



The Sabras of Silicon Valley

How Technion alumni are making their mark in the world's startup capital

Whether lured by Stanford University, tech startups, or California sunshine and cypress trees, many Israelis living in the U.S. have made Silicon Valley a second home. By some estimates, there are upwards of 2,000 Technion alumni in Silicon Valley, many holding senior positions in engineering, operations management, and investment management. "They are making a significant impact," said **Jacques Benkoski '85**, a partner at U.S. Venture Partners (USVP) and board member of ATS – Northern California.

"As a Technion alumnus, I know firsthand the quality of the education and the community's influence on my professional life. Many of our investments at USVP have had Technion graduates in their core teams," said Benkoski. For sure, the Technion has prepared its students to be competitive on the global stage, and **Ziv Lautman '12** is one of those people.

After studying environmental engineering at the Technion, Lautman entered his air pollution technology, BreezoMeter, into the prestigious BizTEC competition — and won.

"The Technion adopted us early on, taking us on U.S. tours to connect us with prospective funders, driving the company forward," he said. In 2015, Lautman moved to San Francisco, where he successfully expanded BreezoMeter. Now he has switched gears.

Lautman has recently returned to academia as a Ph.D. candidate at Stanford University's School of Engineering & Medicine, working in the structural biology lab of fellow Technion graduate **Dr. Adam de la Zerda '05**. "My passion is to improve people's lives," Lautman said. "Health care and the environment go hand in hand. So for me, it was an obvious transition." Lautman, a self-described "scientist in mind and entrepreneur at heart," was also attracted to de la Zerda's enterprising bent. Last year, de la Zerda's company Visby Medical invented a portable test for viruses, the first FDA-approved coronavirus device for point-of-care use.

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Pictured Above / Yaron Hadad, Adi Hanuka, Ziv Lautman

Greeting from ATS

For nearly 100 years, the Technion has been home to changemakers and innovators. Even after graduation, alumni from this world-class institution don't stop pursuing the Technion's calling: to make the world better, safer, healthier. You know this better than anyone else.

The trailblazers in this edition represent just a few examples of how alumni who now call the U.S. home continue to pursue the Technion's mission, years (sometimes decades) after receiving their degree. Reading how our alumni community continues to transform the world filled me with pride. I hope you feel a sense of pride as you flip through these pages as well.

**Michael
Waxman-Lenz**
CEO





Joseph Newman



Amir Neeman

Two Generations of Technion Giving

Every so often the Technion is fortunate enough to receive support from parents, children, and even grandchildren of the same family. Since each generation has a different perspective on giving, this multigenerational approach embraces individual motivations and helps ensure continued philanthropy for years to come.

Such is the case with Technion graduates **Joseph Newman '67, M.S. '68**, and his son, **Amir Neeman MBA '02**.

Joseph Newman grew up without means and is now in the position to give back. In July 2021, he made an extremely generous contribution to the Technion as thanks for a scholarship some 50-plus years ago that set him on his way. “The Technion opened horizons for me,” said Newman. He would like his gift to do the same for others.

Newman had a difficult childhood, growing up on two kibbutzim after

his parents divorced. At age 14, he was sent to an agricultural boarding school, where he learned about work ethic but little in the way of academics. Watching a friend’s father do calculations for his job as a hydraulic engineer, he decided he too wanted to be an engineer. “But the gap between what I studied and the Technion requirements was enormous,” he recalled. “What were my chances of getting in against applicants that studied in good gymnasiums when I only milked cows?”

So while serving as a paratrooper in the Israel Defense Forces, Newman persuaded two book-learned buddies to tutor him, and was accepted into the Technion. He struggled at first but eventually finished his civil engineering degree *cum laude*. While he was accepted into graduate programs at MIT and Columbia University, the Technion brought him back with a \$10,000 scholarship. “Now I want to

help young students — that’s all.”

Newman worked for Solel Boneh, one of Israel’s oldest and largest construction and civil engineering companies, in Israel and Nigeria. Then, at age 57, he moved to the U.S. and started a new career in real estate. Today, Newman lives in Highland Beach, Florida, and heads the real estate development firm Phoenix Group.

