched an international competition that attracted top-tier universities from around the world, committing \$100,000,000 of his own philanthropic dollars to make the vision possible. The Technion and Cornell won that competition as a joint entry with a bold plan to create a revolutionary new model for an institution of higher education.

That vision was also made possible by Technion President Prof. Peretz Lavie, who saw the vast possibilities for expanding his university's global presence over the past decade. Lavie says the new university "will allow us to fuse academia and industry under the same roof, something you will also find at our home campus." That co-mingling of researchers and business professionals "fosters innovation and world-class research and start-ups for economic growth and the public good," Lavie notes.

"Today's Cornell Tech campus opening marks the beginning of a new chapter in the Jacobs Technion-Cornell Institute's ongoing work to foster innovation in New York and beyond," said Lavie, "In partnership with Cornell, we've developed a model of graduate-level technology education that is unlike any other – one that's tailor-made not only for New York City but for the challenges of the digital revolution."

Message from

MARVIN OSTIN



National President

The coming year, 2018 will be very exciting and challenging one for all of us at Technion Canada. Exciting because it will be the 75th Anniversary of Technion Canada coupled with the 70th Anniversary of the founding of the State of Israel. The challenge, and in fact the opportunity will be to showcase the contribution of Technion faculty and graduates, to Israel and to humanity.

Technion Canada's early beginnings brought together a small group of engineers and architects who started modestly by mailing text books to Technion. Over the past 75 years, the contributions from Technion Canada supporters have grown and the campus is dotted with Canadian names marking buildings and laboratories, parks and gardens that have been established by Canadian contributions. Today, I invite you to join me and the members of the Technion Canada Board of Directors in marking this special occasion with a celebratory donation to make 2018 the first of many years to come to outshine and outraise funds from the year before.

Hershel Recht, our Associate Director for Fundraising and Development, is looking forward to sharing with you the broad array of opportunities for engagement at all levels so that you can designate your gift to the area that most resonates with you.

Some of Technion's priorities for the future are Faculty Recruitment - the lifeblood of any academic institution is its Faculty; Research and Research Infrastructure – the Technion is uniquely positioned to succeed in multi-disciplinary cancer research in the Technion Integrated Cancer Center or in Quantum Research, the new frontier of science; Student Support - the well-being of a university's students is essential to its success and Technion is focused on increasing the number of fellowships for graduate students and building a new student village for undergraduate students; Infrastructure Upgrade and Sustainability - where Technion is pioneering new sources of clean water and energy, while managing Israel's scarce resources.

The Technion is contributing to Israel and the global good in unprecedented ways, and it depends on people like you to ensure its continued advancement as a world-class institution of higher education.

Technion Canada 2017-2018 Board of Directors

EXECUTIVE CHAIR **PRESIDENT** VICE-PRESIDENTS **TREASURER SECRETARY** OFFICERS AT LARGE Doreen Green Marvin Ostin **Edward Nagel** Harold Garfinkle Arnold Recht Ronnie Kaplan, Steve Merling, Bill Wiener, Ben Wygodny **DIRECTORS** Jack Bensimon Steve Bramson Eliot Phillipson Harry Sheres Leesa Steinberg **Howard Berish** Neil Closner Paul Raducanu Melissa Singer **HONOURARY LIFE PRESIDENTS HONOURARY DIRECTORS HONOURARY VICE CHAIR** Harry Bloomfield QC, Sydney Cooper, Pearl Sperber David Azrieli z"l Morley Blankstein z"l Sydney Cooper Gameroff, Alex Magil, Eugene Riesman, Barrie Rose

NATIONAL OFFICE

MONTREAL OFFICE

970 Lawrence Avenue West, Suite 206 Toronto, ON M6A 3B6 Tel: 416-789-4545 Email: info@technioncanada.org

6900 Decarie Boulevard, Suite 3435 Cote St. Luc, QC H3X 2T8 Tel: 514-735-5541 Email: montreal@technioncanada.org

Toll Free: 1-800-935-8864

TORONTO



Dr. Noam Adir, the Dean of the Schulich Faculty of Chemistry (on the right) was recently in Toronto to meet with Mr. Seymour Schulich and his daughter, Judy Schulich, to report on the most recent news from the department.

The Schulich Faculty of Chemistry is home to students and researchers whose goals are to understand how the physical world around us behaves as it does, on the molecular level. In this process the students and researchers can also design and synthesize new molecules, with new characteristics, that the world has never seen. These molecules

can be used for the benefit and improvement in the lives of all mankind.

There are 26 faculty members involved in research and teaching, more than 200 undergraduate students and approximately 100 graduate students as well as 40 post-doctoral fellows. The research interests of the faculty members are broad and include Physical, Analytical, Inorganic, Organic, Bio and Theoretical Chemistries. In addition, research is performed in alternative energy technologies, nanoscience, drug design and structural biology.

There is a strong commitment to the promotion of chemical education at the junior and high school levels. Along with the Israel Ministry of Education, the Faculty holds a yearly Israeli Chemistry Olympiad (the Chimiada). A second project, "Archimedes", brings in talented high school students from around Israel to study at Technion for up to three years, completing Technion-level courses which are awarded credits towards a future Technion degree.

