FROM VISION TO REALITY

Celebrating 50 Years of Excellence in Torah and Technology

JCT Perspective

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JERUSALEM COLLEGE OF TECHNOLOGY
LEV ACADEMIC CENTER

Jerusalem College of Technology – Lev Academic Center

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Photography
Hudson Taylor, Shaxaf Haber, Michael Ehrenberg, Zikron Digital

Design & Production
Hagit Bodenstein - Swissa

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Old City Press Ltd.

Jerusalem College of Technology – Lev Academic Center

Department of Development and External Affairs

P.O.Box 16031, Jerusalem 9116001
Tel: 972-2-6751269
Fax: 972-2-6751190
Email: development@jct.ac.il
Website: www.jct.ac.il/en

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JCT's future and Jerusalem's future: an inextricable connection

As I reflect on the significance of JCT's 50th anniversary, I'm reminded of a different milestone that occurred two years ago: the 50th anniversary of a reunified Jerusalem.

Just like Jerusalem's 50th, JCT's 50th serves not only as a time to celebrate, but as an unmistakable call to action. It is time to create a more equitable socioeconomic reality for all residents of Israel's eternal capital.

Jerusalem has long been the poorest of Israel's major cities — largely because it has the country's highest concentration of Arabs and Haredim, communities with disproportionately high poverty rates.

As Jerusalem is the center of the Jewish world, it is incumbent upon the Jewish people to help ensure a brighter future for vulnerable populations in this city. That imperative is at the heart of JCT's institutional mission.

Alongside 52 years of a reunified Jerusalem, JCT's 50 years are defined by our inspiring work to endow Israel's underserved populations with the gifts of academia and employment. Indeed, from the Haredi community to Ethiopian-Israelis, JCT has pioneered academic solutions to acute employment conundrums.

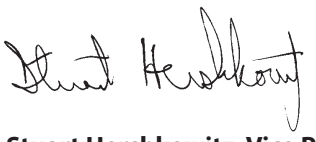
Our Haredi graduates have an 89% employment rate, including 77% in their chosen field — far exceeding the roughly 50% employment rate for Haredi men nationwide. We achieve this by providing the necessary academic support and resources to succeed in STEM disciplines, enabling our students to attain employment in the professions with the greatest demand for skilled labor in Israel's job market.

JCT also shatters the stereotype of women's relative lack of interest in STEM, as 53% of our computer science students are women — 18% higher than any other Israeli college or university.

Finally, our Reuven Surkis Program for Students from the Ethiopian Community helps young Ethiopian-Israelis improve their lives by allowing them to earn an academic degree and pursue careers in high-tech, business, and the Israel Defense Forces, producing graduates with a 95% employment rate.

As we celebrate this momentous anniversary for JCT, let's commit to doing all we can to ensure a more prosperous future for the city of Jerusalem as a whole. That means doubling down on the college's mission to alleviate poverty, most prominently by supporting high-quality academics for Haredim, Ethiopians, and other vulnerable populations.

Together, we will write an even more inspiring story for the next 50 years.



Stuart Hershkowitz, Vice President

Prof. Ze'ev Lev: a man of vision whose impact is stronger today than ever

As JCT celebrates its milestone 50th anniversary, it is remarkable to witness how the original vision of our founder, Prof. Ze'ev Lev, is both maintained and amplified at our institution.

An Israel Prize-winning physicist and influential Torah scholar, Prof. Lev emphasized in his writings the central importance of training yeshiva students to be the State of Israel's leaders in the military, academia, science, and industry. Today, his words have proven prescient as JCT looks back on a half-century of producing scores of talented engineers and other alumni who have infused the IDF and Israeli start-ups alike with their values, high-tech prowess, and ingenuity.

Times have changed, yet the impact of Prof. Lev's vision is more apparent than ever. JCT graduates continue to shine in leadership roles in settings ranging from the technological units of the IDF and of prominent defense contractors to SpaceIL, the company that captured hearts and minds worldwide this year through Israel's mission to the moon. Our alumni have spearheaded the development of crucial defense infrastructure like the Iron Dome and Arrow anti-missile systems, and have stood at the head of the IDF satellite surveillance unit as well as the laboratory integrating the sensor data that uncovered terror tunnels from Gaza to Lebanon. Prof. Lev saw the need and JCT's students delivered, using their unique training to pioneer the technologies that continue to ensure the safety of countless Israeli citizens.

This is no accident. It reflects a notable aspect of Prof. Lev's blueprint — a special sensitivity to the State of Israel's greatest needs. When JCT's Electro-Optics Engineering Department was launched in 1969, electro-optics was not even an accepted academic discipline. We were only the second institution of higher education in the world to teach this specialty. Today, the electro-optics expertise emanating from JCT's campus holds the key to the high-speed communication and high resolution imaging capabilities that are the backbone of everything from Israel's defense sector to its booming tech start-up scene. While the study of electronics with a focus on low-voltage devices is an important activity at JCT and at other academic institutions, in light of Israel's shortage of high-voltage engineers, in recent years we have opened a special track to fill this need as well.

Extending beyond engineering, the same vision emanates from other programs at the college. An outstanding example of this is the major effort we are making to address the Jewish state's severe shortage of nurses (Israel stands near the bottom of the OECD in nurse-to-patient ratio). Our Nursing Department (ranked first by the Ministry of Health among its 24 peers nationwide) produces hundreds of BSN nurses each year and is pioneering the training of Nurse Practitioners in Israel.

Through it all, JCT has also maintained the importance of Torah study as part of our DNA. Moreover, Prof. Lev himself staunchly believed in the centrality of the religious Zionist dream. The religious atmosphere of our campuses that results from the combination of these two values has also made us the go-to destination for Israeli Haredim who wish to benefit from the high-quality academics that provide a practical foundation for future employment. Today JCT functions as an indispensable bridge between not only Israel's religious and high-tech communities, but also within the religious community itself. In my capacity as JCT's sixth president, I'm honored and humbled each day to watch Prof. Lev's founding vision continue to reach greater heights. May the next 50 years be characterized by the same pioneering spirit and sense of purpose, as we go Me'Chayil el Chayil – from strength to strength.

Prof. Chaim Sukenik, President

The scientific and spiritual success story of Israel's lunar mission

Although it did not have a "soft landing," Israel's lunar mission in April was still a tremendous accomplishment, as it made the Jewish state only the seventh nation to orbit the moon. Moreover, the Israeli nonprofit SpaceIL achieved lunar orbit through the Beresheet spacecraft while working with what experts widely considered a shoestring budget of $100 million.

JCT graduate Ariel Gomez, a senior system engineer at SpaceIL, played a major role in making this historic moment a reality. Not only was Ariel responsible for keen components of the project, but he was also involved in the research, consultation and technology needed to minimize the violation of Shabbat while simultaneously ensuring the continued safety of the spacecraft. Gomez consulted another JCT graduate — Rabbi Shraga Dahan, former head of the IDF's Beit Midrash — regarding how to operate Beresheet on Shabbat.

"The head of staff of Beresheet is a Chabad chassid and avoiding the violation of Shabbat is very important to him," Gomez said. "In our contract with the American company, there's a clause that the launch won't take place on Shabbat."

He continued, "We saw Beresheet's mission as a mission of the entire Jewish people and therefore it was very important to us that there won't be any procedures on Shabbat that were not approved by the Chief Rabbi. We used technological innovations that were designed by JCT and the College provided us with keyboards and mice which can be operated through a grama (an indirect action which involves a less serious violation of Shabbat). Additionally, we instructed the staff to do only what is strictly necessary to ensure the safety of Beresheet on Shabbat and no more."

Rabbi Dahan said that "working with the staff of Beresheet has been a wonderful experience. I feel that I'm dealing with heavenly matters in the double meaning of the word. Witnessing Jewish people working together on the project has been a very meaningful experience. We can truly be proud of the Jewish nation."

Earlier this year, Jews in Israel and worldwide bubbled with anticipation as the Israeli non-profit SpaceIL's Beresheet spacecraft prepared to land on the moon.

Why is this important? Aside from the scientific research that can be accomplished through space exploration, the Torah lends insight into another very significant issue associated with Israel's moon mission.