Amir Neeman’s support, which includes serving as vice president of alumni relations on the American Technion Society (ATS) – Washington, D.C. Board, is driven by a very different life story.

Born in Israel, he spent his early childhood in Nigeria, then lived in Israel from the age of 10. He earned his Technion MBA in a combined business/industrial engineering program. He served in the Israeli Defense Special Forces, specializing in counter

“People are interested in the ‘Startup Nation,’ and the Technion exemplifies that spirit. That’s something very appealing to me and many Americans.”

– Amir Neeman MBA '02

improvised explosive devices and bomb disposal, then worked for over a decade at the Israeli Security Agency, a.k.a. the Shin Bet, helping governments and companies monitor security threats and develop and implement technology solutions to mitigate threats. After 9/11, he moved to the U.S., employing his expertise in several security and technology firms supporting U.S. national security. In 2015, he launched ANC Group, LLC, a management consultancy that provides homeland system engineering-focused security services.

Neeman’s dual U.S.-Israeli citizenship, American wife, and three children who are also dual citizens have all shaped his career and philanthropy. “My dual identity is who I am,” he said. “I’m keenly interested in strengthening the bridge between Israel and Jews in the U.S., as I’ve lived that bridge and it’s a huge part of my success.”

To that end, Neeman is a board member in both the Israeli-American Council and his local ATS Leadership Council. “We live in a time when the connection between American Jews and Israel is not a given,” he said. “But people are interested in the ‘Startup Nation,’ and the Technion exemplifies that spirit. That’s something very appealing to me and many Americans.”

Launching a Startup to Help You Get a Good Night’s Sleep

Amir Reuveny '05, Runway Startup Postdoc at Jacobs Technion–Cornell Institute '19

In early 2017, Amir Reuveny became a postdoctoral fellow in the Jacobs Institute’s Runway Program at Cornell Tech, which is aimed at nourishing budding entrepreneurs. “I wanted to make something impactful that can help people,” he said. “This was the right program at the right time and in the right place.” In July 2021, Reuveny launched Wesper, a wireless at-home sleep test started at Runway that diagnoses, treats, and monitors sleep problems over time. The first device of its kind, Wesper innovation combines the ease of sleep wearables with the accuracy of a sleep lab.

“Developing this kind of technology takes knowledge, training, and time,” Reuveny said. “Runway helped me figure out the right path and attain funding, so I could build the dream team I have now.”

After completing his Technion bachelor’s degree, Reuveny served in the Israel Defense Forces’ elite Intelligence Unit 8200 during a period of conflicts in Lebanon and Gaza. He then earned his doctorate at the University of Tokyo, and he currently lives in NYC with his wife and his son.



From Conquering the Business World To Eradicating Diabetes



Serial entrepreneur **Avner Schneur '82** already had several businesses under his belt, including a successful software analytics company started with his wife, **Rina Schneur '86**, when they turned their enterprising mindset toward medical research. They set an ambitious goal: a cure for type 2 diabetes, a disorder that is difficult to treat effectively in the long term and affects so many. “We wanted to have a significant impact on humanity,” said Avner.

While most philanthropists invest in ongoing research, the Schneurs adopted an entrepreneurial approach. They searched for a scientist who shared their dream of eliminating the disease rather than simply managing it. That person was Technion Professor Shulamit Levenberg, a renowned expert in tissue engineering. In 2014, the Rina and Avner Schneur Center for Diabetes Research was established with the goal of engineering new technologies from scratch to battle diabetes.

“It was just an idea, a premise,” said Rina. “We put money into research that didn’t exist.” The financial risks were huge.

Avner added, “In my business, I invest in what I know extremely well. Here we went into an area we didn’t understand well because we wanted to have an impact. Everybody told us we were crazy.”

Today, however, Prof. Levenberg and her team have successfully demonstrated their work in preclinical trials, and a U.S. patent application is under evaluation. The next step is to implement the technology in clinical trials.

