



**JERUSALEM
COLLEGE OF
TECHNOLOGY**
LEV ACADEMIC CENTER

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**MEETING
THE
CORONA
CHALLENGE**

Jerusalem College of Technology – Lev Academic Center

President

Professor Chaim Sukenik

Rabbinic Head

Rav Yosef Zvi Rimon

Rector

Professor Kenneth Hochberg

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Yosef Zeira

Vice President

Stuart Hershkowitz

Editor

Rosalind Elbaum

Copy Editor

J Cubed Communications

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Photography

Hudson Taylor, Michael Ehrenberg,
Kimmel-Eshkolot, Yonatan Blum,
Ron Avital

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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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President's Message

Life is comprised of the routine alongside the extraordinary. The year (2020) תש"פ will certainly be remembered as extraordinary for marking the advent of the Coronavirus pandemic.



Sadly, for many families the memories of this period will be of loved ones who suffered from this deadly virus. Entire cities and even countries will remember the trauma of health care systems nearing collapse.

While some institutions will remember this year as one of crisis, the focus at JCT has been on the amazingly positive and creative response of our staff and students. The transition of both our academic and Torah studies to remote learning was unprecedented both in the speed with which it was implemented and in the new demands it placed on everyone. The fact that our students and faculty had a chance to get to know each other over the first 8 months of the year meant that strong relationships had been built. Nevertheless, our ability to work together under trying circumstances was tested and we passed the test with flying colors.

This trial-by-fire included many truly creative and heartwarming experiences. Nursing students volunteered to be trained as respiratory therapists while other students volunteered at Magen David Adom. Our entrepreneurship center launched new initiatives to help both businesses and non-profits while enabling students to gain valuable experience. New projects, specially targeted to help the most vulnerable populations, have brought exciting results and much satisfaction.

We have learned much about our own resilience as well as entire new skill sets. The benefits of virtual meetings and distance learning are still being evaluated, but it is clear that we now have new tools and we must learn how to best use them.

New management challenges have emerged. In this regard, I want to highlight the outstanding efforts and leadership of our rector **Professor Kenneth Hochberg** and our director general **Mr. Yossi Zeira**. They have had to make difficult decisions with direct consequences for the health and welfare of all of us at JCT. The ability to keep people safe without sacrificing the quality and reputation we have built over the past 50 years has demanded both sensitivity and creativity. There is much to be proud of.

Our students, many of whom are blessed with large families and who have had to face unusual personal challenges, deserve similar praise. Their educational experience has been quite different from their original expectations and their achievements are even more praiseworthy.

Our prayer going forward is that this year's trials and tribulations will strengthen JCT and better enable us to deal with the challenges that lie ahead.

Professor Chaim Sukenik

President

The Tal Campus: JCT's latest crown jewel



When he visited the future site of Jerusalem College of Technology's (JCT) Tal Campus for Women in June, Israel's Minister of Jerusalem Affairs and National Projects **Rabbi Rafi Peretz** captured precisely the essence of the revolution ignited by our institution.

"The development of the Tal Campus for Women is especially important for empowering diverse populations, including religious and Haredi women, through higher education. This ambition aligns with my ministry's top strategic priorities," Minister Peretz said.

The minister also went on to emphasize how he sees the campus as a major component in the development and strengthening of the city of Jerusalem. It isn't every day that the priorities of the government and the higher education sector so neatly align. But JCT was born for this moment.

For more than 50 years, we have operated as one of Israel's most prestigious and unique academic institutions with a focus on science and technology. We supply highly skilled, professional graduates to Israel's and the world's high-tech industry. In addition, we are the only institution of higher learning committed to providing the highest quality academic education to diverse segments of Israeli society who would not otherwise have had the opportunity to enter these fields, offering exclusive programs developed specifically for Haredi men and women and for other demographic groups.

The Tal Campus has now entered the picture as the latest crown jewel of our mission to empower Israel's underserved populations with the gift of pathways to successful careers in science and technology. In this case, our institution is bucking the long-held gender stereotype of women's lagging interest in those professions. Currently, 1 in every 5 women studying computer science in Israel does so at JCT.

Poised to become one of Jerusalem's most important capital projects over the next five years, the forthcoming Tal Campus will be the permanent home for up to 3,000 of JCT's female students in nursing, computer science, electro-optics, industrial engineering, accounting and management. The 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.

The dream of the Tal Campus has made ample progress over the past year. From selecting an architectural firm to designing the project, receiving zoning permission to start building and support in the form of generous funding, including from the renowned Helmsley Charitable Trust, we are now on track to break ground in 2021.

In this edition of Perspective Magazine, you'll read more about the Tal Campus, in addition to exploring JCT's unique response to the COVID-19 pandemic and the latest developments in our staunch commitment to cultivating entrepreneurship.

Last year, we celebrated the College's 50th anniversary. This year, we grappled with unprecedented challenges. Both years have been historic, albeit in different ways. In the months and years ahead, the Tal Campus will serve as a fulcrum of JCT's continued effort to make history in Israeli academia and society.

Stuart Hershkowitz

Vice President



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*Shana Tova,
Metuka, U'briyah,
Lanu U'lekol Am Yisrael*
Wishing you all
a year of good health
and prosperity!



Saying the 'Shehecheyanu' blessing when reconnecting with people

By Rabbi Yosef Zvi Rimon



The COVID-19 crisis has created various halachic issues that many of us have never faced before. One of the most salient changes is being locked down in our homes, in isolation for long periods of time. As we begin to venture out of our residences and meet people —

especially family — whom we have not physically met for a long time, I am frequently asked the following question:

Does one need to recite the blessing *Shehecheyanu vekiymanu vehigi'yanu lazman hazeh* (Who has granted us life, sustained us and enabled us to reach this occasion) after meeting someone in person whom we have not seen for 30 days? And what is the ruling if one has spoken to this person over the phone or via Zoom during this period?

The *Gemara* in *Tractate Berachot* 58 cites: **Rabbi Yehoshua Ben Levy** said: Whoever sees his friend after thirty days says: "*Baruch shehecheyanu vekiymanu vehigi'yanu lazman hazeh*;" after 12 months says: "*Baruch mechayeh hametim*" (Blessed is He who revives the dead).

The *Shulchan Aruch* (*Orach Chaim* 225, A) asks: Should one recite the blessing if one was in contact with the person during the period but did not meet in person?

The *Mishna Berurah* (Sub-paragraph B) indicates there is a dispute between the *Acharonim* (post-16th Century commentators on Jewish law) if it is necessary to recite the blessing *Shehecheyanu* when seeing someone whilst contact was maintained via letters during the 30 days and claims that in fact one should not make the blessing because when there is a doubt whether to recite a blessing or not, the tendency is to refrain.

But apparently this is puzzling: In relation to *Baruch mechayeh hametim*, it is clear that there is no need to say the blessing if one was in contact through letters or another channel because one knows for certain that his friend is alive. However, with respect to *Shehecheyanu*, the main reason for saying the blessing does not stem from the appreciation that one's friend is alive, but rather to acknowledge the joy of seeing him. Therefore it would seem that one should recite the blessing even though one has been corresponding with him and this is the opinion of the *Shulchan Aruch* (225, B) and many other *Poskim*. For

example, **Harav Ovadia Yosef** wrote (*Yechave Da'at* No. 17):

Even if one was in touch by telephone, one should say the blessing to mark the physical encounter, because the primary reason for the blessing is to express one's joy for physically reuniting and seeing each other face to face.

Therefore, it appears that the simplest conclusion is that one should recite the blessing, as it was instituted to be recited upon meeting in person and for the appreciation of the proximity - we can all agree that Zoom does not come close to this nearness (see references above).

Moreover, it would seem that the main reason for saying the blessing is the actual seeing of the person whom one has not seen for 30 days. The question is not whether correspondence in writing or via the telephone, Zoom or direct broadcast are conditions for reciting the blessing, but rather how much they are a measure of the joy upon seeing one another — and as such, if one was in touch during the period, then the joy of meeting could not be so great and that would be a reason not to recite the blessing. However, if having been in touch during the period did not diminish the joy of the physical re-encounter — such as in times we are presently experiencing, where the phone or Zoom meetings only accentuate our challenges and the distancing — then one can certainly say the blessing for seeing each other after 30 days.

Doubt regarding *Shehecheyanu*

To the abovementioned, we need to add another point related to the blessing of *Shehecheyanu*. **Rabbi Joel ben Samuel Sirkis (the Ba"ch)** writes: When in doubt as to whether the blessing should be recited, one should not say it since the general ruling in such cases of doubt is to refrain. But contrary to this, when the blessing of *Shehecheyanu* is in question, one is instructed to say it since the reason behind the blessing is the expression of one's joy of the heart and if it is present, then one should say it.

