



BAR-ILAN CELEBRATES

ISRAEL



President's Report

2023



FULFILLING THE DREAM

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Bar-Ilan celebrates Israel's 75th Fulfilling the Dream

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Message from the President

There's an apocryphal story about an exchange between Lillian Disney, the wife of then-late Walt Disney, at the grand opening of Florida's Disneyworld in 1971. Walking down the park's Main Street in the company of more than 10,000 guests, a friend expressed his regret that Walt wasn't been able to see this. To which Lillian responded, "He did see it. That's why we're here."

History is full of visionaries, perhaps none more so than the founder of modern Zionism. When Theodor Herzl died in 1904, a national home for the Jews was still far from a reality. In his day, many doubted that it would ever come to pass. That's why, on the 75th anniversary of the founding of the State of Israel—both despite and even because of the recent unrest surrounding the government's proposed judicial reforms—it seems only right to recall his impossible vision, without which we would not be here.

To be sure, the vision is just the beginning. The act of building a nation, meanwhile, is a project that never ends. But in many ways, and unlike many other nations, we in Israel are forever striving to fulfill our founders' dreams. David Ben-Gurion's dream of a strong, secure country. Eliezer Ben-Yehuda's dream of a resurrected Hebrew. And the dream of Rabbi Meir Bar-Ilan

that academic excellence meet Jewish ideals—all these are still works in progress, and arguably nowhere more so than at Israel's universities.

This understanding that dreams require not only bold visions, but also a commitment to the long game, has informed the six major initiatives we recently established, and the several more that we plan to establish in the year to come. From the search for renewable energy to personalized medicine, these research and education "mega projects" address some of the biggest challenges facing Israel and all of humanity. At first glance, their goals may seem as unattainable as Herzl's used to be. But there is no doubt that they will be attained—although, in all likelihood, not by us.

By design, these ambitious projects are meant to last for years, ideally decades. They are not the work of just one researcher, one department, or one faculty. They are, in many instances, not even the work of just our University. Animated by the value of collaboration, these projects bring our brightest minds together with those in government, healthcare, culture, and industry. In the case of Psifas, for example, our data scientists are working with Israel's health-management organizations

to create a genome-sequencing and medical database. The findings will then fuel research and development into next-level precision medicine—both in Israeli academia, and in the country's biomedical companies.

Likewise, our investment in the emerging field of bio-convergence, which includes a new Unit for the Synthesis of Smart Materials and the 949 Initiative, a collaboration between the Sheba Medical Center and Bar-Ilan, will result in new technologies for more effective diagnoses, treatments, and life-saving therapies. Together, these initiatives underscore our strategic commitment to strengthening and advancing the field of healthcare in Israel.

The new Institute for National Energy Research, the result of a \$37 million contract awarded by the government last year, will leverage the innovations of scientists at both Bar-Ilan and the Technion to achieve the state's goal of 30-percent reliance on renewable energy by 2030. A major part of the institute's success will be our prototype lab, where ideas will be developed, tested, and translated into products with commercial potential.

In the area of society, our new Jonathan Sacks Institute, based in our Department of Political Studies, will create a network of professionals dedicated to advancing Rabbi Sacks' ideals through their work in every profession and field. In this way, a cohort of citizens will have an outsized influence, shaping the Jewish and democratic character of the state. Also vital to Israel's security, prosperity, and particularity is our Hebrew in the Age of AI Initiative, which includes our work in the Hebrew digital humanities and the Hebrew NLP (natural language processing) Lab. The former will allow the Jewish people's historical texts and modern scholarship to be a part of the global academic conversation. The latter—the only one developing technology, models, and algorithms for enabling data science-based applications in Hebrew— will almost single-handedly ensure that our ancient tongue remains a key part of any future Israeli identity.

In every instance, these projects will extend way beyond our campus, and realize their full potential through robust partnerships. Indeed, as in the case of our Russell Berrie Galilee Diabetes SPHERE, which is working to close the healthcare gap between the country's center and periphery, the vision has now been adopted by five northern municipalities. As such, it's no longer accurate to call the vision ours alone. And I can think of no better indication of the initiative's ultimate success.

Like Walt Disney, and like Theodor Herzl, we might not see the end result of all our ambitious work. But there is no question that we have set in motion multiple visions with the power to change the world. And when they begin, as they are doing now, to bear remarkable fruit, it will be our privilege to have planted the seeds of their impact.



Prof. Arie Zaban

President of Bar-Ilan University



A Word from the Chairmen



Shalom.

It's been another great year at Bar-Ilan. We are in the first year of the second Five-Year Strategic Plan, led by our President Arie Zaban. We continue to achieve great things.

Here are just a few:

- Along with the Technion, we were selected by the government to establish a National Center for the Promotion of Basic and Applied Academic Research on Energy Storage, Fuel Cell, and Hydrogen Economy. This will help Israel achieve energy independence, and help the world lessen its dependency on fossil fuels.
- We established, as part of our Russell Berrie Galilee Diabetes SPHERE, partnerships with major national healthcare providers and municipalities in five pilot cities in the northern periphery. These partnerships will provide education on pre-diabetic care and the management of diabetes and its dangerous complications among the diabetic community in the Galilee.
- We were ranked highly among the world's top universities for natural language processing and are the leading university in Israel developing technology, models, and algorithms for AI-based applications in Hebrew. This work will ensure that Hebrew remains a key part of the Jewish national identity in this new and changing world of "AI."
- We completed a new home for our Department of Computer Science and renovated six classrooms for the new School of High-Tech and Cyber Security, both of which will provide Israel with the skilled professionals that its tech sector needs.
- We were chosen to establish the Jonathan Sacks Institute at Bar Ilan, which will expose our undergraduate and graduate students to the values-based political science and theological teachings of the late Chief Rabbi Jonathan Sacks. It will also create an alumni network that will impact Israeli society with his teachings.

- In the area of education, we hired new staff for the Division of Teaching and Learning. We also revamped 70 courses, the first of thousands that will eventually be modified to make them more relevant and engaging. We also won a multi-year award from the Council of Higher Education to bridge the classroom environment to future careers that are in demand.

- We launched two new programs, a leadership training course for female researchers and a conference to encourage those researchers' media presence. This will further improve our commitment to gender balance in the University's leadership and encourage women to aspire to greater influence and involvement.

- Of the eight lawyers involved in leading the negotiations for judicial reform under the auspices of President Isaac Herzog, four are renowned professors of law at Bar Ilan.

- Two Bar-Ilan Professors were awarded the prestigious "Israel Prize": Prof. Dov Schwartz for elucidating the development of Jewish philosophy and the worldview of religious Zionism, and Prof. Zmira Mevarech for her groundbreaking work in the fields of cognition and metacognition and her promotion of mathematics education in Israel.

Again, all this would not be possible without everyone's participation: the academic community, the administration, our committed Lay leaders, and the leadership of President Zaban. While we are living in difficult and trying times that are affecting our people and country, Bar-Ilan and its Jewish values can be both a beacon of light and hope to our nation, to the global Jewish community, and to all.

Together we will do great things!

With the blessing of *Shalom Al Yisrael*, בברכת שלום על ישראל,

A handwritten signature in black ink that reads "M. Jesselson". The signature is fluid and cursive.

Michael G. Jesselson
Chairman, Board of Trustees



Dear Friends,

It is my pleasure to be able to welcome you all back to campus after almost three years. And yet, despite the long separation, our community has grown even closer than before: The concern we showed toward one other, and the support we gave to Bar-Ilan, proved the strength of our friendship and clarified our sense of shared goals. At this difficult moment for Israel on both matters of security and internal disputes, our Board of Trustees has shown that a strong foundation can weather even the most difficult of challenges. We will need to call upon that foundation as we enter our state's next three quarters' century.

Indeed, it is precisely the emphasis on developing the proper foundations that lies behind Bar-Ilan's advancements in the last few years in so many important areas. The decision to invest in the skills and leadership development of the University's management tier, for example, means that all departments and administrative units are functioning more efficiently and feel more committed to the larger purpose of their work. Likewise, the investment in an advanced digital infrastructure for Bar-Ilan has resulted in better managerial and information systems, better student services, better communication with potential applicants, and more engaging, effective instruction on the part of faculty. It will also soon ensure that our researchers' publications are more widely available and properly credited, too. In turn, this improvement will result in more support from Israel's Council for Higher Education, which awards funding as a percentage of research output. This support will fuel more original scholarship, technological innovation, and scientific discovery, and will attract more top students and faculty.

The dedication of our new Alexander Grass Computer Science Building, which we will be able to celebrate together during our board meeting, is just one of a number of capital projects that are improving our research infrastructure and facilitating needed growth. The soon-to-be-started teaching building at the Azrieli Faculty of Medicine, along with the now-occupied new student village, will also enable the University to accept and educate more students, not just from the country's center, but from everywhere in Israel and abroad.

Last, our great work bringing the Bar-Ilan story to all parts of Israeli society has raised awareness of our impact and increased our appeal among new audiences. Today we are home to students from every community in Israel, and all its nationalities, religions, ideologies, levels of observance, and ways of life. This diversity, perhaps more than any other factor, will ensure that we are a key to the state's prosperity and the cohesion of Israeli society.

All these accomplishments, the result of our firm adherence to our strategic plan, have created a solid foundation on which to build more and from which we will attain even greater accomplishments in the years to come. It is a privilege to be able to share these accomplishments with you, and to start to concentrate on what can be Israel's most successful 75 years yet.

A handwritten signature in black ink, appearing to be 'Shlomo Zohar', written in a cursive style.