The Schneurs met at the Technion doing Israeli folk dancing. Avner studied industrial engineering, Rina civil engineering and applied mathematics. Both moved to Boston in 1986: Avner to manage operations for Elscint, one of Israel’s top medical imaging companies, while Rina entered a Ph.D. program at MIT in operations research and civil engineering.

In 1990, they married and lived briefly in Westchester, New York. As chief technology officer of Astea International, Avner helped lead the software company to an IPO — the first of many successful exits in his career. Rina conducted postdoctoral research at IBM’s Watson Research Center and later joined PTCG/Sabre Technologies, leading advanced analytics teams. In 1996, Avner co-founded the first electronic medical record software for physicians using wireless pen-based technology.

Then it was time to start something of their own. In late 1999, Avner and Rina launched Emptoris, a contract management software startup that transformed the way companies procure goods and services by utilizing mathematical optimization technology. Their enterprise did so well, it was included on the 2011 *Inc.* 5000 list of fastest-growing private companies.

Avner led Emptoris’ impressive growth, which ended with IBM acquiring the company. In late 2011 Avner joined the document management company GRM as president and CEO. Under his leadership, GRM has expanded its digital offerings and extended operations internationally. Avner is also founder and CEO of Kormeli LLC, an investment group named after daughters Koreen and Carmel, which invests in early-stage tech companies. Kormeli has stakes in 35 companies, including two in Israel.

Rina joined Verizon in 2004 and served as the director of business analytics until 2017. In 2011, she was also named president of INFORMS, the world’s largest operations research and analytics professional association.

Today, Rina is dedicating her time and energy to philanthropic civic and political causes. “The Technion taught me

how to study, how to learn, how to put theories into practice. And that was a large part of my career,” she said.

Through the years, Rina and Avner have both made time for their alma mater. Avner is a former chair of ATS — Boston’s alumni program. Together, they have hosted ATS events and have contributed generously to fundraising campaigns. But they have always wanted to do even more. “It’s nice to have your name on a building but it doesn’t help humanity,” Avner said.

“Our goal was to help humanity, focusing on finding a cure for diabetes. We met with researchers at prominent institutes, but everybody wanted our donation to fund an existing project.” So when Rina happened upon a Technion newsletter mentioning Prof.

Levenberg’s interest in diabetes, the couple asked former President Peretz Lavie to arrange a Skype meeting with the professor. Three months passed without a word. Then Prof. Levenberg, the Stanley and Sylvia Shirvan Chair in Cancer and Life Sciences, came back with a plan. “She tailored this whole effort to the research areas we wanted,” said Rina. “That’s how it started.”

In healthy people, the pancreas produces the hormone insulin to help cells convert glucose, or simple sugars, into energy. But in diabetics, the body either does not produce enough insulin or cells are insulin-resistant, leading to an accumulation of glucose in the blood. Complications from diabetes can lead to heart disease and stroke, kidney problems, eye damage, and other

conditions. Prof. Levenberg, in collaboration with the Rappaport Faculty of Medicine, aims to overcome insulin resistance by engineering patients’ muscle cell tissue to become sugar-hungry, thus capable of absorbing high levels of glucose.

The team has shown in preclinical trials that the engineered constructs, when implanted into patients, would help restore blood glucose levels to normal, providing a novel type of prevention, or even a potential cure for diabetes.

“Almost every fifth family in the U.S. has one diabetic member. This is a project with a major health impact, and it has now been validated,” said Avner. “Shulamit is extremely modest. She said it is going well; we can’t have better satisfaction than that.”

Iris Grossman BS & Ph.D. Medicine / Pharmacogenetics '04

Technion’s Ties to Industry Helped Her Become a Biotech Leader

Iris Grossman always thought she’d become a neurologist, but as a Ph.D. candidate at the Technion, she worked closely with Teva Pharmaceuticals and fell in love with personalized medicine. Her expertise in science and analytics has opened doors to high-level positions and consultancies at Teva, GlaxoSmithKline, Eli Lilly, and Takeda, as well as chief scientific officer roles at CAMP4 Therapeutics and Amide Technologies. Currently, she is chief strategy officer at the Israeli-British Eleven Therapeutics.