The pasuk in Vayikra 26:13 states: *"I am the L-rd, your G-d, Who took you out of the land of Egypt from being slaves to them; and I broke the bar of your yoke and led you upright."*

The Targum Yerushalmi explains that this pasuk conveys the importance of standing upright.

Before the modern state's establishment 71 years ago, Israel was at a low point — a mockery and a joke throughout the world. Today, B"H, Israel is standing upright. The State of Israel, the IDF, and all of Israeli society produce immense technological and even spiritual success stories. Products pioneered in the "start-up nation" are used worldwide.

JCT has played a major role in developing these significant and even life-saving technologies. And we had the privilege to be a significant part of Israel's historic lunar orbit through the participation of our graduates in the mission. This is important in itself, but especially when it is rooted in Torah.

Indeed, our job is not to feel that our scientific achievements stem from human power, but rather to acknowledge that G-d is the one who gives us the strength to succeed. To appreciate the help of Heaven is to embrace our mission — a national mission, a human mission, a mission of Torah, a mission of mitzvot.

When Israel eventually attempts another lunar mission and succeeds in landing on the moon, it will represent another stage in the elevation of the Jewish people, another stage added to the glory of the Kingdom of Heaven, and a further strengthening of the course of our redemption.

Rav Yosef Zvi Rimon, Rosh Batei Midrash, JCT

A trailblazing institution grows in Jerusalem: 50 years of JCT - Lev Academic Center

For the past 52 years, Israelis and Jews worldwide have been witness to a breathtaking modern-day miracle: the continued cultural, economic, and religious renaissance of a reunified Jerusalem, the Jewish people's eternal capital.

On a parallel track, for 50 years, the Jerusalem College of Technology has crafted an inspiring narrative of diverse achievements and advancements, elevating not only the institution itself, but Jerusalem and Israel as a whole. Here is JCT's story, from past to present to future.

The past: a presidential perspective, from Prof Ze'ev Lev to Prof. Chaim Sukenik

"One of the prevailing themes that Prof. Ze'ev Lev built into his writings was a strong Zionist message. This featured powerful identification with Israel and the IDF," explains Prof. Chaim Sukenik, JCT's current president, regarding the college's founding president.

A world-class physicist and the 1962 Israel Prize laureate in physics, Prof. Lev was a senior professor at the Hebrew University of Jerusalem during the 1950s and '60s. He was "a scholar of the highest order in both religious and academic studies." His vision for JCT was "to take yeshiva students and train them to be the leaders of the State of Israel."

"His concept of leadership was rooted in real-world perspective, not philosophical leadership or scholarship purely for scholarship's sake, but rather practical leadership for the benefit of the state. This meant educating the cream of the crop for crucial positions in the army, academia, and industry, particularly engineers and other high-tech professionals."

Prof. Joseph Bodenheimer, JCT's fourth president (1993-2009), adds, "Prof. Lev's original idea was to form an institution to train Orthodox students, mostly in areas of high-tech, which was something very new and forward-thinking at the time. In the 1960s, Israelis knew nothing about computers but they understood that it was an important field. We took it a step further."

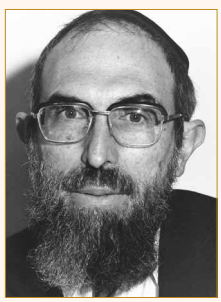
After extended efforts — including consultations with leading Torah sages throughout the world as well as contacts with government ministries and the Jerusalem Municipality — JCT was established in 1969. It became known as Machon Lev (Lev Institute) in honor of Prof. Lev. Initial financing for the institution came from funds awarded by the United States government and American businessmen, along with Israeli government allocations provided with the assistance of then-Minister of Finance Pinchas Sapir.

Five decades later, Prof. Sukenik contends that "judging by the impact JCT's graduates have had as leaders in the state, particularly in the IDF, R&D, industry and the development of various start-ups, Prof. Lev's founding vision has certainly come to fruition and is today as strong as ever."

After Prof. Lev's tenure ended in 1982, German-born Dr. Yitzchak (Ernst) Nebenzahl served as JCT's second president until 1986. Yitzchak Nebenzahl was a professor of law before moving to Israel in 1933. In the pre-state days, he served as the legal advisor of Yefet Bank and an officer in the General Staff during Israel's War of Independence. Later, he was the manager of the Jerusalem Economic Corporation, chairman of the Postal Bank, a member of the Board of Directors of Bank Leumi LeIsrael, chairman of the Advisory Council of the Bank of Israel, and Israel's state comptroller and state ombudsman prior to serving as president of JCT.

Prof. Ze'ev Lev

Dr. Yitzchak (Ernst) Nebenzahl



Mr. Zvi Weinberger

Prof. Joseph Bodenheimer

Prof. Noah Dana-Picard

Prof. Chaim Sukenik

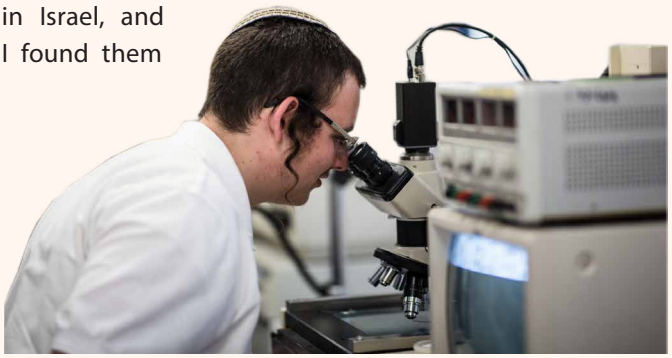
During Mr. Zvi Weinberger's subsequent tenure as JCT's third president until 1993, Prof. Cyril Domb concurrently served as the college's academic president. During this period, JCT's new Beit Midrash was built, with construction completed in 1991.

Zvi Weinberger's successor, Prof. Joseph Bodenheimer, is a world-renowned expert on the intersection of Torah and science. He holds 11 different patents in electro-optics and works as a consultant to high-tech companies in Israel and the U.S. At the age of 8, Joseph Bodenheimer immigrated with his family to Israel from England. Having received his PhD in physics from Hebrew University, he spent a year as a visiting researcher at Kodak Research Laboratories in the U.S. (1978-1979), where he performed pioneering work in the development of the DVD.

Before serving as JCT's president, Prof. Bodenheimer headed JCT's Electro-Optics Engineering Department, which is known for producing alumni who have held senior positions in the high-tech industry, the bio-medical industry, the Israeli Defense Establishment, and institutions of higher education. This department, the first-of-its-kind in Israel was created by Prof. Ze'ev Lev and Harav Prof. Yehuda Levi in 1969. At the time, the only other electro-optics program in academia in the world was at the University of Rochester.

"Electro-optics was always the flagship program of our institution", says Prof. Bodenheimer. Under his leadership, JCT established and significantly grew pioneering programs that empower students from Israel's underserved demographic sectors — such as Haredim and Ethiopians — to enter the workforce in greater numbers.

"In 1993, we decided that one direction to increase enrollment was to not only broaden the range of subjects we taught, but to start reaching out to the Haredi population. I knew that JCT needed to serve as an institution for the Jewish people. I personally met with Haredi leaders from multiple communities in Israel, and I found them much more open to our college than I thought they would be."



"The Institution I envision will educate students to synthesize their profession with a Jewish way of life… not only to provide manpower for Israel's developing high tech industries, but to produce leaders who are strongly committed to Israel, Jewish values, to our People and to humankind…" Prof. Ze'ev Lev

Prof. Bodenheimer also emphasized the importance of women's empowerment during his presidential tenure. "We felt that the same formula which worked so well for the men's program should be able to work for women as well."

Prof. Noah Dana-Picard, JCT's fifth president from 2009-2013, is a French-born mathematician and Talmudic scholar who has taught at JCT for more than two decades. "There are those who see Torah and science as separate domains of knowledge, with some connections, but at JCT, we embrace the fact that G-d created one world, and we work to show the total symbiosis between the various aspects of creation. It's why we empower our students with the ability to balance Torah and academic studies together within the same schedule." Prof. Dana-Picard has beeen Head of the Roland and Astrid Dana-Picard Chair for Education, Torah and Science since 2014.

