

# TAU

Tel Aviv University Review | 2019

**Alumni with  
Big Ideas**



**TEL AVIV UNIVERSITY**  
Pursuing the Unknown



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Tel Aviv University Review | 2019

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Dear Friends,

Another year of Big Ideas took a thrilling turn when, just as *TAU Review* went to press, news broke of the first 3D printed heart engineered from human tissue in the laboratory of Prof. Tal Dvir (Life Sciences), Head of the Sagol Center of Regenerative Biotechnology and a member of the Center for Nanoscience and Nanotechnology. This global breakthrough opens the possibility of a safer, more reliable source for organ transplants.

Two weeks prior to the 3D heart story, the entire world followed Israel's SpaceIL moon mission – brainchild of two TAU alumni, Yonatan Winetraub and Yariv Bash, together with third co-founder Kfir Damari. Our wonderful TAU alumni are proving again and again that they are committed to Israel's scientific, economic and cultural advancement; in this issue you'll have a chance to meet a few more graduates who are making an outsized impact on society. Other stories range from TAU's inroads into medical AI, to our Initiative for Sustainable Development in India and Africa, to a new model of academic-industrial partnership through TAU's new Samueli-Broadcom building.

TAU's diverse achievements inspire great pride, and it has been one of the pleasures of my 10-year tenure as President to introduce each issue of *TAU Review* to our circle of friends and supporters. As I complete my term of office, I wish to bid farewell to our readership and to thank you for joining me on a rewarding journey. May we all continue to feel joy and pride in the Next Big Ideas coming out of TAU and Israel.

Warm regards,

Professor Joseph Klafter  
Outgoing President

## Calling for a New Social Order in Education



A planned “Interdisciplinary Center for Improvement of Education” at TAU is answering Israel President Reuven Rivlin’s call for a new social order that fosters equality and integration among the secular Jewish, national religious, Ultra-Orthodox and Arab sectors.

Without adequate education, the doors to academic and career success can be closed for pupils on the socio-economic and geographical periphery. To redress this, Prof. Audrey Addi-Racah, in collaboration with Profs. Dan Gibton, Moshe Israelashvili,

David Mioduser and Fadia Nasser, all of TAU’s Jaime and Joan Constantiner School of Education, aim to narrow social and academic gaps through large-scale research. The team conducts ongoing interdisciplinary collaboration with the Ministry of Education and other stakeholders in the education sector.

With the support of Circle of Service (COS) and the Davidson Foundation, the first phase of study has been completed. Findings reveal that the secular Jewish education system produces

the highest number of pupils taking advanced math and eligible for high-school matriculation certificates, followed by the national religious population and then Arab students. The Ultra-Orthodox, who are gradually integrating the national core-curriculum of math and English into their schools, remain the lowest performers.

These results will serve as a benchmark for planning interventions and policies.



## Warding Off Evil Spirits One Amulet at a Time



# The Jedis of Messaging Apps

Apps like WhatsApp and Telegram have changed the way we communicate. We can affordably reach nearly anyone, anywhere, at any time thanks in part to the behind-the-scenes tree codes, a class of error-correcting code (ECC) that ensures the accuracy of transmitted messages. “Tree codes are pivotal to digital messages,” says Dr. Gil Cohen of TAU’s Blavatnik School of Computer Science. But the requirements are becoming increasingly complex, creating a demand for new algorithms.

Now, Dr. Cohen and his co-researchers at Carnegie Mellon University and California Institute of Technology have made the biggest breakthrough in ECC tree codes since the 1990s. Their new algorithm removes the unnecessary repetitions from the prior code, which will improve upon the reliability and speed of messages. Imagine the code as an ever-growing pyramid of Jedi knights wielding colorful lightsabers, ready to defend your data.

Although algorithms like this have their roots in the military and government, they are vital to all of us in the digital age. The research builds upon probability theory, perhaps best known for game of chance predictions like casino games, and algebraic structures to help computer engineers predict the seemingly unpredictable patterns in information transmission. “Now we have a better understanding of the theoretical core of interactive message encoding. Hopefully, this will equip us to handle the complexities of the evolving technology,” says Dr. Cohen.



Judaism is no stranger to protective amulets and talismans, despite their resemblance to forbidden “idolatry.” From the mezuzah containing biblical scriptures to Kabbalistic jewelry engraved with mystical Hebrew letters, any number of objects are said to possess protective and healing properties. Thus, it should come as no surprise that Prof. Yuval Gadot of TAU’s Lester and Sally Entin Faculty of Humanities and Dr. Yiftah Shalev of the Israel Antiquities Authority have uncovered a fragment of an ancient clay talisman in their joint excavation in Jerusalem’s City of David National Park in Jerusalem. Still, find-

ing such a vessel so close to the Temple mount is puzzling and intriguing as it exposes popular beliefs that are not always mentioned in the Biblical text.

The jar decoration they found, depicting the Egyptian deity, Bes, can be traced to the Persian period (4<sup>th</sup>–5<sup>th</sup> century BCE), the time of the Second Temple. “Pottery from this period was exposed in the past in the City of David site, but this is the first time that such a vessel has been found in archaeological excavations in Jerusalem or anywhere in the Judean highlands,” say Prof. Gadot and Dr. Shalev. Although Bes originated from the Nile region, this type of jar was

a common item in Phoenician households that settled in the Mediterranean region. Similar vessels have been discovered in other parts of Israel, Shushan, Persia, Persepolis, and other cities along the ancient Persian trade route.

The round, cartoonish eyes, bulbous nose, and other circular features on the “Bes-Vessel” fragment are believed to bring women and children joy and to ward off evil spirits. Having his image at home ensured good luck and protection. This finding reveals that no matter how secular or religious society becomes, superstition is ingrained in the human psyche and culture.

One of the most complex tasks humans and animals have to face is social behavior. Even a normally functioning person can struggle to navigate social norms. However, someone with a developmental disability such as autism spectrum disorder or Williams syndrome can experience lifelong behavioral challenges that can impact his or her education, human relationships, and ability to live independently.

Now, Dr. Boaz Barak of TAU's School of Psychological Sciences and

"If you know what's wrong, you know what to fix," he explains. Dr. Barak and his research team have made a promising discovery of a gene deletion associated with the neurodevelopmental disorder Williams syndrome. His findings reveal that when a gene called *Gtf2i* is missing from neurons, the protective myelin layer around them becomes abnormally thin. Like electrical wires, neurons need the protective sheath to transmit electrical impulses properly. When the myelin is too thin, the brain misfires signals between the different brain regions responsible for

social interactions and impulse control.

Dr. Barak believes that an existing FDA-

## Locating the Brain's Social Cues

Sagol School of Neuroscience hopes to stop behavioral abnormalities in their tracks. Since his postdoctoral research in neurogenetics at MIT, he is identifying the neurobiological mechanisms of developmental disorders and is studying how specific genes and specific areas of the brain can affect social behavior and anxiety.

approved drug for multiple sclerosis (MS) that enhances myelin performance could be repurposed to treat the disruptive behaviors associated with Williams syndrome and other myelin-related disorders. "Now, with a better understanding of neuronal features of Williams syndrome, drugs on the market can potentially improve patients' lives," says Barak.



According to the United Nations, plastic waste accounts for up to 90 percent of all the pollutants in our oceans, yet there are few comparable, environmentally friendly alternatives to the material. Now, a TAU team of researchers has developed a process that produces alternative polymers for "plastic" from marine microorganisms that feed on seaweed. The new material is biodegradable and produces zero toxic waste.

The finding was made by Dr. Alex Golberg of TAU's Porter School of Environment and Earth Sciences and Prof. Michael Gozin



## Honey, should we vaccinate the kids against pneumonia?

Are you on the fence on whether the pneumonia vaccine works or not? Pneumococcal and other common winter infections may be merely an inconvenience for healthy adults, but they can lead to life-threatening complications for small children and others with compromised immune systems. Prof. Galia Grisaru-Soen of TAU's

Sackler Faculty of Medicine, Head of the Pediatric Infectious Diseases Unit at the Tel Aviv Sourasky Medical Center, wants you to know "the vaccine works."

Following Food and Drug Administration (FDA) licensing in the early 2000s, routine pneumococcal conjugate vaccination (PCV) was introduced to the Israeli national vaccina-



# Ridding the Oceans of Plastic Waste

of the Raymond and Beverly Sackler School of Chemistry. It was recently published in the journal *Bioresource Technology*.

The TAU team harnessed microscopic sea creatures that eat seaweed to produce a polymer called polyhydroxyalkanoate (PHA) which can be used in plastics. “There are already factories that produce this type of biopolymer in commercial quantities, but they are based on agricultural land and fresh water,” says Golberg. “Our process will enable countries with a shortage of water, such as Israel, India and China, to switch from petroleum-derived plastics to biodegradable plastic produced completely in seawater.”

According to Golberg, the new study could revolutionize the world’s efforts to clean the oceans without affecting arable land or wasting drinking water. “We have proven that it is possible to produce biopolymers completely based on marine resources in a process that is friendly both to the marine environment and to its residents,” says Golberg.

The research was partially funded by the TAU-Triangle Regional R&D Center in Kfar Kara under the academic auspices of TAU and by the Israeli Ministry of Energy and Infrastructure.

tion program for infants in 2009. Prof. Grisar-Soen led a team of researchers to investigate the efficacy of PCVs.

They evaluated the records from three Israeli children’s hospitals in Tel Aviv and Jerusalem and found a marked decrease in pneumococcal diseases such as pneumonia, bacteremia, and meningitis. “Hospitalizations for bacterial infections decreased by 22% after these vaccines were routinely administered to infants,” Prof. Grisar-Soen reported. Moreover, the overall risk of infection was reduced by 62%, on par with the United States’ post-vaccination results.

Prof. Grisar-Soen also found that the vaccines protect against antibiotic-resistant pneumococci, but there will be a need for a new generation of vaccines before long because new strains of pneumococci are emerging.

“If you decide not to vaccinate your children, you’re not only harming them, you’re harming other kids as well,” says Prof. Grisar-Soen. “Being a part of society means also taking responsibility for the health and welfare of other children who for medical reasons may not be able to be vaccinated.”

## Next Up: Bidding for Parking?

**F**inding parking might be one of the modern world’s most enduring annoyances. Now, TAU’s Prof. Itzhak Benenson of the Porter School of Environment and Earth Sciences at TAU’s Raymond and Beverly Sackler Faculty of Exact Sciences, and doctoral student, Nir Fulman, believe they have found a solution that adjusts parking prices to demand. In a parking area that is fully occupied, the prices will rise and



prevent drivers from coming there for just desperate searching. Drivers will know about the price in the area in advance via a smartphone and can choose to pay or avoid the areas where vacant spots are scarce and prices are high. The new study, recently published in *IEEE Intelligent Transportation Magazine*, suggests that this adaptive parking pricing could help combat urban traffic congestion.

*Tel Aviv University Review* presents some of the best and brightest of its alumni community who are pushing the envelope in neuroscience, social work, medicine, banking and entertainment – while looking to give a leg-up to the next generation along the way.

### At the helm of “radical science”

As an aspiring young painter, Oded Rechavi, who graduated with a PhD in biology from TAU, moved to Paris after his service in the IDF to discover, like many other would-be young painters, that he didn't want to be an artist after all. The stint abroad brought Rechavi back home to Tel Aviv to claim his part in the family business: science (his parents are both medical doctors and scientists and his brothers are MD PhDs). In his “laboratory for radical science,” manned by a team of some twenty researchers, Prof. Rechavi is plumbing the depths of human heredity mechanisms and expanding on a once-revolutionary idea that DNA only tells part of the story.

“I'm very interested to see how memories are encoded on a molecular level,” a topic that for years was seen as strictly non-scientific, said Prof. Rechavi, who is a graduate of TAU's Adi Lautman Multidisciplinary Program for Outstanding Students.

Today an associate professor at TAU's George S. Wise Faculty of Life Sciences and the Sagol School of Neuroscience, Rechavi is recipient of the 2018 Blavatnik Award for Young Scientists and the 2019 Kadar Family Award for Outstanding Research and is funded by the Adelis Foundation and Schmidt Futures. He remembers the days when his research raised eyebrows; it tapped into the same questions that, for centuries, had occupied the world's greatest philosophers regarding the origins of the human condition. The questions included both the esoteric, like memories and character traits, and the physical, like diabetes or other medical ailments. Fundamentally, Prof. Rechavi



# TAU Alumni

Tel Aviv University graduates are applying their **TAU acquired knowledge** toward forging **new frontiers** in traditional and emerging professions – in Israel and abroad. But how, exactly, did they get to the **top of their game**? And what can their stories tell the students of tomorrow?





Prof. Oded Rechavi  
and his lab team

# Make Waves

pondered: Are individuals born *tabula rasa*, or are our lives and personalities molded before we even enter the world?

The ethics and feasibility of such an ambitious line of enquiry have long remained outside of the purview of scientific research. But during his post-doc research at Columbia University from 2010 to 2012, Prof. Rechavi sought an empirical approach to deciphering whether hereditary memories could, in fact, be proven on a molecular level. He succeeded in showing that simple worms infected with viruses generate heritable immunity in order to protect their progeny. In fact, the type of worms he studied were found to be completely resistant to viruses.

## PUSHING THE LIMITS, POST-GRAD

Tel Aviv University's 192,000 alumni are pioneers in the arts, business, science, tech and academic sectors in Israel. Many of them credit their path to success to their time spent as students and researchers at Tel Aviv University, the largest and most influential higher learning institution in the country and, in recent years, ranked among the top 100 Global Innovation Universities.