Shlomo Zohar

Chairman, Permanent Committee

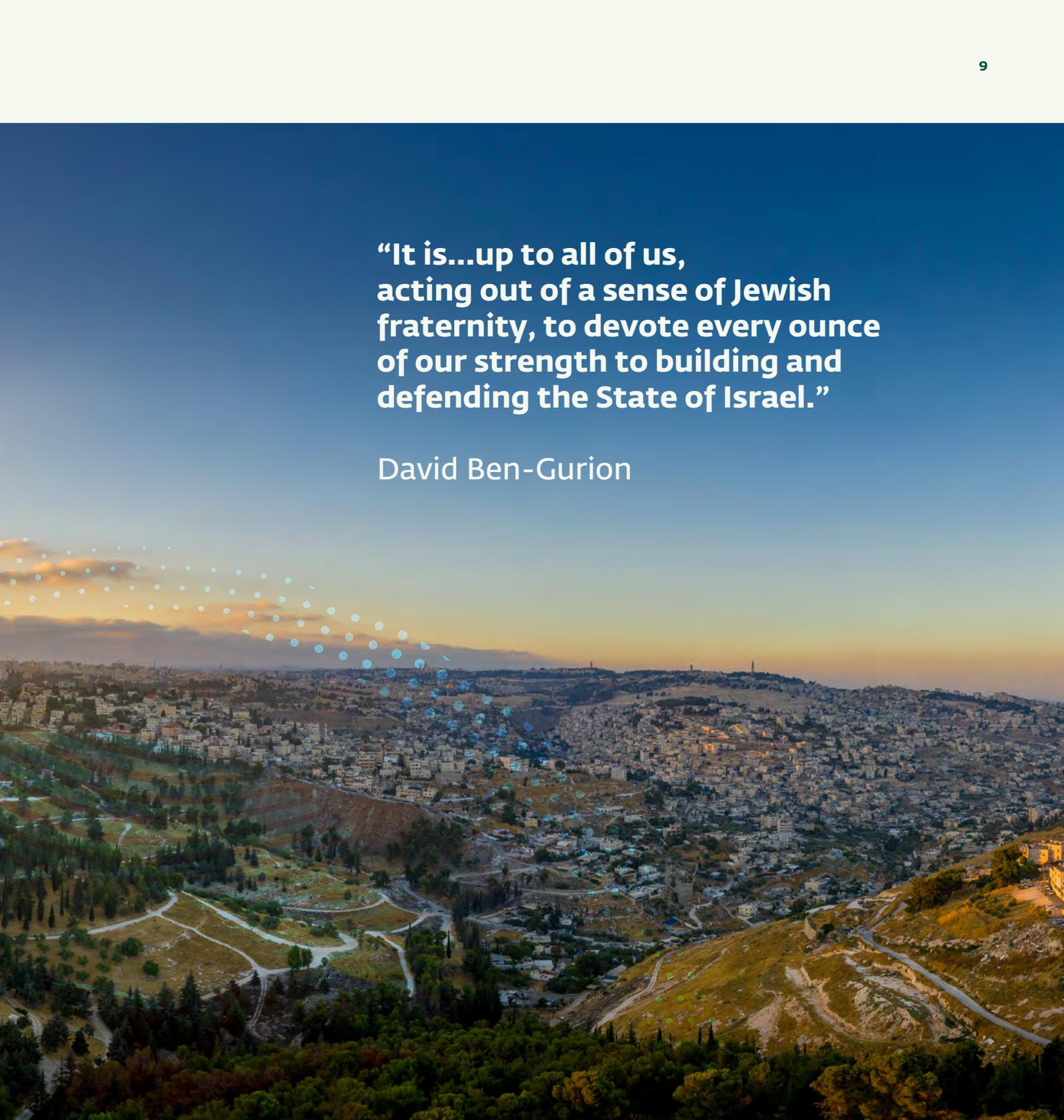


View of Jerusalem



**“It is...up to all of us,
acting out of a sense of Jewish
fraternity, to devote every ounce
of our strength to building and
defending the State of Israel.”**

David Ben-Gurion



**A Secure and
Independent State**





A Bootcamp for Energy Entrepreneurs

As part of its efforts to strengthen Israel's energy ecosystem and support entrepreneurship in the energy industry, the Center for Energy and Sustainability joined the Jewish National Fund in running a "bootcamp" this past summer for Israel's entrepreneurial community. Directed by Prof. Malachi Noked, the program featured six on-campus meetings and two tours of leading energy companies. Selected from a pool of more than 120 applicants with a viable energy-company idea, the program's 35 participants heard lectures from energy-industry experts, honed their business skills with entrepreneurship experts, and worked with mentors to advance their proposed ventures to the launch stage. Participants were joined by representatives from the Doral Group, the Bazan Group, and the Israel Electric Company, and the winning ventures received grants to help make their project a reality.

National Institute for Energy Research

A State's Ambitions, and a University's Boundless Energy

When world-renowned Bar-Ilan materials scientist Prof. Doron Aurbach completed his Ph.D. in 1983, he applied to the leading electrochemistry labs in America in the hopes of pursuing postdoctoral studies. To his surprise, he received a positive answer from the number-one researcher in the field—an offer, he explains, he had to decline, once he learned that Austin, Texas had no Jewish community. Determined to combine his academic career with a commitment to full engagement in Jewish life, Aurbach went instead to Cleveland, where another researcher was open to exploring a new field: lithium batteries.

Four decades, one Israel Chemical Society Gold Medal, and countless transformational battery innovations later, Aurbach is now poised to take his dual passions for energy science and for the Jewish state and people to their highest level yet, as co-director of Israel's first national energy initiative.

In December, Bar-Ilan was awarded, together with the Technion—Israel Institute for Technology, a \$37 million contract by the Israeli government to establish the state's first National Institute for Energy Research. The contract, which calls for basic and applied research in energy storage, fuel cells, and

hydrogen economy, is a profound acknowledgment of both universities' extraordinary accomplishments in the field to date. Indeed, thanks to their longstanding investment in outstanding energy researchers and in opportunities for leveraged impact, Bar-Ilan and the Technion are uniquely positioned among Israel's academic institutions to address the full continuum of clean-energy economies, combining electro-chemistry, materials science, network engineering and environmental regulation to pave Israel and the world's path away from the dangerous dependence on fossil fuels.

"Today, Israel develops most of its own defense technologies. We at Bar-Ilan believe that by bringing together the incredible brain power of Israel's energy scientists, industry players, and entrepreneurs, Israel can also achieve full independence in the area of energy."

Prof. Doron Aurbach

The national institute, which will be headed jointly by Prof. Doron Aurbach and Prof. Yoed Tsur of the Technion, will launch operations with the expansion of both universities' energy research groups, the establishment of new energy labs, and the facilitation of multi-group and multi-disciplinary research in line with the institute's goals. In addition, and in recognition of Bar-Ilan's successful history of academic-industry collaboration, Bar-Ilan will establish a prototype lab where ideas can be developed, tested, and translated into products with commercial potential. The leadership at Bar-Ilan will also include the prolific energy researchers Profs. Malachi Noked and Lior Elbaz of the Department of Chemistry.

In its second stage, the institute will create academia-industry-government interfaces for energy R&D, provide training for tomorrow's workforce for Israel's clean-energy industry, and help establish new clean-energy companies based on the institute's research.

The expected outcome of the institute's activities is a revolutionary upgrade to Israel's clean energy capabilities, and the attainment, within four decades, of David Ben-Gurion's dream of energy self-sufficiency. No less important, the institute is expected to provide all countries with effective solutions to our shared environmental crisis, thus advancing Bar-Ilan's mission of making impact for tomorrow, today.

Building Bridges Across Sand: The Israel – Morocco Energy Collaboration

In what Israel's then-Minister of Education Dr. Yifat Shasha-Biton described as "a historical stepping stone for scientific collaboration between our region's states," the Israel-Morocco agreement for energy cooperation was signed last September between Mohammad VI Polytechnic University, which includes 20 research groups from various Moroccan universities, and the Israel National Energy Research Consortium, which represents 33 research groups from seven Israeli academic institutions, including several from Bar-Ilan.

Under the agreement, which was designed in large part by Bar-Ilan Prof. Doron Aurbach, bilateral research will be carried out in such areas as rechargeable batteries, recycling, solar energy, and the hydrogen economy. Indeed, this past March, an Israeli delegation headed by Aurbach and including researchers from six universities visited Morocco for a three-day workshop. Together with their Moroccan counterparts, the researchers determined the optimal way to promote the formal collaboration between both countries' energy communities.

Moreover, beginning this April, 15 doctoral students from Morocco will arrive in Israel for up to six months' work with university energy-research groups, including several at Bar-Ilan. The goal of their stay is to grant them the knowledge they need to help advance energy solutions in their home country. And they'll need it: Last year, Morocco set a national goal of producing 52 percent of its electricity through renewable energy by 2030.

Thanking his Moroccan counterparts for their participation in the agreement, Bar-Ilan President Prof. Arie Zaban noted that while energy is today a cause for war in Europe, "we in the Middle East are showing that it can also be a tool for peace."

Helping Companies Go Green: A Club for the Energy Industry

They say that membership has its benefits—and for the six companies in Bar-Ilan's first-of-its-kind club for the energy industry, those benefits' value would be hard to overstate.

"When ICL (Israel Chemical Ltd.) wanted to power its Ein Gedi production plant by means of green energy, they turned to us and said, 'we need your help.' Over the next few months," explains club coordinator Dr. Hagit Aviv, "we organized a series of troubleshooting sessions between a group of Bar-Ilan hydrogen, battery, and solar-panel experts and ICL engineers. We put our expertise at their service, and in turn they're helping create a cleaner country."

Currently featuring the six leading players in Israel's energy industry—the Israel Electric Company, Doral Energy, the Bazan Group, Hon HaTeva, Ratio Energies, and ICL—the club offers members access to Bar-Ilan's energy researchers for consultations on such issues as technology investments and transformations to clean energy, as well as to Bar-Ilan students for help with their research.

"Our goal is to get knowledge into the hands of all of Israel's energy players, so they can apply it for the benefit of the state as a whole," says Prof. Lior Elbaz. "Solving Israel's energy problems can only happen through the efforts of an entire ecosystem, and we're happy to work within that system to move it forward and maximize its potential."



The Brain Power Behind an Energy Revolution

The National Institute for Energy Research, housed in Bar-Ilan's Center for Energy and Sustainability, will be led by three leading Bar-Ilan energy scientists: Profs. Doron Aurbach, Malachi Noked, and Lior Elbaz. Noked, the recipient of the prestigious Yigal Alon Fellowship for young scientists, heads a lab designing next-generation electrodes for batteries and rechargeable metal anodes. Elbaz is director of the Israeli Fuel Cells Consortium, which develops fuel cells for use by the Israeli Defense Forces in ground vehicles, boats, and submarines.



Image generated by AI

The Begin-Sadat Center for Strategic Studies

Winning a Hybrid War

Anonymous cyber-attacks, subversive online campaigns, and the destruction of critical infrastructure for which no country can be definitively blamed: Welcome to hybrid warfare, a relatively new, dangerously ambiguous, and highly effective collection of threats. Indeed, while this form of warfare almost never involves someone opening fire with a weapon, responding requires no less assessment, information, and training—and arguably, in the future, even more.

To help countries understand the phenomenon and prepare their counter offense, Begin-Sadat Center for Strategic Studies (BESA) Director Dr. Eitan Shamir and Research Fellow Dr. Shay Attias joined the EU's Erasmus+ Hybrid War Project at the Romanian Military Academy in Sibiu last fall. The result of a major grant from the European Union's Erasmus+ project to conduct research on hybrid warfare, the BESA researchers and their six European partners presented recommendations for decision-makers, military leaders, and diplomats tasked with addressing non-conventional challenges to states' security. Ultimately, the project aims to provide lectures and produce a definitive textbook for use by institutions of higher education, military academies, police forces, and civil service leaders.

Research for the Hybrid War Project is part of BESA's program of renewal, which last year included establishing a new academic board, led by Rector Prof. Amnon Albeck, Dean of the Faculty of Social Sciences Prof. Gil Epstein, and Head of the Department of Political Studies Prof. Jonathan Rynhold; recruiting new staff members and researchers who will expand the center's fields of expertise; upgrading the center's website and its social-media presence; and reviving the distribution of "Perspectives," email digests containing short expert analyses. Together, explains Shamir, these changes "will enhance BESA's standing as a leading source of analysis and expertise related to Israel's national security and foreign policy, and directed toward regional peace and stability."

Worthy Allies: Partners in the Hybrid War Project

1. The School of Applied Military Studies, University of Torino and the Italian Army Education and Training Command, Torino, Italy
2. University of Public Service – Ludovika, Budapest, Hungary
3. BESA Center, Bar-Ilan University, Ramat Gan, Israel
4. The Nicolae Balcescu Land Forces Military Academy, Sibiu, Romania
5. Centre for the Study of New Security Challenges, Galashiels, Scotland
6. The Armed Forces Academy of General Milan Rastislav Štefánik, Liptovský Mikuláš, Slovakia

Preparing for the Future Battlefield: The IDF Land-Warfare Conference

In today's national-security debates, big land wars are out, and unmanned systems in. Yet betting too heavily on cyber warfare and new technologies may miss an important point: Namely, the enemy has a say, too. To ensure that Israel's defense forces are equally ready for the land-warfare possibility, the IDF's Land Warfare Research Institute held a conference in December hosted by Bar-Ilan's Begin-Sadat Center for Strategic Studies (BESA) and organized in collaboration with Bar-Ilan's Spokesperson's Unit. Titled "The Future Battlefield," the conference focused on four main topics: strategies for building tomorrow's land forces; strengthening tomorrow's land forces through the use of AI; the place of unmanned drones in tomorrow's land battles; and the role of industry. Featuring keynote speeches by leading generals—including Major General Tamir Yadai, commander of the IDF's Ground Forces; Major General Sa'ar Tzur, commander of the Northern Corps and head of Maneuver Array; and Major General (res.) Gershon Hacohen, former commander of the IDF Military Colleges—as well as BESA experts, researchers from other Israeli universities, and industry executives, the conference was the first to bring the military, the academy, and industry together for knowledge-sharing on the topic.