Before becoming JCT's sixth president in 2013, Prof. Chaim Sukenik was Dean of the Exact Sciences Faculty at Bar-Ilan University and among the founders of the Bar-Ilan Institute for Nanotechnology and Advanced Materials.

Today, Prof. Sukenik says he is particularly moved by how "JCT's enormous growth has all occurred while maintaining a remarkable consistency with Prof. Lev's original vision."

"Our graduates are heads of entire tech divisions within the IDF, from satellite surveillance to missile defense to data analysis to intelligence. It is likely that Prof. Lev envisioned that outcome from day one".

"We have broadened our scope to disciplines beyond engineering. Good examples of this are that today we are home to Israel's top-ranked nursing and accounting programs. Through it all, the underlying theme has remained the same — whatever you do, make sure to do it at the highest level possible. Prof. Lev's commitment to excellence has never waned or wavered here."

The present: a snapshot of JCT's accomplishments

The JCT that you see today — a thriving institution with a diverse array of academic programs, highly accomplished alumni, and outsized contributions to Israel's socioeconomic successes — has literally been 50 years in the making. The following is just a snapshot of the institution's achievements.

- Conducting advanced research which has led to major advances in fields ranging from cyber security to medical technology to driving safety.
- Producing alumni who have become leaders in Israel's defense industry and are involved in top-tier defense projects like the Iron Dome and Arrow anti-missile systems, as well as the country's space program and satellite development efforts. For example, an alumnus of JCT's Electro-Optics Engineering Department currently holds the position of chief technology officer in the Ministry of Defense's central R&D organization.
- Empowering women to pursue and excel in previously male dominated science and technology-related career paths. 20 percent of women who study computer science in Israel are enrolled at JCT; 53 percent of all JCT's computer science students are women, which is 18 percent higher than any other Israeli academic institution.
- Trailblazing a new narrative of socioeconomic prosperity for the Haredi community through programs developed specifically to suit their needs; JCT's Haredi graduates have attained an 89 percent employment rate, far exceeding the roughly 50 percent employment rate for Haredi men nationwide.
- Enabling Israeli and international yeshiva students to strike a balance between Torah studies, high-level academics, and strong professional training. In 2010, JCT launched its International Program in English for men in the fields of business management and computer science. This year, JCT is opening Israel's first computer science degree program in English, exclusively for women.
- In partnership with the University of Toronto, JCT established Israel's first academic program in the cutting-edge field of health informatics, which aims to improve the quality of patient care by utilizing data as the basis for making better clinical decisions.
- Empowering young Ethiopian men and women to improve their lives by enabling them to earn an academic degree and pursue careers in high-tech, business, and the IDF through the Reuven Surkis Program for Students from the Ethiopian Community, which has produced a 95 percent employment rate for its graduates.

- Providing intensive cyber training to selected outstanding graduates in software engineering and computer science through our Cyber Elite program, helping JCT students secure positions at cyber start-ups as well as in cyber departments of multinational, aerospace, and defense companies.

Goals for the future: reducing poverty through Haredi academics

Although the reunification of Jerusalem was a defining moment in Jewish history, that moment also serves as an important reminder to both JCT and all of Israeli society, that we still have a lot of work to do when it comes to developing life and prosperity in Israel's capital — especially around the issue of socioeconomic equality, JCT's Vice-President Stuart Hershkowitz recently wrote for *The Times of Israel*.

Jerusalem has long been the poorest major city in Israel, largely because it has the nation's highest concentration of Arab and Haredi residents. The the National Insurance Institute has found that poverty rates for Israel's Arab and Haredi families are 47 and 43 percent, respectively.

"For decades, we have witnessed unacceptable levels of poverty in Jerusalem. During those same decades, we've responded by pioneering an academic solution to the Haredi employment dilemma. We achieve progress by focusing on excellence in the STEM disciplines, enabling our students to attain employment in the professions within Israel's job market with the greatest current demand for skilled labor."

The look of the future: the new Tal Campus for women

The poster child for the institution's future — and perhaps for a socioeconomically brighter future for all of Jerusalem — is the Tal Campus for women.

After years of negotiations, JCT is finally in the early stages of planning the construction of a new 300,000-square-foot women's campus. The campus is expected to become one of Jerusalem's most important capital projects over the next five years and will provide a permanent home for all of Tal's academic programs: nursing, computer science, electro-optics, industrial engineering, and accounting and management departments. It will also include a mechina (pre-academic preparatory) program, alongside a newly authorized master's degree in nursing.

The Tal Campus will provide increased opportunities for national religious, Haredi, and Ethiopian women to pursue higher education and attain quality employment in Jerusalem's high-tech industries.

In other words, the Tal Campus is where JCT's past, present, and future all come together.

THE NEW TAL CAMPUS

Credit: Kimmel Eshkol architects renditions

Currently occupying approximately 10,000 square feet of rented space in the industrial area of Givat Shaul, the new Tal Campus will provide a permanent, state-of-the-art facility with the capacity to house up to 3,000 students. The new campus will be built in Givat Mordechai, adjacent to JCT's existing Lev Campus for men, major transportation routes and the new southern entrance to Jerusalem. Designed at the highest level, with the latest and most advanced technologies especially for JCT's female students. The project is part of the shared vision to strengthen Jerusalem as Israel's academic capital, enabling members of all sectors to integrate into the workforce, contribute to its economy and become highly skilled and professional leaders of Israel's rapidly advancing technology, science and health fields.

The firm, Kimmel Eshkolot Architects has been chosen to design the new campus. Etan Kimmel and Michal Kimmel Eshkolot founded the award-winning architectural firm in Tel Aviv in 1986. In the first years of their practice, they were involved in the preservation and rehabilitation of Tel Aviv's historical neighborhood of Neve Tzedek, for which they were awarded the Rokach prize in 1993. Since then, they have won several national competitions for the design of high-profile public projects, such as the new expansion of the government compound ("Kiryat Hamemshala") in Jerusalem, the Davidson Museum in the Archaeological Park near the Western Wall and the Memorial Center for Israeli military casualties at Mount Herzl.

Further, in 2011, Kimmel Eshkolot Architects won the Rechter Prize for Architecture, considered to be the most prestigious award in this field in Israel. They received the award for the design of a rehabilitation center in Be'er Sheva in the south of Israel. This project was also named as one of Israel's Seven Wonders of Architecture by Wallpaper Magazine, and was selected as "project of the year" in the international competition of the magazine Israeli Architecture. Most recently, the architects won three international awards at the 2019 Shenzhen Global Design Awards.

The excitement over the new Tal campus is matched only by its historical significance in the continued growth of JCT. It heralds an era of new opportunities to serve future Machon Tal students and the people of Israel.

In Memorium

JCT is greatly saddened by the recent passing of Rabbi Prof. Yehudah (Leo) Levi at the age of 93. Prof. Levi was born in Germany in 1926 and educated in the USA where he earned his Bachelor's and Master's degrees in electrical engineering from City College, N.Y. and his Ph.D in physics from the Polytechnic Institute of Brooklyn in 1964. While earning his doctorate in physics at the Polytechnic Institute of Brooklyn, he studied intensively at the Gur Aryeh Kollel and received rabbinical ordination from Rabbi Yitzchok Hutner and Prof. Rabbi Joseph Breuer. In 1970, with his wife and three sons, Prof. Levi settled in Jerusalem, where he founded the electro-optics department of the Jerusalem College of Technology. From 1982 to 1990 he served as Rector of the college.

Prof. Levi published over 100 articles in scientific, technical, and Jewish-thought journals as well as many Jewish works which combine practical law with an understanding of their philosophical underpinnings. This prolific scholarly activity was in addition to his academic books on Applied Optics. Professor Levi received the Feder Award for Torah and Science and the Abramowitz-Zeitlin Award for Jewish Literature. He served as president of the Association of Orthodox Jewish Scientists in both the USA and Israel.