Since its founding in 2015 under the auspices of President Prof. Joseph Klafter, the Tel Aviv University Alumni Organization has worked to strengthen ties among the community and today is in contact with around 70,000 alumni. It has recruited more than 220 for its growing mentor network. "We see our alumni as Tel Aviv University ambassadors in Israel and abroad," said Head of the Alumni Organization Sigalit Ben Hayoun. "By consolidating the connections between our alumni and the institution, we will form a united force able to influence and contribute to society as a whole. Recently, the Alumni Organization launched a global fundraising campaign with the goal of raising 300 student scholarships. So far, 78 have been raised."



Prof. Amir Yaron

## TAU ALUMNUS APPOINTED GOVERNOR OF THE BANK OF ISRAEL

Prof. Amir Yaron, an alumnus of Tel Aviv University, started his five-year term as the Governor of the Bank of Israel in December 2018. Born and raised in Israel, Prof. Yaron received his BA and MA in economics from TAU. He earned his PhD from the University of Chicago and spent 25 years abroad before returning to Israel to fill his new role. Prof. Yaron is an expert in macro-finance, asset pricing and applied time series econometrics.

After returning to Tel Aviv University in 2012 to establish his own lab, Prof. Rechavi discovered that his most valuable clues came from recent history. He found a somewhat obscure chapter of the Second World War known as the “hunger winter,” in which the Nazi regime starved large populations from the Netherlands from 1944 to 1945. As it turned out, large-scale studies showed that descendants of “hunger winter” victims passed on trauma-associated traits that made their descendants more susceptible to conditions like diabetes or schizophrenia. With the historical indicator established, Prof. Rechavi sought to translate the idea to the molecular level, using tiny, simple organisms to test the theory that memories of physical and emotional trauma could, in fact, be transmitted genetically.

“We made it clear that we were studying this idea rigorously and we got to a mechanistic understanding of the process,” he recalled of the early phase of his research, which almost immediately generated buzz and excitement among the scientific community. Prof. Rechavi observed worms as they gave birth to hundreds of new offspring every three days. Their traits were passed down through RNA, DNA’s smaller, lesser-known molecular relative that also, as we now know, seems to be responsible for some of the most complex processes within the human cell.

Prof. Rechavi predicts that the findings – still under examination at TAU as to their human relevance – will have massive, wide-reaching implications. As the topic of molecular inheritance, which he helped to advance, ramps up, he hopes that he and his colleagues are laying the groundwork for new understanding of and new medicines for diseases like cancer, Alzheimer’s, and Parkinson’s.

Prof. Rechavi credits his years in academia – which allowed him to make mistakes, U-turns, and revelations – for leading him to deepen and hone his promising research. During his PhD at

TAU, he recalls his mentor Prof. Yoel Kloog telling him to “be bold and try everything,” a value he today tries to impart to young mentees in the field.

“You make mistakes and failures anyway. It only increases your chances of finding something new. Every time you do an experiment, in the tube that you use there are ten Nobel prizes that no one has discovered yet,” he said.

He’s optimistic, too, that multidisciplinary developments in his and other fields are becoming more possible as academia evolves, especially in recent years, with calls for more diversity in old-school institutions gaining momentum. Prof. Rechavi has hosted, along with other Israeli and German researchers, “DIY,” youth-oriented science conferences in which students are invited to informal meetings for collective brainstorming and collaborative activities. The idea is to get feedback on unpublished theories while encouraging a vibrant scientific community.

“The science departments were once very male-dominated, hierarchical and formal. But I think many of the old ways that should have changed, have changed,” Rechavi explained. “I think the culture of science is changing for the better.”

### Role model for inclusion

Talia Bejerano, who graduated from TAU with an MSc in business management, has also taken up the torch to enact social change, but in the somewhat more obvious field of social work. It all started in 2009 when at the age of 26, for the first time, Bejerano met a “disabled” person. The 12-year-old boy was paralyzed from head to toe and sat in a wheelchair holding an electric keyboard for communication. She introduced herself but wasn’t sure the boy understood her. He responded simply, through his electronic board: “Don’t pity us here.”

Bejerano remembers it as a formative experience. “When I was in youth move-



ments, everyone had been the same,” she recalled. Suddenly, she realized how little she knew about children with disabilities, having never encountered them in any of her academic, social or public circles. Years later, she came to lead an organization that is also very much a community, “Krembo Wings,” which focuses on children with conditions ranging from autism to cerebral palsy and Downs syndrome. The set-up is simple: “abled” volunteers socialize, play, and hang out with their “disabled” peers. The result, says Bejerano, is a “win-win” for both groups.



Talia Bejerano

A decade after that first encounter, Krembo Wings, where Bejerano currently serves as CEO, is recognized as among the world’s most innovative approaches to special-needs education, with 70 branches throughout Israel serving more than 6,000 members from the age of 7 to 22. It serves religious, secular, Jewish, Arab, new immigrant, and the many other subgroups that make up Israel’s diverse tapestry, all of whom, Bejerano believes, are part of her ambitious vision for authentic inclusivity in Israeli society.

From her teenage years, Bejerano was drawn to volunteering. “Being with people who are different from you allows you to think more creatively, to get outside of your own narrow space,” she explained. For years, she was disappointed by traditional charities, which

she said often operated, both physically and emotionally, in a “place that’s sad or miserable.” She was disturbed by what she felt was a self-aggrandizing attitude among the normative volunteers: that they were there to help the less fortunate.

While pursuing a master’s degree in business management at TAU, she contemplated ways to replace that paradigm with a space through which she could cultivate mutually-beneficial relationships between mentors and mentees.

At Krembo Wings, she found a surprising opportunity, ripe for the startup touch, where she could apply new, administrative skills and methods she had acquired as a university student. With a business-oriented intuition and a belief in effecting real social change through incremental steps, she aimed to make Krembo Wings an organization for children by children, led by mostly teenage volunteers who could receive on-the-job training.

Initially, some parents were made anxious by the idea of sending their disabled kids to be with young, unqualified caregivers. But, their fears quickly faded as the model proved its worth. At Krembo Wings, the children’s main resource was their friendship, Bejerano found. They were able to find creative workarounds to any communicative or physical obstacles. “If one of the kids is physically unable to run,” she boasted, “a volunteer will run for them.”

A proud mother of three, Bejerano believes that all children need to be surrounded by diversity. Children who participate in Krembo Wings return to their families as ambassadors of tolerance, correcting their parents or friends if they, for example, use the word “retarded” derogatively.

With plans to expand further into all sectors in Israel, Bejerano sees the organization not as a charity, but as a business opportunity that is prime for international export. Since being named a Special Advisor to the United

Nations’ Economic and Social Council, Bejerano has begun to formulate plans for world-wide courses and training workshops in inclusive education, to be provided by the Israeli team.

“This new generation has already accomplished their revolution. They understand that it’s all about making things accessible in a human way, not just through a physical ramp, but through a change in thinking,” she said. “Ten years from today, we’ll see the graduates from this program spreading that acceptance. It’s going to be huge.”

### Breaking the glass ceiling

Dr. Osnat Levtzion-Korach, who holds an MA in health administration from TAU, has served as the director of the Shamir (Assaf Harofeh) Medical Center in central Israel since 2017. She is the first Israeli woman to ever be appointed to run a public hospital, in this case, one of the largest and busiest hospitals in Israel.



Dr. Osnat Levtzion-Korach

In 2017, Deputy Minister of Health Rabbi Yakov Litzman asked Levtzion-Korach to head the hospital, with the aim of leading a significant change in the national healthcare system. “It was a once in a generation opportunity – a great honor and privilege as well as a huge responsibility,” says Levtzion-Korach. “It’s a male world out there,” she says.



When Levtzion-Korach began having children – she now has four boys – and needed, like many working mothers, to juggle various obstacles, she initially struggled to figure out what was expected of her. But at TAU she received support. She often took her third son to class with her, even when he was just ten days old. “He was a great student,” she laughed. When she would leave him at home during the finals period, her lecturers inquired after his whereabouts. “As a mother, I think it was important for my boys to see me as a role-model, to see that I can multi-task,” she recalled.

That same knack for multi-tasking has carried over into her work at Assaf Harofeh, where she’s instituted interdisciplinary and increasingly patient-focused approaches to care. That is possible, she says, through a “lean” approach by which processes are mainstreamed so as to cut waste of precious time and resources. In the highly chaotic emergency room, Dr. Levtzion-Korach has overhauled the approach by giving general medical care to all inpatients, creating a baseline for care and treating low-priority patients before they even go through the bureaucratic procedures. The seemingly simple hack has had tremendous success. According to a recent study conducted by the Israeli Ministry of Health, Assaf Harofeh ranks first in the country for emergency room services.

The aim, she describes, is to “make the most out of the work of our team while also implementing an institutional knowledge base.” It’s a daunting ambition in Israel, a country that every year faces serious health sector budget cuts and manpower shortages. While OECD countries spend an average of 10 percent of their national budgets on healthcare, Israel spends only around 7 percent.

“In Israel, we’re always in a state of lacking,” she says. But the only possible way forward, she adds, is taking a ho-

listic look at the situation and getting creative with solutions.

### Reaping the fruits of TAU’s global reach

As the CEO of Bank Discount – one of Israel’s leading banks – since 2013, Lilach Asher-Topilsky has reached the pinnacle of her field with an ear to the ground. She’s a strong believer in confronting deeply traditional, often male-dominated fields with innovative approaches that are simply too important to deny. From 1998, Asher-Topilsky worked in several positions at Bank Hapoalim, including as deputy CEO and head of the retail banking division including where she was responsible for the bank’s 280 branches and leading business initiatives. In 2014 she was selected by *Forbes Magazine* (Israel) as one of the four strongest women in Israel.

During her previous positions, she was always on the lookout for ways to “really understand finance, not just the numbers on the spreadsheet,” she said. That high-level insight into what makes a business work and what doesn’t “is what I like most about my position and my job today.”

From 1991 to 1994, Asher-Topilsky pursued a double major BA in economics and business management at Tel Aviv University, where she learned something that wasn’t in her textbooks: the value of really good contacts. Her professor, the renowned TAU economist Ariel Rubinstein, recognized that she had a talent for economics and pushed her to pursue it. “It gave me an important boost, to understand that I was good at this and that I should be even more rigorous about my studies.

“Career-wise, I think you have to think about your next role, what skills you have, what you want to gain, and on the other hand be very flexible to see where the world is changing and be willing to pursue it,” she said.

Now, after more than a decade and



Lilach Asher-Topilsky

a half in banking, she’s witnessed the sector’s dramatic revolutions and has made a name for herself in instituting a culture of innovation and flexibility at what is today one of Israel’s top banks. In retrospect, with the help of mentors and colleagues, she’s come to understand that in both her career and her personal growth, “it’s been

a marathon, not a short-distance sprint.”

### Spinning the conflict into “Fauda”

Avi Issacharoff, a TAU master’s graduate in Middle Eastern History, got into journalism by accident. As a veteran military combatant with experience in the West Bank and a fluency in Arabic, he stumbled upon a correspondence course at the now-dismantled Israel Public Radio. It was an early, “old-school era” for journalism, he recalls, free from social media and a multitude of sources. Issacharoff started each day digesting the news from the major newspapers, and then hitting the field, where he cultivated relationships with people on the ground, over time and over long tea and coffee breaks, and often in the homes of figures from across the Palestinian political spectrum. “A lot depended on personal chemistry,” he recalled.

Suddenly, though, in 2000, “I went on to find myself in the middle of a war,” he said. It was the outbreak of the First Intifada, or popular Palestinian uprising, and Issacharoff’s job sud-



denly transformed from coverage of a slow-burning conflict to reportage on all-out, active war. Issacharoff was sent to riots on the Temple Mount, the Jerusalem holy site and flashpoint, and to clashes in the West Bank; he met with Marwan Barghout, widely seen among Palestinians as the leader of both the First and Second Intifadas; and he interviewed Hamas officials. He was struck by their colorful, three-dimensional lives, and was eager to find out their hobbies, their favorite foods, their relationships with their children, even as some of them were involved in high-level terrorist activities against Israelis like himself.

As it turned out, it was great material for TV.

Issacharoff teamed up with a friend from Jerusalem, Lior Raz, to dramatize the scenes they both witnessed in the army and later on. Their highly popular series, “Fauda,” follows “*mistaarvim*,” or Arabic-speaking Israeli special intelligence forces who infiltrate the West Bank and, often, undergo several identity crises in the process. It is one of the only shows on Israeli TV that is mostly in Arabic and, amid growing political polarization, is one of the only ways for Israelis to glean a glimpse, though a fictionalized view, into the daily lives of Palestinians caught up in the conflict’s cross-hairs.

It took years, though, before someone actually thought it could work. At

first, “no one knew how to pronounce it, and no one wanted it,” remembered Issacharoff, laughing. But he and Raz kept writing “Fauda,” for no other reason than it was fun to work together. Ultimately Yes, one of Israel’s biggest broadcasters, bought the first six episodes of the first season. When the show received immediate praise from critics and the public alike, they rushed to order the rest of the first and second seasons. Years later, the series was sold

to Netflix as part of its plans to expand into international television. Issacharoff and Raz are now creating two other shows for Netflix, including “Hit and Run,” a CIA-Mossad thriller.