Among the Bar-Ilan researchers who spoke at the conference were military historian Dr. Eitan Shamir, head of the Begin-Sadat Center for Strategic Studies, who discussed land warfare from a historical perspective; computer scientist Prof. Noa Agmon, who spoke about the latest developments in military robots; electrochemist Prof. Doron Aurbach, who explained the potential of energy storage to remake battle capabilities; and President of Bar-Ilan Prof. Arie Zaban, who explained that tomorrow's top soldiers may well need a computer science degree. "Just as Bar-Ilan has adapted itself to meet the needs of Israel's high-tech industry," he promised, "we will also ensure that Israel maintains its defensive advantage."



Dr. Eitan Shamir





School of High-Tech and Cyber Security

Kicking Learning Up a Level

Given the fast pace of technological development, even high-tech employees sometimes struggle to keep up. Fortunately, a new Bar-Ilan initiative offers them a way both to gain needed knowledge and advance in their industry. The best part? They can do it all while they're working—no need for a professional timeout.

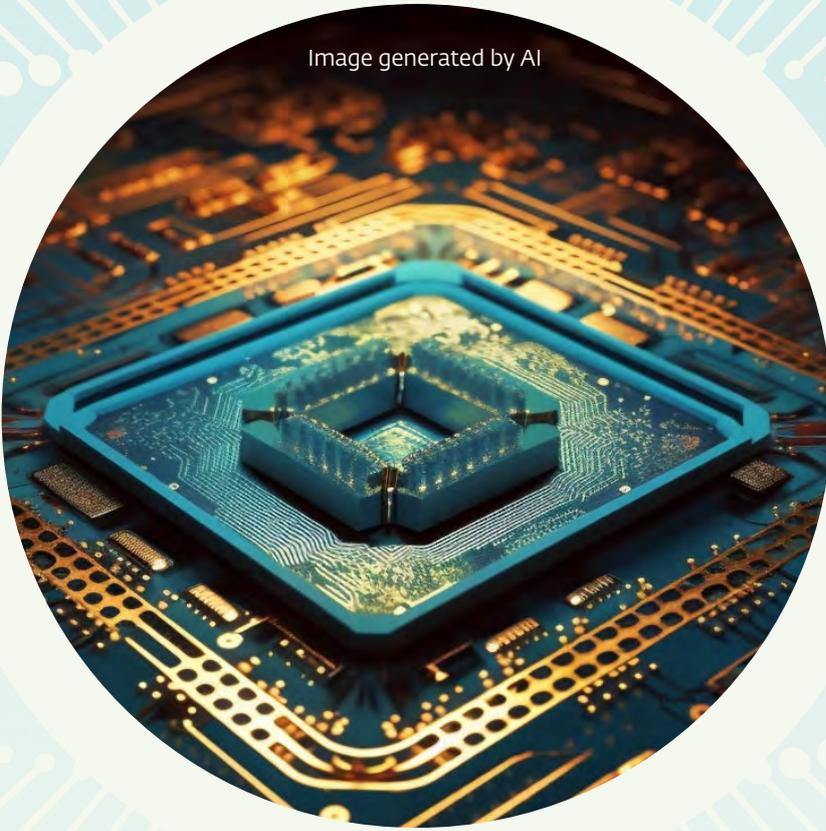
Launched in December of last year, the new School of High-Tech and Cyber Security offers continuing-education courses in data analysis, information systems, business intelligence, and more, with an emphasis on the practical experience required in the field. Taught by industry leaders with expertise in high-tech training, school courses are held in special classrooms with advanced multimedia equipment and computing capacity. In addition, many are offered jointly with the High-Tech Companies Forum, which includes companies such as VMware, Ec-Council, and Fortinet. The collaboration means that students can receive international certification for highly sought-after skills.

“Our vision,” explains school Director Eran Shaham, the founder of numerous authorized training programs in the fields of cyber, networking, and virtualization, is “to accompany high-tech employees from the outset of their journey and on through the rest of their lives. High-tech professions require lifelong study and the continued acquisition of new tools—and the new school at Bar-Ilan will enable high-tech employees in Israel to do both.”

Bar-Ilan CEO and Senior Vice President Zohar Yinon agrees. “This new school’s opportunities for reskilling and upskilling offer a highway to Israel’s the high-tech sector and a way to increase Bar-Ilan students and alumni’s employability. It’s all part of our commitment to enable life-long learning, for our students and the wider community.”



Eran Shacham



EnICS: The Emerging Nanoscaled Integrated Circuits and Systems Labs

It Takes a Kibbutz

“Everything needs silicon-based systems,” says Dr. Adam (Adi) Teman of the Alexander Kofkin Faculty of Engineering. “Everything.”

From quantum computing and 5G to big data and AI, integrated systems and circuits are the force that powers technology, doing, as former Intel Corp. senior executive David Perlmutter once said, “for the digital world what fuel does for industry.” Yet despite the semiconductor’s indispensability, it has long played second fiddle in the Israeli tech scene, considered the less-sexy sibling of splashy software companies. Now, however, that may be about to change: As the U.S. and Europe seek to up their chip-design game—and decrease their dangerous dependency on the global chip-design and manufacture leader, Taiwan—multinational giants such as Google, Intel, and Microsoft are setting up and expanding their chip-design operations in Israel.

All they’ll need to succeed, smiles Teman, is Bar-Ilan engineers.

Ranked the top university in Israel for electrical engineering by the *Times Higher Education*, Bar-Ilan boasts the largest number of Israeli researchers in the field of hardware design. And in 2015—“years before the world was focused this problem,” points out Teman—they had formed EnICS, the research-cooperative cum lab almost single-handedly preparing the next generation of chip designers for Israeli industry.

Formally titled the Emerging Nanoscaled Integrated Circuits and Systems Laboratory, EnICS was the elegant solution to a problem plaguing all institutions and companies trying to design a new chip: Namely, limited resources. “Developing a prototype generally requires at least two years and more than 50 dedicated engineers. But even then, the average cost per chip is \$50 million,” explains Teman, one of the six Bar-Ilan researchers who head the EnICS lab. “This means that most companies able to raise that kind of capital have little incentive to take risks when designing new chips; as it is, they can barely afford to pay the needed number of engineers. It also means

that academic institutions, the natural site for innovation, are largely locked out of the chip-design space.”

To overcome these challenges and ensure Israel's competitive edge, EnICS founders “decided to create a kibbutz,” Teman continues, “in which we’d pool our infrastructure, research teams, budgets, and knowledge to overcome the challenges in the chip-design process.” Today, EnICS has succeeded in designing more than 40 working chips whose functionality push the boundaries of today's silicon-based systems, including a chip described by the Cadence Academic Network as “one of the most complex chips ever designed within an academic environment.” What’s more, the EnICS model ensures a continuity of knowledge and research, as all members share findings with the others and create a whole far greater than the sum of its parts.

Alongside innovation and research for chip design, EnICS also advances semiconductor education: Recognizing that most Israeli engineering graduates finish their studies with no real knowledge of chip design, EnICS's researchers launched the Hardware and Chip Design Engineering Track within the computer-science degree—the first such undergraduate degree of its kind in the country. With 20 outstanding students in its first year alone, the track is poised to play a key role in packing Israel's hardware-engineer pipeline. Finally, the lab runs an academy for upskilling experienced engineers who want to transition into Israel's emerging hardware-design field.

“The design of new chips is one of the most complicated tasks there is, but when you pull it off, you take giant leaps forward for humankind,” concludes Teman, who offers as examples of chips' applications genome analysis, quantum computing, and hardware security. “There's no doubt that the talent needed for this challenge exists in our universities, and we're determined to leverage it for the benefit of all Israel.”

One Hardware Lab, One Giant Leap for Humanity

- 15** new academic courses
- \$20+** million in grants
- 85** patents
- ~500** journal papers



The EnICS team today, with research heads Dr. Itamar Levy (second row, third from left); Prof. Alex Fish (second row, fourth from left); Prof. Adam (Adi) Teman (second row, fifth from left); Prof. Joseph Shor; and Dr. Osnat Keren (third row, first on the right).



The Undergraduate Program in Product Management

Highway to High-Tech

No, Bar-Ilan's new undergraduate program for product management doesn't include a course in calligraphy—at least, it doesn't include one yet. But when it came to designing a curriculum that would prepare students in the humanities and social sciences to contribute to Israel's vibrant high-tech sector, the program's founders definitely took to heart Steve Jobs' famous anecdote about the value of inter-disciplinarity.

A collaboration of Bar-Ilan and the Israel Growth Forum (IGF), a consortium of the top Israel-based “unicorns,” or multinational tech companies listed on NASDAQ, the program offers outstanding students from the humanities and social sciences an opportunity to augment their undergraduate degrees with a carefully selected course load in product management, currently the fastest-growing sector in high-tech companies. Comprising studies in data science, information systems, programming, business management, online marketing, and more, the program—initiated by Faculty of Law Prof. (emeritus) Yaffa Zilbershatz, President Prof. Arie Zaban, and

CEO and Senior Vice President Zohar Yinon—will combine academic and guest lectures, workshops, a final project, and internships at a range of high-tech companies. Moreover, the program will be accompanied by a committee of senior industry executives, who will ensure that alongside its rigorous academic standards, the program maintains its relevance to industry.

According to Israel Growth Forum CEO Kerem Nevo, the goal is not only “creating additional and diverse entrance doors to Israeli high-tech,” but also ensuring that “thoughtful and superb personnel” from non-technological backgrounds help advance the growth engine of Israel's economy.

Open to rising sophomores, the one-year program—led by head of the Unit for Special Programs Prof. Nissim Leon with the support of Rector Prof. Amnon Albeck and Vice Rector Prof. Arie Reich—is completely free of charge and provides its graduates with a dual certificate from Bar-Ilan and the IGF. The

initial cohort of 35 students, which began its studies this March, was selected from among more than 130 qualified applicants.

“The launch of this innovative program is another way that Bar-Ilan is working to bridge the worlds of academia and industry,” said President Prof. Arie Zaban at the program’s launch last December. “It’s an example of the mutual benefit that each can derive from the other, when they permeate and erase the boundaries that have traditionally kept them apart.”

In Good Company

Established in 2006 by Wix President and VP of Operations Nir Zohar, the Israel Growth Forum features 24 leading Israeli technology companies, which together helped design the Program for Product Management’s curriculum. They include:



At the Program in Product Management’s launch event were, from left to right, Bar-Ilan Chief Marketing Officer Naama Gat; Wix Government Relations Manager Michal Sarig-Kaduri; Israel Growth Forum CEO Kerem Nevo; Bar-Ilan Faculty of Law Prof. (emeritus) Yaffa Zilbershatz; and Bar-Ilan CEO and Senior Vice President Zohar Yinon.



SOURCES OF National Pride



PROF. DOV SCHWARTZ

Department of Jewish Philosophy, Faculty of Jewish Studies, for receiving the Israel Prize in Jewish thought

Prof. Dov Schwartz will receive the Israel Prize in the field of Jewish thought, philosophy, and Kabbalah on Israel's 75th Independence Day for "establish[ing] new norms and research methods in various areas of the study of Jewish thought."