And although the *Achronim* (later authorities) tend to be more stringent, many did agree with the Ba"ch and therefore his opinion may be included as an additional reason to say the blessing.

In light of the above, it seems that when a person meets family members after not seeing them for 30 days (for example, during the coronavirus period) and is very happy to see them, he should recite the blessing of *Shehecheyanu* despite having been in touch with them over the phone or through Zoom, etc.

When a person sees other people with whom he has spoken

through Zoom, if he is extremely happy to see them face to face (especially in the reality of the coronavirus, which has generated warm feelings among people) — he can recite *Shehecheyanu*. When a person meets a group of people with whom he is not particularly close, yet amongst them are individuals with whom he was not in touch and is happy to see, for example: The first time he sees them in a shul or at a work setting, he can bless *Shehecheyanu* over the entire group together. However, if one meets a person with whom one has been in touch through Zoom and does not particularly feel joyous about the encounter — then one should not recite the blessing.

Even if one is not used to saying *Shehecheyanu* upon seeing a friend after 30 days, today's unusual reality, in which one is home for such a long period of time, is that most people are very happy to see their friends and thus this would be a good reason to recite *Shehecheyanu*.

Virtual Beit Midrash

Due in part to the challenges presented by coronavirus, the Jerusalem College of Technology (JCT) has launched a first-of-its-kind online Beit Midrash (house of learning) that focuses on fostering interaction between learners in a virtual environment.

The Beit Midrash, headed by the College's Rosh Yeshiva Rabbi Yosef Zvi Rimon, is the first virtual Torah study initiative that enables both fully interactive and real-time study for its participants. The platform will be available not only to JCT students, but to all who are interested in Torah learning and have the necessary Hebrew proficiency.

While myriad audio- or video-based Torah classes already exist online, such learning is conducted in one direction — from the rabbi, who gives the lesson to listeners and viewers, as opposed to the type of engagement and collaboration which usually occurs in a Beit Midrash setting. With Beit Midrash facilities closed due to social distancing, JCT's new tool cultivates interactivity by allowing participants to express themselves, ask questions and develop discussions accordingly. This is also a step up from the kind of question/answer that is occasionally available via "chat" capabilities since it allows back and forth discussion both synchronously and asynchronously.

The new Beit Midrash is hosted on a unique online platform established by Israeli screenwriter Udi Leon. Participants will access traditional Judaic classes as well as courses on other contemporary issues which are at the

intersection of Torah and technology.

For instance, students will explore the topic of allocation of life-saving resources under crisis conditions. Such questions have gained increased relevance during the pandemic due to the strain on hospitals with limited lifesaving medical equipment — in principle forcing them to decide who to save first.

"Various developments in the internet age have empowered people to interact in seamless and accessible new ways, including in the realm of Torah study," said Rabbi Rimon. "Yet until now, online Torah classes have offered only a one-way street from lecturer to listener. JCT's online Beit Midrash will bring together people from all across Israel under the same virtual roof, where they will work together on analyzing and navigating the most important halachic issues that are at stake both during the pandemic and in more normal times."

Before the pandemic, JCT's brick-and-mortar Beit Midrash served over 400 students, offering 20-30 hours of organized Torah learning per week. The College's rigorous Beit Midrash curriculum — which includes Tanach, Talmud, Jewish law, Jewish philosophy, business ethics and the synthesis of Torah and technology — provides students with the strong foundation necessary to cultivate an enduring commitment to Jewish values and integrate it into every aspect of their lives. The College fully expects to resume its in-person Beit Midrash program once the outbreak subsides and the government lifts the restriction on large gatherings. The virtual component of the Beit Midrash will also continue post-pandemic.



Rav Yosef Zvi Rimon and Rav Herschel Shachter participating in a Zoom-conference on corona-related issues.

Tal Campus for women receives historic financial support, high praise from government

JCT is undergoing a momentous and historic change with the construction of the Tal Campus for women, a permanent campus for 4,000 students and home to the college's new Faculty of Life and Health Sciences Building.

The campus will be located in Givat Mordechai, adjacent to the Lev Campus for men and the new southern entrance to Jerusalem.

Helmsley Charitable Trust's \$9 million grant

In May, JCT was awarded a \$9 million grant from the **Leona M. & Harry B. Helmsley Charitable Trust** to help fund the construction of the Faculty of Life and Health Sciences Building on the Tal Campus. The grant represents one of the Trust's largest-ever gifts to an Israeli institution or cause.

The college's Faculty of Life and Health Sciences includes one of the largest nursing programs in Israel, serving more than 1,000 students annually. It is widely recognized as the country's premier nursing program.



Architect's simulation from L-R: Helmsley Faculty of Life and Health Sciences, Faculty of Engineering and Faculty of Management

With only 5.1 nurses per 1,000 people, Israel stands in the bottom five among the 37 OECD nations on that metric. Today, as the COVID-19 crisis exposes Israel's shortage of nurses and other health professionals, JCT is strongly positioned to play an even more significant role in addressing the crisis as a result of the Helmsley Charitable Trust's support for the Tal Campus.

"By directly supporting our world-class training for nurses, the Trust is providing the entire city of Jerusalem with a much-needed lifeline amid the unprecedented strain on healthcare systems," said JCT president **Professor Chaim Sukenik**.

The campus is designed to provide the students with the best possible environment to enhance their learning experience. Three buildings will be constructed in the first stage of the project, spanning a total of 220,000 square feet.

Tal in the Eyes of the Israeli Government

Israel's Minister of Higher Education **Zeev Elkin**, Council for Higher Education Chair **Professor Yaffa Zilbershats** and the Council's Acting Director General Michal Neumann visited the Jerusalem College of Technology (JCT) in July to discuss the importance of promoting JCT's forthcoming Tal Campus for Women.



From L-R: Yossi Zeira, Minister Zeev Elkin, Prof. Chaim Sukenik, Prof. Kenneth Hochberg, Prof. Yaffa Zilbershats, Stuart Hershkowitz and student representatives

"JCT has made a unique contribution over the years to the Israeli economy," said Minister Elkin during the visit. "The establishment of the new Tal Campus will advance the development of an institution that empowers thousands of graduates who contribute to Israel's defense, high-tech and health sectors. JCT has a special ability to incorporate underserved populations who largely would not otherwise reach the gates of academia — particularly Haredim, thanks to the college's combination of Torah and general studies in a religiously sensitive environment. JCT is today one of the most successful academic institutes leading the integration of the Haredi community in higher education and society at-large and can serve as a model for other institutions."

The Tal Campus project is part of the vision JCT shares with the Israeli government 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.

"JCT plays a leading role in making higher education accessible in the area of Jerusalem," said Professor

Zilbershats. “I welcome how the institution allows diverse demographic sectors of Israeli society to attain higher education in the engineering, high-tech and health professions not only for their own benefit and welfare, but for the development of the Israeli economy.”

The new campus will be the permanent home for up to 3,000 of JCT’s female students in nursing, computer science, electro-optics, industrial engineering, accounting and management. The 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.

“JCT’s growth is driven by our alignment of academic offerings with pressing needs in Israeli industry,” JCT president Professor Chaim Sukenik said. “The establishment of a new Tal Campus will enable JCT to continue to evolve and to provide graduates who make strong contributions to the economy of the State of Israel. I thank our friends, Minister Zeev Elkin and Professor Zilbershats, for their longtime support of this effort.”

Minister Rabbi Rafi Peretz: Tal Campus ‘aligns with my ministry’s top strategic priorities’



Minister Rabbi Rafi Peretz and Stuart Hershkowitz

Israel’s Minister of Jerusalem Affairs and National Projects **Rabbi Rafi Peretz** has also visited the site of the Tal Campus. Peretz praised JCT’s shared vision with the Israeli government 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 development of the Tal Campus is especially important for empowering diverse populations, including religious and Haredi women, through higher education.

This ambition aligns with my ministry’s top strategic priorities,” Peretz said. “The current, temporary Tal Campus does not provide the proper environment for religious women to study prior to integrating into Israel’s employment market. Given the need to build a dedicated and high-quality campus for these women, I am looking at different ways to support the construction of the Tal Campus in the coming year.”