Issacharoff later went on to teach in TAU’s Department of Middle Eastern and African Studies for a short time. He said that while he’s seen both the worlds of journalism and TV change dramatically in recent years, there’s still hope for aspiring storytellers. Like the original story of “Fauda” itself, the path to creating something worthwhile and compelling is neither linear nor romantic. “Just do something and see what sticks” seems to sum up his philosophy.

“If you have something that looks impossible, it’s worth trying anyway,” he said. “I didn’t have in mind that I would write a TV show. Only after I met Lior and we inspired each other, did it happen. We weren’t really practical. But then we pushed each other and suddenly we found ourselves with a show on Netflix!”



Avi  
Issacharoff

### EXPORTING THE MISSION ABROAD



Nirit Bialer, who graduated TAU with an MA in Security Studies, is an Israeli native and, for the past thirteen years, an unofficial Israeli cultural ambassador in Berlin. She runs a cross-cultural program, known as *Habit* or “home” in Hebrew, which promotes modern Israeli culture and hopes to counter stereotypes and misconceptions about both Israel and Judaism as the country encounters new manifestations of anti-Semitism.

“I try to be a kind of a bridge, connecting between different mentalities, explaining the other side a bit better, and what and how can we achieve the same goal together,” says Bialer. Today, around 15,000 Israelis are estimated to live in Berlin, drawn by the comparative low cost of living and the internationally-oriented arts, academic and professional scenes.

No matter where they end up, Bialer believes that young students today should try to “decide on a field of studies which they find interesting and exciting rather than trying to fit themselves into a field which others find attractive.” Bialer was a guest speaker at a TAU German-speaking Friends event.

Nirit Bialer

# TAU-Style Tikkun Olam

Researchers' academic innovation impacts India and other parts of the developing world



By Maayan Hoffman

One of the greatest challenges of the modern age is securing an environmentally sustainable supply of energy, water and food that can meet the needs of billions of people in developing countries.

Researchers at TAU's Boris Mints Institute for Strategic Policy Solutions to Global Challenges hope to find solutions through the new Initiative for Sustainable Development (ISD). The program harnesses the academic and lab work conducted on campus in areas such as water and agri-tech, public health, public policy, economics and data science, and takes it outside the walls of the university to farms and villages in developing countries.

"To understand if you are developing the right technologies you can't only examine them in the lab, you have to test them out in the field," says Prof. Hadas Mamane, Head of the Water Tech Laboratory at TAU's Iby and Aladar Fleischman Faculty of Engineering and a member of the Moshe Mirilashvili Institute for Applied Water Studies.

The concept is non-traditional.

With its emphasis on theories and models, academia is often far removed from ground realities in developing

countries. But Mamane says that by moving the classroom and the lab to villages located in India or other parts of the developing world, researchers can more effectively develop and prove new approaches to achieving sustainable development goals.

## Water is life

"We face a growing challenge to provide access to potable drinking water," Mamane says. For almost 15 years, she has been researching dirty water, specifically in India, where she says statistics show that in some places 20% of children under the age of five become sick due to water pollution and environmental factors.

"The water is contaminated with harmful bacteria and viruses and these pathogens can kill," Mamane says. "Without safe water, humanity cannot exist. Water is life."

Currently, Mamane and her team of students are searching for solutions that reduce energy and water consumption and that can be viable for use by poor communities. Specifically, they are focused on using solar technologies to deactivate bacteria, control biological pollution, and chemically oxidize the water to improve its quality for consumption and for agriculture.

Mamane is exploring a remote-controlled disinfection system using LEDs in a project supported by Israel's Ministry of Economy. The team also received a grant from the Environmental Protection Ministry to learn how to make ethanol – a replacement for gasoline – out of paper, agricultural waste and trimmings.

"We are trying to see how these innovative technologies can be implemented on tight budgets and by people with limited skill sets," Mamane explains. To ensure success, she and her students spend a lot of time – as much as six months to a year – doing field work.



Prof. Hadas Mamane in India



The TAU team and local farmers test Israeli agricultural devices in India.

Mamane herself just came back from a sabbatical in southern India. “My mission was to get my hands dirty, literally,” she says. “I wanted to go into all of the polluted canals, to the places most people don’t want to be, to smell them and submerge myself in what is happening on the ground. Only when you know about a problem, feel it and get emotionally involved, can you think of a solution.”

### Practical solutions

Mamane’s close colleague, Dr. Ram Fishman of the School of Social and Policy Studies, explains that students who work in his lab are trained to systematically analyze challenges in developing countries from an interdisciplinary perspective. They formulate novel and practical solutions based on cutting-edge statistical techniques in big data, backed up by rigorous in-depth fieldwork and intensive interactions with local populations. Finally, they deliver strategic policy recommendations and detailed blueprints for the implementation of these policies.

Recently, he and a group of graduate students spent months on the ground in Jharkhand and Andhra Pradesh, India, to test a range of novel agricultural

technologies, including drip irrigation, smart mulching and improved fertilizers and seedlings, and to find ways to diffuse them among local farmers. “In these areas, many people live on \$1 to \$2 a day and are suffering from acute malnourishment,” he says.

Topics for research are selected based on their potential for return on investment, not only in monetary terms, but also in terms of the likely social impact of the findings. An emphasis is put on paradigm building, whereby solutions would be workable on a large, worldwide scale, thereby ensuring the greatest possible impact.

### Saving the world

Karel Finkelshtein, a research fellow in Fishman’s lab, says, “Our goal is to help farmers increase their income so their lives can be better. We don’t care if the cauliflower is bigger; we care if the cauliflower increases the farmer’s income.”

Finkelshtein says that “being there on site makes you really understand how much these people are incredibly intelligent and diligent; it is just a matter of lack of opportunity. It is our respon-

sibility to understand that most of the world lives like they do in Jharkhand and to make sure that resources are spread more equally.”

Already, the team is starting to see some success, notes David Shurman, another research fellow who recently returned from a field visit in India with Finkelshtein.

Shurman says that, while at first increased productivity and income transpires only for the specific farmers with whom the team is directly working, the success spreads quickly. Neighboring farmers watch, learn and then adapt these new practices for themselves. The team operates its experiments to ensure that if they fail, as they sometimes do, the farmer’s costs are recovered.

### Tikkun Olam

Fishman says that the TAU Initiative for Sustainable Development “harnesses Israel’s innovative edge in the service of humankind,” and is rooted in the Jewish value of *tikkun olam*, a concept defined by acts of altruism performed to perfect or repair the world or to safeguard those who may be at a disadvantage. He adds that TAU is lucky to have local philanthropic partners at field sites, such as Tata Trusts, founded by TAU Honorary Doctor Ratan Tata, which supports his and his team’s work as part of the Indo-Israel Innovation Villages Program.

“Israeli students’ inherently innovative and entrepreneurial mindset, together with their maturity and ambitions to ‘heal the world,’ make them the ideal field researchers and ambassadors of change and goodwill for TAU, Israel and the world and for spreading Israeli expertise to where it is most needed and least applied,” Fishman says.

TAU has, more than any other Israeli university, turned its attention to this goal. “I always feel uncomfortable saying I am saving the world,” concludes David Shurman. “Maybe it sounds pretentious. But we are helping to solve real problems.”

# Harnessing Academic Studies for Social Good

The TAU Impact Program is the first of its kind to offer all undergraduate students accredited courses for working in community engagement

By Idit Nirel

**T**AU graduate Romy Levy didn't study medicine, but the work she recently did at a health clinic in South Tel Aviv will have a long-lasting effect on the health of countless refugee women and their babies. Her humanitar-

ian work was part of a unique TAU course, "Applied Anthropology: African Migrants and Refugees in Israel," taught by Dr. Ravit Cohen Talmi. Romy, 28, used her African Studies training at

TAU to assist the staff of the clinic, who provide medical treatment to immigrants who have no legal status in Israel. Romy's course is just one of over 50 across the campus that form the

integrate cutting-edge knowledge in a specific field with corresponding community engagement projects.

As part of the course, Romy met with Mr. Orel Ben Ari, Director of the Terem Urgent Health Center, and his staff, and learned that one of the challenges they faced was encouraging pregnant women from Eritrea and Sudan to come in for regular prenatal checkups. Most of these women only came to see the doctor at a relatively late stage of their pregnancy, lessening the chances of identifying risk factors early on. The reasons for this could range from fear of missing work to diverse cultural and religious backgrounds.

## Adapting to cultural needs

To help tackle the problem, Romy developed a survey that helps the clinic's staff better understand the women's specific cultural perceptions, needs and constraints. Based on this, they plan to adapt the pregnancy monitoring process so as to encourage their patients to come in for regular checkups.

This was not Romy's first encounter with African culture nor with social engagement. Before studying at TAU, she volunteered for over a year in Tanzania and Uganda. Working with local groups



Romy Levy

groundbreaking TAU Impact program. The first of its kind in Israel and possibly the world, the Program offers all undergraduate students at the University accredited courses that





of women, she helped them gain economic independence by establishing a jewelry cooperative. Her main conclusions from both her volunteer work in Africa and with the refugee clinic in Israel, is the importance of humility: “Always ask the local partners what kind of assistance they really need. Don’t assume you know better than they do.”

### Environmental good

TAU engineering students in the course, “Engineering Design,” similarly put their knowledge to use for the benefit of society. They work in teams to design solutions for real-life problems raised by local NGOs and government agencies. Jonathan Haran, a 35 year-old alumnus of TAU’s Iby and Aladar Fleischman Faculty of Engineering, is one of five instructors of the course this year.

Jonathan introduced one of the student teams to the organizers of *Midburn* – a festival modeled after the *Burning Man* event held annually in Nevada, USA. The Israeli version has gained popularity over the last few years, with thousands of Israelis flocking to the Negev for a 6-day festival, during which they build a massive camp and celebrate community, art, and radical self-expression. It turns out that the festival brings with it also negative implications for local residents of the area: high levels of dust particles in the air caused by the temporary “invasion” of festival-goers. The team proposed and designed practical engineering solutions to overcome this challenge, working in cooperation with the festival organizers.

Another student team, led by Jonathan himself, designed water security solutions for remote communities, while others worked with various organizations, assisting them in designing solutions for minimizing food waste, recycling plastic, and improving accessibility for people with disabilities.

“The added value of this course is immense,” says Jonathan. “It gives students practical tools and hands-on experience

in working together in interdisciplinary teams for the first time, as they will be expected to do when they go out into the ‘real world’. Most of all, it exposes students to crucial challenges that Israel faces, and allows them to make a true impact.”

### Engineering for society

Jonathan himself was eager to make a difference during his days as a TAU student. An active member of the

brought drinking water and solar energy to communities in Africa and India.

Nowadays, apart from being an instructor at TAU, he serves as a consultant to municipalities, companies and other organizations on energy and waste issues, and runs an environmental start-up he developed. He hopes that TAU Impact courses will inspire today’s students to give back to society on a lasting basis.

Meanwhile, Romy too aims to com-



Jonathan Haran

Student Union, he also volunteered in a mentoring program for young people from disadvantaged neighborhoods and initiated a student support program at the Engineering Faculty. But his true passion was putting his engineering training to use for improving society. As head of the Israeli branch of Engineers Without Borders, an organization that initiates sustainable development projects for developing countries, he assisted in implementing projects that

bine further academic studies with field work in the social arena, and hopes to continue her involvement with the refugee clinic. The intercultural encounter with the clinic’s patients was truly inspiring,” she says. “The course gave me an opportunity to get to know – and to help out – the lesser known groups in Israel.” Romy was awarded a scholarship by Israel’s Council of Higher Education for her exceptional social involvement.

Artificial intelligence (AI) is on fire in the marketing, transportation and finance industries, but the healthcare arena has been slow to adopt this innovation. No more. Today, with the growth of clinical data captured effectively by digital health records, the medical world is increasingly taking advantage of AI tools.

TAU scientists and their hospital-based physician colleagues are leveraging new AI techniques such as machine learning and deep learning to accelerate, deepen and extend the impact of laboratory findings. The difference between regular data-crunching solutions and current AI systems is that the latter mimic human learning and *teach themselves* to make sense of vast amounts of information. As new patterns are “learned” and catalogued, the AI-driven software can ultimately assist and improve the performance of human care providers.

Last year, TAU upped its game by inaugurating the Yandex Initiative in Machine Learning (ML), which supports mostly ML courses at the Blavatnik School of Computer Science, creating the next generation of leaders in industry.

### More nuanced diagnoses

According to Talma Hendler, professor of psychiatry at TAU’s Sackler Faculty of Medicine and Sagol School of Neuroscience, AI software can help doctors gain insights into a patient’s clinical results in real or rapid time. With AI, a computation based on clinical data that might have taken a month in the past can now be computed in an hour.

Increased AI will also allow for more personalized medical treatment and give doctors the ability to look at patients more holistically. If in the past, a patient would have been labeled as diabetic or having heart disease, “machine learning will cluster all of a patient’s ailments and perhaps help develop new, more nuanced correlations and labels.”

Hendler believes that, just as today every patient entering an emergency room is automatically given a blood test, in the future, some form of AI-related testing and consideration will become standard practice.

In her own research, Hendler is working on a multidisciplinary platform to address mental health problems combining AI with advanced brain imaging and other neuroscience techniques. Specifically, she has been mapping objective brain markers and

# Intelligent Enough to Make You Healthy?

TAU biomedical researchers bring innovative AI techniques into the real-world clinical environment

behavioral characteristics of individuals who are experiencing a mental disorder. The goal is that when a patient says he is depressed, she would be able to confirm this depression not only subjectively (by talking with the patient), but through objective factors (by examining his neural networks).