Former JCT President and electro-optics pioneer Prof. Joseph Bodenheimer Received the Yakir Yerushalayim award

Established in 1967, this prestigious honor recognizes residents of Jerusalem who have made outstanding contributions to the cultural and educational landscape of the city. Prof. Bodenheimer received the award from Jerusalem Mayor Moshe Lion during a ceremony on Yom Yerushalayim (Jerusalem Day), which was celebrated this year on June 2nd.

Prof. Bodenheimer lectures around the world on the intersection of Torah and science, including in Boston, Chicago, Cleveland, London, Los Angeles, Melbourne, New York, Ottawa, Seattle, and Toronto. Additionally, he has received several patents for inventions, published extensively in leading electro-optics journals and consults to high-tech companies in his field of expertise.

Born in 1941 in Cambridge, England, Joseph Bodenheimer immigrated to Israel with his family at age 8 and proceeded to serve in the IDF's Nahal Paratrooper Unit. He received his PhD in physics from the Hebrew University of Jerusalem and conducted postdoctoral research in laser spectrometry at King's College London, where he discovered a new spectrometric technique. During 1978-1979, as a visiting researcher at Kodak Research Laboratories in the U.S., he performed pioneering work in the development of the digital video disc (DVD).

In 1993, Prof. Bodenheimer was appointed President of JCT and held this position until 2009.

"We congratulate Prof. Bodenheimer, a leader who embodies JCT's dual commitment to excellence in Judaic and technological studies, on this well-deserved honor," said JCT President, Prof. Chaim Sukenik. "His long, illustrious career at our institution has unfolded in parallel with the storied history of the city of Jerusalem itself during the last half-century, which is why the Yakir Yerushalayim award is such a fitting tribute to Prof. Bodenheimer's legacy."

Professor Bodenheimer receiving the Worthy Citizen of Jerusalem prize

LevTech Entrepreneurship Center

LevTech specializes in teaching people to think "outside-the-box" to create unprecedented opportunities for students to enter the entrepreneurial ecosystem as innovators and industry leaders. Participants receive access to both business and tech mentoring as they build teams and create products through a pre-accelerator program (LevTech LAB), exposure and opportunity to create tech solutions for challenges presented by companies in on-campus hackathons (48-hour technology marathons), and special events encouraging creative thinking in the business and high-tech spheres. The Center also offers a Hub, a shared workspace for student start-ups along with on-site mentoring. The goal of the Center is to provide the skills for participants to establish start-ups, create their own products and/or utilize their entrepreneurial skills to attain higher level positions in the companies they work for. Since LevTech's program launch in 2017, there have been 130 participants in the program who have worked on 30 project initiatives, of which 15 are currently active.

LevTech
Entrepreneurship Center
LEV ACADEMIC CENTER

LevTech is now undergoing a major expansion to provide JCT students with the physical facilities that will help develop their entrepreneurial skills. JCT views this as a high priority project for the coming academic year. If you are interested in supporting this project please contact development@jct.ac.il.

Entrée to Entrepreneurship Seminars

Engaging JCT's first and second year students, the new Entree to Entrepreneurship program will generate far-reaching impact among Orthodox and Haredi men and women, by altering how they value their capabilities and perceive their role in the workplace. The goal is to teach them to think innovatively at the outset of their academic career so as to impact their mindset for all subsequent studies. Starting with pilot groups which we hope will then grow up to 1,000 participants, the program will expose increasing numbers of Orthodox women to the high tech sphere, effectively becoming a catalyst for change in their communities.

In small groups with facilitators, participants will be given a platform to research, create and present a potential product idea in response to market needs, receive critical feedback and then improve the idea. Those who wish to bring their product to market will enter the LAB pre-accelerator with training and mentors in tech and business guidance on product development, crafting business plans and pitching to investors. Entrée to Entrepreneurship will result in greater participation in the pre-accelerator, thereby producing more start-ups and industry involvement.

Moshe Lugassi and Eliran Oren - Flytech and Flycom

Moshe and Eliran are both IDF veterans of air force units. They grew up in traditional homes but chose to become more observant and enrolled at JCT where they could combine Torah study with academics. As part of the JCT LevTech program, Moshe and Eliran established Flytech and Flycom, two start-ups that develop cutting-edge aerial technologies. Their team currently has 10 employees and they have attracted clients from across the government, business and private sectors. Flytech develops the operating capability of aircrafts such as drones for both government organizations and private companies. Flycom develops advanced technologies for aircrafts designed to provide communication solutions.

In addition to their professional success, the two have successfully maintained their commitment to Torah learning: as part of their paid work hours, employees can choose to start their day with Torah study or invest weekly hours volunteering.

Oxygen monitoring device for infants wins first prize at JCT's 2nd annual women's hackathon

In June, over 100 women from Machon Tal worked tirelessly around the clock at the College's 2nd annual Hack@Tal, a 44-hour Hackathon.

Pictured below, the winning team, consisting of five computer science, electronics, and business students, won a 3,000 shekel prize for their innovative solution to a challenge presented by Intel and Alyn Hospital. They designed a device to more comfortably monitor oxygen levels in an infant's bloodstream by means a wireless product embedded into a comfortable sock, in contrast to the current commonly used device clipped on to a finger and attached by wires. Other challenges at the event were provided by Intel, IBM, Rafael Defense Systems, ExLibris, Synamedia, Magen David Adom, Melabev, Cybersafe, Brix Software, and more.

"It was really amazing to be able to develop this tremendous product from scratch. We created a product that can generate real change and help a lot of people," said Hadass Wittow, a third-year computer science student at Tal who was part of the winning team. "We slept about three hours total during the 44 hours. It was a very special experience. We felt confident throughout the competition that we were going to win, but it was thrilling to hear our names called out as the winners."

Second place was awarded to a team who used machine learning to automatically detect the images of patients and then blur them. This enables organizations and hospitals to protect the privacy of their patients.

The women taking part in the Hackathon were from a variety of disciplines, including software engineering, electrical engineering, industrial engineering, and business. At the event, many mothers were often tasked with the challenge of trying to code and develop solutions, programming with one hand and holding an infant in the other. Hack@Tal is likely the only hackathon in the world to provide daycare services until 1:00 a.m.

"Last year was our first Hackathon for women at Tal, and the interest in participating was absolutely through the roof - so much so that we had to close registration early," said Orlee Guttman, Director of Strategic Partnerships at JCT. "It goes to show you what we've known all along. As soon as you provide women from these communities with the chance to create, use their brains and their skills, they take the opportunity and run with it, above and beyond all expectations. We will continue to work hard so that this type of engineering and innovation will continue to come forth from these women and communities. These women will continue to receive our support to further develop these products and get them to market."

Hackathon winners - Hadass Wittow, Chedva Edry, Avigail Wilk, Hadar MIzrachi, Batsheva Gutman

Lifesaving Solution for Magen David Adom Wins Jerusalem College of Technology Men's Hackathon

The 3rd annual Great Minds Hackathon saw challenges presented by Intel, IBM, and Rafael Advanced Defense Systems

Last May, over 80 JCT students (from Israel and 23 other countries) participated in Machon Lev's 3rd annual Great Minds hackathon.

The winning team, consisting of Brazilians Daniel Vofchuk, David Zimberknopf and Daniel Grunberger, won a 3,000 shekel prize for their lifesaving solution to a challenge presented by Magen David Adom (MDA), designed to eliminate human error when checking crucial inventory in ambulances before they are sent out. Having to use a paper checklist of well over 100 items, MDA personnel must check inside the ambulance manually, allowing important devices and medications to get left behind when the ambulances dispatch.

Around the world, instances arise when ambulances arrive at places without critical lifesaving equipment like oxygen, a defibrillator batteries, or even needles. The winning team developed an app where sensors installed in the ambulance will be able to identify necessary items and communicate with a tablet on board to notify if something is missing.

"In addition to a studying at JCT, I am also an EMT volunteer for Magen David Adom, so this challenge really spoke to me personally as I know the problem first-hand," said Vofchuk. "At this hackathon, I was able to put into practice my high-level studies of engineering at JCT, together with my knowledge as an EMT, to hopefully save lives and help more people."

"We are so excited to work with these students. They have great questions and are very creative – both the international students and the Israeli students," said Matanya Frankel, one of the mentors from Magen David Adom who worked with the participants throughout the hackathon.