Many of the varied activities described above have been made possible by the generous and long-standing support of Mr. Seymour Schulich.

MONTREAL





Technion PhD student, Rotem Vishinkin was recently in Montreal for the McGill Summer Institute in Infectious Diseases and Global Health. She met with a group of Technion Alumni and supporters to share the exciting research that she is participating in with the team at the Laboratory for Nanomaterial-based Devices.

Her current research interests include detection and identification of disease related volatile biomarkers, especially emitted from the





skin, using analytical methods and nano-arrays of chemical sensors, and development of gold nanoparticles based sensors for sensing applications.

She is working under the supervision of the head of the lab, Prof. Hossam Haick, an expert in the field of nanotechnology and non-invasive disease diagnosis.

CALGARY







University of Calgary Vice President (Research), Dr. Ed McCauley, the Dean of Engineering and seven other Research Professors visited Technion to continue their research collaboration initiatives in Energy toward a Low Carbon Future.

Prof. Yoed Tsur, Director of the Grand Technion Energy Program (GTEP) provided an overview of the program that was followed by a tour of Laboratories including the Energy Storage Complex, Hydrogen

Technologies, Photovoltaics, Non Carbon Fuels, and the GTEP Central Laboratory and Headquarters. A presentation was made on using solar energy to split water, and produce hydrogen at the point of sale located far from the solar farm along with several workshops and one on one meetings between the appropriate Research Professors of University of Calgary and Technion as well as with the Technion President, VP Research and other Leaders and Staff.

TECHNION THINGS

BOARD OF GOVERNORS MEETINGS 2017







The 2017 BOG acknowledged the generous donation of Dr. Andrew and Aviva Goldenberg with the unveiling of a temporary plaque for the Dr. Andrew and Aviva Goldenberg Architecture Studio Pavilion. Several Architectural students presented their current research projects to the Goldenbergs, their guests and the Technion Canada BOG participants.





Following the visit to the Faculty of Architecture, the Goldenbergs unveiled a plaque on the Guardian Wall which recognized them as having made the highest level of commitment to the Institute.



A significant program of the BOG, "Technion, Israel and the World in the 21st Century – Fulfilling the Technion Vision" was in tribute to several significant visionary supporters of Technion among them, Dr. Andrew and Aviva Goldenberg.

Both Technion graduates Dr. Andrew and Aviva Goldenberg will donate US\$5 million to the Technion, which will also include Scholarships to Robotic Students. Dr. Goldenberg expressed thanks and appreciation to the Technion

for providing the two of them with tools for successful and rewarding careers. Moreover, the Technion is the place where the couple met for the first time 50 years ago, in December 1967.

"AT THE TECHNION WE RECEIVED TOOLS FOR A CAREER"

THANK YOU TO HARRY SHERES AND FAMILY FOR THEIR MEANINGFUL SUPPORT OF THE TECHNION OHEL AHARON SYNAGOGUE



Harry Sheres and Reena Sheres





Mr. Matanyahu Englman, Executive VP & Director General, Student Representative, Rabbi Elad Dokow and Harry Sheres

TECHNION THINGS

BOARD OF GOVERNORS MEETINGS 2017

MAZEL TOV TO SUSAN RAYMER AND BEN WYGODNY ON BEING AWARDED AN HONORARY FELLOWSHIP

"In recognition of your joint leadership in both community and philanthropic causes; with appreciation for your exemplary role within Technion Canada; in tribute to your relentless efforts to promote Technion, and for your selfless dedication to the Jewish community and the State of Israel."



Susan Raymer and Ben Wygodny



Technion President, Prof. Peretz Lavie, Susan Raymer and Ben Wygodny



Susan Raymer and Ben Wygodny and their family

TECHNION CANADA "GENERATION NEXT" TRIP TO ISRAEL AND TECHNION

This was the 5th Technion Canada Generation NEXT Trip to Israel and Technion and we were fortunate to recruit a dynamic and diversified group of seven participants, ages 32-53 – Doron Sayegh and Joel Zolov from Montreal, Jonathan Cohen, Nathalie Hadlington, Matt Mortazavi and Ayal Senior from Toronto and Jason Baserman from Calgary. Andrew Wolinsky from Toronto, whose family foundation, The Leonard Wolinsky Foundation was a major supporter of the trip, joined the group and was a definite asset to the dynamic.

The itinerary included attendance at the Technion Board of Governors event where the participants had an opportunity to meet and engage with professors and students and

meet representatives of the worldwide Technion Societies. Before travelling to Haifa for the BOG, the group spent two days in Tel Aviv and two days in Jerusalem.