“Being able to calculate a patient’s brain network functioning will help doctors formulate a personalized treatment plan,” Hendler said.

### Genetic genius

Hendler’s methodology is not unlike the work being done by the Sackler Faculty of Medicine’s Prof. Lina Basel Salmon, who heads the genetics institute at the TAU-affiliated Rabin Medical Center. She has been using deep learning and computer imaging techniques to train software to recognize genetic disorders among children based on their facial abnormalities.

“Nowadays there are so many sources of information,” she said, which can make it difficult to determine a diagnosis.

Salmon helped spearhead a now Boston-based startup called FDNA and its Face2Gene app, which allows doctors to take a picture of a baby or toddler’s face and upload it to the app. Then, it provides the top 10 most likely genetic syndromes based on facial patterns. Doctors then help the technology narrow down potential diagnoses by uploading the patient’s symptoms to the app as well.

Salmon said the software is about 91% accurate – much more accurate than even the best genetic specialists. She noted that the app is not meant to replace the physician, but rather to provide support.

“This will help the physician extract the best and most precise information and suggest to him or her ideas for treatment and management,” she said.





### Pregnancy predictions

Another team hopes to prevent preeclampsia, a leading cause of maternal death. This condition occurs only during pregnancy and can cause high blood pressure, damage to the liver and kidneys, and severe bleeding or infection after childbirth.

Prof. Noam Shomron, MSc student Artem Danislevsky and physician Prof. Moshe Hod of TAU's Sackler Faculty of Medicine, together with researchers at King's College in London, used computational methods that included statistical analyses and machine learning algorithms to discover molecular biomarkers in the blood for preeclampsia.

They extracted RNA molecules, snippets of molecular information present in human cells, from the plasma of women in Italy, Spain, Russia and Israel. The genetic material was then rapidly sequenced and evaluated for a preeclampsia molecular "signature."

In the past, gynecologists assessed a woman's risk of preeclampsia by referring to previous pregnancies, blood pressure levels and other general symptoms. Shomron's breakthrough will now allow doctors to predict the condition as early as the first trimester through a simple blood test. Then, the complication could be treated or even prevented with low doses of aspirin administered from the 16th week until the end of the pregnancy.

The Shomron team is currently using similar techniques to develop a blood

test that will reveal an array of genetic disorders in fetuses as early as 11 weeks of gestation.

### Cancer confronted

Prof. Roded Sharan, a 2015 Kadar Family Award winner and a researcher at TAU's Blavatnik School of Computer Science and Edmond J. Safra Center

for Bioinformatics, heads a group that mines biological data using networks and applying graph algorithmic and machine learning techniques to extract patterns of biological significance.

The group has successfully modeled mutational processes in cancer using machine learning techniques with applications for early diagnosis and personalized treatment. In one study, Sharan worked with Prof. Gil Ast, incumbent of the Dr. Boris (Dov) Quartin Chair in Chemical Pathology, and a group of students at TAU's Sackler Faculty of Medicine, to better understand the mechanisms by which mutations lead to colon cancer. "We found a pathway of three genes that is activated by a known oncogenic mutation and could explain all the changes that we observed in colon cancer patients; we validated the role of these genes in the lab using patient samples," Sharan said.

In another study, bringing together students and collaborators from TAU, Switzerland and the US, Sharan developed machine learning approaches to identify genes that drive disease. "In application to high throughput data from breast cancer patients we could discover novel disease mechanisms and demonstrate their diagnostic potential."

### Modeling the future

While Sharan's team looks closely at genes, Prof. Hayit Greenspan, head

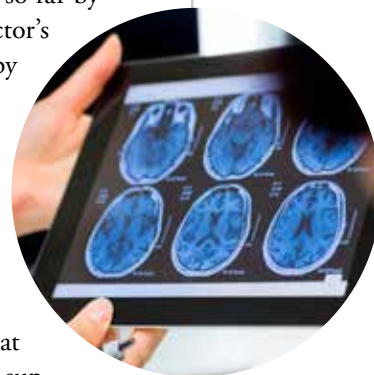
of the Medical Image Processing and Analysis Lab at TAU's Biomedical Engineering Department, monitors the progression of cancer and other deadly diseases using advanced image modeling and analysis. She has been conducting research in image processing and computer vision for the past 20 years. Now, she is taking advantage of new modeling and estimation algorithms to improve her work.

Greenspan said that while imaging techniques, such as MRI images of diseased hearts or cancerous tumors, have improved substantially over recent years, the image interpretation process has only recently begun to benefit from computer technology. Image interpretation has been limited so far by the technician or doctor's subjectivity, and even by factors such as fatigue.

"Computerized tools are the key enablers to improve diagnosis of cancer and other diseases by facilitating identification of the findings that require treatment and supporting the expert's workflow," Greenspan said. These tools can be critical for tracking the progression of diseases, like if a tumor is growing slowly or quickly.

For the first time, Greenspan said, artificial intelligence and machine learning technologies are practically affecting the clinic and could revolutionize the medical industry.

So, while AI may not replace doctors, it will certainly make our doctors' clinics smarter.



Prof. Talma Hendler and student



Teaching  
Laboratory  
at the  
Department  
of Materials  
Science and  
Engineering

By Lisa Kremer

Whoops and cheers rip through the room as industrial engineering student Merav David looks on with amusement. She has just told 60 teenage girls on a tour of TAU's Iby and Aladar Fleischman Faculty of Engineering that women are by far the highest achievers among the students in her third-year class. The girls on the tour study advanced math and science in Bat Yam high schools – defying the gender gap in science, technology, engineering and mathematics (STEM). This gap is evident from an early age and carries through university, where women represent fewer than 25% of STEM graduates in developed countries worldwide, even as they outnumber men in study programs overall.

Starting young is critical according to Prof. Rachel Gali Cinamon, Head of TAU's Jaime and Joan Constantiner School of Education: “The current system misses out on girls. We must engage them before they are tracked into non-STEM fields.”

A new TAU program, “Girls Think Science,” is designed to spark girls’ interest in STEM subjects during the golden window of learning from 3<sup>rd</sup> to 6<sup>th</sup> grade. Girls from Israel’s social and geographic periphery, including Arabs and Orthodox Jews, enjoy experiential learning at STEM labs, guided by female students and researchers. The program expands upon engineering tours that Dr. Dana Ashkenazi of the School of Mechanical Engineering has been organizing on a volunteer basis for the past decade at TAU’s Engineering Faculty. Girls attending the tours get answers to questions such as “why is the sky blue?” at Prof. Avishay Eyal’s Optics & Photonics Lab, guided by doctoral student Lihi Shiloh; see the inner workings of the body with 3D printing of biological organs at Dr. Orna Sharabani-Yosef’s Tissue Engineering Lab; and encounter artificial intelligence (AI) robots at Dr. Goren Gordon’s Curiosity Lab.



## It's Simple Math

TAU is pursuing creative ways to get more girls interested in STEM subjects

During her PhD studies in the 1990s, Dr. Ashkenazi was the lone woman in a class of 40. This experience motivated her to introduce girls to the joys of science in the hope of recruiting more women to STEM. “My parents exposed me to scientific and engineering topics from a young age. But still, as a mother, I could see my daughters being steered toward humanities tracks at school. I tell them they can do whatever they set their minds to, but society says something else. Girls begin to question themselves, their abilities and their chances to succeed.”

Questioning one’s ability to succeed influences the high rate of attrition that increases with each higher

education milestone among women in STEM. Prof. Cinamon, in conjunction with Israel’s Ministry of Science & Technology, studied this phenomenon and developed unique interventions for all stages of academic development, from BSc through post-doc. Interventions range from mentorship to reframing the post-doc as a unique family experience. “Among undergrads, MScs, and PhDs we found that *academic identity* – rather than academic achievement – is the major factor determining whether a student will pursue higher level STEM studies. Women may have phenomenal grades and academic achievements, yet still may believe they are not good enough.”



## The post-doc hurdle

But what *are* women's chances of making it in STEM? The TAU President's Advisor on Gender Equity Prof. Ilana Eli runs the numbers: "Women represent 54% of PhD candidates at TAU, but less than 50% of TAU lecturers and only 22% of professors. In STEM fields these percentages drop precipitously, with some departments employing only one female faculty member among nearly 50 men.

"These numbers reflect the past – professors today began their careers more than two decades ago. Yet these numbers also influence the future – our female students lack role models showing the academic path as accessible to women, especially in STEM," says Eli.

The postdoc is the most formidable obstacle for Israeli women in academia. By the time they complete their PhDs many are starting a family and a postdoc placement of two to four years abroad can seem untenable. TAU is now helping by awarding yearly stipends of \$25,000 each for women postdocs in STEM.

"We grant five stipends annually. But deserving candidates are double that number and we wish we could grant more," says Prof. Eli.

Other programs include a joint postdoc in which women conduct research abroad under the auspices of a foreign university as well as at TAU, thus cutting the need for a multiyear relocation. The President's office also sponsors stipends for travel with a nursing baby and caregiver, enabling new mothers to participate in international conferences essential for establishing themselves in academia.

## Changing reality

TAU scientists are eager to boost the number of female faculty through Girls Think Science. "It's simple math: The larger the pool of girls exposed to STEM, the greater the chance of women choosing to go into STEM

fields, both in industry and academia," says Prof. Shiri Artstein-Avidan, the only female full professor of pure



**"It's simple math: The larger the pool of girls exposed to STEM, the greater the chance of women choosing to go into STEM fields, both in industry and academia."**

**– Prof. Shiri Artstein-Avidan**

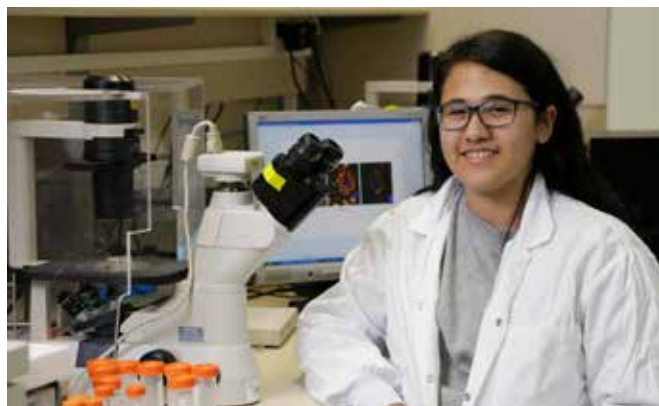
math among over 40 professors at the Raymond and Beverly Sackler School of Mathematical Sciences and a 2016 Kadar Family Award winner. "My father is a mathematician. I want to bring girls who were not brought up in a scientific milieu to this fascinating world."

Dr. Vered Padler-Karavani of the George S. Wise Faculty of Life Sciences did not enjoy access to science in her home or local school. She grew up in a development town and discovered science through TAU's long-running Dov Lautman Unit for Science Oriented Youth (now Youth University). "Starting early is important, as is having someone to look up to," says Padler Karavani. That is why she volunteers as Chair of ISEF—the Israeli Scholarship Education Foundation—which seeks to expand STEM among youth in Israel's periphery. She is eager to host Girls Think Science participants in her lab where she studies how to target diseased cells through their protein and sugar coatings.

Role models are crucial, maintains Dr. Ashkenazi. "We hold our tours in the presence of female faculty members and students as mentors." Ashkenazi believes that the program must engage students from Israel's periphery, not just from the urban, affluent areas of central Israel because, "When it comes to these subjects, just being a girl places you in the periphery."

## EVERYONE HAS THEIR OWN THING THEY LIKE BEST

Twelve-year-old Noa Yosef is the daughter of Dr. Orna Sharabani-Yosef of the Iby and Aladar Fleischman Faculty of Engineering. She grew up visiting her mother's cell and tissue biomedical engineering lab and has given scientific talks on engineering tours to other girls. As for her interest in science Noa says, "Some kids may think it's strange that a girl likes science, but it doesn't bother me—everyone has their own thing they like best. I like science and I want to learn things like how my body works because it gives me a better understanding about my body and nature. I want to study electrical energy because it is interesting and there are lots of opportunities."



Noa Yosef

**A**di Sharabi has never let stigmas or day-to-day struggles stop him. Partially deaf in both ears since he was a baby, Adi had to overcome missed class material throughout his schooling – yet he still graduated high school with high grades. Today, at 31 years old, he's flourishing as a contracts and real estate lawyer and is married to a full-hearing woman. He's also gone back to school to get a master's degree in Geography and Environmental Studies at TAU.

"Life isn't easy as a partially deaf person," he says. "Each and every day I come across people who do not understand the severity of my hearing loss and the requirements for communicating with me."

That's why Adi is grateful for the sophisticated study aids at TAU's Mia and Mile Pinkas Accessible Learning Center, as well as for his Pinkas Scholarship. "It's a great place to study and above all, *accessible!*" he says. "It means a great deal to me."

### Immediate impact on lives

The Pinkas Center was established in 2015 by longtime TAU benefactors Mia and the late Haim Mile Pinkas, who was a TAU Governor. The couple's fondest wish was to have a real and immediate impact on the lives of TAU students. The Center offers a study facility with specialized computers and software to a spectrum of students with special needs. These include people born with physical, hearing or vision impairments; former combat soldiers with injuries; victims of terror attacks; and young people with chronic illnesses. In addition, the Center provides scholarships together with essential services for students such as tutoring, mentoring, psychological support, career counseling and group workshops.