History of the campus

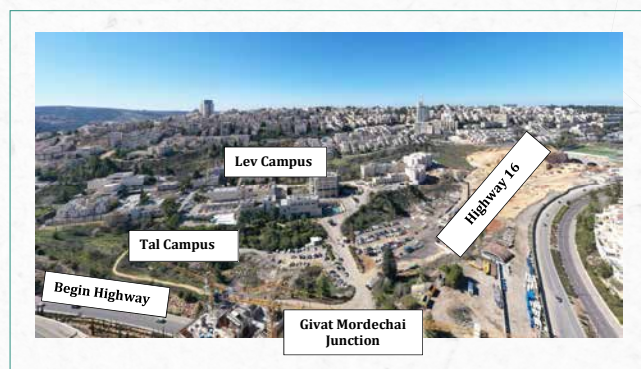
On Jerusalem Day in May 2015, JCT was awarded 14 dunam (150,000 square feet) to build the Tal Campus on a prized piece of land situated at the apex of Jerusalem’s newest gateway — where the Begin Highway meets the new Highway 16 that will enter Jerusalem through tunnels under the Jerusalem Forest and Mount Herzl.

JCT immediately began the task of rezoning the land for use as an educational facility. This has been a long process, in part delayed by the planning of Highway 16. This new entrance to Jerusalem will run alongside the Tal Campus.

Renowned architects

The architect for the Tal Campus is **Kimmel Eshkolot**, an award-winning firm founded by Etan Kimmel and Michal Kimmel Eshkolot in 1986.

In the first years of its practice, the firm was involved in the preservation and rehabilitation of Tel Aviv’s historical neighborhood of Neve Tzedek, for which it was awarded the Rokach Prize in 1993. Since then, it has won several national and international competitions for the design of high-profile public projects such as the expansion of the government compound (“Kiryat Hamemshala”) in Jerusalem, the Davidson Museum in the Archaeological Park near the Western Wall and the National Memorial for Israel’s Fallen Soldiers on Mount Herzl.



Aerial view of the Jerusalem College of Technology showing Highway 16 and light railway under construction.

Higher education adapts to the pandemic era: from best practices at JCT to the bigger picture

When the COVID-19 pandemic intensified in March, the higher education system in Israel and worldwide was turned on its head overnight. While dramatic changes such as the move to remote learning were essentially instantaneous, the ramifications of coronavirus will likely be felt on campus for years to come.

The question hovering over academic institutions remains: How can we best cope with the current circumstances while planning for an uncertain long-term future?

“Traditionally it has been very difficult to make changes in higher education,” says **Meir Komar**, Lecturer in the Computer Science Department and Fellow at the Center for the Advancement of Teaching. “To implement any type of shift is a very slow and long process. COVID-19 provided an incredible push and accelerated the adoption of digital learning and other forms of innovation.”

E-Learning Coordinator **Yona Kurtz** echoes that sentiment.

“There was a bit of a learning curve at the beginning of the pandemic, with questions such as, ‘How do you start using all of these new platforms in a matter of days?’” says Kurtz, who works with instructors to help them implement online tools for the purpose of improving their teaching. “But our faculty really accepted the challenge and understood its importance. We have a WhatsApp group with all our teachers and it was great to see their questions quickly transition from technical difficulties to best teaching practices.”

JCT’s immediate response

In March, JCT found itself well-positioned to rapidly adapt to the new normal.

“We were ahead of the curve in efforts to provide a virtual learning experience to domestic and international students alike,” says the college’s vice president **Stuart Hershkowitz**. “Our online instruction infrastructure was under development by our Center for the Advancement of Teaching headed by **Dr. Menashe Puterkovsky**. They invested many hours working with small groups of faculty and students to train them even before the government-mandated shutdown.”

Online learning officially commenced on March 15 at JCT, following the Israeli government’s closure of all college

and university campuses. Most of the college’s virtual courses that include live lecturing are conducted via Zoom. In addition, JCT instructors also have the ability to upload and disseminate videos, PowerPoint presentations, assignments and other materials through the very versatile Moodle interface. Furthermore, we ensured that each department at the College has a designated staff/faculty member to guide the entire department through the transition to this online learning environment and the development of digital materials. This approach was unique and is a model now being considered by other institutions.

According to Hershkowitz, the College’s transition to remote study was also eased by the expertise it has gleaned from an existing partnership with the **European Union’s Erasmus Programme**. JCT is part of a consortium of Israeli and European universities and colleges intended to provide academic and personal tools to empower students to adapt to the academic environment in the country where they choose to learn. As part of the EU initiative, JCT is tasked with establishing virtual classrooms which will enable international students in Israel and in Europe to study together.

“JCT’s collaboration with the Erasmus Programme is helping to shape not only the College’s own operations in Jerusalem, but our greater contributions to higher education in Israel and worldwide,” Hershkowitz says.

The challenges of remote learning

Not surprisingly, however, distance learning comes with its share of challenges and potential pitfalls.

“The coronavirus-compelled educational environment reveals a problematic dichotomy,” says JCT president **Professor Chaim Sukenik**. “Higher education is regarded as a ticket out of poverty based on knowledge and hard work. Ironically, taking the college experience online



Hybrid classroom with some students in the classroom and others participating via zoom

undermines this social agenda since the logistics of distance-learning are disproportionately more difficult for people with limited resources.”

For JCT, an important social component of the institution’s mission focuses on promoting higher education for the Israeli Haredi community, which now makes up nearly half of the College’s student body.

“This is a population which faces real barriers to higher education based on social, philosophical and ideological issues that are slowly but surely being overcome,” Sukenik says. “The reality of the living circumstances of large Haredi families presents problems that make it hard to succeed in the world of remote learning. While the typical upper-middle class student in Israel enjoys personal communication devices and housing that allows for privacy and undisturbed concentration, sharing one internet-enabled device and mediocre internet bandwidth among many family members in what are often relatively cramped quarters creates an almost insurmountable barrier to effective online study.”

Komar tells the story of one Haredi instructor at JCT who does not have a smartphone or a wireless internet connection at home and had to teach from a neighbor’s home.

“While some faculty found their own solutions, we also helped them develop alternatives,” Komar says. “Our lecturers were incredibly resourceful in making it work.”

In Komar’s estimation, a school’s response to the pandemic “really needs to focus on both students and faculty. “As a lecturer, if you’re designing a course for online learning, you use different methodologies than when doing a formal face-to-face class,” says Komar. “What we had to do was very quickly deal with faculty on the technological aspects of remote learning — to connect them with the equipment they needed and train them how to optimally use tools like Zoom. They needed to learn and they needed to learn fast.”

Komar continues, “Then we had to start working with the lecturers on the pedagogical issues rather than the technological issues. How do you teach online? The whole concept of distance learning is new. For a lot of people, they don’t know the first thing about it. We had to help them understand the difference between live and remote learning and how to address that effectively. Some lecturers thought, ‘I am going to do the same thing I do for students in person, I’ll just be in my bedroom or study. It seems easy enough.’ Others found it harder to adapt and needed some extra guidance. In addition, we had

the problem of lecturers who couldn’t align their newly defined teaching responsibilities with their family lives. Imagine a lecturer who needs to teach an online class at 2:30 in the afternoon, someone with eight kids living in a small apartment in Jerusalem. How can the school expect that she can provide a suitable setting for effective on-line teaching/learning?”



Dr. Menashe Puterkovsky

Kurtz says she was “honestly very surprised at how fast our lecturers were able to adapt to these technologies and move to distance learning. They really jumped in with both feet and hit the ground running.”

At the same time, she does not view distance learning as “being the way of the future and frankly I really hope it’s not. Part of the amazing thing about JCT is the campus atmosphere. That is definitely something which must be preserved.”

“There is learning technology in emergency circumstances, like we’re doing now. Then there is distance learning technology that is thoughtfully integrated into regular higher education,” Kurtz explains. “The pandemic was an opportunity for innovation, but it wasn’t the time to overhaul our entire learning infrastructure and start from scratch. It wasn’t the time to start changing syllabi. The ingredients of effective distance learning need to be thought about at the beginning of the development of a course and the curriculum should reflect that. In the future, I hope that lecturers take elements of their newfound experience in online learning and integrate them into their classroom teaching.”

From a student’s perspective, there are concerns that pertain to scheduling and other logistics.

“A lot of our French and American students went home for Pesach and they couldn’t return to campus, so we have been continually supporting them with distance learning,” Komar says. “But distance learning can be

done from Haifa, Chicago, or anywhere else. How do we support students in different time zones? For example, if we have a student in Chicago who needs to take a class at 10 AM Israel time, that is 2 AM in Chicago. Sometime the sacrifice can be made on the student's part and they can cope. But because we record everything, the students don't necessarily have to do the distance learning live. Moreover, the recordings allow students to speed up, rewind, or pause the lecture, to take a break and so on."