We firmly believe that offering these participants an opportunity to visit Israel and see for themselves the impact of Technion on the growth of the State of Israel, particularly in the area of startups, as well as its impact on the global community through its successful graduates, is the best way to cultivate and develop future leaders for Technion Canada















PHOTOS TAKEN BY KATAN STUDIOS

TECHNOVATION GALA

Technion Canada's Technovation Gala was held on Sunday, June 4, 2017 at the Evergreen Brick Works in Toronto, with over 600 guests in attendance. The honourees, Lillyann and Bill Wiener, Paul and Les Wynn and Jeff Weinzweig are long time and generous Technion supporters. Technion Canada was proud to recognize them. Proceeds from the Technovation Gala will support Engineers Without Borders, Technion Chapter, which was established to partner with developing communities worldwide in order to improve their quality of life.

Technion Alumni Innovations were highlighted by representatives from Insightec, whose global team is united by a common vision to transform healthcare by making MR-guided focused ultrasound a standard of care that allows performing surgical procedures with surgical precision but without incisions and ReWalk, a wearable robotic exoskeleton that provides powered hip and knee motion to enable individuals with spinal cord injury to stand upright, walk,

turn, and climb and descend stairs. In addition, there was a 3D and Laser etching studio displaying examples from the Technion Faculty of Architecture's digital laboratory. A number of Lassonde School of Engineering Students, who had attended programs at the Technion, was available to share their "Technion experience".

The evening's emcee, Kiss' Gene Simmons entertained the guests, backed by the Montreal Rhapsody Orchestra, hosted a short talk show and hyped the sales in our auction. It was his message on the important role that Technion has played in development of Israel as the Start Up Nation that left a lasting message with all our guests.



The future of Israel is in high-technology and the future of high-technology in Israel is at Technion.

TECHNION TRIUMPHS

TECHNION INTERNATIONAL GRADUATES GOING OUT INTO THE WORLD:



15 STUDENTS FROM 6 COUNTRIES HAVE COMPLETED THEIR STUDIES AT TECHNION INTERNATIONAL

"They say that if you're the smartest person in the room, it's a sign that you're not in the right room. Here, I was in the right room with the best and smartest people." This is how Rebecca Samarelli summed up her four years of study at Technion International.

Samarelli said, "The beginning was not easy. The shock on the first day was tremendous, and communication was complex. I thought I'd get excellent grades here, just like I did in high school – and I was wrong, big time. But our class turned into a melting pot very quickly: we studied together, we had fun, we suffered, and we became a family. We learned the meaning of hard work here. We learned that the effort is always worthwhile."



Samarelli is one of fifteen students who recently completed their studies Technion International and earned a degree in Civil Engineering, focusing environmental engineering and construction management. Four of them are from Italy, one from France, seven from China, one from India, one from Guatemala and one from Japan. Two of them will continue to earn graduate degrees at Technion and two will join the labor market in Israel.

Recently, Asher Daniels, North America Recruiter for Technion International (TI), visited the University of Waterloo and the University of Toronto to promote Technion's undergraduate programs taught entirely in English. The Program offers a challenging and intensive course load designed to provide students with the tools and experience necessary to excel in their undergraduate academic career. From its renowned medical school and engineering excellence to its unique entrepreneurial know-how, TI offers a variety of academic programs led by the university's best

minds, at its advanced laboratories, with its brilliant students and rich student life, on its vast forested campus on Haifa's Mount Carmel.

Each semester, the Technion hosts students from more than thirty countries, who choose from a wide range of advanced engineering, science and entrepreneurship and innovation programs. There is also a vibrant student life, living in modern dorms on campus, making use of the Technion's excellent sports facilities, learning Hebrew (optional), and participating in exciting social and cultural activities.

Professional and research internships offer students the opportunity to gain valuable work experience and broaden their perspectives while taking in Israel's unique entrepreneurial economy and Technion's penchant for innovation. The Neubauer Professional Internship course is a directed work-study experience where students get to work in their fields of study or interest, supervised by Technion faculty and on-site supervisor. Research internships at the Technion are generally organized as direct individual tutorship and collaboration between a Technion faculty member and the student.

The newest of Technion International offerings is the Gap Year Program, designed for students between high school and college. The program offers students an opportunity to enroll in college-level STEM courses while living on campus, learning with renowned faculty, making new friends and participating in unique cultural activities while exploring the country's most popular tourist attractions.

Technion welcomes students from all over the world. For more information contact Asher Daniels at: asher@ats.org

TECHNION FORMULA TEAM RANKS 8TH WORLDWIDE



This is the fifth year that Team Technion has participated in Formula Student competitions. Technion's car was developed as part of the New Product Design Project course led by Dr. Hagai Bamberger under This is the fifth year that Team Technion has participated in Formula Student competitions. Technion's car was developed as part of the New Product Design Project course led by Dr. Hagai Bamberger under the guidance of Prof. Reuven Katz, Head of the Design, Manufacturing, and CAD track at the Faculty of Mechanical Engineering. This year, around fifty students from seven different faculties are participating in the project, which is led by the Mechanical Engineering and Aerospace Engineering faculties. At the unveiling held recently at Technion, certificates of merit were awarded to several students: Alain Altari, Or Amsterdam, Yael Haslavsky, Omer Cohen, Tal Lipshitz, and Tom Mazor.