PROF. ZMIRA MEVARECH

Faculty of Education, for receiving the Israel Prize in education

Prof. Zmira Mevarech will receive the Israel Prize on Israel's 75th Independence Day for being "a trailblazer, [and] one of Israel's leading researchers in the field of cognition, metacognition, and the promotion of mathematical education in Israel and the world."



PROF. AVI SAGI

Department of General Philosophy, Faculty of Humanities, for receiving the prestigious Bialik Prize

Prof. Sagi was awarded the prestigious Bialik Prize for literature for his more than 40 books and hundreds of articles in the fields of general and Jewish philosophy, halacha, and literary and cultural criticism.



PROF. SHULAMIT MICHAELI

The Mina and Everard Goodman, Faculty of Life Sciences, for receiving the Kater Award

Vice President for Research Prof. Shulamit Michaeli was awarded the prestigious 2023 Kater Award at the ILANIT conference in recognition of her pioneering research in the field of RNA biology. The ILANIT conference, held once every three years, brings together all the Societies of Experimental Biology in Israel.



PROF. ZHAVIT GROSS
Faculty of Education, for winning the Jerusalem Academy Award

Dean of the Faculty of Education Prof. Zehavit Gross was awarded the 2023 Jerusalem Academy Award in recognition of her years of dedication to the study and remembrance of the Holocaust, both in Israel and around the world. The award was presented by Foreign Minister Eli Cohen and Jerusalem Mayor Moshe Leon.



PROF. SHMUEL REFAEL
The Joseph and Norman Berman Department of Literature of the Jewish People, Faculty of Jewish Studies, for receiving Spain's Order of Civil Merit

Prof. Shmuel Refael, dean of the Faculty of Jewish Studies, was awarded the La Cruz de la Orden del Mérito Civil by the King of Spain for strengthening ties between Spain and Israel through his writings on Ladino and Sephardic Jewish culture. A playwright, poet, translator, and expert on Judeo-Spanish literature, Refael directs research on Ladino at the University's Salti Institute.



PROF. YEDIDIA STERN



PROF. YAFFA ZILBERSHATS



PROF. SHAHAR LIFSHITZ



PROF. ARIEL BANDOR

Faculty of Law, for their contributions to President Isaac Herzog's People's Framework

Distinguished jurists Profs. Yedidia Stern, Yaffa Zilbershats, Shahar Lifshitz, and Ariel Bandor contributed their expertise in Israeli and Jewish law to the task of forging a compromise in the current struggle over the government's proposed judicial reform. Together with legal scholars from across Israel's universities, they helped to formulate the People's Framework, offered by President Herzog as a basis for discussion.



DR. RAVEH HARUSH and students OFIRE YABLONKA, YONATAN HOFFMAN, AVI TURGEMAN, and MEIR COHEN

**The School of Business Administration
Faculty of Social Sciences, for being serial winners in the global business simulation challenge**

Ofire Yablonka became the fourth Bar-Ilan student, after Yonatan Hoffman, Avi Turgeman, and Meir Cohen, to win first place in the Capsim Challenge, a biannual international competition for business students that simulates the management of a multi-million-dollar company.



**DR. AYELET OREG
The Louis and Gabi Weisfeld School of Social Work,
Faculty of Social Science, for their Full-Bodyed
Philanthropy project**

Dr. Ayelet Oreg and her students organized a campus donors' event as part of their course on philanthropy and civil society. Students were encouraged to donate blood and hair and to register for organ-donor cards, and were introduced to Israel's National Human Milk Bank and the Gift of Life organization for altruistic kidney donations.



YARON ALON and ALMOG FRANJI, fourth-year undergraduate students, Faculty of Law, for winning an international competition in mediation and negotiation

Yaron Alon and Almog Franji won first place in a prestigious international commercial-negotiation competition held in Dubai. Sponsored by ADR ODR International, a world leader in negotiation training, the conference promotes alternative methods for resolving disputes.



**PAVEL SHTEYNER, postdoctoral researcher,
Department of Mathematics, Faculty of Exact Sciences,
for research on the theory of matrix majorizations**

After making aliyah from Russia following the outbreak of war with Ukraine, he was accepted to Bar-Ilan's Department of Mathematics. In his first year, he published two articles in the high-ranking journal *Linear Algebra and its Applications*.



**ROI SHLOMI, M.A. student, Department of Arabic,
Faculty of Humanities, for publishing an original
collection of Arabic poetry**

Roi Shlomi published *Parashat*, a collection of experimental Arabic poetry, with the Jordanian publishing house Dar Ward.





DR. NISAN OZANA
The Alexander Kofkin Faculty of Engineering, for receiving the fNIRS Research Excellence Award in the field of neuro-engineering

New faculty member Dr. Nisan Ozana received the fNIRS Research Excellence Award for his development of highly sensitive optical methods for measuring cerebral blood flow in real time.



DR. GILLY HARTAL
The Prof. Dafna Izraeli Gender Studies Program, Interdisciplinary Studies Unit, for winning the Experience-Based Academy Award

Dr. Gilly Hartal's Gender in the Field project won the Experience-Based Academy award for the second year in a row. The project mobilizes 15 students for work on activist projects related to gender equality, with the goal of helping them to gain work experience in their field.



PROF. EITAN GILBOA
School of Communication Faculty of Social Science, for receiving the ISA Distinguished Scholar Award

Prof. Eitan Gilboa, the founder of Bar-Ilan University's School of Communication and a world-renowned expert in U.S. policy in the Middle East, received a Distinguished Scholar Award from the International Studies Association for advancing the understanding of international, transnational, and global affairs.



PROF. MAAYAN ZHITOMIRSKY-GEFFET
Department of Information Science Faculty of Humanities, for winning the PICCASO award for privacy on the web

Prof. Zhitomirsky-Geffet's CSI-COP (Citizen Scientists Investigating Cookies and App GDPR Compliance) project won a 2022 PICCASO award in the category of "Best Innovative Privacy Project." The PICCASO Privacy Awards recognize outstanding contributions to the field of privacy and data protection.



PROF. LIAT AYALON
The Louis and Gabi Weisfeld School of Social Work, Faculty of Social Science, for being recognized by the UN for her research on healthy ageing

Prof. Liat Ayalon is one of 50 individuals from around the world who were recognized by the United Nations as part of the first-ever "Healthy Ageing 50: Leaders Making the World a Better Place to Grow Older."



ADI SHPERLING, fourth-year graduate student, The Mina and Everard Goodman Faculty of Life Sciences, for the Teva Fellowship for Outstanding Graduate Students

Adi Shperling studies genetics, molecular biology, and RNA editing in Prof. Shay Ben-Aroya's laboratory. Adi was awarded the prestigious Teva fellowship for outstanding graduate students.



PROF. OREN PEREZ and DR. OMER PELLED
Faculty of Law, for receiving the Cheshin Prize for Academic Excellence in Law

Prof. Oren Perez won the senior researcher prize and Dr. Omer Peled the young researcher prize in the field of legal research. Awarded jointly by the Shneur Zalman Cheshin Foundation and the Faculty of Law of the Hebrew University of Jerusalem, the Cheshin Prize is in memory of former President of the Supreme Court Judge Shneur Zalman Cheshin.



AVIV MESIKA, M.D./Ph.D. candidate The Azrieli Faculty of Medicine, for The Teva Fellowship in the Bio-Innovators Forum

Aviv Mesika, a student in the Prof. Tzipora Falik-Zaccai's lab in the Galilee Medical Center's Research Institute, is studying the mechanism behind NGLY1 deficiency, a rare but devastating genetic disease prevalent in the Galilee. He recently created a zebrafish model as a platform for the development of NGLY1 therapies.



Prizes and Awards

FACULTY MEMBERS

PROF. LIAT AYALON of the **Louis and Gabi Weisfeld School of Social Work** on being selected for inclusion in the UN's "Healthy Ageing 50" list.

DR. DORIT GOTTESFELD, head of the **Department of Arabic**, on being appointed to the Academy of the Arabic Language in Israel.

PROF. GABRIEL DANZIG of the **Department of Classical Studies** on being selected president of the International Society for Socratic Studies for the next three years.

PROF. (EMERITUS) ELY MERZBACH of the **Department of Mathematics** on being awarded the 2021-22 Katz Prize.

PROF. YOSEF OFER of the **Zalman Shamir Department of Bible** on being appointed vice president of the Academy of the Hebrew Language.

PROF. YUVAL FELDMAN of the **Faculty of Law** on his appointment as committee member of the Fund for the Advancement of the Humanities and Social Sciences in Israel.

PROF. BENNY PINKAS of the **Department of Computer Science** on his appointment as a fellow of IACR – International Association for Cryptologic Research.

PROF. ARIE REICH of the **Faculty of Law** on his appointment as president of the International Academy of Commercial and Consumer Law.

PROF. RIVKA TUVAL-MASHIACH of the **Department of Psychology** on being invited to appear before the UN Global Congress of Victims of Terrorism.

DR. LEORE SACHS SHMUELI of the **Department of Jewish Philosophy**, **DR. NATALIA MEIR** of the **Department of English Literature and Linguistics**, **DR. MOR MITRANI** of the **Department of Political Science**, and **DR. GUY RON-GILBOA** of the **Department of Arabic** on being appointed to the Young Scholars Forum of the Israel Academy of Sciences and Humanities for 2022-23.

PROF. RACHELLE ALTERMAN, Academic Coordinator of the **ROM Real-Estate and Appraisal Program**, on being elected to the Israel Academy of Sciences and Humanities.

PROF. MASAD BARHOUM of the **Azrieli Faculty of Medicine** on being named a Knight of Quality Government in the Life-Work category by the Movement for Quality Government.

PROF. (EMERITUS) EYTAN GILBOA of the **School of Communication** on receiving the Distinguished Scholar Award in International Communication from the International Studies Association.

PROF. SHARON GANNOT of the **Alexander Kofkin Faculty of Engineering** on receiving a Best Paper Award at a conference in signal processing.

PROF. ZEHAVIT GROSS of the **Faculty of Education** on being appointed to the Ministry of Education's Steering Committee "Living Together: Fostering Identity and Creating Solidarity Across Israeli Society."

PROF. (EMERITUS) ED GREENSTEIN of the **Zalman Shamir Department of Bible** on receiving an Honorary Doctorate from the Jewish Theological Seminary.

PROF. SIMI HABER of the **Department of Mathematics** and **DR. OR SHEFFET** of the **Alexander Kofkin Faculty of Engineering** on receiving the Artificial Intelligence Journal's 2022 Prominent Paper Award for their 2015 paper co-authored with other researchers.

Message from the Rector

Far from an ivory tower, Bar-Ilan emphasizes engagement with and meaningful impact on the wider Israeli and international societies. Whether through scientific discovery, technological innovation, or pathbreaking scholarship, our faculty and students consistently further this mission, as evidenced by the following list of remarkable accomplishments. That they do so in a spirit of collaboration, and are driven by a desire to advance their state's health, security, and prosperity, demonstrates that our University's dual commitment to timeless Jewish values and academic excellence are a source not of tension, but of inspiration, and a catalyst for influence and productivity.

It is therefore with the deepest pride that I congratulate the recipients of this year's prestigious appointments, prizes, and awards.



Prof. Amnon Albeck

DR. DOV COHEN of the **Joseph and Norman Berman Department of Literature of the Jewish People** on his appointment to the Governing Council of the Autoridad Nacional del Ladino.

PROF. YEHUDA HALPER of the **Department of Jewish Philosophy** on receiving the 2022-23 Goldstein-Goren Book Award for the Best Book in Jewish Thought.

DR. DAVID ZADA of the **Mina and Everard Goodman Faculty of Life Sciences** on being selected a 2022-23 Zuckerman STEM Leadership Postdoctoral Scholar.