Last year the Pinkas Center assisted 174 students through its programs, including funding 623 tutoring hours and allocating 49 scholarships. Administering the activities are the Unit for Student Advancement at the Student

Services Division in partnership with the Elias Sourasky Central Library.

The Pinkas' son Miguel Pinkas, also a TAU Governor and a TAU Global Campaign Cabinet member, says that the family is delighted with the work of the Center and that "everyone should know about the great work TAU is doing with these students, giving them a supportive environment and making sure they succeed in their studies." Mr. Pinkas personally meets with students at the Center every year.



Adi Sharabi



## Unstoppable in Their Academic Dreams

Providing specialized equipment, mentoring, scholarships and a warm home, the Pinkas Accessible Learning Center ensures that all disabled students at TAU have optimal study conditions

### Aiming high in tough departments

24 year old Liraz Halo, another Pinkas Center beneficiary, was diagnosed at age 9 with severe spinal scoliosis and had to wear a back brace until age 13. At age 17, she was diagnosed with a second genetic disease – a rare muscle wasting disorder called HIMB or GNE myopathy with as yet no cure.

Despite her conditions, Liraz successfully finished school, volunteered in a youth movement counseling youngsters, worked as a teacher's assistant, and went to the beach and concerts with friends. Her school performance was so outstanding that she was accepted into one of TAU's most competitive departments, Psychology, and is now combining her BA studies there with Sociology and Anthropology.

As of now it's hard for her to maintain a routine of studies, physical therapy and social life, but the Pinkas

Center is helping her persevere.

"My condition keeps getting worse as my muscles get weaker," she says, "and I need help with my daily routines. The scholarship I receive from the Pinkas Center helps me pay for this help."

Liraz also benefits from the group activities sponsored by the Pinkas Center. "As part of the scholarship, I participate in a support group for students with disabilities. We help each other," she says.

"Thanks to the Pinkas family I got to meet an amazing group of fellow students I now call friends, and it makes it easier to get by," Liraz says.

Adi Sharabi echoes this gratitude and appreciation. "The difficulties due to my hearing loss haven't ended and will continue as far as I know for the rest of my life. But because of Pinkas Family support, I'm getting help in achieving one of my biggest dreams – graduating with a master's degree!"



## Be Part of the Next Big Idea TAU Global Campaign

### SUSAN AND HENRY SAMUELI ENGINEERING BUILDING

## A New Paradigm in Industry-Academia Partnership

One of Tel Aviv University's most ambitious building projects to date is being realized through the vision of Prof. Henry Samueli, co-founder and CTO of semiconductor giant Broadcom Inc., and his wife Dr. Susan Samueli. Some ten years in the planning, the Building is unique in that it will partner academia and industry by housing both Broadcom engineers and TAU engineering researchers and students under one roof.

The state-of-the-art building, currently under construction, will comprise 160,000 sq. ft. total, of which 50,000 sq. ft. will be allocated for Engineering Faculty labs, classrooms and offices. The Building will serve 3,900 students – 1,300 of them on MSc and PhD levels.

TAU President Joseph Klafter said at the cornerstone-laying ceremony, "This project goes beyond a large and beautiful facility – to reshape the very structure of the university-industry partnership. It represents a new model for TAU, for Israel and most probably for the world." He noted that it would enable TAU students to work on projects with Broadcom engineers, while showcasing the best young talent to Broadcom.

The ceremony took place in the presence of the Samuelis; Mayor of Tel Aviv-Yafo Ron Huldai; Vice President of Broadcom and 2019 TAU Honorary Doctor Dr. Shlomo Markel; and Dean of Engineering Yossi Rosenwaks. The ceremony was officiated by TAU Vice President for Resource Development Amos Elad.

Prof. Klafter noted the Broadcom Foundation's long-time support for scholarships, TAU's Youth University, and joint workshops in computer science and engineering with UC Irvine.

He acknowledged the active role taken by Dr. Shlomo Markel, who is also Chairman of the TAU technology venture arm, Ramot, in facilitating the project. "Through this friendship a great many collaborations were born between TAU and Broadcom," said Prof. Klafter.

“Giving to TAU symbolizes our love of Israel and of Jewish values and religion.”



### Special relationship with TAU

In his response, Prof. Samueli noted that "Tel Aviv University is the first university we are supporting outside of UCLA and UC Irvine. It takes many years to build up a personal relationship and trust with a university, including with its president and deans, and that is what we have achieved here." Samueli also said that giving to TAU symbolized the couple's love of Israel and of Jewish values and religion.

Following the formal part of the ceremony, the Samueli family laid the cornerstone and unveiled a sign at the building site, which is adjacent to the existing Wolfson Building for Software Engineering and the Wolfson Building for Mechanical Engineering.



From left:  
Dr. Susan  
and Prof.  
Henry  
Samueli;  
Prof. Joseph  
Klafter; Dr.  
Shlomo and  
Mrs. Arieli  
Markel

**YOSEF AND FARANG SHAHERY LOBBY**

## A Family Passion for Giving

The Yosef and Farang Shahery Lobby was inaugurated at TAU's new Check Point Building, a state-of-the-art facility which will serve TAU's Blavatnik School of Computer Science and Youth University. The Shahery family siblings Frank, Vida, Shaw and Shahrzud gathered together with extended family members to honor their parents, Yosef and Farang Shahery of the USA.

TAU President Joseph Klafter said the lobby "provides a spacious and elegant facility to welcome students and researchers of computer science as they meet, socialize and study together." He praised Yosef and Farang Shahery as committed Zionists, friends of Israel and believers in the country's renowned

higher education sphere. He noted that the gift includes a perpetual fellowship fund to support talented Israeli graduate students.

In his response on behalf of the family, Mr. Shaw Shahery said, "our parents, Yosef and Farang, were role models for the values we believe in. We are sorry that they could not be here with us today."

Originally from Tehran, Yosef Shahery is a compassionate humanitarian who provided support to Jews who fled the Islamic Revolution in 1979 and sought refuge in the United States. He provided generous financial aid, personal advice and even established a Farsi-language newspaper. In the 1980s, together with Farang, he co-founded the Iranian Jewish Foundation of New

York and the Maccabee Foundation, among other projects in Israel and New York.

The ceremony was moderated by TAU VP for Resource Development Amos Elad and attended by Chairman of the Iranian American Jewish Federation (IAJF), Shaharam Yaghoubzadeh, senior TAU officials and friends of the Shahery family. Also speaking were Robert Kahan, President of the IAJF, and Prof. Amir Globerson of the Blavatnik School of Computer Science.



Shahery family at the ribbon cutting ceremony

The discovery in an Israeli cave of a fossilized human jaw bone, dating from between 177,000 and 194,000 years old, pushed the timeline for *Homo sapiens* venturing out of Africa back 100,000 years. This astounding discovery was made by physical anthropologists at TAU's Dan David Center for Human Evolution and Biohistory at the Steinhardt Museum of Natural History. The David Center houses TAU's unique Biological Anthropology Collection of

**DAN DAVID CENTER FOR HUMAN EVOLUTION AND BIOHISTORY**

## New Center Sheds Light on Human Evolution

specimens dating back 1.5 million years.

The Center was inaugurated in the presence of TAU Honorary Fellow and Governor Gabriela David and her son, TAU Governor and Global Campaign Cabinet Member, Ariel David. The Center honors the memory and legacy of the late Dan David, an inventor, philanthropist, and founder of the annual Dan David Prize at TAU.

TAU President Joseph Klafter thanked the David family for being pillars of support for TAU for many years. "It is hard to imagine this

university without Dan David, but it's just as difficult to imagine TAU without Gabi and Ariel," he said. Ariel David spoke of how his father had taken part in digs in Israel for more than two decades.

Head of the Center Prof. Israel Hershkovitz said, "Dan's generous support enabled numerous breakthroughs, including important discoveries in Israeli caves."

Also speaking were Prof. Tamar Dayan, Chair of the Steinhardt Museum, and Dr. Rachel Sarig of the Maurice and Gabriela Goldschleger School of Dental Medicine.

From left: VP for Resource Development Amos Elad; Prof. Israel Hershkovitz; Ariel David and Gabriela David







## Yuri Milner “70 for 70” Doctoral Fellowship Initiative

Russian-born Israeli entrepreneur, investor and philanthropist Yuri Milner, founder of the Breakthrough Prize, is a strong believer in the potential of Israeli science and technology. To this end, he established the Yuri Milner “70 for 70” Doctoral Fellowship Initiative – a \$7 million Initiative supporting 70 exceptional PhD students over a period of ten years, and in honor of Israel’s 7<sup>th</sup> decade. The Initiative supports PhD candidates in fundamental physics, mathematics and life sciences at TAU, Hebrew University of Jerusalem and Technion–Israel Institute of Technology, and is

administered by TAU. The funds will award \$25,000 a year to each fellow for 4 years.

At a meeting with TAU President Joseph Klafter as well as the other university heads, Mr. Milner noted that fundamental science and mathematics are among humanity’s highest achievements and are essential for the growth of technological progress. “The goal of these fellowships is to help outstanding young researchers contribute to research on the deepest questions. I hope they will have the freedom to pursue their dreams,” he said.

Yuri Milner graduated in 1985 from Moscow State University with an advanced degree in theoretical physics and subsequently conducted research in quantum field theory and science. In 1999 he founded the Mail.ru Group and under his leadership it became one of Europe’s leading internet companies. He later founded DST Global to focus on international internet investments. Milner was named as one of the world’s 100 “greatest living business minds” by *Forbes* last year.



From left: Julia and Yuri Milner; Prof. Joseph Klafter; Prof. Peretz Lavie, President of the Technion—Israel Institute of Technology; Prof. Asher Cohen, President of Hebrew University, Jerusalem

A unique new institute launched at TAU’s Jaime and Joan Constantiner School of Education is using the power of music to promote dialogue in a somewhat fractured Israeli society. The Institute was initiated by TAU Governor and donor Aviad Meitar, and is being run by Israeli composer, conductor and educator Dr. Ori Leshman.

“Music is a dialogue between composer and lyricist, between performer and audience,” says Dr. Leshman, whose vision is to use music to unite people from dissimilar cultural, ethnic or national backgrounds, overcome barriers, and improve society in Israel and worldwide.

Benefiting from TAU’s interdisciplinary campus culture, the new Institute combines music with education, psy-

### INSTITUTE FOR PROMOTING DIALOGUE THROUGH MUSIC

## Connecting through Music

chology, brain studies, sociology, communication and data science. Additional activities include teaching; support for student ventures; conferences and workshops; grants to students with special achievements; and social projects.

The “Music for Dialogue” method was collectively pioneered by Leshman, Aviad Meitar and businessman Amnon Herzog. Mr. Meitar developed a project entitled, “Music as a Tool for Conflict Resolution,” during his 2016 Fellowship

at the Advanced Leadership Initiative at Harvard University.

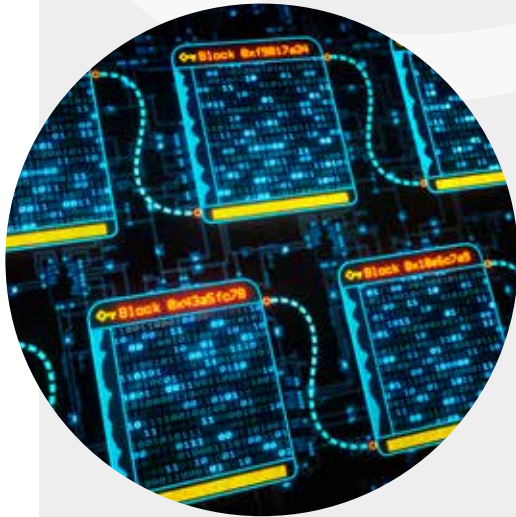
Meitar, a TAU alumnus in law, is Chairman of Quadrant European Beverages Ltd., the Pepsi bottler for Bulgaria. He is a second generation member of the Meitar family, major benefactors to TAU in the fields of law, management and philanthropy studies. Meitar’s sister, Dafna Meitar-Nechmad, is co-chair of the TAU \$1 billion Global Campaign.



From Left: Mr. Amnon Herzog; Dr. Ori Leshman; Prof. Rachel Gali Cinamon, Head of the Jaime and Joan Constantiner School of Education; TAU President Joseph Klafter; Mr. Aviad Meitar; and TAU VP for Resource Development Amos Elad

# Celebrating the Next Big Ideas

at the 2019 Tel Aviv University  
of Governors Meeting



## Hogeg Blockchain Research Institute

Created by Israeli serial entrepreneur Moshe Hogeg, this institute is the first of its kind in Israel to focus exclusively on investigating the potential impact and applications of blockchain, the record-keeping technology behind bitcoin that is revolutionizing internet-based transactions.



## Yehuda Naftali Botanic Garden

The dedication by Israeli-American philanthropist Yehuda Naftali of the University's Botanic Garden will bolster its vital national research, education and conservation activities.



# Board

## **Aufzien Family Center for the Prevention and Treatment of Parkinson's Disease**

Longstanding TAU supporter Alan Aufzien and family have established a center, in collaboration with the Tel Aviv-Sourasky Medical Center Neurological Institute, dedicated to preventing suffering and saving lives.



## **Dr. Garry Rayant and Dr. Kathy Fields-Rayant Minducate Learning Innovation Research Fund**

Founded by dermatologist Dr. Kathy Fields-Rayant and her husband, dentist-entrepreneur Dr. Garry Rayant, this fund will jumpstart advanced research at Minducate, TAU's cross-disciplinary research center aimed at harnessing the latest advances in neuroscience to design practical approaches, tools and products to enhance learning.