Dr. Grossman, a modern Orthodox mother of four who currently resides in Boston, is part of a multigenerational Technion legacy as her mother, father, brother, and husband,



Aharon Grossman '04, are all alumni. “It’s a joke in the family that our children can major in whatever they want, as long as they go to the Technion,” she said.

“It is completely awe-inspiring to see the impact Technion alumni have made in every aspect of our lives,” Dr. Grossman said. “There are many wonderful universities here, but they are not as innovative or interdisciplinary as the Technion. It is our responsibility as alumni to nurture and invest in that creative approach.”

Pictured Above / Iris Grossman with her children (from l to r) Carmel, Eden, Harel, and Avri, and husband, Aharon

Your Best Business Card: Your Talent

Photonics Pioneer Reflects on How Forgoing the “Boys’ Club” Led Her to Success

Q&A

Professor Michal Lipson '92, M.S. '95, Ph.D. '98,

is the Eugene Higgins Professor of Electrical Engineering and Professor of Applied Physics at Columbia University, president-elect of the Optical Society, a 2010 MacArthur Fellow, and a pioneer in the field of nanophotonics. More than 1,000 papers published yearly involve devices and circuits based on her research. The Technion is family, as her father and father-in-law were both professors at the university.

In 2021, you became the first woman to receive the John Tyndall Award for outstanding contributions to optical-fiber technology. What inspired you to pursue a discipline dominated by men?

M.L. Funny enough, gender discrimination played a role. When I started my career in 2000, the area of silicon nanophotonics, optics printed on chips, didn't exist. I pioneered this. There were many types of semiconductors that people were working with, such as GaAs (gallium arsenide). But they were difficult to grow. So if I wanted to use these materials as the basis for optics, I felt it would require me to be “in the club.” And being a young woman, I'd never be in the club.



Professor Michal Lipson

So silicon was easier to work with. I could do it myself. It was easy to grow and easy to buy. Silicon was used then for electronics, but nobody else was using it to transmit light. So I gravitated to silicon nanophotonics as I felt I had the best chance to succeed because I was self-sufficient.

For the uninitiated, what is silicon photonics and why is it important?

Anything that uses electronics, from toys at McDonald's to your Mac computer, is based on silicon chips. In photonics, we use the same material but with circuits of light traveling through the chips.

Silicon chips in your laptop are very complicated. They have one processor on the right end of the chip, another processor, or computing mode, on the left, and they need to talk to each other. So a wire goes across the chip to connect them, but these wires heat up your computer and are limited to how much information they can transmit. They are being replaced by nanophotonic fibers, just one-thousandth of a hair in width, that can carry an enormous amount of

information by light, quickly, without getting hot.

In the company that I co-founded, Voyant Photonics, we are applying nanophotonic and LiDAR (light detection and ranging) technology to develop autonomous vehicles. The technologies can also be applied to medical and environmental sensors, and are already used today in data processing centers.

What advice would you give budding female electrical engineers?

I'm often asked, “How do you wine and dine? How do you make connections?” I always recommend staying away from networking, at least in the beginning. We're in applied physics and engineering, so success can be quantified without discussion. It's not “she's good or not good,” but “she demonstrated the bandwidth in X number of bits per second.” If you are really good you don't need to network. You have your number and everybody knows how you got it. The work will speak for itself. As a woman, it's easier to rely on these metrics of success than on networking.

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Lautman and de la Zerda are researching the non-invasive imaging modality optical coherence tomography (OCT), which offers high-resolution imaging at the cellular level. The nascent technology is currently used in ophthalmology. Lautman and his team are advancing it to study various brain diseases including glioblastoma, an aggressive brain cancer.

Lautman lives on the Stanford campus with his wife and two children and is active on the ATS – Silicon Valley board. “I was lucky to receive a full, four-year scholarship at Technion that enabled me to immerse myself in study, and it had an enormously positive effect on my career,” he said. “So I wanted to contribute back.” He attends ATS events, where he has grown his circle of Technion alumni.