PROF. ZEEV ZALEVSKY of the **Alexander Kofkin Faculty of Engineering** on receiving the prestigious Humboldt Research Award by the Humboldt Foundation – Federal Republic of Germany.

DR. ASSAF HAMO of the **Department of Physics** on being selected a Zuckerman STEM Leadership Faculty Scholar.

DR. SHAI COHEN of the **Department of Music** on receiving the Menachem Avidom Achievement Award for his piece "Darkness."

PROF. YEHUDA LINDELL and **PROF. BENNY PINKAS** of the **Department of Computer Science** on receiving the IACR Test-of-Time Award for their 2007 joint paper, presented at the prestigious Eurocrypt Conference.

PROF. RACHELI MAGNEZI of the **Department of Management** on her appointment to the Ministry of Health's Quality Standards Advisory Committee.

PROF. GILBERT DANIEL NESSIM of the **Department of Chemistry** on being conferred the prestigious Order of the Star of Italy for his contribution to the development of scientific and technological innovation and the promotion of academic collaboration between the two countries.

PROF. ELY PORAT of the **Department of Computer Science** on receiving the PODS Test-of-Time Award.

PROF. BENNY PINKAS of the **Department of Computer Science** on receiving the TCC Test-of-Time Award for a 2005 paper he co-authored with other researchers.

DR. YONATAN ROCHMAN of the **Department of Physics** on being awarded the 2022 Krill Prize.

PROF. SHMUEL REFAEL, dean of the **Faculty of Jewish Studies**, on his appointment to the Autoridad Nacional del Ladino.

PROF. AVI SAGI of the **Department of Philosophy** on receiving the 2022 Bialik Award for Jewish Thought.

PROF. ONN SHEHORY of the **School of Business Administration** on being elevated to the level of senior member of the Institute of Electrical and Electronics Engineers (IEEE).

PROFS. EHUD BODNER and **AMIT SHRIRA** of the **Department of Social and Health Sciences**; **PROF. CHAIM NOY** of the **School of Communication**; **PROFS. SHIRA OFFER** and **LARISSA REMENNICK** of the **Department of Sociology and Anthropology**; **PROF. ONN SHEHORY** of the **School of Business Administration**; **PROFS. LIAT AYALON, NEHAMI BAUM, ORIT TAUBMAN-BEN-ARI**, and **JONATHAN RABINOWITZ** of the **Louis and Gabi Weisfeld School of Social Work**; **PROF. TOVA ROSENBLUM** of the **Department of Management**; **PROF. JONATHAN FOX** of the **Department of Political Science**; **PROF. (EMERITUS) ARYE HILLMAN** of the **Department of Economics**; and **PROFS. ILANIT HASSON-OHAYON, RONIT KARK**, and **SHLOMO YEHUDA (EMERITUS)** of the **Department of Psychology** on their inclusion in the Stanford University – Elsevier database listing of the top 2 percent of most-cited scientists and researchers in their respective fields. Previous Bar-Ilan researchers included in the database were the late **PROF. YONA AMITAI** of the **Department of Management** and the late **PROFS. ISRAEL ORBACH** and **VICTOR FLORIAN** of the **Department of Psychology**.



Prizes and Awards

DR. EYLON YOGEV of the **Department of Computer Science**, **DRS. LIOR LOBEL** and **CHANA KRANZLER** of the **Mina and Everard Goodman Faculty of Life Sciences**, and **DR. LIRON ROZENKRANTZ** of the **Azrieli Faculty of Medicine** on being awarded the 2022-23 Alon Scholarship for the Integration of Outstanding Faculty.

PROF. DOV SCHWARTZ of the **Department of Jewish Philosophy** on being awarded the 2022-23 Israel Prize in the field of Jewish Thought.

PROF. NEHAMI BAUM and **PROF. (EMERITUS) RAMI BENVENISTI** of the **Louis and Gabi Weisfeld School of Social Work** on being selected by Sage Journals as among the top 100 most-impactful contributors to social-work journal scholarship.

PROF. ORLY BENJAMIN of the **Department of Sociology and Anthropology** on being selected president of the Israeli Sociological Society for the next three years.

PROF. EMERITUS AHARON GAIMANI of the **Israel and Golda Koschitzky Department of Jewish History and Contemporary Jewry** on being awarded the Prime Minister's Prize for the Encouragement and Empowerment of Jewish Communities in Arab Countries and Iran.

PROF. SHARON GANNOT of the **Alexander Kofkin Faculty of Engineering** on receiving the 2022 EURASIP Group Technical Achievement Award.

PROF. ZEHAVIT GROSS, dean of the **Faculty of Education**, on being awarded the 2022 New South Wales Premier Award of Australia for Outstanding Contribution to Religious Education in Australia in both Theory and Practice; and the Jerusalem Prize for Academic Education in recognition of her contribution to the study and commemoration of the Holocaust in Israel and around the world.

PROF. ZEEV ZALEVSKY, dean of the **Alexander Kofkin Faculty of Engineering**, on being awarded an international prize for his contribution to metrology (the study of measurement), granted by the the Society of Photographic Instrumentation Engineers.

DRS. MICHAL ZELTZER-LAVID and **ALON LEVKOWITZ** of the **Asian Studies Program** on being awarded a grant by the Academy of Korean Studies to enhance the quality of Korean studies in institutions outside of Korea.

PROF. NISSIM LEON of the **Department of Sociology and Anthropology** on being selected president of the Israeli Anthropological Association.

PROF. AHARON MEIR of the **Martin (Szusz) Land of Israel Studies and Archaeology Department** on being awarded six additional years of funding by the Minerva Center for the Relations between Israel and Aram in Biblical Times.

PROF. SHULAMIT MICHAELI, **vice president for research**, on being awarded the prestigious 2023 Ephraim Katzir Prize for pioneering groundbreaking research on RNA biology.

PROF. (EMERITUS) DAN MICHMAN of the **Israel and Golda Koschitzky Department of Jewish History and Contemporary Jewry** on receiving the Distinguished Achievement Award for his groundbreaking scholarship and devotion to students at the biennial Lessons and Legacies Holocaust Conference in Ottawa.

PROF. JEAN SOUSTIEL of the **Azrieli Faculty of Medicine**, on being elected to the Israeli National Academy of Science in Medicine.

PROF. EVAN FALLENBERG of the **Department of English Literature and Linguistics** on his appointment to the advisory committee of the Bogliasco Foundation Fellows.

PROF. (EMERITUS) JUDIT FRIGYESI of the **Department of Music** on being awarded first prize in the Miriam F. Lindberg Peace Foundation's international Poetry for Peace Competition for her poem "Girls on the Balcony."

DR. LIRON ROZENKRANTZ of the **Azrieli Faculty of Medicine** on being included in The Marker's "40-under-40" list of promising leaders in economics and society.

PROF. SHMUEL REFAEL, dean of the **Faculty of Jewish Studies**, on his conferral by the King of Spain with the Order of Civit Merit for his contribution to strengthening the relations between Spain and Israel through the study of Landino and its culture; and on his appointment as a full member of the editorial board of Spain's "Biblical Research, Hebrew, and Judeo-Spanish Studies."

PROF. NOGA AYALI-DARSHAN of the **Department of Hebrew and Semitic Languages**; **PROF. EVAN ELLIOTT** and **DR. JUMANAH ESSA-HADAD** of the **Azrieli Faculty of Medicine**; **PROF. ELI BARKAI** of the **Department of Physics**; **DR. SHLOMO GUZMEN-CARMELI** of the **Department of Sociology and Anthropology**; **DR. ROY HOROVITZ** of the **Department of Comparative Literature**; **PROF. YUVAL HELLER** of the **Department of Economics**; **DR. GILLY HARTAL** of the **Prof. Dafna Izraeli Gender Studies Program**; **DR. ELIAHU COHEN** of the **Alexander Kofkin Faculty of Engineering**; **DRS. ORNIT SPEKTOR-LEVY**, **HAGIT RIFINSKI**, and **IRIS SCHREIBER** of the **Faculty of Education**; **DR. AYELET PEER** of the **Department of Classical Studies**; **PROF. SIVAN KORENBLIT** of the **Mina and Everard Goodman Faculty of Life Sciences**; **GUY BLACHAR** of the **Department of Mathematics**; and **DR. MICHAEL RABINOWITZ** of the **Department of Physics** on being awarded the 2022-23 Bar-Ilan University Outstanding Lecturer Prize.

DR. RAVEH HARUSH of the **School of Business Administration** on being awarded the 2022-23 Bar-Ilan University Innovative Lecturer Prize.

Prizes and Awards

POSTDOCTORAL FELLOWS AND STUDENTS

DR. HAGGAI OLSHANETSKY of the **Department of Classical Studies** on being awarded a postdoctoral fellowship at the University of Basel's Institute of Archaeology.

HILLEL SANHEDRAI of the **Department of Physics** on being awarded the 2022-2024 Israel Council for Higher Education's 4th Annual Scholarship for Outstanding Postdoctoral Fellows in Data Science.

EYLON PERSKY of the **Department of Physics** on being awarded the 2022-24 Israel Council for Higher Education's 5th Annual Scholarship for Outstanding Postdoctoral Fellows in Quantum Science and Technology.

DR. SARINA SHABSO of the **Azrieli Faculty of Medicine**; **DR. ANAT VIVANTE** of the **Department of Physics**; **DR. KAREN YIRMIYA** of the **Department of Psychology**; **DR. SHILAT HAIM-NACHUM** of the **Faculty of Education**; **DR. SHIRA ROTH** of the **Alexander Kofkin Faculty of Engineering**; and **DR. TAMAR BAR-ON** of the **Department of Mathematics** on being awarded a 2022-23 Bar-Ilan Postdoctoral Fellowship for Women.

DR. KAREN YIRMIYA of the **Department of Psychology**; **DR. SHIRA ROTH** of the **Alexander Kofkin Faculty of Engineering**; **DR. TAMAR BAR-ON** of the **Department of Mathematics**; and **DR. ANAT VIVANTE** of the **Department of Physics**, on being awarded the 2022-23 Israel Council for Higher Education's Scholarship for Outstanding Postdoctoral Women Students.

DR. SARINA SHABSO of the **Azrieli Faculty of Medicine** on being awarded the 2022-23 Israel Council for Higher Education's Scholarship for Outstanding Postdoctoral Students from the Arab Community.

ALEXANDRA GLICK AZARIA and **MICHAL POPLINGER** of the **Alexander Kofkin Faculty of Engineering** on being awarded the 2022-23 Scholarship for Outstanding Women Doctoral Students in High-Tech Professions.

AMIT TE'ENI of the **Alexander Kofkin Faculty of Engineering** and **ROY ELBAZ** of the **Department of Physics** on being awarded the 2022-25 Israel Council for Higher Education's 3rd Annual Scholarship for Outstanding Doctoral Students in Quantum Science and Technology.

AMICHAY ASSIS of the **Department of Music** and **HILLEL FEUERSTEIN** of the **Department of Jewish Philosophy** on being awarded the Rotenstreich Scholarship for Outstanding Doctoral Students in the Humanities.

Yael ATTALI PADAEL of the **Mina and Everard Goodman Faculty of Life Sciences** on being awarded a 2022-23 Scholarship for Outstanding Doctoral Students from Haredi Society.

ADI ANAKI of the **Alexander Kofkin Faculty of Engineering** on being awarded the Prof. Nehemia Levtzion Scholarship for Outstanding Doctoral Students from the Periphery.

OMER GOLDMAN, **SHAUL RAVFOGEL**, and **ARIE CATTAN** of the **Department of Computer Science** and **SAPIR ISRAELI** and **OSHRIT SHTOSSEL** of the **Department of Mathematics** on being awarded the 2022-25 Israel Council for Higher Education's 4th Annual Scholarship for Outstanding Doctoral Students in Data Science.