## **Check Point Building and Check Point Road**


Initiated by TAU benefactor and Governor Gil Shwed, who founded and heads Check Point Software Technologies Ltd., the Check Point Building provides a new, state-of-the-art home for TAU's Youth University and the Blavatnik School of Computer Science.

PROFILE: ERIC AND JAMES GERTLER, USA

# Passing on the Torch

Brothers Eric J. and James S. Gertler are trustees of the Zuckerman Family Foundation and nephews of Mortimer B. Zuckerman, initiator of the \$100 million Zuckerman STEM Leadership Program, which supports US-Israel academic collaboration, including at Tel Aviv University. In 2018 the Gertler brothers, both TAU Governors, founded the Frenkel-Zuckerman Institute for Global Economics at TAU. They discuss their views on philanthropy with *TAU Review*.



 Eric Gertler (left) and James Gertler speaking at TAU

## How can a family foundation effect real change?

Eric Gertler:

Philanthropic organizations like ours play an important role in advancing humanity in various ways, including, with respect to the Zuckerman STEM Leadership Program, by enabling the best and brightest minds to do amazing work. We hope that this program will lead to unimaginable discoveries that will help all.

James Gertler:

The one great thing about a family foundation is that we can make contributions accountable in a way that governmental organizations cannot. We can come up with hard and fast matrices to assess the impact that gifts provide, and if things are not working we can make quick changes.

## How do we keep Israel and America connected?

James Gertler:

We believe that Israel's most important geo-political relationship is with the US, and if as a family foundation we can strengthen this tie, this is of paramount importance, especially for both economies.

Eric Gertler:

With our Zuckerman STEM scholarships, we want to ensure a robust exchange of scientists between the US and Israel for years to come.

## What is your passion in philanthropy?

Eric Gertler:

I have always believed that a fundamental value is to give back to society. That is why I joined government and helped with the economic development of New York City. Giving to Israeli and Jewish causes is something that's been instilled in us from a very young age, so to be able to participate actively – and in such an impactful way – is extraordinarily rewarding and I feel truly blessed.

James Gertler:

One of my greatest passions is recapturing Jewish history and we are

funding the archaeological work being carried out at the Kotel (Western Wall) as part of a new center we are building there. I believe that this is a gift for the Jewish people and to humanity, in the sense that if you capture the past you'll be more certain of your future.

## What is business's role in society?

Eric Gertler:

Business certainly plays a role in employing people and helping give them a sense of meaning. However, today, business has realized that it has an expanded role beyond profit making to address social issues. For that reason, you see many businesses creating corporate social responsibility programs or foundations that help support these efforts.

## What do you say to your children?

James Gertler:

I tell them that things don't matter; people matter. As a family we spend money on experiences. We are trying to pass down some of our uncle Mort's values to our children, who are already showing an interest in Jewish identity and the importance of Israel to one's life.

*Eric J. Gertler is Executive Chairman of U.S. News & World Report and Chief Executive Officer of Ulysses Ventures. He has served as Executive Vice President of the New York City Economic Development Corporation. He holds degrees from Brown University, the Sorbonne at the University of Paris, Institut D'Etudes Politiques in Paris and a law degree from American University where he served as Editor-in-Chief of The Law Review.*

*James S. Gertler is President and CEO of Drew Lane Capital, LLC; Vice Chairman and Senior Managing Director of Legacy Partners and board director of U.S. News & World Report. He holds degrees from the Wharton School at the University of Pennsylvania and from Harvard Business School.*

### Berlin: Science Week

German Friends hosted three of TAU's brightest talents during Berlin Science Week, where a veritable who's who of leading scientists and researchers from around the world assembled for a week of lectures, forums, workshops and interactive activities, hoping to inspire the next generation of young scientists and academics. The TAU Alumni Organization also held its first ever networking event in Germany, in which Nirit Bialer, graduate of the TAU Security & Diplomacy Program, spoke to over 35 TAU alumni on local networking strategies.

From left: Dr. Rachel Sarig of the Gabriela Goldschleger School of Dental Medicine and Dan David Center for Human Evolution and Biohistory Research; Zipi Roitman, Vice President, German Friends; and Dr. Manfred Lautenschläger, philanthropist



### London: University for a Night

Israeli Ambassador to the United Kingdom Mark Regev was among 200 guests who enjoyed an evening of cocktails and lectures at TAU Trust UK's University for a Night lecture series. Hosted at the London offices of Rothschild Co., talks were given by TAU Middle East expert Prof. (Emer.) Asher Susser; Dr. Goren Gordon, Head of the Curiosity Lab; and world-renowned trauma expert Prof. (Emer.) Zahava Solomon. Also present were TAU VP of Resource Development Amos Elad; TAU Trust UK Chairman Richard Anton and emcee of the evening, TAU Governor Prof. Eli Talmor.



From left: Prof. Zahava Solomon, Prof. Asher Susser, Dr. Goren Gordon, and Cara Case, Chief Executive, TAU Trust UK

From left: Amnon Dick, Adi Olmert, TAU President Prof. Joseph Klaffer, Prof. Daphne Barak-Erez, and Prof. Yossi Shain



### Israel: Law, Politics and Ideology

The Business-Academic Club of Israeli Friends of TAU held a premiere screening of "On the Basis of Sex," a film featuring the life of US Supreme Court Justice Ruth Bader Ginsburg. Prior to the screening a dialogue on law and social change was held between Israel Supreme Court Justice Prof. Daphne Barak-Erez, a TAU alumna and former Dean of Law, and Prof. Yossi Shain, Head of TAU's School of Political Science, Government and International Affairs. Among the guests welcomed by President of Israeli Friends, Amnon Dick, and CEO, Adi Olmert, were TAU Governors Etti and Gabi Rotter, Pini Rubin, Tamir Gilat and Nathan Hevrani.

### Miami: Inspirational Design

TAU Governor Leslie Gelrubin Benitah and husband Harry Benitah, along with American Friends of TAU, hosted a fundraising event in support of the David Azrieli School of Architecture at Tel Aviv University. The evening of cocktails and dinner at the Benitah home in Bal Harbor celebrated the annual Michel Gelrubin Prize for Architecture, founded by his children Samuel and Leslie in his memory. Special guest speaker was famed Miami architect Kobi Karp.



From left: Leslie Gelrubin Benitah, Harry Benitah, Isaac Benitah, Kobi Karp and Salome Benitah



Back row, from left: Mexican Friends Board members, Fernando Lasky, Carlos Gatt, Karen Rossow (Executive Director), and Ferenz Feher

### Mexico City: Showcasing TAU Innovation

Mexican Friends of TAU held their first TAU Innovation Day at the World Trade Center in Mexico City, aimed at bringing together entrepreneurs and students to explore business trends and opportunities for government and international funding. The event featured 19 guest speakers including TAU Dean of Engineering Prof. Yossi Rosenwaks. Funds raised went to the Mexican Friends of TAU Scholarship Fund, which helps Mexican students wishing to study at TAU.

Front row: Mexican Friends members Jaime M. Franklin, Yael Guzik and Alejandra Meyer; Prof. Yossi Rosenwaks; Mexican Friends President Jaime Murrow; and Mexican Friend Elias Shuchleib



### Montreal: Fighting Cancer

TAU Prof. Dan Peer, Director of the Laboratory of Precision Medicine at the George S. Wise of Life Sciences, braved arctic-like conditions



From left: David Levy, Consul General of Israel to Quebec and Atlantic Canada and TAU alumnus; Prof. Dan Peer; Judge Barbara Seal-Shiveck, Immediate Past National President of CFTAU; Dr. Michael Tenenbaum, Regional Chair, CFTAU Ottawa, Quebec and Atlantic Canada; Sharon J. Fraenkel, Executive Director Ottawa, Quebec and Atlantic Canada; and Rotem Segev, Deputy Consul General

to speak at three successful events: an intimate cocktail gathering hosted by CFTAU and the Israel Cancer Research Fund (ICRF) in support of his research, "Cannabis Revolution in Cancer Treatment"; a scientific symposium and round table titled "The Future in Oncology: Accelerating Academic Ideas into Clinical Translation and Potential Cures," hosted by medical consortium TransMedTech; and a fundraiser and cocktail reception for CFTAU supporters and young professionals.

### Madrid: Second Annual Maimonides Prize

Spanish Friends of TAU hosted a gala event at the luxurious Villa Magna Hotel, where the second annual Maimonides Prize was awarded to esteemed Spanish businesswoman and philanthropist Alicia Kopolowitz for her championing of research into childhood and adolescent mental disorders, including autism and behavioral problems. Students of the Buchmann-Mehta School of Music entertained the distinguished guests, who helped raise funds for scholarships for Spanish students studying at TAU, and various research projects.



From left: Herman Richter, Senior Resource Executive, Latin America, Spain & Portugal; Isaac Querub, Co-President of Spanish Friends; Esther Querub; Astrid Misrahi, TAU Governor; Alicia Kopolowitz; Patricia Nahmad, Co-President of Spanish Friends; and Amos Elad, VP of Resource Development

## ••• Top Global Friends Events

### Paris: Classical Performance

French Friends of TAU and the City of Paris hosted a concert at the famed Theatre des Champs Elysées. TAU Buchmann-Mehta School of Music students Shir Hayat (violin), Simon Lemberski (viola), and Ori Ron (cello) joined the Chamber Orchestra of Paris, thrilling the audience with their interpretation of Schubert's *Unfinished Symphony*. The concert continues the tradition of cooperation and cultural exchange between the Buchmann-Mehta School and the Chamber Orchestra of Paris.



### Toronto: Supporting Lone Soldiers

Canadian Friends of TAU and the Lone Soldier Center in Memory of Michael Levin hosted former Israeli ambassador to the UN, Ron Prosor, at the downtown conference center in the luxurious Scotia Plaza. Over 100 guests enjoyed Prosor's eloquent and timely wisdom gained from a career representing Israel on the world stage. Funds were raised in support of scholarships for Lone Soldiers studying at TAU.



From left: Nathan Disenhouse, Board Chair-CFTAU; Stephen Adler, Executive Director, Ontario & Western Canada; Galit Baram, Israeli Consul-Toronto and Western Canada and TAU Alumna; Ron Prosor; and Michael Domb, Vice President, Lone Soldier Center

### Sydney: Paying Tribute to Dear Friends

Over 100 friends and guests of Australian Friends gathered at the seaside home of the Moss family at Piper Point to pay tribute to the late Agi and Sam Moss, beloved friends and long-time supporters of TAU and the Australian Jewish community. Sam was a Holocaust survivor, a TAU Governor and a founding member of the New South Wales Division of Australian Friends. Prof. Yair Bar-Haim of the School of Psychological Sciences and Sagol School of Neuroscience spoke on TAU's new National Center for Traumatic Stress and Resilience, where one of its wings is being named in honor of Agi and Sam Moss.



From left: Steven Moss and Meir Moss, sons of Agi and Sam Moss

### Zurich: Talking Environment

TAU Prof. Colin Price, Head of the Department of Environmental Studies, treated an intimate gathering of Swiss Friends to a lecture on TAU innovations in mobility, nutrition, energy and water management. The evening was hosted at the Zurich home of Dr. Michael Rabner and his wife Gabriella, at which scholarship funds were raised.



From left: Patrick Loeb, President, TAU Swiss Friends; Dr. Michael & Gabriella Rabner; Prof. Colin Price; and Alain Picard, CEO Swiss Friends.



### São Paulo: Showcasing TAU Innovation

TAU President Joseph Klafter held a fireside chat at the Brazilian think tank Center for Debates on Public Health (CDPP), extolling the University's accomplishments in AI, national security and medicine. At a separate event, prominent Brazilians Victor Elias and Alessandra Nigri hosted a cocktail reception and dinner at their São Paulo home. David and Tamy Safra co-hosted the evening with Raymond Shayo, a TAU alumnus. A talk was given on Translational Medicine by Prof. Dan Peer, Director of the Laboratory of Precision Medicine at the George S. Wise Faculty of Life Sciences.

From left: Amos Elad, VP Resource Development; Alessandra Nigri; Tamy and David Safra; Prof. Joseph Klafter; Raymond Shayo; Prof. Dan Peer; and Victor Elias Nigri

### San Francisco: Evening of MultiPiano Delights

TAU's Buchmann-Mehta School of Music was well represented at the San Francisco Conservatory of Music, with School Head Prof. Tomer Lev and alumni Berenika Glixman, Nimrod Meiry-Haftel and Ayal Pelc entertaining guests with a "two-piano, four-hands" concert, born out of Lev's award-winning MultiPiano project. The AFTAU event included an elegant dinner prior to the concert, hosted by philanthropists Barney and Barbro Osher. Distinguished guests included Israel Consul General to San Francisco Shlomi Kofman and Executive Director of the California Israel Chamber of Commerce Sharon Vanek.



From left: Prof. Tomer Lev with Barbro and Barney Osher



From left: Nimrod Meiry-Haftel, Berenika Glixman, Ayal Pelc and Prof. Tomer Lev



From left: Prof. Markus Müller; Prof. Liat Kishon-Rabin, Head of the Stanley Steyer School of Health Professions; Dr. Bernhard Ramsauer; Dr. Christiane Druml, Director of the Medical Collections, MedUni Vienna; Prof. Wolf-Dieter Baumgartner, Chairman of the HEARING Network; Prof. Raanan Rein; and Alexander Gertner, General Secretary of TAU Austrian Friends

### Vienna: Advancing Medical Cooperation

Austrian Friends and Medical University of Vienna (MedUni Vienna) held their second annual gala dinner to raise funds for joint research projects between TAU's Sackler Faculty of Medicine and MedUni Vienna. TAU Vice President Raanan Rein, Austrian Friends President Dr. Bernhard Ramsauer and MedUni Vienna Rector Prof. Markus Müller each spoke to the 200 guests on the rich history of friendship and collaboration between the institutions.