ATS – Silicon Valley: A Haven for Alumni

“I was a new mom, had a new job, and was in a new country,” **Adi Hanuka '13, Ph.D. '18, postdoc '19** recalled. “It wasn't easy.” Hanuka left Israel for Silicon Valley in February 2019 for a post as an AI research scientist at Stanford Linear Accelerator Center (SLAC), one of 17 U.S. Department of Energy national labs. The local ATS provided instant community, easing the challenges of relocation, and even outfitting her baby (the first of two) in a Technion-logoed onesie.

Like Lautman, Hanuka tapped into her entrepreneurial side early on. As a Technion Ph.D. student, Hanuka invented an eyelid motion monitor that attaches to ordinary eyeglasses to diagnose eye and neurological diseases. She also earned a place on *Forbes Israel's* 30 Under 30 list of promising young scientists, for her work advancing the accelerator-on-a-chip. That

technology shrinks enormous particle accelerators into a portable device that is affordable and accessible for a variety of uses, including medical radiation, security, and the semiconductor industry.

After one year of postdoctoral research at the Technion, Hanuka landed a second postdoc at SLAC. The world-renowned particle physics laboratory had just received funding to research machine learning in particle accelerators. “It was an interesting opportunity to explore the fascinating interplay between machine learning and particle accelerator physics,” she said. Not only was she successful with the task at hand, but she has since published on three different projects that have pioneered new ground in the field. The latest research pairs machine learning with physics to optimize particle accelerator performance.

Now Hanuka is on the move again. In June, she joined Eikon Therapeutics, a drug discovery company co-founded by the Nobel Prize-winning physicist Eric Betzig. “Eikon was in a unique position to take advantage of the methods we developed for particle accelerators, and apply them to drug discovery,” she said.

“Some of the most talented people I've met here are Technion alumni,” said **Yaron Hadad '06**, who knew Lautman from the Technion and met Hanuka at a barbecue this past summer.

Hadad got his first break in the army. He was recruited for intelligence, but an administrative error landed him in the equipment unit working as a truck driver. Determined to clear up such inefficiencies, Hadad built a computer system to match incoming soldiers with their optimal assignment. His system saved the Israel Defense Forces

millions of dollars, lowered dropout rates by 50%, earned Hadad the Chief of Staff Award, and likely helped get him into the Technion.

Hadad eventually graduated *cum laude* in mathematics and physics, but the Technion was tough. “It was insanely rigorous and competitive. The first year was a complete shock,” he recalled. In 2011, while doing his Ph.D. at the University of Arizona, he co-founded digital health startup Nutrino. Using state-of-the-art data science to analyze an individual's food, sleep, and activity patterns, Nutrino creates a personalized assessment, or FoodPrint — namely what foods are best for an individual.

In 2016, he moved to Silicon Valley to grow his company. Two years later it was acquired by the global medical technology company Medtronic to augment its diabetes capabilities. “Joining Medtronic gave us the opportunity to take what we've been dreaming about and bring it to real scale,” said Hadad, vice president of AI and data science of the diabetes business at Medtronic.

He is active on the local ATS board, where he has made close friends of all ages. “Alumni in the U.S. buy T-shirts and signs for their cars. Israel doesn't have that culture. This is my way of giving back, and I love it,” said Hadad, who lives with his wife and toddler-aged son.

Hadad credits his alma mater for providing the building blocks of his success. “I could say the Technion taught me how to do calculus, solve differential equations, and how physics works,” he said. “But I don't think that was most important. The greatest lesson I learned at the Technion was how to learn. I learned how to learn by myself. That allows me to better understand and do my work.”



A LASTING LEGACY

SPECIAL WAYS YOU CAN SUPPORT THE TECHNION TODAY

Including the American Technion Society in your will or living trust, or as a beneficiary of your retirement plan is a way for you to help Technion's future. These promises of support help educate the next generation of Technion leaders and innovators to discover solutions and develop new technologies that will improve the human experience and change the world.

For more information on how best to create your bequest and become a member of the Genesis Circle, contact Judy Sager, Executive Director of Planned Giving, at judy@ats.org, or call 781-531-0441.

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