NOGA TOUITOU of the **Mina and Everard Goodman Faculty of Life Sciences** on being awarded a U.S – Israel Binational Science Foundation Grant to conduct research at the National Institutes of Health (NIH).



NILI BONEH, SHKEIR RUDAINA, and **HAGIT ERLICH** of the **Prof. Dafna Izraeli Gender Studies Program** on being awarded the 2021-22 Maor Prize for Feminist Activism.

HILAH CLARA HONIG of the **Department of Chemistry** on being selected to attend the Lindau Nobel Laureate Meetings.

TAMAR BAR-ON of the **Department of Mathematics**; **ANAT VIVANTE** of the **Department of Physics**; **KAREN YIRMIYA** of the **Department of Psychology**; **SHILAT HAIM-NACHUM** of the **Faculty of Education**; **SHIRA ROTH** of the **Alexander Kofkin Faculty of Engineering**; and **SARINA SHABSO** of the **Azrieli Faculty of Medicine** on being awarded a Bar-Ilan Fellowship for Women for Postdoctoral Work Abroad.

ISRAELA JEGNA of the **Faculty of Education** on being awarded a 2021-22 Scholarship for Master's Degree with Thesis for Students of Ethiopian Descent.

KATHLEEN JAGODNIK of the **School of Business Administration** on being selected as a Zuckerman STEM Leadership Postdoctoral Scholar.

YAFIT EZER of the **Department of Middle Eastern Studies** on being awarded a 2021 President of the State of Israel Scientific Excellence and Innovation Grant.

MOHAMMAD ATRASH of the **Mina and Everard Goodman Faculty of Life Sciences** on being awarded a Scholarship for Outstanding Doctoral Students from Arab Society.

HAMOUDY IKRAM of the **Department of Physics** and **BAHUS MALAK** of the **Department of Psychology** on being awarded a Scholarship for Outstanding Master's Degree with Thesis for Students from Arab Society.

EINAT BUZNACH and **MICHAL NATAN** of the **Department of Physics** on being awarded a Scholarship for Outstanding Master's Degree with Thesis for Students in High-Tech Professions.

YAIR BERLIN of the **Program for Hermeneutics and Cultural Studies** on being awarded the British Leverhulme Fellowship for postdoctoral work to be conducted at the University of Cambridge for the next two years.

MIRIAM HASSON of the **Louis and Gabi Weisfeld School of Social Work** on being awarded a 2023-24 Rothschild Fellowship.

TEHILLAH LIEBERMAN of the **Martin (Szusz) Land of Israel Studies and Archaeology Department** on being awarded the David Amit Prize for Archaeological Research.

SHAHAR MENDELOVICH of the **Department of Sociology and Anthropology**, on being awarded first prize by the Israeli Sociological Society for her thesis "A Voice Calls Out to Wander: National Identity and the Collective Among Israeli Digital Nomads," under the mentorship of Prof. Ori Schwarz.

HANNA SOLODKIN-ALAYEV of the **Department of Arabic** on being awarded a scholarship by the Academy of the Arabic Language in the doctoral-studies category.

NATAN ZVI PASTERNAK and **RIVKA ERBLICH** of the **Department of Psychology** and **BATYA KAPLAN** of the **Faculty of Education** on being awarded a 2022-23 Scholarship for Outstanding Master's Degree with Thesis for Students from Haredi Society.

EYLON PERSKY of the **Department of Physics** on being awarded a prize from the Pazy Foundation, a joint research fund of the Israel Atomic Energy Commission and the PBC.

OLGA KREICHMAN of the **Leslie and Susan Gonda Multidisciplinary Brain Research Center** on being awarded a prestigious travel prize by the Society for Neuroscience (SfN).



“The Hebrew language will go from the synagogue to the house of study, and from the house of study to the school, and from the school it will come into the home and... become a living language”

Eliezer Ben-Yehuda

Rothschild Boulevard, Tel Aviv



A Vibrant Israeli Culture



Image generated by AI

The Humanities

Machine Learning and the Meaning of Life

Sam Bankman-Fried, the disgraced founder of the now-defunct crypto exchange FTX, once proudly told an interviewer that he would never read a book. “I don’t want to say that no book is ever worth reading,” he conceded, before adding, “but I actually do believe something pretty close to that.”

In light of his own story’s ending, it might well be argued that the true value of a humanistic education is most evident in its absence.

“The role of the humanities has always been twofold,” says Prof. Daniela Dueck, the dean of Bar-Ilan’s Faculty of Humanities. “First, it aims to preserve the knowledge accumulated over centuries of wrestling with eternal questions about the human condition. But second, it seeks to promote discussion on what it means to be human in the face of unprecedented possibilities. And the age of AI and machine learning,” she concludes, “is nothing if not that.”

True to form, at a faculty-organized conference this March on “AI and the Future of Academia,” there was plenty of discussion

about the ways technology can enhance humanistic education, as well as how the humanities can enhance learning and working in our technology-driven age. And with a roster of speakers that included a senior product manager at Google and chief scientist at Microsoft Israel, “this was the opposite of an echo chamber,” says Dueck. “On the contrary, it was a proactive engagement on the part of our scholars with the software that is shaping tomorrow’s world. And no less important, it was a statement that engineers and computer scientists will soon need the historians, sociologists, and philosophers more than ever, whether to determine the ethical use of chatbots, for instance, or what self-driving cars deem right or wrong.”

Perhaps a familiarity with the great texts that have guided civilizations for millennia might have prevented Bank-Friedman’s self-defeating, means-to-an-end worldview, too?

“We’ll never know,” she laughs. “And in the end, that might just tell us everything.”

The Humanities and Israeli Society

How the Faculty of Humanities uses knowledge, creativity, and compassion to advance the State of Israel.

Humanities for Healthcare

The **Department of Philosophy's** Master's Program in Bioethics and Healthcare prepares researchers and professionals in genetics, the health sciences, government, and law to assist in clinical decision-making, advise on policies, and address advancements in medical technologies that raise ethical questions. Among the program's many graduates helping to shape a more ethical healthcare industry for Israel are Dr. Ella Koren, director of the Ziva Tal Nursing School at Tel Hashomer Hospital; Prof. Shaul Dolberg, an expert in pediatrics, former director of the neonatal and premature infants department at Beilinson Hospital, and chair of a new Ministry of Health committee established for "protection for the helpless and minors in the health system"; and Dr. Vardit Ravitsky, a professor in the Bioethics Program of the University of Montreal's School of Public Health, a senior lecturer on global health and social medicine at Harvard Medical School, president of the International Association of Bioethics, and director of ethics and health at Canada's Center for Research on Ethics.

Humanities for Sustainability

With the help of 949, the healthcare accelerator of Bar-Ilan's venture-builder UnBox, the **Multidisciplinary Studies Unit's** Dr. Ran Shauli of the Program in Asian Studies turned his historical research on the lessons of Southeast Asian countries' poor environmental policy into partnership in the startup DriftSense. The precision-agriculture company, which aims to reduce airborne pesticide drift, builds customized, AI-based profiles for agricultural plots.

In addition, through the **Humanities and Sustainability Curriculum** in Bar-Ilan's new School of Sustainability, the faculty offers students a multidisciplinary approach to the study of our current environmental challenges. Featuring courses on the history, literature, and philosophy of such problems as climate change, the exploitation of natural resources, and unequal access to food and water security, the curriculum encourages students to explore humanity's beliefs about its relationship to nature as a basis for informing and directing development toward a more sustainable world.

Humanities for Research Innovation

By using new technologies to handle and search digitized culture, humanities scholars are transforming our ability to study the great works of our civilization. Statistical analysis, search and retrieval, topic modelling, and data visualization—all these methods, when applied to vast archives and collections, facilitate large-scale humanities projects that provide unprecedented insight into the past and present alike. In particular, the **Department of Information Science's** new M.A. specialization in the digital humanities prepares the next generation of researchers capable of answering the boldest, most ambitious questions about the human condition, human culture, and human creativity.

Humanities for the Community

The **Department of Translation and Interpreting Studies'** course "Community Translators" prepares graduates to assist non-Hebrew speakers in their interactions with official Israeli bodies, such as welfare and health services. This year, the course placed special emphasis on mediating between Israeli government agencies and new immigrants from Russia and Ukraine.

Meanwhile, the **Department of French Culture** brought students to old age homes with native French speakers for a mutually beneficial project: Residents helped students improve both their French and interviewing skills, and students helped residents to write their memoirs as a legacy for their families.

Finally, in March, the **Department of English Literature and Linguistics'** Prof. Marcela Sulak coordinated a poetry reading at the University of Haifa to bring Bar-Ilan students' verse to new audiences. More than 100 people attended the standing-room-only event.



Prof. Daniela Dueck

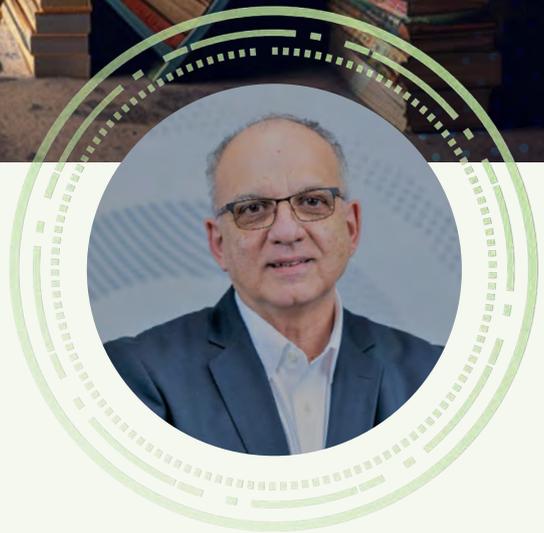




Image generated by AI

Jewish Studies

Faculty in Motion



Prof. Shmuel Refael

“There’s an incredible interest in Jewish-Israeli society for knowledge about Jewish texts and culture. Young Israelis are studying in pre-army leadership academies, at secular yeshivot, in academic and informal programs and everywhere in between,” says Prof. Shmuel Refael, dean of Bar-Ilan’s Faculty of Jewish Studies. “They want to strengthen their individual and collective identity in an age of fast-changing concepts and shifting norms, and responding to that desire must be a national priority.”

It’s a particular priority for the faculty at Bar-Ilan, which is both the largest in the world and home to many of the leading scholars in the field. Indeed, given its sheer abundance of expertise, the faculty’s biggest challenge at this moment in Israel’s history is how to make the full spectrum of its scholars’ knowledge accessible to a wider cross-section of citizens—both to create more context for their learning, and to make of their heritage a richer, more compelling story.

Refael believes that one means of opening the faculty to a bigger

and more diverse student body is encouraging collaboration between its 10 different departments, which together explore Jewish foundational texts, the Jewish nation’s history in the land of Israel and the larger region, and the language, literature, and art that define the global Jewish people today. To that end, Refael is working with the departments’ directors, the President’s and Rector’s Offices, and a strategic consultant to help the faculty’s more than 120 senior scholars synchronize their activities and see themselves as part of a coherent and purpose-driven narrative. In addition, he plans to renovate the building’s teaching and social spaces to make them more welcoming.

Refael believes the most significant step in the faculty’s advancement, however, will result from a new emphasis on the study of Judaism as a culture, as opposed foremost to a collection of texts. “When you widen the educational lens to include the full range of experiences and expressions that characterized Jewish life throughout time and place, you create more points of entry for outsiders, and more opportunities for meaningful engagement,” Refael says.