# Building Bridges to Africa



A delegation of 20 academics, business-people and policymakers, led by TAU President Joseph Klafter, attended the second Africa-Israel Forum held in Abeokuta, Nigeria. The Nigeria summit, dedicated to technology in agriculture, was hosted by former Nigerian President Olusegun Obasanjo at his Presidential Library. It was held by TAU in partnership with the Brenthurst Foundation, the Agricultural Research

Institute (ARO) Volcani Institute of Israel, Israel Innovation Authority and AJC Africa Institute. Among the delegates were two Nigerian alumni of TAU, Endurance Ojo and Tony Bawo Esimaje, graduates of the Manna International MSc Program in Plant Sciences with Emphasis on Food Safety and Security. The event received the active help and support of attendees Eytan Stibbe of Vital Capital and Stanley and Dr. Marion Bergman. African delegates included the Vice President of Malawi, Saulos Chilima; Finance Minister of Lesotho, Dr. Moeketsi Majoro; and senior officials, bankers and entrepreneurs from across Africa.

digest



TAU President Joseph Klafter with former Nigerian President Olusegun Obasanjo



## Partnering in Nanoscience

A new collaborative venture between Northwestern University and TAU brings together researchers and students in the field of nanotechnology. Under the new partnership, two young researchers from each university will receive post-doctoral fellowships supporting two years of their research at the partner institution. The fellowships, which will cover about 75% of the total cost of the research, were paid for with funding provided by philanthropist and businessman Roman Abramovich, benefactor of TAU's planned Abramovich Building for Nanoscience and Nanotechnology. The collaboration will also offer up to two joint research grants a year to support pilot projects with commercial potential.

## TAU-USF Join in Aging Research

A MoU was signed between TAU, the University of Southern Florida (USF) and the Florida-Israel Business Accelerator (FIBA) to advance R&D technologies in the field of aging, with the aim of improving life for the elderly population. The agreement was signed at a ceremony in Tampa by TAU Vice President Raanan Rein and USF President Prof. Judy Genshaft.

TAU Governor David Scher, on behalf of the TAU UK Trust, was a key force behind the collaboration. The program will focus on innovations in four areas: aging in one's own home, cardiovascular patient self-management, virtual reality in health, and hearing and speech technology. Researchers from USF and from several companies presented their latest findings.



From left: Prof. Judy Genshaft, Prof. Raanan Rein and Joseph Probasco, President, Tampa JCC and Federation



**▲**  
Maestro  
Zubin Mehta

## Annual Gala Concert of Buchmann-Mehta Symphony Orchestra

The Annual Gala Concert of the Buchmann-Mehta Symphony Orchestra was held at the Charles Bronfman Auditorium in Tel Aviv. The concert was conducted by Yoel Levi and featured performances by outstanding Buchmann-Mehta School students and graduates, hornist Noam Fresko, pianist Itamar Prag, percussionist Eran Margalit and violinist Victoria Gelman, playing selections from Mozart, Prokofiev, Keiko Abe, Ravel and Gershwin.

During the event, the 2019 TAU President's Award was conferred upon Maestro Zubin Mehta, Honorary President and co-founder, together with philanthropist Josef Buchmann, of TAU's Buchmann-Mehta School of Music, and accepted on his behalf by Avi Shoshani of the IPO. The Award recognized Mehta's more than 15 years of dedicated service to the Buchmann-Mehta School, his success in bridging between the School and the IPO, which he led for five decades, and his remarkable sixty-year international career as a conductor who has worked with some of the world's most notable orchestras.

The second global summit on "Life in Extreme Conditions – A Lesson from Nature," was held at Masada by TAU's Porter Dead Sea Institute for Life Under Extreme Conditions, funded by the Porter Foundation, in cooperation with the Tamar Regional Council and the Dead Sea and Arava Science Center. The goal of the summit was to bring together researchers from overseas and Israel to explore the intersections between geological, environmental, medical and cultural aspects of this unique region. Topics included health and medicinal benefits, microbiome, biodiversity, geophysics, seismology, sociology, anthropology, disaster mitigation and environmental studies, among others. The conference was organized by Dr. Mira Marcus-Kalish, Director of International Research Affairs of TAU.



Group photo at the Dead Sea Institute

## Dead Sea

## American Studies Center Launched



Dr. Yoav Fromer

TAU established a new multidisciplinary Center for the Study of the United States in collaboration with the Fulbright Program, headed by Dr. Yoav Fromer of the Lester and Sally Entin Faculty of Humanities and Gershon H. Gordon Faculty of Social Sciences. The Center promotes research on politics, society, policymaking, the economy, foreign relations, culture, art and more in the USA, with the first year's agenda dedicated to immigration issues. At the launching ceremony, Dr. Anat

Lapidot-Firilla, Executive director of the Fulbright Commission in Israel, expressed her hope that the Center "will produce relevant, fresh and reliable knowledge of American contemporary society and institutions to be disseminated to a wide audience of students, researchers and public policy and opinion makers throughout Israel." Also attending were Terry Davidson, Counselor for Public Affairs at the US Embassy in Israel, and Prof. Raanan Rein, Vice President of TAU.



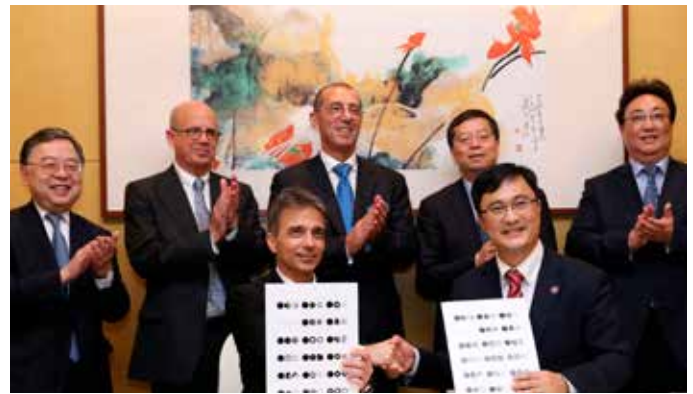


## Third Annual China Israel Innovation Forum

The third annual China Israel Innovation Forum was held in Shenzhen, China, by TAU in partnership with Tsinghua University and Morningside from Hong Kong. The gathering welcomed some 120 influential individuals from academia, government and industry from China and Israel to explore the latest technological developments and university-driven innovations. TAU President Joseph Klaffer co-chaired the Forum together with TAU Honorary Doctor and President of Tsinghua University Prof. Qui Yong and TAU Honorary Doctor Mr. Ronnie C. Chan, Co-founder of Morningside and Chairman of Hang

Lung Properties. During the Forum meeting, TAU and Tsinghua Berkeley Research Institute (TBSI) launched a new center in Shenzhen for collaborative research, startup acceleration and incubation, thereby advancing Israel projects entering the Chinese market and vice versa.

Signing in the new TAU-TBSI Center



# Focus



An Escape Room in action

## Pure Escapism

TAU is providing creative new ways of making learning more fun through the Escape Room Project, a physical space that provides a hands-on and alternative way of learning complex

course material. The Escape rooms involve groups of students being locked in a room and timed on how fast they can solve puzzles based on academic course material, and

are designed by both academic staff and students. The Project is run by Minducate, a collaboration between the Sagol School of Neuroscience and TAU Online—Innovative Learning Center. An Escape Room called ChemX, based on a course in life sciences, involved finding an antidote to a poison created by a crazy professor. “In the escape room, abstract concepts become tangible, providing an additional level of understanding of the material,” says Guy Teichman, a PhD student in life sciences. Head of the Project Dr. Limor Radoszkowicz of Minducate, says that the project has been extremely popular with students and that registration for the slots filled up almost immediately upon opening.

people

## Israel's President Graces Campus

President Reuven (Ruby) Rivlin visited TAU's cutting-edge labs and heard about programs that enhance social involvement and accessibility to higher education. He then joined a panel of researchers and TAU top officials at the Cymbalista Jewish Heritage Center, where he heard presentations by Dean of Students Tova Most on TAU Impact, a program that offers students accredited courses involving community engagement projects; Arab master's student Hiyam Diab on her experience of creating a dialogue with prisoners through TAU's Community Theater Program; Prof. Noam Shomron of the Sackler Faculty of Medicine and master's student Malak Darawshe, on genetic screening for preventing diseases; Prof. Yael Hanein, Head of the Center for Nanoscience and

Nanotechnology, on a project that brings together Ultra-Orthodox rabbis with TAU scientists for dialogue and cooperation on issues at the crossroads of science and Torah study; and Prof. Noam Mizrahi, Head of Bible Studies, on how state-of-the-art technologies, such as AI or DNA decryption, are taking the study of the Dead Sea Scrolls to the next level.



▶ President Rivlin with TAU International students

he heard presentations by Dean of Students Tova Most on TAU Impact, a program that offers students accredited courses involving community engagement projects; Arab master's student Hiyam Diab on her experience of creating a dialogue with prisoners through TAU's Community Theater Program; Prof. Noam Shomron of the Sackler Faculty of Medicine and master's student Malak Darawshe, on genetic screening for preventing diseases; Prof. Yael Hanein, Head of the Center for Nanoscience and

President Rivlin said: "I saw here today not only great scientific discoveries, but also a true understanding of the need for dialogue, and the ability to see what connects us, and not only what separates us from one another," he said. "I hope that our society will similarly become more inclusive, so that all university graduates, no matter what their backgrounds, will be able to integrate into Israeli society and not be blocked by a 'glass ceiling.'"

## When Harry Met Zahava

TAU's Prof. Zahava Solomon discussed issues relating to the long term trauma of military combatants with HRM Prince Harry, the Duke of Sussex, at the 2019 Veterans' Mental Health Conference held at King's College London. The goal of the conference was to share ideas about how best to support the psychological wellbeing of former military personnel.

The Duke, who served two tours in Afghanistan, discussed the long-term effects of military service with several speakers, praising their work. He is a regular champion of mental health advocacy through his work with the Royal Foundation's "Heads Together" project, which aims to promote a national conversation on the topic.



Prince Harry discusses post-military combat trauma with TAU Prof. Zahava Solomon

"The Prince expressed great interest and concern for the safety of soldiers," said Solomon, an Israel Prize laureate and retired Lieutenant-Colonel in the Israel Defense Forces. "I expressed my appreciation in the name of mental health professionals in Israel for his involvement and sensitivity. For someone in his position to come forward and say it's quite normal to be traumatized, is really beneficial."

Prof. Solomon heads the I-CORE Research Center for Mass Trauma at TAU and has served as Head of TAU's Bob Shapell School of Social Work and of TAU's Adler Research Center for Child Welfare and Protection.

## Cycling Prowess


TAU Governor Sylvan Adams (right) test drives one of the new high-performance bicycle training rigs that is part of the Sylvan Adams Sports Institute, headed by Prof. Mickey Scheinowitz (left) of the Iby and Aladar Fleishman Faculty of Engineering.



 prizes

Prof. Amnon Yariv, the Martin and Eileen Summerfield Professor of Applied Physics and Electrical Engineering at the California Institute of Technology, was awarded a TAU Honorary Doctorate for his indelible mark in the field of integrated optics technology. Prof. Yariv is the recipient of prestigious awards and honors including the US National Medal of Science presented by President Barak Obama in 2010. His research group has generated numerous technologies, including the invention of the semiconductor distributed feedback laser, a device that enabled the transmis-



 From left: Prof. Yaron Oz, Prof. Amnon Yariv and Prof. Raanan Rein

## TAU Confers Honorary Doctorate on Pioneer in Internet Technology

sion of mass data via phone, video, cable and the Internet. The award was presented by TAU Rector Yaron Oz and TAU Vice President Raanan

Rein. Prof. Yariv is a member of and visiting lecturer at TAU's Mortimer and Raymond Sackler Institute of Advanced Studies.

community 

## At-Risk Women Get a Second Chance to Fulfill their Dreams

Young women from disadvantaged backgrounds also dare to dream big. The Alumni Organization of TAU's NCJW Women and Gender Studies Program pioneered a project, "From #MeToo to Witches: Talking Gender," part of the "Dream House" project at the Manof Youth Village in Akko, a boarding school for 11<sup>th</sup> and 12<sup>th</sup> graders and pre-army trainees who have struggled to integrate successfully into traditional educational frameworks.

Recognizing the role gender plays in social and work culture, the TAU alumni, led by TAU graduate and doctoral student Michal Zeevi, developed an 8-month biweekly female-centric program with Manof staff member Yakira Levi, with the cooperation of Manof Director Zehava Atrakzi. The women confronted issues such as

body image, relationships and domestic violence through lectures, videos, games, and discussions meant to empower them. "Each girl needs to have a dream and she needs to try to fulfill it," said Yakira Levi.

The NCJW supported Alumni Organization was established in 2017 by Prof. Daphna Hacker, Head of TAU's NCJW Women and Gender Studies Program and a member of the Buchmann Faculty of Law. As part of the Program, graduates are committed to giving back to women in the community.