Perhaps naturally, when a recording of a lecture is available there is a decrease in real-time participation. Over time, we will hopefully understand the plusses and minuses of on-line and/or recorded lectures and find the right balance between them and in-person instruction.

"Not everyone can do online learning," adds Komar. "There are many challenges students have faced in the process of changing their learning style. But if you start from the beginning and build the course knowing that it is a fully online course, you can still maintain active learning and participation and that is so important. Even fully in-person courses, will inevitably have an increased digital component in the future. Academic institutions need to start using many more digital tools and COVID-19 helped push lecturers to implement them faster."

Additionally, it is "tricky" to evaluate students online, according to Kurtz.

"There is an element of student ethics when taking an exam remotely and we have addressed this by involving Rav Yosef Zvi Rimon, the Beit Midrash Ramim and the heads of Tal's Midrasha to educate the students and by writing a Declaration of Honesty. We emphasized to our students the importance of academic integrity and the halachic ramifications of cheating."

The long-term opportunity

Ultimately, the pandemic has accelerated how JCT develops within its students the skills such as communication, collaboration, critical thinking and creativity. This is what they will need to succeed in an ever-changing work environment.

Dr. Puterkovsky says, "Lecturers have undergone a revolution in their thinking about teaching in the 21st century. The Center for the Advancement of Teaching must help lecturers make the switch from focusing on teaching to focusing on student learning. Distance learning requires lecturers to recognize that the student who is studying passively will simply turn off the camera and surf the net.

We must engage them in a more proactive way than ever before."

Hershkovitz views COVID-19 as an opportunity to globalize academia.

"It is incumbent upon colleges and universities to create social, academic and business infrastructures for collaboration across borders in the future — and the future is now," he says. "Indeed, rather than viewing coronavirus exclusively as an obstacle, higher education institutions can approach this episode as an opportunity to use remote learning to truly internationalize their offerings in an increasingly borderless world."

Komar agrees, "Covid-19 is poised to inspire greater cooperation between institutions. More institutions will make suggestions to each other and share best practices as we all go through this together," Komar says. "Why should we reinvent the wheel? We need to curate, not create."



Faculty training session

In conclusion, Dr. Puterkovsky notes that "a large part of the success of the transition to online learning can be attributed to two important collaborations. One is the cooperation within the Forum of the Heads of the Centers for the Advancement of Teaching of different institutions of higher education here in Israel. This group is dedicated solely to promoting teaching in academia without anyone seeking personal credit. It is inspiring to see so many people whose only interest is to help each other for the benefit of all students and lecturers in the State of Israel."

He adds, "The second forum for cooperation was among the lecturers of the Lev Academic Center. Our staff worked together in a truly spectacular fashion. Every day, throughout the day and evening, they asked and answered questions among themselves. This promoted a significant flow of information that enabled everyone to learn quickly."

JCT's nursing program steps up to the COVID-19 challenge

Hundreds of the College's nursing students were trained in respiratory care within a week, while over 30 started working in nursing homes across Israel to help curb the spread of coronavirus.

For more than 50 years, JCT has prided itself on using its academic excellence to help Israeli society address the country's most pressing needs. In the coronavirus era, this institutional priority has become more important than ever, particularly when it comes to the College's nationally renowned nursing program.

Rapidly responding to a national crisis

Heeding the urgent request of the Health Ministry's director of nursing, JCT's goal in March was to train a therapeutic team that can provide treatment to coronavirus patients with respiratory symptoms and conditions, should medical personnel be forced to go into isolation or if there is an extreme burden of patients requiring additional personnel. Answering the call, some 600 third- and fourth-year nursing students from JCT's five campuses were trained within a week.

"The nursing students at Machon Lev, Mivhar, Shaare Zedek Medical Center and Machon Tal embody the overall spirit of nurses across the country who recognized the challenge of completing training in such a short time frame, but yet, stopped at nothing to help the community at large," Dr. Haya Raz, head of the nursing school at JCT, said.

Raz pointed out the need for the urgent influx of personnel since the demand for treating patients with coronavirus is far exceeding what doctors and nurses are currently capable of providing. This is especially true as workers in the health sector are more exposed to the virus. In fact, many health care workers have become sick or entered quarantine.

"Doctors and nurses work 12-hour shifts a day as it is. There's only so long they're able to maintain this high level of stress and fatigue before they burn out. This extra help is critical to making sure our healthcare system doesn't collapse," she noted.

Shoshanna Mayer, who is studying at JCT for her master's degree and nurse practitioner license in geriatric nursing, works as an emergency nurse at Hasharon Hospital in Petach Tikva. When the COVID-19 crisis intensified in Israel and the hospital closed its normal operations, including its emergency room, Mayer began treating coronavirus patients

who were in critical condition in a new intensive care unit.

"It's been a real learning experience," she said. "You dress up in your 'space suit' and all your protective gear. You go in and you're supposed to take care of these patients when you're afraid to move, because your protective gear might fall off or tear. Not all of the patients are sedated. It's very strange for them. They can't really see you because you're covered almost head to toe, they only see your eyes."

Mayer recalled how one COVID-19 patient who was alert but not speaking pointed to a blue marker, so that he could communicate to her in writing. Mayer eventually sent messages and photos to the patient's daughter through his phone.

"It gave his family strength, it gave the patient himself strength and I saw that he slept much better at night after that," said Mayer.

Leveraging the College's specialized training in clinical geriatrics

As approximately one-third of Israelis who have died from coronavirus have been residents of nursing homes, JCT students mobilized to assist these facilities in curbing the spread of the virus.

In partnership with Israel's Ministry of Health, Home Front Command and Health Maintenance Organizations (HMOs), the Department of Nursing on JCT's Tal Campus for women was well-positioned to supplement the government's emergency aid for nursing homes, as the college is the country's only academic institution that offers a master's nurse practitioner certification and clinical specialization in geriatrics. JCT's nursing students are also older than most other undergraduate or graduate students in Israel and have accumulated significant prior experience working in the healthcare system.

"We are proud to use our nationally renowned nursing program to provide a lifeline for at-risk Israelis and



JCT student nurses

“After work hours, each employee at a nursing home returns to their personal life at home,” Mirishvilli said. “Unfortunately, we have seen that if just one of these workers gets the coronavirus, they can infect many of their colleagues and patients. Therefore, this project aims to stop the spread of the virus in homes and professional teams, ultimately protecting the elderly and connecting them with the best possible treatment.”

LevTech Entrepreneurship Center develops technological solutions for the pandemic era.

As the COVID-19 pandemic intensified, Israel's emergency services and nonprofits were faced with a serious conundrum: limited contact with their beneficiaries, including the elderly, children with disabilities, the sick, people in need of food and medicine and other populations whose existing vulnerabilities are amplified during an era of self-isolation. Yet at JCT, an impactful solution was already in place.

Year-round, LevTech leverages the untapped potential of engineering and business students and graduates from the Orthodox and ultra-Orthodox (Haredi) communities to create innovative solutions to identified challenges, especially in the social and emergency services sectors. From its pre-accelerator program to industry-led workshops, to hackathons with industry involvement, LevTech enables participants to solve real-life challenges

TakeAction works to provide technological solutions that enable emergency services and nonprofits to serve Israel's vulnerable populations despite the obstacles presented by coronavirus. Current solutions being developed include optimized communication systems and ambulance routes for quicker and more efficient home-testing of the quarantined (for the Magen David Adom emergency and medical services organization); a platform for artists and performers to interact live with children with physical and mental disabilities who are homebound

TakeAction platform for artists and performers

without needed therapy; a streamlined method for emergency recruitment, coordination and tracking of platelet and granulocyte donations for immediate help for cancer patients; and conversion of existing programs for Alzheimer's and dementia patients into online versions accessible for caretakers and therapists.

"We understand that so many entities can use all the help they can get right now, which is why we are recruiting the talents and innovation of JCT for those who need it the most," said **Orlee Guttman**, JCT's director of Strategic Partnerships and co-founder of LevTech.

Women's Hackathon: 'sharp technological skills and sensitivity to the real needs of people'

TakeAction's focus on addressing the challenges of the pandemic era inspired the theme of this year's annual **Women's Hackathon** (technology marathon) for students from JCT's Tal and Lustig campuses. On June 19, close to 100 students completed a 44-hour online hackathon in which they designed and marketed innovative solutions for populations affected by COVID-19.