A Culture that Contains Multitudes: The Dean's Series on Contemporary Thought

The Faculty of Jewish Studies' annual Dean's Series on Contemporary Thought featured a roster of leading thinkers and public figures on the complex yet fruitful tension between Judaism and Israeli society. Lecturers included:



Dr. Ruth Calderon
"Judaism and Israeli Culture:
The Challenge"



Rabbi Shai Piron
"The Third Israel: Between
Statehood and Traditionalism"



Dr. Rani Jaeger
"The Rabbi Goes Among His
People": Rabbi Abraham Bekhar"



Dr. David Lavi
"Jewish Studies and Engineering
a Hebrew Culture"



Dov Elbaum
"Towards a Modular Judaism:
Insights from My Travels in
Israel's Heritage"



Prof. Haviva Pedaya
"Judaism and Culture: Towards a
New Definition of Concepts"



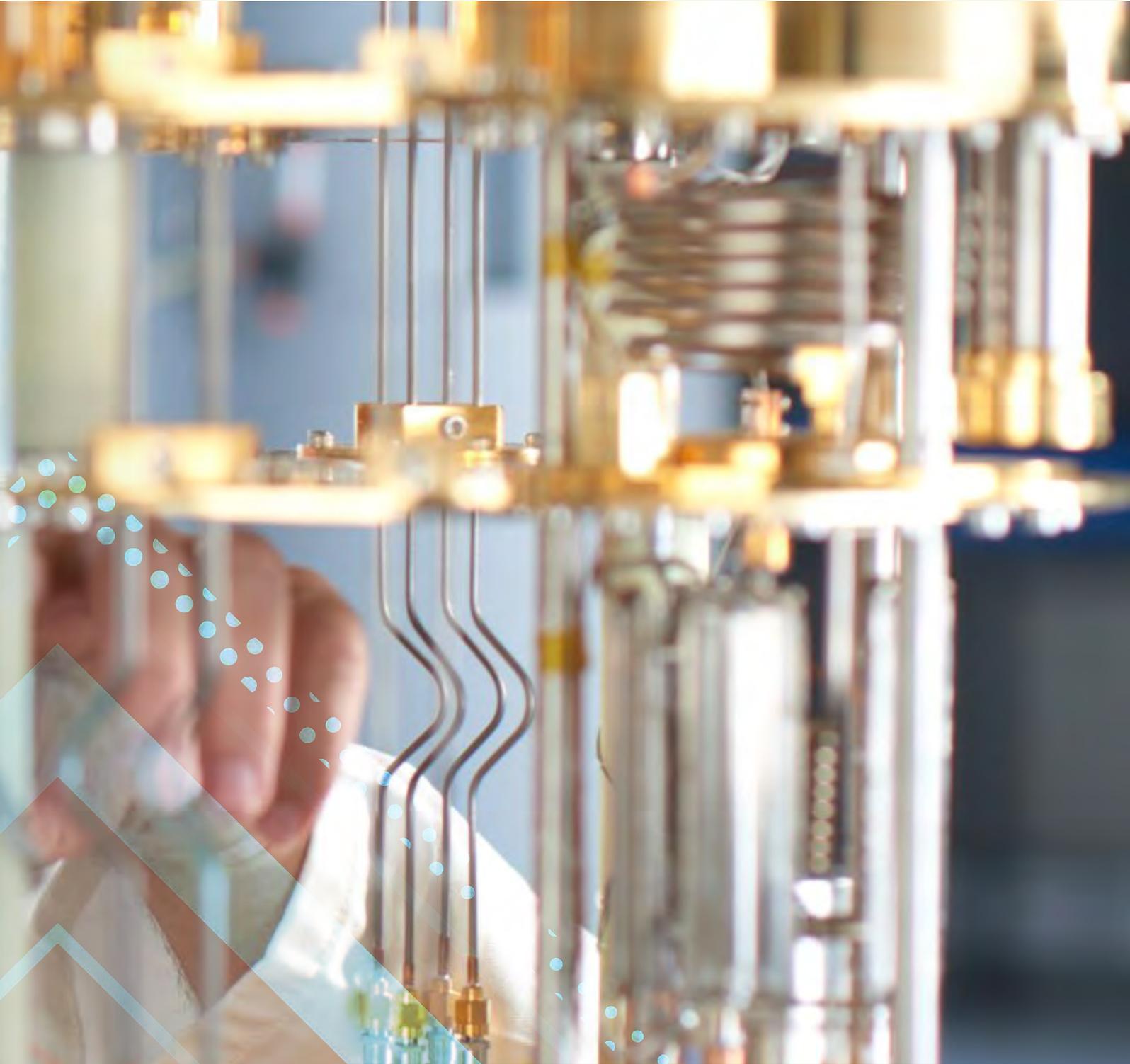
Tower of David, Jerusalem



“The pure righteous do not complain of the dark, but increase the light... they do not complain of ignorance, but increase wisdom.”

Rabbi Abraham Isaac Kook

Prof. Michael Stern, the Quantum
Nanoelectronics Laboratory



A Leader in Discovery **and Innovation**



The Psifas Personalized-Medicine Project

Small State, Big Data, and Outsized Impact for Healthcare

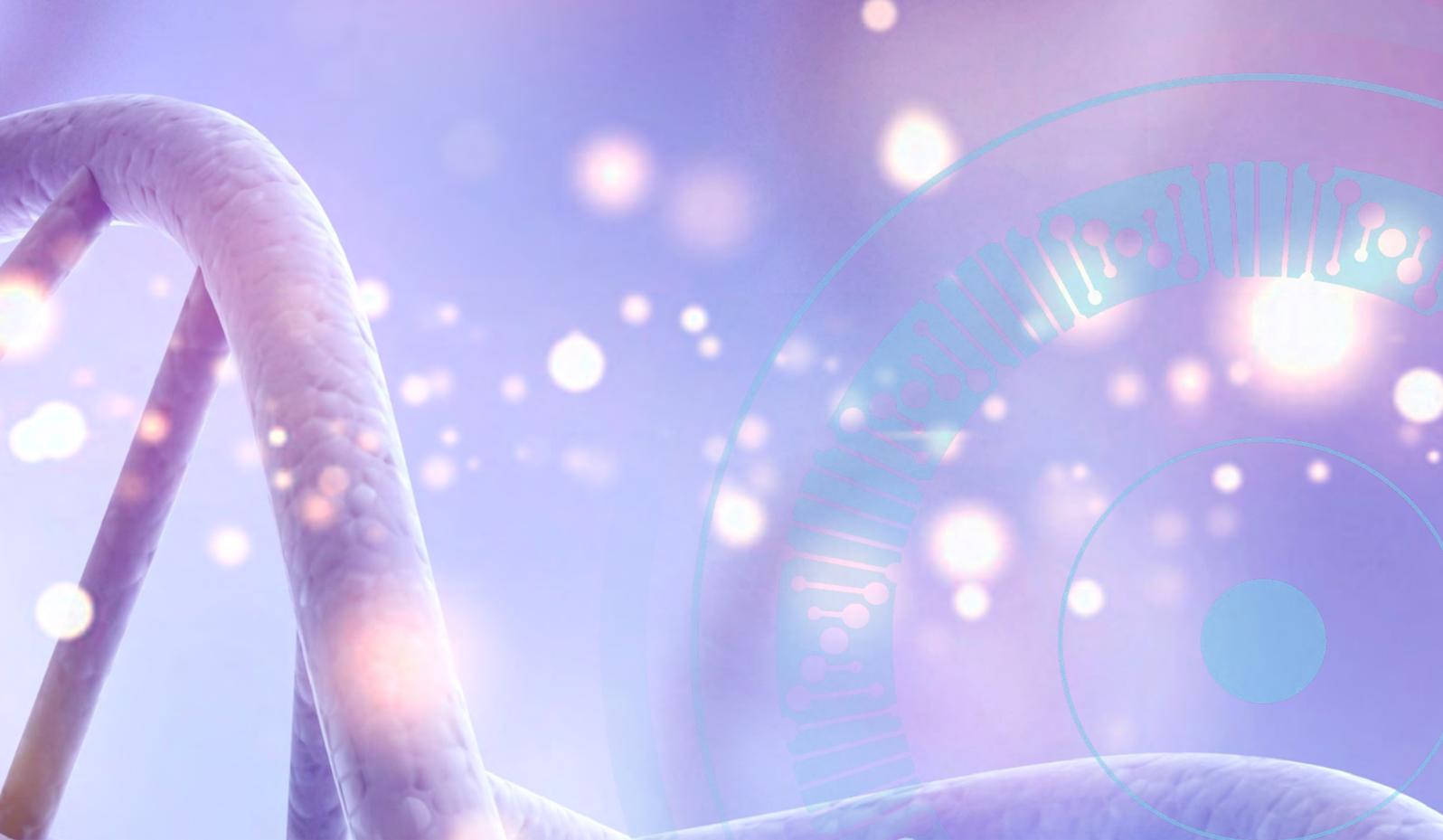
“When it comes to the story of national genomics databases, which other countries have been building for years, it’s easy to think that Israel’s will be just another footnote,” says Prof. Gabi Barbash, the former CEO of Tel Aviv Sourasky (Ichilov) Medical Center and current director of the Psifas National Genomic Medicine Initiative, based in the Nanotechnology Building at Bar-Ilan. “But when you realize how unique our country is, especially with regard to its healthcare system, you see that what we’re actually doing is writing the next chapter for the world.”

Psifas, which means “Mosaic” in Hebrew, is a precision-medicine collaboration among Israel’s universities, Israel’s Ministry of Health, the Israel Innovation Authority, the Digital Israel Bureau, the Medical Corps, the Ministry of the Treasury, and the country’s biomedical industry. By collecting and processing health data and biological samples from hundreds

of thousands of Israeli volunteers, data and health-informatics scientists from Psifas, Bar-Ilan, and other universities will fuel academic and industry research into more effective therapies. Moreover, by leveraging the power of artificial intelligence—a field in which Bar-Ilan is a national leader, and a key reason for its having been selected to house the project from among all of Israel’s universities—Israeli researchers hope to detect the genetic variations that may one day result in disease.

And fortunately, they have a head start.

“Israel has several key advantages when it comes to genomics data,” Barbash says. “For starters, Israel’s population is ethnically extremely diverse, much more so than in other countries. This means that the data will be a treasure trove for our understanding of human history, biology, and health disparities.”