Prizes for second and third place at the hackathon were given to solutions in machine learning to identify online anti-Semitism and take action, while other challenges included a solution involving video analytics and machine learning to identify road accidents in real-time and alert emergency services, an at-home training device for MDA medics, and a solution for soldiers with PTSD to provide improved therapy.

The winning team of Daniel Vofchuk, David Zimberknopf and Daniel Grunberger

JCT students at work during the hackathon

"At JCT, we started doing hackathons on campus in order to enable our students to take what they learn in their engineering, business, and nursing courses and then create," said Orlee Guttman, Director of Strategic Partnerships at JCT. "What we find each year is that what appeals to our students are challenges that save lives and are critical to the wellbeing of the community, and we couldn't be prouder of them. In addition to the means, we also provide them a platform to take the prototypes they create and develop them into products ready for market, so they can see their ideas truly make an impact."

JCT students with Magen David Adom

Marking a decade of the 'Perot Hallan' Scholarship Fund for Ethiopian Students

JCT hosted its 10th annual scholarship award ceremony for Ethiopian students in honor of Major Ilan Raiz z"l, an IDF officer, husband and father of four, who died 10 years ago from cardiac arrest at the young age of 35. In memory of his outstanding contributions to the IDF, the development of sophisticated, high-tech defense systems as well as his love of Torah and the land of Israel, the Perot Hallan Scholarship Fund was established by his family at JCT, to perpetuate his memory and the exemplary ideals he embodied in his short life.

The ceremony was attended by Raiz's family, students and JCT faculty. JCT president, Prof. Chaim Sukenik, spoke about the unique contribution every member of the Jewish people makes to Eretz Israel and encouraged those present to persevere through challenges and to pursue their ambitions.

In partnership with the family, private donors and foundations, the annual fund promotes the advancement of Ethiopian students who would otherwise not have the opportunity to pursue academic studies. Students with potential are recruited from high schools all over Israel and many are required to study at JCT for up to six years in order to complete their academic studies.

To date, more than 300 students have entered the program and of the 188 graduates, many of them serve in the IDF as professional officers in their fields of expertise. Over 80 graduates have continued their education to obtain Masters Degrees. We are very proud of our graduates' accomplishments and wish all our students continued success!

Michael, Shira, Itai and Arel Raiz presenting the awards with Adi Yonas, director of the program at JCT

Employment Fair 2019

In May, JCT hosted its annual Employment Fair. Some 45 leading companies from the financial, business and high-tech sectors participated, including: Intel, Mobile Eye, Israel Aerospace Industries, the Civil Service Commission, large accounting firms and banks.

The fair was attended by some 400 students and graduates currently seeking work. Many were invited to submit applications and received praise from recruiters, "JCT graduates are the highest quality candidates we've ever met."

We were also excited to see some of our graduates among the recruiters who came as representatives of the companies!

Amitai Silberzweig is a JCT graduate who entered the workforce following his participation in one of the College's past fairs.

"My name is Amitai Silberzweig and I'm from Kibbutz Ein Hanatziv. I studied industrial engineering and management at JCT from 2012-2016. Today I work as a Priority Developer in the Neopharm group in the area of information systems. During my studies at JCT, I participated in the employment fair and found a job in the aerospace industry in the field of information systems. I moved to the north and started working at "*Deshen Hatzafon*", where I began to deal with ERP Priority. I attended courses in the system and started implementing and developing this field. It was very challenging and interesting. The position requires defining cross-departmental processes as well as understanding the different kinds of data on a micro level and how they relate to one another.

I'm really glad I attended that employment fair because during my studies I really didn't know exactly what I was interested in. Discovering the aerospace industry and getting my first job in the field is what launched my career path and led me to my current job at Neopharm. At work I meet many graduates from JCT. My boss is always happy to receive new employees from the College. I'm even working now with one on my team."

JCT awards inaugural Rozalie Schachter Scholarship, named after trailblazer in technology and business

Ahuva Cohen, 19, a first-year software engineering student at JCT's Tal Campus for women, received the inaugural Rozalie Schachter Scholarship. The scholarship towards tuition fees is awarded to a Tal Campus student annually. Eligible recipients are students who achieve an average score of over 90 in their studies.

The prize is named after the late Dr. Rozalie Schachter, the daughter of Satmar Chassidim, who immigrated to the U.S. from Romania at age 16, obtained a Ph.D. in physics from New York University (NYU), and became a trailblazer for women in the fields of technology and business. Schachter served as vice president of strategic initiatives at Herley Industries and vice president of business development at General Microwave Corporation, among other senior roles.

Ahuva, a Jerusalem native and the oldest of seven siblings, will utilize the scholarship to advance her goal of following in her parents' footsteps by working in the field of computers. JCT is the ideal destination for that pursuit, as the college is a leader in preparing women for careers in high-tech and engineering.

"I'm extremely grateful that the Rozalie Schachter Scholarship will enable me to devote more time to my software engineering courses while maintaining my usual focus on Jewish studies — a challenging combination that JCT makes possible for so many religious students," Cohen says. "I'm also humbled to receive an award named after Dr. Rozalie Schachter, a true role model for religious women like myself who wish to pursue ambitious careers in business, science, or technology, but also to balance those aspirations with a strong commitment to family life and Torah values."

Ahuva Cohen with Rozalie's grandchildren who attended the scholarship award ceremony

When Rozalie Schachter settled in Brooklyn upon moving to America, she studied at the Beis Yaakov school for girls in Borough Park and became interested in the fields of science and math. When she finished high school, the Satmar Rebbe gave her a blessing to attend college in order to follow her dreams in physics and the sciences. In the 1960s, her completion of a Ph.D. in solid-state physics at NYU was considered an anomaly not only for an Orthodox Jewish woman with children, but for all American women at the time. Schachter was posthumously honored at last year's Friends of JCT gala dinner in New York.

"Dr. Rozalie Schachter was an entrepreneur in business, a pioneer for social causes, but most importantly, a stalwart for family," said American Friends of JCT Chair Aurora Cassirer. "Despite her prolific career, Rozalie valued her family and community above all else. Her modesty and professionalism, combined with her religion and family values, epitomize the message of JCT. This new scholarship ensures that Rozalie's legacy lives on through the unique achievements of the Tal Campus students who will receive the award over the course of the next decade."

Matching Donation for Scholarships

JCT also received a generous donation for student scholarships and living stipends from the Harvey Goodstein Foundation. This funding will provide special scholarships and stipends to students with the most complex life circumstances, offering them the critical support they need to succeed during the early stages of their academic studies. A large percentage of JCT students face disproportionately high economic barriers and many are already married with children of their own to support. Lacking financial and family support, these students are dependent on critical financial assistance to succeed. These scholarships will significantly reduce their financial strain, enabling them to focus on their studies and achieve academic success. It is hoped that these scholarships will translate into a reduced drop-out rate and improved overall academic performance.

JCT launches Israel's first English-language computer science degree for women

The College announced that it is launching Israel's first computer science degree program offered exclusively to women, with classes fully conducted in the English language.

Following on the success of JCT's International Program in English for men, which allows students to continue learning with their rabbis in yeshivas in Israel while simultaneously obtaining strong professional training, the new computer science program for women will combine rigorous academic learning with a strong religious environment and Torah study, beginning in the fall semester of 2019. The new program is part of Machon Tal and will be recognized by Israel's Council of Higher Education, making all credits fully transferable.

JCT is establishing the program at a time when the college continues to defy gender patterns on women's lagging participation in science and technology education and careers. It is important to note that this is happening at a time when, Israel faces a shortage of well-trained and capable computer programmers and coders, forcing domestic companies to look outside of the Jewish state to fill open positions.

"Our new international program strives to empower religious women of all backgrounds—from haredi, to Modern Orthodox, and everything in between—with the transformative gift of a high-quality academic degree that they can pursue while continuing to embrace a religious lifestyle," said Bracha Berger, coordinator for the new women's computer science degree. "Religious women should be prepared to take the high-tech field by storm, to set themselves up for successful careers and to help solve the shortage of software engineers in Israel."