The winning product was the design of a virtual platform to enable singles to interact in ways that resemble face-to-face dates. In addition, the product also created interactive activities the potential couple could do together such as a simultaneous cooking competition, online card games and a spinning wheel for discussion topics.

In the religious and Haredi communities, where partnership and marriage are of the utmost importance, COVID-19 has had a damaging impact as in-person dating has been impossible. The winning team of more than 20 students created an innovative solution to try and make dating a reality, virtually. The product is launching in the dating world, but this platform and its interactive games can be expanded for relationship building of any kind.

Other challenges students were tasked with at the hackathon included building a platform for people to support small businesses by buying products from them to donate to groups and organizations such as medical teams, security teams and nursing homes; improving access to medical and educational services for at-risk youths in times of crisis; linking artists and homebound populations for interactive performances; and creating a system to recruit massive numbers of volunteers for emergency situations.

The expert judges who evaluated the proposed technological solutions were **Yonit Serkin**, managing



director of MassChallenge; **Anat Greemland**, vice president of strategy at Scale-Up Velocity; **Fleur Hassan-Nahoum**, deputy mayor of Jerusalem; **Galia Kut**, an entrepreneur and investor, **Efrat Weiss**, director of Synamedia; and **Michal Wosk**, developers marketing manager at Microsoft.

"COVID-19 has created major challenges for small businesses, nonprofits, artists, teens at-risk and young people looking to launch relationships. But it has also created incredible opportunities for new technologies and solutions to help those who need them most," said Serkin. "The technologies built and developed by the students at the Jerusalem College of Technology's Women's Hackathon clearly show that great ideas can come from everywhere and that together, we can create new realities for our communities.

While JCT's annual hackathons are usually bustling in-person events, the college replicated that environment remotely by shipping decorated boxes to participants which included hackathon t-shirts, coffee cups, water bottles, energy bars and special face masks for the competition. Online games allowed participants to release energy in between their action-packed hours of programming, developing marketing strategies and creating business plans.

In previous years, hackathon teams have worked on exhibiting a proof of concept for their solutions. But for this event, due to the significant and immediate needs emanating from the pandemic, teams were challenged with creating a functional and scalable product that is ready for market. Students were supported by mentors from different professions who offered preparatory seminars during the week leading up to the hackathon, enabling the women to expand their knowledge about programming, marketing and delivering public presentations.

"The Jerusalem College of Technology has proven that the best post-coronavirus solutions come from the

combination of sharp technological skills and sensitivity to the real needs of people. I was proud to have been a part of that,” said **Fleur Hassan-Nahoum**, deputy mayor of Jerusalem.

In December 2019, during Chanukah, 120 students participated in JCT’s annual **Men’s Hackathon**. Industry partners included **Intel, Amazon Web Services, OrCam, FlyTech** and the aerospace and defense company **Elbit**, among others. Students worked in teams to produce solutions to challenges presented by these companies, with a focus responding to medical and social needs. These included sensors to help preventing children drowning, prevention of car accidents through fatigue sensors, enabling the visually impaired to “recognize” faces from a distance, software to help stroke patients receive therapy remotely and more. The winning project was technology that can be used by drones for early detection of crop diseases.



Entrepreneurship in more normal times

Although COVID-19 has been an all-encompassing challenge for JCT and Israeli society as a whole, LevTech’s entrepreneurial spirit had long preceded the pandemic.

The **LevTech LAB Pre-Accelerator Program** is a 12-week pre-accelerator program designed for JCT students on all campuses, graduates and faculty with either start-up ideas and/or technical skills to create products. Due to COVID-19, LAB has continued to take place through Zoom videoconferencing. This year’s program includes 35 participants working on 11 different projects that could each potentially turn into start-ups. LevTech has provided mentors in the areas of technology, business, marketing, legal and investor pitching to its LAB graduates this year. The mentoring helps the start-ups progress, determine their next steps, develop more robust products and sometimes alter their original ideas. As the entrepreneurial world is new for

most JCT students and graduates, mentoring is provided at every step of product and business development.

Students and graduates of LAB can apply for space in the **LevTech HUB**. Presence in the HUB also includes on-site mentoring and an environment of entrepreneurship. There are currently five student start-up teams working in the HUB, as well as other student start-up teams who come to the HUB for mentoring and meetings. Plans for the renovation of a larger space on the men’s campus are in process with a completion date in early 2021. A dedicated entrepreneurship center is planned for the new Tal campus. It will replace the current temporary facility used by the women.

Last year, the entrepreneurship center discovered a population of students (particularly women and specifically from a haredi background) who were not confident enough to sign up for LevTech due to fear of failure or because they believe they do not have the required skills. This discovery propelled the college to design the **Entrée to Entrepreneurship** program, geared for a larger mass of beginner students. The program will provide three-hour seminars to most of JCT’s students at the beginning of their degree studies to encourage entrepreneurial thinking in order to fundamentally impact their mindset and allow them to envision themselves as creators. This program was scheduled to begin in May, but due to COVID-19 the college plans to launch it in November.

Moving forward, JCT is considering developing new versions of its current entrepreneurship programs for training at other institutions.

Scholarships and Stipends

JCT is grateful to its many friends and supporters for their generous financial support this year, including the **Harvey Goodstein Foundation, Moshal Scholarship Program, Kirsh Family Foundation, Eim Hamoshavot Fund, Jerusalem Foundation, Katzir Fund, Estate of Jacqueline Newman, Morris Berger Trust, Ruth Brandt and Hanna Weil**.

Avraham, a 33-year old computer science student with five children is one of six recipients of scholarships from the Morris Berger Trust.

“I plan to pursue a career in programming, upon graduating from Machon Lev,” Avraham said. “As one of this year’s recipients, I am grateful for the opportunities this award will provide me. Receiving this scholarship will help reduce my financial burdens and provide assistance for me to

continue pursuing my education. This scholarship helps me to focus more on my studies rather than on funding my studies. I hope that someday I will be able to pay this forward and help someone else from my community.”

Canadian-born Israeli nursing student prepares to help fill ‘dire need for geriatric nurses’

Did you know there are no nurse practitioner’s in the Middle East? Jerusalem College of Technology’s first-of-its-kind program is changing that.

JCT student **Shoshana Hershkop-Ratz** is becoming the youngest nurse practitioner in the region. See what this Canadian native has to say about medicine in the Middle East and why these nurses are crucial in Israel.

While the coronavirus pandemic highlights both the importance of the nursing profession and the vulnerability of elderly patients, Shoshana Ratz is making history on both of those fronts this year.



Ratz is poised to become the youngest graduate of Israel’s first-of-its-kind master’s degree program for geriatric nurse practitioners. She made Aliyah in 2011 as a single young woman and met her husband in Israel during her third year of study at the Jerusalem College of Technology’s (JCT) Tal Campus for women. The newlywed couple settled in Beit Shemesh, where Ratz completed her Bachelor of Science from JCT’s nursing program, which serves more than 1,000 students annually and has been ranked first among 24 nursing departments nationwide by the Israeli Ministry of Health.

Balancing academic and family life — including her two young children — Ratz recently returned to the Tal Campus by enrolling in the new Nurse Practitioner’s Program, where Israel’s future in the health care professions

continues to blossom. It is also no coincidence that Ratz came to the Tal Campus from Toronto, as the University of Toronto is the institution that partnered with JCT’s nursing program to launch another first-of-its-kind academic program in Israel — in health informatics, a relatively new field that bridges clinical, information and communication technology expertise.

In the following interview, Ratz discusses her time at JCT and her career ambitions in geriatric nursing.

How did you choose JCT’s nursing program?

“The program chose me. I was completing my pre-med studies in Canada for a year until my mother told me about the Tal Campus nursing program, which she had read about in a newspaper advertisement. During a summer seminary program in Israel, I met with **Professor Chaya Greenberger**, former dean of JCT’s Faculty of Life and Health Sciences, who told me that the Tal Campus was offering its own nursing program. Professor Greenberger invited me into her program and I started in August of 2010.”

What were your initial thoughts upon starting the program?

“The program was difficult, particularly because classes were taught entirely in Hebrew, but the professors were incredibly accessible — many are English-speakers themselves — and they helped me acclimate to this very new style of learning in a different language. While I was very overwhelmed at first, I knew this program was right for me when I noticed the care and camaraderie the students and staff possessed in helping me adjust to new materials, while making learning in a new language a comfortable and a relatively easy experience. I felt that if I lagged behind, my classmates would pull me up to ensure we collectively finished the work and received good grades together.”

How did you experience the program’s growth from a student’s perspective?