## Eli Gelman Appointed TAU Executive Council Chairman

Eli Gelman was appointed as Chairman of Tel Aviv University's Executive Council, replacing Dr. Giora Yaron who completed his term of office. From 2010 to 2018, Mr. Gelman served as President and Chief Executive Officer of Amdocs Management Limited, a leading software and services provider to communications and media companies, with 25,000 employees. His career at Amdocs spanned more than 30 years, including operations, software development and sales, alongside strategy and corporate development. Mr. Gelman has been a member of the Amdocs Board of Directors since 2002, and was also a Board Member and Chairman of Retalix, a provider of software solutions to retailers and distributors worldwide. Mr. Gelman holds a BSc in electronic engineering with a specialization in communication and computers from the Technion—Israel Institute of Technology. His 5 years of service in the Israel Defense Forces during the 1980s included a leadership role in developing frequency-hopping encrypted communication gear which is still in use today. In his charitable work, Mr. Gelman has devoted significant personal time to youth education.



## Prof. Ariel Porat Is President-Elect of TAU

TAU alumnus Prof. Ariel Porat of the Buchmann Faculty of Law is a member of the Israel Academy of Sciences and Humanities and a 2014 EMET Prize laureate. His main research areas are torts, contracts, remedies, and law and economics. After completing his LLM and direct JSD at TAU, he performed post-doctoral studies at Yale Law School and joined TAU in 1990. From 2002 to 2006, he served as Dean of Law and from 2013 to 2014 he chaired the University Strategic Steering Committee tasked with the academic restructuring of the University. Porat is Alain Poher Professor of Law at TAU, and Associate Member and Fischel-Neil Distinguished Visiting Professor of Law at the University of Chicago. He was also a Visiting Professor at the University of California at Berkeley, Columbia University, New York University, Stanford University, University of Toronto and the University of Virginia. He is a member of the American Law Institute, a former board member of the American Law and Economics Association and a former president of the Israeli Law and Economics Association. From 1997 to 2002, he was the Director of TAU's Cegla Center for Interdisciplinary Research of the Law. He is the founder of the journal *Theoretical Inquiries in Law* and was its editor-in-chief in the years 1999-2003. Porat is the author of four books and more than 90 articles published by the world's leading academic presses and scholarly journals.

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**Appointments:** Prof. Marc Teboulle, Exact Sciences, incumbent of the Eric and Sheila Samson Chair in Optimization • Prof. Dana Ron-Goldreich, Engineering, incumbent of the Lazarus Brothers Chair of Computer Engineering • Prof. Ruth Ashery-Padan, Medicine, incumbent of the Zucker-Sussman Chair in Glaucoma Research • Prof. Gideon Paret, Medicine, incumbent of the Leon Alcalay Chair in Pediatric Immunology • Prof. Neil Gandal, Social Sciences, incumbent of the Henry Kaufman Chair in International Capital Markets • Prof. Shmuel Sagiv, Exact Sciences, incumbent of the Software Systems Chair • Prof. Emilia Fridman, Engineering, incumbent of the Chana and Heinrich Manderman Chair in System Control • Prof. Nahum Kiryati, Engineering, incumbent of the Manuel and Raquel Klachky Chair of Image Processing • Prof. Eugenii Shustin, Exact Sciences, incumbent of the Bauer-Neuman Chair in Real and Complex Geometry • Prof. Nissan Itzhaki, Exact Sciences, incumbent of the Dr. Teodoro Jack and Dorothea Krauthamer Chair in Physics • Prof. Ehud Nakar, Exact Sciences, incumbent of the Jack Adler Chair of Extragalactic Astronomy endowed by P.E.F Israel Endowment Funds • Prof. Mordechai Gutman, Medicine, incumbent of the Mordechai-Reuven and Jetta Chilewich Chair of Plastic Surgery • Prof. Diana Golodnitsky, Exact Sciences, incumbent of the Raymond and Beverly Sackler Chair in Chemistry and Energy Sciences



## ISRAEL PRIZE



The 2019 Israel Prize in the category of Jewish History was awarded to TAU **Prof. (Emer.) Mordechai Akiva Friedman**, who was recognized by the Prize committee as “the greatest Geniza scholar of our generation. His work has shed light on the history of the Jewish people in the Middle Ages in the East, including in North Africa, the Land of Israel and beyond to India, and on Jewish-Muslim relations.” Born in the US, Prof. Friedman earned his BA and PhD from the University of Pennsylvania and a Rabbinical Degree from the Jewish Theological Seminary of America. He joined the TAU faculty in 1973, served recurrently as Chairman of the Talmud Department, and was the incumbent of the Joseph and Ceil Mazer Chair in Jewish Culture in Muslim Lands and Cairo Geniza Studies. In 2001, he was elected Fellow of the Israel Academy of Sciences and Humanities. He has authored 12 books, edited 20 and published 160 articles in professional journals.

## EMET PRIZE



The EMET Prize in the social sciences, an annual prize given for excellence in academic and professional achievements under the auspices of the Prime Minister’s Office, was awarded to **Prof. Hanna Herzog** of the Department of Sociology and Anthropology. Prof. Herzog is a founder of the field of women and gender studies in Israel and was cited for her contribution to advancing the status of women in Israeli society. Prof. Herzog joined the TAU faculty in 1981 and has served as Chair of the Department of Sociology and Anthropology. She is the author of many books and articles on political-historical sociology, ethnic, national and gender inequality.



**Prof. Abdussalam Azem** was appointed Dean of the George S. Wise Faculty of Life Sciences, replacing Prof. Daniel Chamovitz. Prof. Azem was born in Taybeh and gained his BSc degree in Biology from Ben-Gurion University of the Negev and MSc and PhD in Biochemistry from Tel Aviv University.

He joined the TAU faculty in 1997 and served as Chairman of the Department of Biochemistry and as Head of the School of Neurobiology, Biochemistry and Biophysics. Prof. Azem researches the molecular mechanisms of protein systems and their relation to genetic diseases. He twice won the Rector’s Outstanding Lecturer Award.

**Honors:** 2018 Israel Chemical Society (ICS) Prize for Outstanding Young Scientist, **Prof. Roey Amir**, Exact Sciences • Kadar Family Award for Outstanding Research, **Dr. Ayala Arad**, Management • Reading Hall of Fame, **Prof. Dorit Aram**, Education • 2018 Alon Fellowship, **Dr. Iair Arcavi**, Exact Sciences • Ernest and Bonnie Beutler Research Program of Excellence in Genomic Medicine Award of Rambam Hospital, **Prof. Karen Avraham**, Medicine • 2018 Alon Fellowship, **Dr. Liron Barak**, Exact Sciences • Founder Award for Research from the International Society of Nurses in Genetics, **Prof. Sivia Barnoy**, Medicine • SPS Prize of NATO, **Prof. Nir Ben-Tal**, Life Sciences • 2019 Karl Pearson Prize, **Prof. Yoav Benjamini**, Exact Sciences • Member of the Israel Academy of Sciences and Humanities, **Prof. Eyal Benvenisti**, Law • President of ETOPIIM, **Prof. David Bergman**, Exact Sciences • France Israel Foundation Young Economist

Award, **Prof. Nittai Bergman**, Social Sciences • 2018 Alon Fellowship, **Dr. David (Dudu) Burstein**, Life Sciences • 2018 RSA Conference Award for Excellence in Mathematics, **Prof. Ran Canetti**, Exact Sciences • Kadar Family Award for Outstanding Research; 2018 Computer Graphics Achievement Award, presented by ACM SIGGRAPH, **Prof. Danny Cohen-Or**, Exact Sciences • Special Award from the Israeli Pain Society, **Prof. Ruth Defrin**, Medicine • Fellow of the Israel Physical Society, **Prof. Guy Deutscher**, Exact Sciences • Christian Huygens Medal for Exact Sciences; “Knight of the Sciences and Arts” of the Russian Academy of Natural Sciences, **Prof. Lev Eppelbaum**, Exact Sciences • Foreign Fellow of the American Academy of Arts and Sciences, **Prof. Ora Entin-Wohlman**, Exact Sciences • 2018 Amazon Research Award, **Prof. Michal Feldman**, Exact Sciences • Fattal Prize for Excellency in Law Research, **Prof. Talia Fisher**, Law • IEEE Award,

**Prof. Emilia Fridman**, Engineering • 2019 Rappaport Prize for Excellence in Biomedical Research; Foreign Fellow of the Indian Academy of Sciences, **Prof. Ehud Gazit**, Life Sciences • Life Achievement Award of the Israel Public Health Medical Organization, **Prof. Uri Goldbourt**, Medicine • Israel Sarob Prize, **Prof. Uri Gophna**, Life Sciences • 2018 Herbert Jacob Book Prize, **Prof. Daphna Hacker**, Humanities • Zeltner Prize, **Prof. Yitzhak Hadari**, Law • ACM Fellows for 2018, **Prof. Dan Halperin**, Exact Sciences • Knight of the Order of Arts and Letters of the Minister of Culture in France, **Prof. Sefy Hendler**, Arts • Kadar Family Award for Outstanding Research, **Prof. Tamar Herzig**, Humanities • Fellow of the Israel Physical Society, **Prof. David Horn**, Exact Sciences • 2018 Gideon Doron Best Book Award, **Dr. Yuval Jobani**, Humanities • 2018 Excellence Award from the Israeli Physiotherapy Society, **Dr. Micha Katz-Leurer**, Medicine • Paul Dudley White International Scholar Award of the American Heart Association, **Prof. Silvia Koton**, Medicine • 2018 Jordan Schnitzer Book Award, Association of Jewish Studies, **Dr. Michal Kravel-Tovi**, Social Sciences • Gwinner Prize, **Prof. Noga Kronfeld-Schor**, Life Sciences • Member of the Israel Young Academy, **Dr. Kinneret Lahad**, Humanities • 2018 Alon Fellowship, **Dr. Ori Lahav**, Exact Sciences • 2018 Tenne Family Prize for Nanoscale Sciences, **Prof. Gil Markovich**, Exact Sciences • Award by the Society of Ethnomusicology, **Dr. Moshe Morad**, Humanities • Zeltner Prize, **Prof. Guy Mundlak**, Law • Fellow of the Israel Physical Society, **Prof. Hagai Netzer**, Exact Sciences • 2019 Earle K. Plyler Prize for Molecular Spectroscopy & Dynamics, **Prof. Abraham Nitzan**, Exact Sciences • 2018 Alon Fellowship; 2018-19 Colton Fellowship, **Dr. Hannah Pollin-Galay**, Humanities • 2018 Bahat Prize for Outstanding Academic Manuscripts, **Prof. Dina Porat**, Humanities • Kadar Family Award for Outstanding Research, **Prof. Oded Rechavi**, Life Sciences • Fellow of the European Association for Theoretical Computer Science

(EATCS), **Prof. Dana Ron-Goldreich**, Engineering • 2018 Karl August Mobius Prize, **Prof. (emer.) Eugene Rosenberg**, Life Sciences • 2018 Jordan Schnitzer Book Award, **Prof. Orit Rozin**, Humanities • Best Paper Award in FOCS 2018, **Prof. Muli Safra**, Exact Sciences • 2019 Israel Cancer Research Fund (ICRF) Professorship Award, **Prof. Ronit Satchi-Fainaro**, Medicine • Honorary Doctorate from University of Paris1 Pantheon-Sorbonne; **Prof. David Schmeidler**, Exact Sciences • Member of the American Society of Microbiology (ASM), **Prof. Gil Segal**, Life Sciences • Best Paper Award, International Communication Association, **Dr. Elad Segev**, Social Sciences • 2018 Krill Prize, **Dr. Amit Sever**, Exact Sciences • 2018 Israel Chemical Society (ICS) – Adama Prize for Technological Innovation **Prof. Doron Shabat**, Exact Sciences • Hashin Prize for Young Researchers, **Dr. Hila Shamir**, Law • Israel Political Science Association Lifetime Achievement Award, **Prof. Michal Shamir**, Humanities • Israel Young Academy of Sciences and Humanities, **Dr. Eilon Shani**, Life Sciences • Member of Israeli Academy of Sciences and Humanities, **Prof. (Emeritus) Micha Sharir**, Exact Sciences • Scientific Member of the Max Planck Society in Germany, **Prof. Amiel Sternberg**, Exact Sciences • RAICES 2018 Prize from the Argentinean government, **Prof. Marcelo Sternberg**, Life Sciences • Distinguished Manuscript Award from Open University, **Dr. Ravit Talmi-Cohen**, Humanities • SIAM Optimization Prize, **Prof. Marc Teboulle**, Exact Sciences • Gorni Prize for Public Law, **Dr. Yofi Tirosh**, Law • Optical Society of America (OSA) Lifetime Achievement Award, **Prof. Moshe Tur**, Engineering • Toshihide Numata Prize in Buddhism, **Dr. Roy Tzohar**, Humanities • Charter Honorary Fellow of the John Bell Institute for the Foundations of Physics, **Prof. Lev Vaidman**, Exact Sciences • 2018 ARCHES Award, **Dr. Miri Yemini**, Humanities • 2018 Lifetime Achievement Award at the Knesset, **Dr. Luba Zak**, Medicine

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"The interdisciplinary approach we learned at **Tel Aviv University** helped us think out of the box and reach the moon."

**Yonatan Winetraub and Yariv Bash,**  
Co-Founders of **Spacell** and **TAU Alumni**



TAU Alumni **Yonatan Winetraub** and **Yariv Bash** and former TAU Instructor **Kfir Damari**  
Co-Founders of **Spacell** and recipients of the 2019 TAU President's Award



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