JCT's Computer Science Department offers students theoretical background as well as practical experience in computers, providing them with familiarity in programming, the architecture of computer systems, and engineering software and communications. Alumnae of the new women's program will be fully equipped to enter the workforce following graduation, having gained competitive skills and a full breadth of knowledge of the current high-tech ecosystem.

"Women, and especially religious women, are part of the enormous untapped potential of the Israeli and global population. They are sure to shake up the global high-tech world in the years to come, and in Israel's academic sector, JCT is at the forefront of this revolution," Berger said.

The computer science degree consists of three years of study. It is a full-time academic program, with classes held four days a week in the mornings. Tuition is approximately $2,800 per year for Israeli citizens, not including room and board; residence in the dormitories near Machon Tal in Jerusalem's Givat Shaul neighborhood costs approximately $2,000 annually. The price for non-Israeli citizens is around $3,800. Part of the tuition is eligible to be reimbursed for new Olim (immigrants) to Israel.

Registration for the new women's program is open online at: https://english-rishum.jct.ac.il/home/login

JCT Graduates of 2019

Congratulations to this year's 855 JCT graduates! The breakdown of that number includes 324 men and 531 women grads, 407 engineering graduates, 215 nursing grads (including 19 men) and 44 Master's degrees in business management and software communications. On behalf of all faculty members and staff, we would like wish them much success as they embark on their new professional career paths!

26th Torah and Science Conference

JCT once again hosted the annual conference in collaboration with Bar-Ilan University. The summit brought together senior researchers, rabbis and tech experts to explore the ongoing dialogue between Torah, science and technology and to address some of the most compelling questions of our times.

This year, the conference dealt with topics such as halacha in relation to human vs. artificial intelligence; *agunot* (women who are refused a Jewish divorce); the connection between medicine and biology; ethical dilemmas of physicians; and the halachic significance of archeological evidence, among others. The conference was organized by a committee under the auspices of Prof. Noah Dana-Picard, mathematician, Talmudic scholar and JCT's President Emeritus. At the gathering, the Lev Prize (named after Prof. Ze'ev Lev, founder of JCT) was awarded to Rabbi Prof. Avraham Steinberg, who is active in the field of medical ethics and has headed public committees on the subject of transplants and dying patients. Among other accomplishments, he has published 42 books and 292 professional articles.

One of the highlights of the conference was a discussion around landing the Israeli spacecraft "*Beresheet*" on the moon. Another important issue was addressed by Rabbi Dr. Yosef Yitzchok Lifschitz, who called on *dayanim* (rabbinical judges) and rabbis to consult with psychologists and psychiatrists in cases of *agunot* (men who refuse to give their wives a *get*) and *mesoravot get* (women who refuse to receive a halachically mandated divorce (*get*).

Dr. Yitzhak Meitlis challenged the idea that archeological truths could be relied upon. "Archeology changes and history changes over the years and we are reaching new conclusions all the time. What I learned as a student is not necessarily still true today."

Prof. Dana-Picard concluded, "I am not surprised by the obvious connection between Torah and science. We deal with subjects that are relevant both to those who adhere to Halacha as well as to scientists. The connection between the spheres is constantly growing. The more we investigate, the more we find that again and again there are no contradictions between Torah and science. On the contrary, quite the opposite is true. It is precisely through understanding science that we become even better acquainted with God's world and creation."

Rabbi Prof. Avraham Steinberg MD receiving the Lev Prize from Prof. Chaim Sukenik

The Torah and Technology Research Center

JCT recently received a generous challenge grant to launch the College's new Torah and Technology Research Center. As a recognized leader in both Torah and Technology, JCT will offer the specialized expertise necessary to respond to the complex ethical and Halachic challenges of our times. The Center will provide answers to unprecedented issues in Halacha as related to modern technology such as smart homes, autonomous vehicles, robots, genetic engineering and artificial intelligence.

The Center will operate under the direction of Rabbi Yosef Tzvi Rimon, Rosh Yeshiva of JCT's Beit Midrash. This unique collaboration will bring together *Talmidei Chachamim* with high level Halachic expertise and faculty members from across the College's Computer Science, Engineering and Health Sciences departments, to address the influx of questions and concerns that arise on a daily basis.

JCT expands Israel's top-ranked nursing program

This past academic year some 1,000 students, among them, 460 Haredim, 180 new immigrants, and over 30 Ethiopian-Israelis, studied towards nursing degrees at JCT, accounting for 20 percent of all nursing students in Israel. 215 students graduated in nursing including the first Lev campus graduating class of 19 male students!

First year students once again received stethoscopes as a gift from ProLeysins, a philanthropic foundation in Switzerland. 170 students attended a special ceremony at Tal campus where the stethoscopes were awarded.

New programs

This coming academic year, JCT will be offering a new Palliative Care track within the Glickman Masters' Nurse Practitioner Program (MSN) besides the Geriatric track that is now in its second year. The program is the first in the country, which makes possible the pursuit of both an advanced academic degree and professional certification as a nurse practitioner. The latter significantly expands the scope of practice of the nurse. Nurse practitioners have been practicing in Israel only for the last decade. Until now, nurses had to complete their Master's degree and then a certification program in a specific clinical field of expertise. JCT was the first, and at this time, remains the only academic institution granted approval for the combined innovative program.

Following the success of a Health Informatics certification course that was offered last year at JCT, the College is currently offering a new Master's program in this rapidly developing field. JCT's Nursing Department is collaborating with the University of Toronto's (U of T) Institute of Health Policy, Management and Evaluation (IHPME) to develop Israel's first program in health informatics, a cutting-edge field that aims to improve the quality of patient care by utilizing data as the basis for making better clinical decisions. After a series of campus visits between IHPME and JCT as well as the exchange of syllabi and curriculum ideas, JCT's joint certificate program with U of T in Health Informatics was launched towards the end of 2017. The certificate program's first cohort completed its studies in April 2018. The academic partnership was facilitated by Toronto resident Dr. Judith Shamian, past president of the International Council of Nurses and a member of JCT's board of trustees.

JCT is also planning to launch a special BSN track in Bnei Brak to serve the Haredi community, which does not have access to a similar program from any other academic institution in Israel. "We see that the Israeli job market is saturated with Haredi college graduates, particularly women, in professions like teaching which have typically been filled by members of that religious community," Prof. Chaya Greenberger, dean of the Faculty of Life and Health Sciences said. "The new second-degree program is a win-win situation, enabling Haredim to change their career course and simultaneously helping to solve the significant national problem of Israel's shortage of qualified nurses. Our BSN program in Jerusalem has already shown that religious students have a high level of interest in the nursing field because they see the value of giving. That's not to say the secular community doesn't. But it seems to be at the forefront of the minds of our religious students and applicants—to be able to give and contribute, and to make a good living at the same time."

Dr. Chaya Raz, head of the Nursing Department at JCT, explains the secret to the program's success. "Our students have a strong sense of purpose and know that they are entering a profession that really makes a difference in people's lives. We make sure to give our students an enriching learning experience, and make sure that all the material is up-to-date and practical."

Sara Sova, 34, a mother of three who completed her BA in Nursing at JCT in 2018, now serves as a nurse in the neonatal and neonatal intensive care units at the Mayanei Hayeshua hospital in B'nei Barak. Ever since she was a child, Sova yearned to make a difference for her community. "I work in a ward with wonderful people inside and outside the religious community, and we all come together with a shared mission. We work to help children and their parents get through their most challenging times."

Top ranked Nurses!

For the fifth consecutive year, JCT nursing students achieved a 100% pass rate on their final national license exams and are now embarking on their careers as officially certified nurses. This year, 215 students from JCT completed and successfully passed the Ministry of Health licensing exam with an average score of 77%, in comparison to a 70.5% average of students from other institutions around the country. Both in quantity and quality, JCT is consistently producing large numbers of highly skilled graduates to meet the ongoing need for more professional nurses in hospitals, emergency medical centers, clinics and nursing homes.

JCT President Chaim Sukenik explains, "Our program teaches theory and how to put it into practice. Our students demonstrate a high level of academic learning and we're confident their future patients will receive professional, high quality care".