“My first year enrolled was the fourth year of the nursing program at JCT, so there was no real indicator of fellow alums’ success. When I began at the Tal Campus, I felt the school trying to actively prove itself. After all, it was a fledgling program without much of a track record. At times, I felt that fellow colleagues and friends from other programs would laugh at us and say, ‘You’re just a college, not even a university,’ but we had the last laugh in the end. Every student from that first graduating year

passed the Government Licensing Exam with the highest average of any university in all of Israel. Suddenly we were on the map.”

What are your future career and life plans?

“I’ve decided to go into geriatrics, as there is a dire need for geriatric nurses. I completed a specialty in a joint geriatric ICU program and then I heard about the new Master of Science/Nurse Practitioner Program (NP) in Geriatrics. My goal is to change the way we treat our elderly within the health system. As a nurse practitioner, I feel qualified as a medical and nursing professional to make the most impact since I understand both aspects of the patient — the care and the value of conversation and relationships with patients, in addition to the importance of medicine and research.”

How have the Tal Campus and your new career prepared you for life in Israel?

“Going to an Israeli college ‘straight off the plane’ prepared me for the culture shock and the language barrier all new immigrants are destined to face. If I had chosen to go to a non-Israeli college, it would have been harder to acclimate to Israeli society and to my current job. If somebody wants to make Aliyah, I recommend they go to an Israeli college and I believe the Tal Campus is the best place to enroll. This is because they have a kind, English-speaking staff and they accept and respect your background, encouraging you to learn in Hebrew while utilizing your English skills as an advantage. I could never have imagined my journey would lead me here. but I would not want it any other way.”

Physics Olympiad 2020

The seventh annual Physics Olympiad for religious high schools was held in February at the Jerusalem College of Technology. Juniors and seniors from a broad range of yeshiva High Schools and Ulpanot who are studying for five units of the matriculation exam in Physics participated. There were some 100 participants on each of the men's and women's campuses.

These events were held in cooperation with the **Department for Religious Education of the Education Ministry** and **Jerusalem's Science Museum**, enabled students to visit exhibits and enabled students to learn about recent developments in electronics and imaging. **Daniel Markovitz** of Tamar Ariel high school in Netanya



won first place in the contest held at the men's Lev Campus. **Shira Klein**, of Zviya Ulpana in Ma'ale Adumim won first place at the women's Tal Campus. JCT president **Professor Chaim Sukenik** and rector **Professor Kenneth Hochberg** awarded tuition scholarships to those individuals who secured the first three places on both campuses.

Klein could barely contain her excitement, saying “It was an amazing experience. The test was very difficult and I was truly surprised that I had won. I love physics. It is an incredible field that very much develops thinking and allows us to absorb a little of the remarkable world that G-d created.”

Torah and Technology Research Center

At the end of last year, the Jerusalem College of Technology (JCT) launched a first-of-its-kind Torah and Technology Research Center, which will provide the specialized expertise necessary to respond to the complex ethical and Halachic (Jewish legal) issues of our times.

Operating under the direction of internationally respected posek (Halachic decision-maker) **Rabbi Yosef Tzvi Rimon**, Head of JCT's Batei Midrash and Jewish studies programs, the center pioneers a unique collaboration between Halachic experts and renowned faculty members from the college's computer science, engineering and life and health sciences departments in order to address emerging questions pertaining to both Torah and technology. Examples of such inquiries include:

- ▶ Is it permissible to ride in an autopilot vehicle on Shabbat?
- ▶ Can “meat” grown using cells taken from a pig be kosher, or even parve?

► Can you send Alexa voice commands on Shabbat?

“Despite rapid technological development and growth, there is currently no centralized, scholarly body equipped to deal with all of the Halachic implications and questions that have arisen as a result. Our new center fills that void,” says Rabbi Rimon. “Today, not only are Halachic authorities struggling to keep up with the flood of questions regarding issues that never before existed, but they also lack the technological expertise necessary to understand the full scope of the issues. The Torah and Technology Research Center strives to solve this dilemma by facilitating an unprecedented meeting of the minds across Halacha and science.”

Support for the center is made possible by the **Walder Foundation**, a family foundation based in the Chicago area. **Dr. Joseph and Elizabeth Walder** have been passionately interested in science education within the world of Jewish schools for many years and the new Torah and Technology Research Center is very much in keeping with their world view that embraces science and technology within a halachically observant Jewish world.



Professor Ron Goldstein of the Life Science faculty at Bar Ilan University lecturing at the Walder Torah and Technology Research Center

In addition to serving as a centralized authority for the international Jewish community, the nascent Research Center will facilitate the development of innovative technologies specifically adapted to meet Halachic requirements for Shabbat, among other areas and will disseminate scholarly material. The center will also host international symposia that will bring leading experts from around the world to JCT to discuss recent innovations and developments on both the Halachic and technological fronts. An important goal of the Center is to engage the broader public in serious discussions of these issues in order to promote greater appreciation of their importance and to educate them on even the most complex topics.

“For five decades, JCT has been tremendously proud of

its excellence in both Jewish studies and technology-related fields. This has expressed itself in providing high-level training to a student body which spans the religious community from Haredi to Dati Leumi. This unparalleled track record places our college in a unique position to be a trailblazer at the intersection of Torah and technology through the new center,” said Professor Chaim Sukenik, president of JCT.

On Campus

Construction is almost completed on the **Joseph and Faye Tanenbaum Dormitory**, which will consist of four towers with 48 apartments on six floors. It is surrounded by 2 dunam of green spaces including a children’s play area, grassy areas and parking. The dormitory is due to open during the Fall semester of 2020 and is a gift of the Jewish Legacy Charitable Foundation through the Canadian Friends of JCT.



Expansion of the **Israel Henry Beren Institute of Torah and Science** is now complete. The building was built in 1997 and originally consisted of three floors. In 2000, in order to accommodate a growing student population and thanks to the generosity of **Israel Henry Beren**, an additional floor was built and an elevator was added to the building. The two new floors, generously funded by **Mr. Robert Beren**, have added 800 square meters (8,611 square feet) of space and provide offices, classrooms and a new expanded simulation laboratory for the nursing department on the Lev Campus.



Meet Dov Rubin, medical technology expert and new chairman of JCT's Board of Trustees

JCT congratulates **Dr. Dov Rubin** on his election as chairman. Dov is the first JCT graduate (Class of '75) to chair the board. He earned his B.Sc. in Electro-Optics and Applied Physics and went on to receive a Ph.D. in Biomedical Engineering from the University of Southern California and an M.Sc. from Case Western Reserve University.

Dov is an expert in non-invasive medical technologies. Prior to his current position as CEO of **Lev-EL Diagnostics**, Dov was president & CEO of **Itamar-Medical** (TASE), developing state-of-the-art biomedical products for non-invasive, early detection of heart disease & obstructive sleep apnea. He was Senior VP at **HealthWatch**, creating textile ECG-sensing garments communicating to smartphones for around-the-clock personal monitoring as well as developed the first transcutaneous oxygen sensor (Radiometer) and the first digital patient ventilator (Puritan Bennett). Dov was co-founder of **NDS** (NASDAQ), the leading supplier of secure digital TV delivery to over 350 million worldwide viewers, which he started in 1988 along with News Corporation's Rupert Murdoch; NDS was ultimately acquired by **Cisco**.

Below, Dov shares his vision for JCT in the coming years.

"A butterfly flaps its wings in Tokyo and, subsequently, a storm ravages half of Europe" – Chaos Theory by Lorenz (1963)

"The ongoing coronavirus pandemic has shown the world that we are all interconnected and interdependent. At the Ministry of Health's command post, controlling the epicenter of the Israeli response to coronavirus, was none other than a Machon Tal graduate of Industrial Engineering. Who would have thought that a few JCT graduates would provide encryption technology into 350 million homes around the world transforming how we communicate? Add to that the immense effort by the JCT nursing graduates working around the clock along with the engineering graduates developing Israel's defense technologies and you have a JCT institution that forms the backbone of our Start-up Nation that is influencing the entire world.

There isn't a high-tech company or institution in Israel that does not already employ JCT graduates. Why? Because JCT graduates not only deliver high-quality engineering skills but also deliver the honesty, dedication

and discipline imparted from their Torah background that is part of the JCT DNA.

While we might think otherwise, technology is all about people. The demand for trained engineers far exceeds today's supply. This is the challenge that JCT faces – supplying the ever-increasing demand for top-notch engineers.