Prof. Chaya Greenberger, shared, "I am so proud of their impressive accomplishments. Their success in the exam reflects the high standards of education we practice throughout the program, and strengthens our position as one of the top academic institutions in the field. Israel's Ministry of Health has now gained a valuable new addition of young professionals in the field. We wish all our new graduates success in their future professional endeavors".

With the opening of the new academic year, Prof. Greenberger will be retiring as dean of the Life Sciences and Health Faculty. Chaya joined JCT in 2007 when she opened the nursing department, which has grown to become one of the largest and most successful in Israel. Her vision and strong leadership has played a significant role in the expansion of JCT into the health related disciplines. We wish Chaya much success for the future and hope that she will continue to enjoy a close relationship with JCT.

We also wish to take this opportunity to welcome Prof. Freda De Kaiser-Ganz as the new dean and wish her much success.

InSite Conference

In July, JCT hosted the Insite Conference, a week-long international conference that brought over 100 researchers from around the world to the Lev Campus. The conference focused on information science and issues concerning information management, social media, big data, business information, and false information (mis-data).

"Hachnasat Sefer Torah" at JCT's Lev Campus

Just one day before Jews around the world observed Shavuot — the holiday which marks the anniversary of the Jewish people receiving the Torah at Mount Sinai — JCT rejoiced in a *"Hachnasat Sefer Torah"*, a ceremony for inaugurating a Torah scroll.

The event began with a festive procession starting at the Lev Campus main entrance, continuing with a march and dancing to the campus Beit Midrash (Jewish study hall). The program also included remarks from the Heads of the Beit Midrash and was open to the entire community.

The Torah scroll was generously donated by Canadians, David and Zena Zobin, and the ceremony was held in partnership with Mizrachi Canada.

"The verse '*vehagita bo yomam* valayla' (Joshua 1:8) implores us to meditate upon the Torah day and night. At JCT, a highly motivated student body takes that commitment to the next level by immersing themselves around the clock not only in Torah, but in a rigorous education in science, technology, business, and other fields," said Simmy Zieleniec, CEO at Canadian Friends of the Jerusalem College of Technology. "As JCT welcomes this new Sefer Torah with joy, love, and honor, we know that the scroll will continuously inspire and energize the college's students. We express our deepest gratitude to the Zobin family for their generous, much appreciated gift."

JCT's Lev Campus welcomes a newly dedicated Torah scroll, generously donated by the Zobin family.

JCT's Physics Olympiad spotlights religious scientists of the future

The talents of the religious scientists of the future were on full display as more than 100 high-school students from around Israel participated in Jerusalem College of Technology's (JCT) sixth annual Physics Olympiad last week. Held in cooperation with Israel's Ministry of Religious Services and Ministry of Education, the event marked the latest initiative by JCT to empower religious students in Israel and abroad with high-level science and technology skills.

As part of the competition, boys at JCT's Lev Campus and girls at the Tal Campus solved university-level physics challenges. At the end of the busy and exciting day, JCT announced the winners of scholarships towards studies at its Lev Academic Center The winners of the girls' competition were Hadas Fiksler of Bnei Brak, Miri Butel of Shalavim, and Ayelet Hashachar Barel of Rishon LeZion. In the boys' competition, the winners were Liav Shlechdarov, Daniel Markovitz, and Michael Piper, all of Netanya.

"As an academic institution that advocates excellence, we conduct the Physics Olympiad to encourage religious teenagers to pursue a high-level science education and to develop new ways of thinking and learning — and to aspire for greatness," said Dr. Frishman. "Physics plays an important role in developing a number of important professions within the State of Israel's economy. Our goal is that all who took part in this competition will understand the importance of physics not only in the scientific world, but to their country."

One of the winners of Jerusalem College of Technology's (JCT) sixth annual Physics Olympiad Ayelet Hashahar Barel of Rishon Letzion; Eti Stern, head of JCT's Tal Campus for women; Yocheved Berstel, girls' physics high school teacher in Rishon Letzion; and rector of JCT's Lev Academic Center Professor Kenneth Hochberg.

The British Ambassador visits Lev Campus

British Ambassador, Mr. Neil Wigan recently visited JCT as part of a tour of Jerusalem to learn about academia, science and innovation. After meeting with senior academic staff, Ambassador Wigan visited JCT's Beit Midrash and was very impressed to see how Jewish learning is conducted alongside academic study. He met with senior staff including lecturers and researchers, and of course students who were currently in the middle of final exams. JCT President Prof. Chaim Sukenik, said: "Commitment to Torah and *halacha* is the College's primary foundation. High level academics is implemented accordingly, and always with an emphasis on excellence".

VP Stuart Hershkowitz, President Chaim Sukenik and Ambassador Neil Wigan

The integration of Haredim into prominent positions in high-tech and business has become a hot topic in public discourse, and of course among young people who want to build a Torah-home and also earn a good living. JCT is a recognized leader of academic training and professional advancement for the Haredi community. "JCT's academic model can serve as an inspiration to institutions around world who want to help people integrate into the job market, and address market needs, while enabling the students to maintain their personal life-style as well as achieve high academic standards. Israel's high-tech industry is a world leader, and therefore requires a high-quality workforce", remarked Wigan.

From 'start-up nation' to 'Middlestand nation'

By Dr. Brian Polin

History works in interesting ways. Seventy years after the end of the Holocaust and fifty years after the establishment of diplomatic relations between Germany and Israel, a German historian who studies ancient Jewish communities has helped the two countries find synergies in their business cultures. The Jerusalem College of Technology and the Fulda University of Applied Sciences have now partnered to research two successful, but very different entrepreneurial styles: Israel's start-up nation" and Germany's "Middlestand enterprise model."

In Israel's "start-up nation" landscape, an entrepreneur will launch a company, and eventually there will be an "exit" — sometimes a particularly lucrative one, like Google's $1.3 billion purchase of Waze or better yet, Intel's $15.3 billion acquisition of Mobileye. The start-up's headquarters will then likely move overseas. The problem for "start-up nation" is that the venture maintains some R&D presence in Israel, but loses much of its original identity as an Israeli company.

In Germany's "Middlestand" environment, many family businesses are small-to-medium enterprises. These businesses often lack the creative, bold, defiant spirit — the "chutzpah" — that Israeli start-ups are known for. German ventures can scale, but they struggle to innovate.

So, how can Israeli and German entrepreneurs learn from each other?

That was precisely the subject of a presentation I gave in 2017 to students at Germany's Fulda University of Applied Sciences as part of Jerusalem College of Technology's (JCT) academic partnership with that school. The partnership is the brainchild of German historian Dr. Michael Imhof, author of the book "Jews in Germany and 1,000 Years of Judaism in Fulda" as well as the initiator of connections between Fulda University and multiple colleges in Israel.

As part of his research into Fulda's Jewish history — including interviews with Holocaust survivors and their descendants from Australia, South America, France, the U.S., and Israel — Dr. Imhof met Michael Cahn, grandson of the last chief rabbi of Fulda. Dr. Cahn lived in Jerusalem and was a friend of Prof. Ze'ev Lev, JCT's founder and the namesake of its Machon Lev campus. While Prof. Lev died in 2004, I first met Dr. Imhof and Dr. Cahn in 2013 during a meeting at JCT that aimed to foster German-Israeli collaboration.

Dr. Imhof connected me with a professor at Fulda University, and we began collaborating as part of my research on entrepreneurship. We continue to do research and to publish research papers together. Through his initiative, Fulda University of Applied Sciences offers JCT two full scholarships for our students to attend their summer exchange program.

Fast forward to 2017 and there I was, lecturing to Dr. Stephan Golla's management class at Fulda University about the factors that drive Israel to be an entrepreneurial nation — beginning with the Jewish state's desire to innovate in order to meet the country's pressing needs in areas like defense, agriculture, and water.

I explained that aside from the details behind how venture capital investment, R&D, and other factors have propelled Israel's rise as a global innovator, what it often comes down to is the more intangible factor of the Israeli spirit: the willingness to challenge status quo and the social acceptance of failure.

At the same time, I acknowledged that even success presents challenges, including the challenges confronting Israel in the wake of its entrepreneurial success: how to implement equitable distribution of the wealth which innovation has created, and the need to maintain the high level of innovation required to sustain the Israeli economic model.