The challenge JCT faces in the years ahead is determining how to ramp up the quantity of graduates without sacrificing on quality. JCT students are getting snapped up even prior to graduation. How can we ensure they finish their education before heading into the workplace? Is JCT poised to assist in securing greater employment opportunities for the untapped Haredi population, which can become the next driving force in technology? How does JCT remain viable and relevant as changes in technology accelerate so rapidly? It's all about people. This is what JCT will be focusing on the years ahead.



Together with the upcoming new Tal Campus in Jerusalem, our vision is that JCT will flap its wings, setting the tone by providing multi-disciplinary *tikkun olam* solutions that the world urgently needs in the years ahead. *Ki Mitzion Tetzei Torah ... u'Madah* — all emanating from Jerusalem."

JCT would like to thank **Adv. Sanford Colb** for his eight years of service as chairman of the Board of Trustees. During this period, Sandy oversaw efforts to improve academic excellence and the teaching of English at the college. New master's programs, increased enrollment and the advanced planning of the Tal Campus for Women were among the notable achievements of this period under Sandy's leadership.



Friends around the Globe

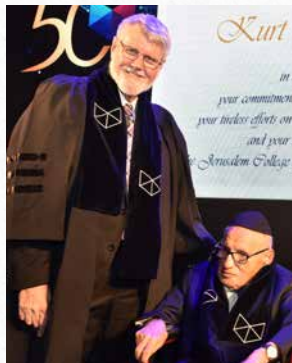
The COVID-19 pandemic curtailed many of the planned activities during the past year, but the new reality is creating new opportunities such as international Zoom events for friends and supporters highlighting the contribution of JCT's nurses and a shiur by **Rav Yosef Zvi Rimon** on "The Meaning of Mourning the Destruction" before Tisha B'Av.

Jerusalem

From Haredim to Ethiopians to everyone in between, JCT has proven since 1969 that Israel can be the land of opportunity for students from any background. A leader in providing high-level science and technology education to religious students in Israel and beyond, the College kicked off its 50th anniversary celebrations at a festive ceremony in Jerusalem.

The event, which took place at the College's Schloss Plaza on the Lev Campus, featured remarks from Jerusalem mayor **Moshe Lion** and **Professor Yaffa Zilbershats**, chair of the Planning and Budgeting Committee of the Israeli Council of Higher Education. The two leaders extolled JCT's parallel legacies of inclusion and academic excellence, in which the institution has empowered its students to obtain a high-quality education and subsequent employment in their fields of choice regardless of their gender, ethnicity, or level of religious observance.

JCT bestowed an Honorary Fellowship (honoris causa) upon 99 year old **Kurt Rothschild** in recognition of his commitment to the State of Israel, his tireless efforts on behalf of the Jewish People and his steadfast support for the Jerusalem College of Technology since its inception.



Kurt Rothschild was one of **Professor Ze'ev Lev's** advisors when he set up the Jerusalem College of Technology and JCT owes a great debt to him for his wise advice and assistance over the years. As an *Askan* par excellence, Kurt has always been available to call on people in the highest echelons, to bring new friends and supporters to JCT, brainstorm on important decisions, oversee fundraising events and much more.

Toronto

The Canadian Friends of the Jerusalem College of Technology (CFJCT) and the Jerusalem Foundation collaborated to raise awareness and funds for scholarships to assist young men and women from Jerusalem's Haredi community who are studying at JCT. The College has a longstanding relationship with the Jerusalem Foundation, which has provided scholarships for its students for many years.

CFJCT recently expanded its Board under the chairmanship of **Larry Krauss** and welcomed new members **Shlomo Reichmann**, **Judith Shamian**, **Mark Frischman** and **Dr. Avi Orner**.



Back row: Simmy Zielenic, Sarah Krauss, Julia Koschitzky, Nomi Yeshua, Joel Reitman, Lewis Mitz, Jerry Klasner, Robert Reichman
Front row: Esty Edell, Robin Gofine, Deputy Mayor Yisrael Kellerman

New York

The American Friends of the Jerusalem College of Technology (AFJCT) held a gala dinner in honor of JCT's 50th anniversary in New York City with 300 guests in attendance, featuring a keynote speech from **Jonathan Medved**, founder and CEO of the successful investment platform OurCrowd. JCT vice president Stuart Hershkowitz was honored for his many years of service on behalf of the institution. Additionally, a young professionals' event engaged new faces and educated the New York community about the important work of JCT.

In February, the AFJCT board elected a new Executive Committee to replace the Presidium members who stepped down. The board elected **Joel Strauss** and **Moshe Sukenik** as co-presidents, **Helene Rothenberg** as vice president, **Linda Allen** as treasurer and **Charles Popper** as secretary. We wish to thank **Rori Cassirer** for her many years of service on behalf of AFJCT as president of the board.

Ethiopian students recount their life-changing moment and the ongoing journey at JCT

Last September in Ethiopia, best friends Nigatu and Mengistu could not have imagined how much their lives were about to change based on a single decision.

After months of studying for the SAT exam and the arduous process of completing an application for a student visa, Mengistu, who goes by Itai and Nigatu, who goes by Shachar, were set to receive the long-awaited answer as to whether their applications would be approved and they would be allowed to study in Israel.

“We went to the embassy on a Friday morning to get the decision. We opened up the passports right there with everyone else waiting and truly couldn’t believe it,” Itai recalls. “We were so thrilled, the guards outside the Israeli embassy there started wishing us a Mazel Tov and were happy for us. Easily, it’s one of the best days of my life.”

Itai and Shachar are part of the Ethiopian Falash Mura community, descendants of the Ethiopian Jewish community who do not have the right to Israeli citizenship under the Law of Return, since their ancestors were forced to convert to Christianity. It has been a collective lifelong dream for the community to make Aliyah to Israel, but government logistics have slowed the process.

Now, the two are thriving as students at JCT — Itai studying computer science in the International Program in English and Shachar preparing to join the computer science program this coming fall, having just completed the College’s Mechina (preparatory) program.

Itai and Shachar received the news of their application’s approval on a Friday and by the following Wednesday they were on a plane to Tel Aviv.

“I’ll never forget being on the airplane to Israel — I was in a state of shock,” Itai recalls. “Being here is an absolute dream come true. On the first day, the moment I got here, my mouth was hurting from smiling so much with joy. In Israel, everywhere I go I feel like I have freedom. I truly feel like I’m at home here.”

This wasn’t the case in Addis Ababa, where both Itai and Shachar were studying at university in the city. Not only is it an extremely difficult place for an observant Jew to study in a collegiate environment, but a dangerous one as well.

“When I was in Addis studying at college, it was very hard to be a student while keeping Shabbat and other Jewish

traditions. Not to mention it is not safe to walk around with a kippah on. Now, to be living in the heart of Jerusalem and studying at a college where Torah study is as critically important as the academics, it’s just incredible how fast things can change,” says Itai. “The college I went to in Ethiopia had around 20,000 students, only a few of them knew I was Jewish.”

“The education is beyond my expectations. It is much harder than the coursework in Ethiopia,” says Itai. “Only smart kids can survive here.”

Last April, the two met **Rabbi Zvi Ron** and his family who were in Ethiopia as emissaries from The Jewish Agency for Israel. After speaking with the young men and hearing their stories, Rabbi Ron and his family were inspired to assist them fulfill their dream of studying in Israel — a process that would not have been possible without the Ron’s support.

Recognizing the many challenges that would present themselves to the students in their absorption into Israeli life, Rabbi Ron immediately knew that JCT would be an ideal fit.



Itai and Shachar learning in JCT's Beit Midrash

“They lived a very sheltered and religious lifestyle in Ethiopia and therefore they needed an environment that was religious. More specifically, much of communal life in Ethiopia is segregated by gender and I felt that the all-male environment at Machon Lev would be appropriate and would enable the easiest adjustment for them,” Rabbi Ron says.

He continues, “They also needed a smaller campus, not a sprawling space that would be too overwhelming for them. Finally, I was very impressed with the yeshiva aspect at JCT, that the students receive personal attention. This was particularly important because

Itai and Shachar were thrown into Talmud and other subjects which were completely new for them.”

Dedicated to promoting socioeconomic mobility as a central aspect of the college’s mission, JCT was one of the first Israeli institutions of higher education to offer specialized programs for the Ethiopian community in the fields of science and engineering. This is just another example of JCT’s “strong commitment to the wellbeing of the Ethiopian immigrant community,” Rabbi Ron says.

Rabbi Ron emphasizes the role that JCT supporters from Israel, the U.S., Canada and around the world play in enabling students like Itai and Shachar to turn their dreams into a reality.

“Students coming from Ethiopia could not make this journey without access to basic necessities like clothing, personal hygiene products, books for classes once they arrive on campus and much more — and those needs are met directly through the support of our donors,” Ron says.

JCT empowers 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.

To date, over 180 students have graduated from JCT’s Reuven Surkis Program for Students from the Ethiopian Community and more than 50 percent have gone on to pursue graduate studies. Ninety-five percent of the College’s Ethiopian alumni are employed in a range of professions in their fields.

“Ethiopians’ journey from persecution and poverty in their native country to the game-changing benefits of higher education in their new home shows that Israel is truly a land of opportunity,” says Rabbi Ron, “and JCT is proud to help build the Jewish state’s character in this way.”

Behavioral neuroscience researcher paves a path to success from Jerusalem to Cambridge

There aren’t many men who cradle their young daughter in their arms while they discuss the finer points of the role that chemical compartments play in normal and aberrant decision-making. But this seems to be a typical Sunday afternoon for **Dr. Alexander Friedman**.

As a researcher at the McGovern Institute for Brain Research and the Department of Brain and Cognitive

Sciences at the Massachusetts Institute of Technology (MIT), Friedman lives and breathes big data analysis and behavioral neuroscience.

Yet Friedman has another burning passion that has driven much of his life — Torah. After immigrating to Israel from Minsk as a teenager, he fondly recalls his time at the Jerusalem College of Technology (JCT), where he learned that a love of science and God can complement each other.



Dr. Alexander Friedman with Professor Anne Graybiel of the Department of Brain and Cognitive Sciences at the Massachusetts Institute of Technology

“My family were all involved in science,” he says of those early teenage years. “Initially, I intended to continue in the medical field in Russia. But I took the psychometric exams with the hope that I would be accepted to a school in Israel. I got good scores, even though my understanding of Hebrew was not great. At the time, JCT was taking in Russian groups. Academically I was extremely well-placed, but the language barrier was a difficult challenge. But it was a very rewarding challenge. I learned Hebrew quickly and also made friends.”

Friedman also emphasizes JCT’s unique balance of Jewish studies and secular academics, a central component of the college’s mission since its founding in 1969.

“The Jewish teaching at JCT was fascinating and there were several amazing *rabbonim*. I learned how to study *Gemara* and the *Shulchan Aruch*, for example,” he says and considering that Friedman came from a traditional, but not particularly observant home in the former Soviet Union, this path to a greater connection with Judaism was a new and enlightening one.

He praises his professors at JCT for not just teaching the next generation of would-be scientists and researchers, but for helping bridge the socioeconomic gaps in Israeli society. While members of the Haredi community are gradually entering the workforce in greater numbers, Friedman applauds JCT for doing its part to accelerate

that process. In fact, JCT's Haredi graduates attain an 89 percent employment rate (including 77 percent in their field of choice), far exceeding the roughly 50 percent employment rate for Haredi men in Israel as a whole.

"Places like JCT will make Israel sustainable. These institutions can help sustainably close the gap between secular and religious students," Friedman says.

Friedman credits his academic experience at JCT with paving his path to MIT today.

"JCT was instrumental in my current success at MIT. I was expertly taught the basics of topics that I am now studying in more depth. My thesis today requires the interpretation of a massive amount of data and I owe JCT a debt of thanks for enhancing my ability to do that," he says.

Now at MIT, he works with a team on two ambitious projects. The first involves studying brain patterns and what governs decision making. The second revolves around creating computational tools for simultaneous recorded multidimensional data.

"We built a special system where we could research up to 30 animals simultaneously," he explains regarding the former project, adding that his team's work was published in the prestigious journal *Cell*.

For that project, Friedman's team attempted to prove how anxiety and stress affect decision-making. The research's everyday implications could be revolutionary. By determining how a certain brain circuit leads to abnormal decision-making, manipulating that pathway and normalizing it could help patients suffering from depression, addiction and anxiety — all factors that lead to poor decision-making.

But as far as decisions go, Friedman is quite calculating about what he chooses to do from one moment to the other. He has a full life in Boston, where in addition to his research and fatherhood, he teaches a class about Hassidic thought.

So how does he do it all?

"To be able to balance everything you need to have an understanding of what is and what is not important. One needs to have a constant focus, because there are so many things competing for our attention," he explains, with the kind of rational calmness you'd expect from a scientist. "One needs to be capable of starting and finishing a task or project. If you stop in the middle of something, it takes a lot of time and energy to get started again."

Schachter scholarship 2020

The Jerusalem College of Technology (JCT) has announced the second recipient of a new scholarship for its outstanding computer or engineering students.

Avital Galinsky, a 20-year old software engineering student at JCT's Tal Campus for women,

has received the 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 emigrated 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.

Avital — a Jerusalem native with nine siblings — is grateful that the scholarship eases the burden of worrying about paying full tuition and will allow her to focus on what matters most: her studies and faith.

"I'm extremely grateful for this generous gift. My sister, who is a Machon Tal graduate, benefited greatly from JCT's ability to combine both secular and religious studies and I look forward to continuing to do the same. At JCT, I will continue to pave my path towards becoming an accomplished tech professional and an observant family woman," Galinsky said. "It's even more gratifying to receive a scholarship named after a trailblazer who also believed that devotion to Torah learning and science are not mutually exclusive."



JCT International Program's 'Torah and technology' mission undeterred by pandemic

Together with its higher education counterparts in Israel and worldwide, the International Program in English at the Jerusalem College of Technology (JCT) is adapting to the unprecedented conditions of the coronavirus pandemic, taking instruction online and providing students with

other resources in order to ensure that their experience is uninterrupted.

In the following interview, Coordinator for the Men's International Program, **Gavriel Novick** discusses the program's value proposition for religiously observant and academically ambitious Jewish students from around the world, during uncertain times and more normal times alike.

What do you think makes the International Program in English at JCT so special?

"The program is unique in three ways. First, we provide the only full undergraduate degrees in business and in computer science in English in Jerusalem. Second, our program is one of the most affordable options available. Tuition is approximately \$3,800, which is a fraction of what students would be required to pay to attend many other institutions. Third, we are a Jewish religious institution. That means that all academic courses are offered in a way that does not conflict with a student's Torah-learning program. Students have off for all Jewish holidays, including Chanukah. All food on campus is strictly kosher and there are separate campuses for men and women. All of this makes the program quite unique and special."

How does the program help its students strike a balance between Torah and technology?

"All of our academic courses are offered in the afternoon to allow for Torah learning in the mornings. Our campus contains a large central Beit Midrash with a dedicated staff of rabbis and teachers to guide students in their learning, along with a Judaic library containing hundreds of books on a wide range of topics.

"Now, in response to the current social distancing standards, JCT is offering both local and international students a first-of-its-kind online Beit Midrash. It is the first virtual Torah study initiative that enables both interactive and real-time study for its participants during their free time. This is accomplished through cutting-edge technology, which cultivates interactivity by allowing participants to express themselves, ask questions and develop discussions accordingly."

What career paths do graduates of the program mainly go on to pursue after graduation?

"Graduates in computer science continue to find jobs in the fields of high-tech, web development, cyber security and computer programming. Graduates in business

administration continue to attain jobs in the fields of investment banking, marketing, start-ups, management and financial planning.

"It is also important to note that our international students emerge from campus prepared not only to embark on successful career paths, but also thriving life paths that maintain an abiding fidelity to Torah and Israel. They can replicate the essential work-life, Torah-technology balances which were modeled for them at JCT."

How has coronavirus affected the program during the last three months?

"We have transitioned to online classes to enable our students to continue their academic studies even from abroad. We have been in touch with our students to ensure that everyone has what they need to succeed in their courses, from wherever that may be. We have provided laptops for students that did not have computer access. We have been working with the Ministry of the Interior to help arrange visas as needed and we all look forward to greeting our students back on campus as soon as it is determined to be safe."



JCT has launched Israel's first Computer Science Degree in English for women combining rigorous academic learning with a strong religious environment and Torah study. The full-time, three-year academic program is fully recognized by Israel's Council of Higher Education, and all credits are transferable. "Our new international program strives to empower religious women of all backgrounds with the transformative gift of a high-quality academic degree that they can pursue while continuing to embrace a religious lifestyle," says Siona Margrett, program coordinator. According to the Council of Higher Education, women account for 58% of students who pursue a bachelor's degree in Israel, but just 29% of Israeli college students who study computer science. Yet at JCT, 53 percent of the institution's computer-science students are women, and they account for 20% of female computer-science students in all of Israel.



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