The primary message was that indeed, Germany and Israel should learn from each other's experiences regarding best practices in entrepreneurship — but they do not necessarily need to transform their approaches to innovation in order to solve their problems. They just need to complement each other's strengths through increased collaboration. We see the fruits of German-Israeli collaboration in both the public and private sectors, including Germany's Continental AG buying the Israeli cybersecurity firm Argus, the establishment of Hessian Israeli Partnership Accelerator for Cybersecurity (HIPA), and the partnership between JCT and Fulda University.

Moving forward, the modern-day miracle of German-Israeli relations should serve as a continued impetus for the start-up nation and the Middlestand nation as they work together to forge a prosperous shared future that is driven by entrepreneurship and innovation.

Interview with Tal graduate Elisheva Epstein, Head of the Development Team at CrediFI

"I am a Haredi women and I can tell you, Haredi women are the biggest feminists of all."

By Shiri Dover

Translated from article in Hebrew https://www.globes.co.il/news/article.aspx?did=1001264012

Where am I catching you and what does your job entail?

"I get to work between 6:30 and 7:00, so that I can get back to my three children in time to be with them while they're still awake. I am usually the first to arrive but I'm not the only one; there are also fathers who like to get home at a normal hour. I'm also flexible about the time I leave; it depends on my work load. The vision of CrediFI is to bring transparency to the world of real estate in the US. After the market collapsed in 2008, investors came up with the idea to make the market more transparent. We collect data from all over the world and analyze it. Our customers are regulators such as large banks in the US. I manage the development team which is comprised of 10 people, including three developers and three customer service agents. We are now in the process of recruiting and expanding our team."

How long have you been in the company and what did you do before?

"I previously worked at Kramer Electronics and have been here for two years. I decided that I wanted to combine professionalism with my passion and be part of a company that has a global impact. There is a certain thrill that comes with the pressure and challenge of working for a young start-up. I believe that to have a successful career, you have to have the experience of working for a big company and also for a start-up".

How did you get into the field?

"I studied computer science at a Beit Yaakov seminary and then went on to complete an undergraduate degree at the Tal Institute of the Lev Academic Center. During that time, I also worked as a counsellor for American students who were spending a year learning in Israel. After that I worked for a company that creates software solutions and I got into project management with customers. From there I moved on to working for a start-up."

Did you always know that this was what you wanted to do?

"Yes. Already from the ninth grade I started studying computers and loved it. I then went on to study at a Torah-based college."

Do you identify as religious (Dati) or ultra-orthodox (Haredi)?

I'm Haredi. But in the professional world, I look at people as professionals. Whether they are a man, a woman, an Arab, a Jew, religious or secular is irrelevant." I do my best to uphold this standard even when I'm interviewing people. People often judge and categorize others based on stereotypes and what they know from their own social background, but it's not right to do that."

Do you feel like people try to categorize you?

"When I'm interviewing people a man might come in and say, 'Oh, so you're from Human Resources?'" Of course he is assuming this because I'm a woman. It's a problem that I think everyone has, and it has nothing to do with which sector of society. In fact, this scenario happens more often with some of the most liberal people. Even when I was interviewed, my employers tried to guess the age of my children and assumed that the next one was already on its way. Women in high-tech need to be pushier."

Can you be Haredi and feminist?

"Sure, why not? Haredi women are the biggest feminists of all, after all they are the breadwinners. Compare a Haredi woman to any non-religious woman and you will see that the Haredi woman carries a much heavier load. I also believe that women put themselves under a glass ceiling".

Where do you think you'll be five years from now?

"I want to start my own start-up company with a few of my good friends, or be an R & D Manager at a start-up."

How I struck the future-altering Torah-academic balance

Ari Schiff is a native of Staten Island, N.Y., and a graduate of the Torah Academy of Bergen County high school in Teaneck, N.J. He graduated from the Jerusalem College of Technology this year with a degree in business administration.

During my second year at Yeshivat HaKotel in Jerusalem, I decided to settle in Israel. Yet I had more questions than answers. Chief among them: I wanted to remain in yeshiva, but also to make progress towards a career. How could I do so at the same time? Striking the right balance between Torah and academics was difficult—and at times, it even felt unattainable. At JCT, however, I found the unique solution I was looking for.

I discovered the college in 2015 through a friend in JCT's engineering program, and started to do some research. What immediately caught my attention was the school's International Program in English, particularly its BA in business administration, which incorporates lectures and practical research projects challenging students to apply their knowledge to real-life situations.

The program gave me the freedom to live off campus as well as flexibility in my schedule—with classes condensed to Tuesdays and Fridays—that enabled me to not only live and learn in whichever yeshiva I chose, but to learn 2 sedarim (study sessions) daily.

The real game-changer was JCT's faculty. The professors are personally invested in their students, but it is also a symbiotic relationship. When students show an interest to learn more, they are willing and happy to give of their own time to help the professors create a rich environment for learning. Many of JCT's professors come from highly respected professional backgrounds in the business and high-tech sectors, and provide students with career advice or even set up meetings with potential employers.

My professors introduced me to guest speakers who visited campus. I later contacted the same speakers on my own, and worked for them during the summer. In my first year of college, a start-up founder who was brought in by JCT offered me an internship, and the same scenario played out during my second year. This is typical at JCT, as professors frequently invite potential employers to campus to recruit summer interns, while other employers have proactively approached JCT about providing them with students who can work part-time, and eventually full-time once they graduate.

JCT's practical approach, which was constantly focused on empowering me with a sustainable future, enabled me to get on the right track career-wise and acquire the best possible experience. Once I graduate next month, I'll be working full-time for the Avalon Capital Merger, an acquisition firm in Tel Aviv. JCT gave me all the experience I needed and positioned me to obtain my job—while I was still in school.

It is highly challenging to navigate the Torah-academic balance as an aspiring college student who does not wish to give up the lifestyle of a yeshiva student. The most important step you can take in that situation is to put yourself in a growth-oriented environment, and build a structure that will allow you to learn seriously on the Jewish and secular fronts alike. You have to know yourself—what motivates you, and how you can properly focus in order to maximize your time.

I was interested in earning a degree, but in the context of a setting and schedule that were also conducive to learning Torah seriously. JCT gave me the best of both worlds, while putting me on the path towards a vibrant future as an American-Israeli.

New York

Hosted by Friends of the Jerusalem College of Technology, Ariel Gomez, a senior system engineer at the Israeli nonprofit SpaceIL and a JCT alumnus, was in New York City in June, taking packed audiences behind the scenes of Israel's recent journey to the moon.

"Israel's inspiring moon mission not only captured countless hearts and minds in the Jewish world and beyond, but also underscored the crucial lesson that we can appreciate the process and the journey behind any ambitious goal, rather than exclusively dwelling on the specifics of the result," said Chairman Aurora Cassirer. "The entire JCT community is tremendously proud of Ariel's contributions to that journey as one of the college's outstanding alumni, and we were thrilled to get an inside look at this when he visited us in New York."

The events saw a combined total of 200 people attend to hear Gomez and to learn more about the Jerusalem College of Technology.

The American Friends of JCT will once again be holding a Gala Dinner on November 3 in New York. For more details please contact office@friendsofjct.org.

בס"ד

JERUSALEM COLLEGE OF TECHNOLOGY
LEV ACADEMIC CENTER

INVITATION

Join us for an evening to celebrate
the Jerusalem College of Technology –
Lev Academic Center's 50th Anniversary

Thursday, Elul 19, 5779, 19/09/2019

on the Schloss Plaza, Lev Campus,
21 Vaad Haleumi St, Givat Mordechai, Jerusalem

7:00 p.m. Reception and 50th Anniversary Exhibition
8:00 p.m. Dinner

The event will take place in the presence of
Mayor of Jerusalem, **Mr. Moshe Lion**
Guest of Honor, **Mr. Kurt Rothschild**
Keynote Speaker, **Professor Yaffa Zilbershats**
Chair of the Planning and Budgeting Committee
of the Israeli Council of Higher Education

All proceeds to the 50th Anniversary Fund

For more information and reservations: lev50@jct.ac.il or Tel: +972-2-6751269