Prof. Gabi Barbash

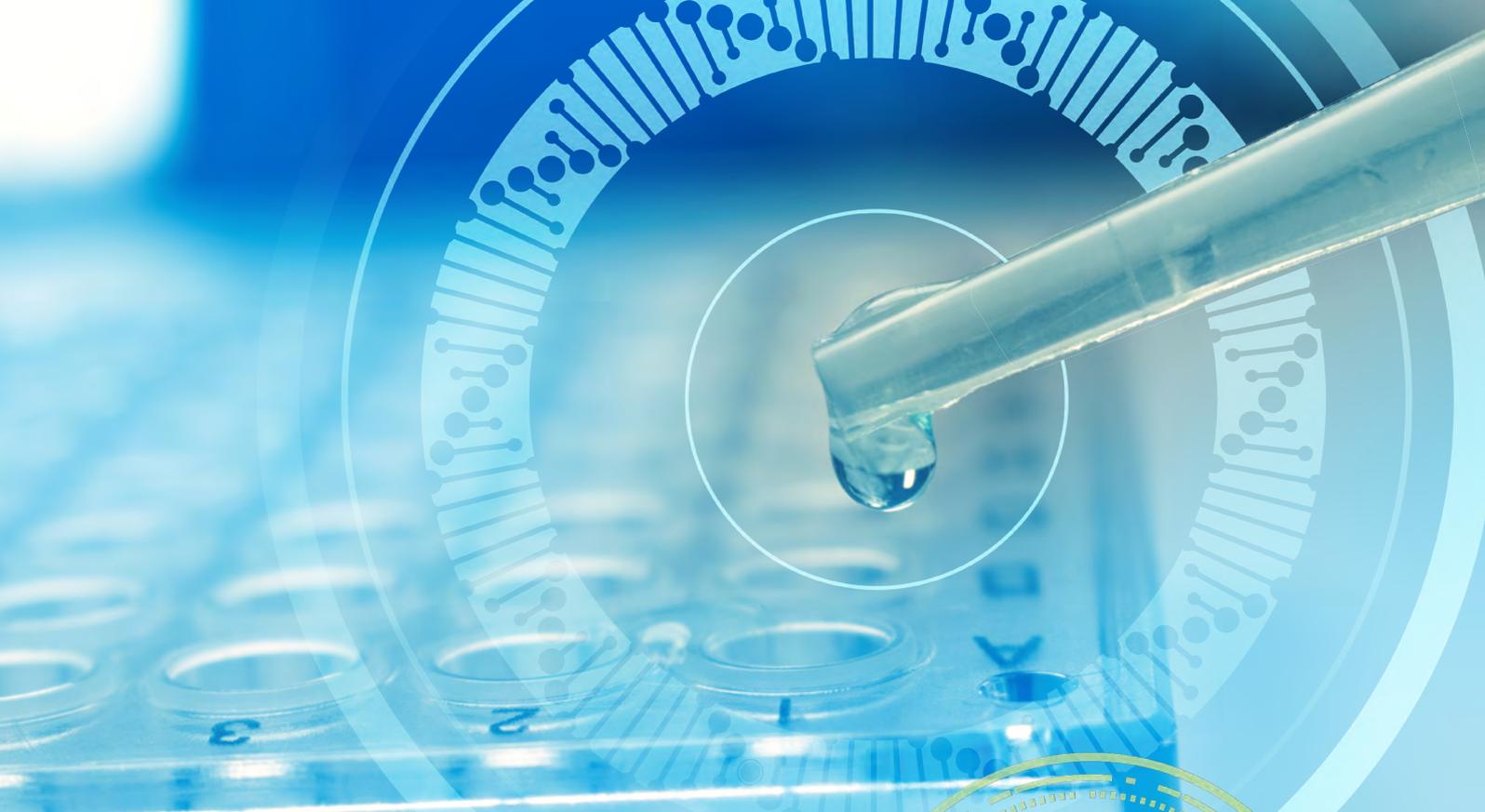
In addition, Barbash explains, while other databases usually depend on health questionnaires, Israel's centralized, highly compact healthcare system links patients' records across hospitals and health-management organizations. This means that each patient's data has the potential to be much richer—and in most cases, Barbash adds, the information spans more than 20 years.

Finally, that integration of patient information across all providers of healthcare means that Psifas can easily follow and find participants, “no matter where they are in life,” he says. “In the U.S., changing jobs may mean changing your healthcare provider, and for clinical follow-up, that’s a loss. Here in Israel, we’ll be able to reach out to all patients suffering from a specific condition, say, and offer them the opportunity to participate in prospective clinical trials. And we’ll be able to follow their progress and refine our therapies. That continuity,”

he concludes, “is gold.”

Today, Barbash and his team are building the computational infrastructure for the database; they have also begun collecting samples from hundreds of volunteers. Barbash is quick to note that the support of Bar-Ilan President Prof. Arie Zaban and CEO and Senior Vice President Zohar Yinon has been the key to getting the project set up so quickly.

“Bar-Ilan fought hard to house this project, since it recognizes its vast potential to advance Israel, and the vast contribution its researchers can make,” Barbash concludes. “One year in, having seen how much energy and excitement there is for this project among the university's leadership, I think it’s only fair to say: I’m delighted that Bar-Ilan won. I could not wish for better partners in this challenging yet critical voyage.”



The Laboratory of Tumor Immunotherapy

Fighting to Win

In the war against cancer, the most promising of science's new weapons is targeted immunotherapy. By injecting cells or administering drugs that block patients' production of certain proteins, the therapy unleashes the power of our immune systems to target—and kill—the cancer cells in our bodies. And now, thanks to research by Prof. Cyrille Cohen of the Mina and Everard Goodman Faculty of Life Sciences, that weapon has been refined to maximize its efficacy.

Cohen, head of the Bar-Ilan Laboratory of Tumor Immunotherapy and president of the Israel Society for Cancer Research, developed a treatment that involves first removing a type of white blood cell called T-cells from cancer patients, then injecting them with an artificial molecule. Once returned to patients' bodies, the molecule grants the T-cells the ability to recognize and kill cells that cause cancer.

Which is precisely what happened in more than 60 Israeli patients with multiple myeloma, a deadly blood cancer that affects nearly 200,000 people around the world each year. In clinical trials at Hadassah Medical Center, held in collaboration with Prof. Polina Stepensky, 57 percent of patients treated with



Prof. Cyrille Cohen

the highest dose of Cohen's therapy went into remission, while a full 90 percent saw a marked improvement in their condition.

"These trials are exciting for many reasons, among them the fact that our treatment represents the first immunotherapy of its type developed entirely in Israel," said Cohen. "It's a blue-and-white cancer treatment, and we're honored to help our country make such an important contribution to the world."

Now, Cohen is working to extend his successful approach to "solid-tumor" cancers, including lung, pancreatic, and breast. "We have to find a way to enable our modified cells, which recognize cancer cells and eradicate them, to penetrate the cells of solid cancers. It's a huge challenge, although we're encouraged by the results thus far." They're not the only ones encouraged: In January, Bar-Ilan and Hadassah signed a deal with the Los Angeles-based Immix BioPharma for the further development and commercialization of their therapy. Significantly, the drug's name—HBl0101—pays tribute with its first three letters to both Hadassah and Bar-Ilan.

Psychotherapy Research Laboratory

Letting Data do the Lifting

Expected to be the world's biggest health burden by 2030, depression affects almost 322 million individuals globally. Yet despite decades of research and substantial funding, psychology has yet to understand the root causes of depression, let alone make progress toward a cure. Indeed, though available treatments have demonstrated an average level of efficacy, up to half of all patients who suffer from depression report no real benefit.

Increasingly, clinical psychologists and academic researchers are seeking answers in personalized interventions. One promising approach is leveraging AI and machine learning to identify the specific sequence of events that lead to therapeutic improvement in individual patients; in turn, this knowledge can be used to develop more effective treatments on a large scale.

At the forefront of this effort are Department of Psychology Profs. Dana Atzil-Slonim and Eva Gilboa-Shechtman, whose Psychotherapy Research Lab harnesses a vast, diverse dataset and collaborates with mental-health and AI/machine learning experts to uncover novel insights into depression-treatment strategies.

"Years before it was fully embraced in mental-health research, [Bar-Ilan President] Prof. Arie Zaban insisted that data analytics are the future, and can revolutionize mental healthcare. He encouraged us to collaborate with Bar-Ilan data scientists Profs. Yoav Goldberg and Sharon Gannot for the collection and analysis of our clinical work, and almost five years, 2000 patients, and 30,000 psychotherapy sessions later, our lab's initial findings only underscore his point," says Atzil-Slonim.

She explains that by integrating multi-modal data from psychotherapy sessions in the Psychology Department's Community Clinic—including texts, audio, facial expressions, body movements, and even physiology, along with subjective reports from therapists and patients—the lab can identify patterns in patients and therapists' interactions that predict positive treatment outcomes.

"These technologies allow us to zoom in on clinical treatment sessions and measure every aspect for its negative or positive effect," says Atzil-Slonim, whose lab works with two of the world's leading institutes for data science and AI: the Alan Turing Institute in London and the UKP lab in Darmstadt Technical University in Germany. "In one such project, we use state-of-the-art natural language processing (NLP) techniques



Prof. Dana Atzil-Slonim



Prof. Eva Gilboa-Shechtman

to automatically recognize in transcripts specific therapists' interventions and patients' responses, speech turn by speech turn, throughout the course of treatment. Then, we use data mining techniques to identify sequences of therapists' interventions and clients' emotional responses that are predictive of positive outcomes."

Another benefit of large enough datasets, continues Atzil-Slonim, is the ability to cluster patients on the basis of predictive factors. By recognizing that patients with certain personal characteristics and behaviors tend to respond in certain ways to a given treatment, therapists can begin to personalize interventions for better and faster results.

In the coming years, the Psychotherapy Research Lab hopes to validate its AI-derived best practices and methodologies in randomized clinical trials. In the long term, it also hopes to adapt its findings across different cultures and languages.

Atzil-Slonim concludes that psychology has only recently begun to realize the immense potential of collaborating with data scientists and software engineers. While computers can learn much faster than humans, she believes that rather than replace them, they will "complement therapists' abilities to help their clients achieve better well-being."

ERC Grantees

Research that Goes the Distance

By funding frontier-pushing projects over a period of at least five years, the prestigious European Research Council (ERC) grants enable outstanding researchers such as this year's four winners from Bar-Ilan to maximize their chances of success—in advancing science, a just society, and the study of the Jewish tradition.

ERC SYNERGY GRANT

Synergy grants fund collaboration between groups in a given field, equipping highly accomplished researchers to work together to solve intractable scientific challenges.



Dr. Avi Shmidman
Using AI Analysis to Decipher
Ancient Hebrew Manuscripts

Dr. Avi Shmidman of the Faculty of Jewish Studies, along with Profs. Daniel Stökl Ben Ezra and Judith Olszowy-Schlanger of the Paris-Sciences-Lettres University and Prof. Nachum Dershowitz of Tel Aviv University, was awarded 10 million euros to develop computational methods for analyzing medieval Hebrew manuscripts. The project—the first within the field of Jewish studies to be awarded a Synergy Grant—plans to aid in the deciphering and dating of the tens of thousands of surviving handwritten documents, as well as to make them available to both scholars and the general public everywhere.



Prof. Shulamit Michaeli
Overcoming Parasites' Drug
Resistance through RNA Editing

Vice President for Research Prof. Shulamit Michaeli of the Mina and Everard Goodman Faculty of Life Sciences, together with Prof. Gerald Spaeth of the Institut Pasteur in Paris and Prof. Yitzhak Pilpel of Israel's Weizmann Institute of Science, have been awarded 9 million euros for a project that aims to uncover the molecular means by which *Leishmania*—the parasites that cause the disfiguring and sometimes deadly disease Leishmaniasis, which currently affects more than 12 million people a year—develop drug resistance through changes to their genome. Through RNA analysis, network modelling, and single-cell sequencing, the project will work to curb these genetic adaptations, understand how the parasite benefits from them, and mitigate the toxic effects of the “unwanted” genes. Moreover, since genomic adaptations are a common strategy in cancer cells, Michaeli's team hopes its findings can also lead to improvements in cancer-drug resistance.

ERC STARTING GRANT

Starting grants enable promising young researchers to launch their own projects, form the necessary teams, and pursue ideas with the potential to reshape their fields.



Dr. Chana Kranzler
Revealing the Effect of Phytoplankton
Viruses on Global Ocean Health

Dr. Chana Kranzler of the Mina and Everard Goodman Faculty of Life Sciences was awarded 1.8 million euros to study the interaction between viruses and a group of phytoplankton, the microscopic plant-like organisms that form the base of the aquatic food web. The group, called diatoms, are responsible for nearly 20 percent of the photosynthesis on the planet, yet little is known about the effect of viruses on this population. She hopes to further our understanding of microscale dynamics across diverse ocean environments and discover how they help shape global biogeochemical processes.

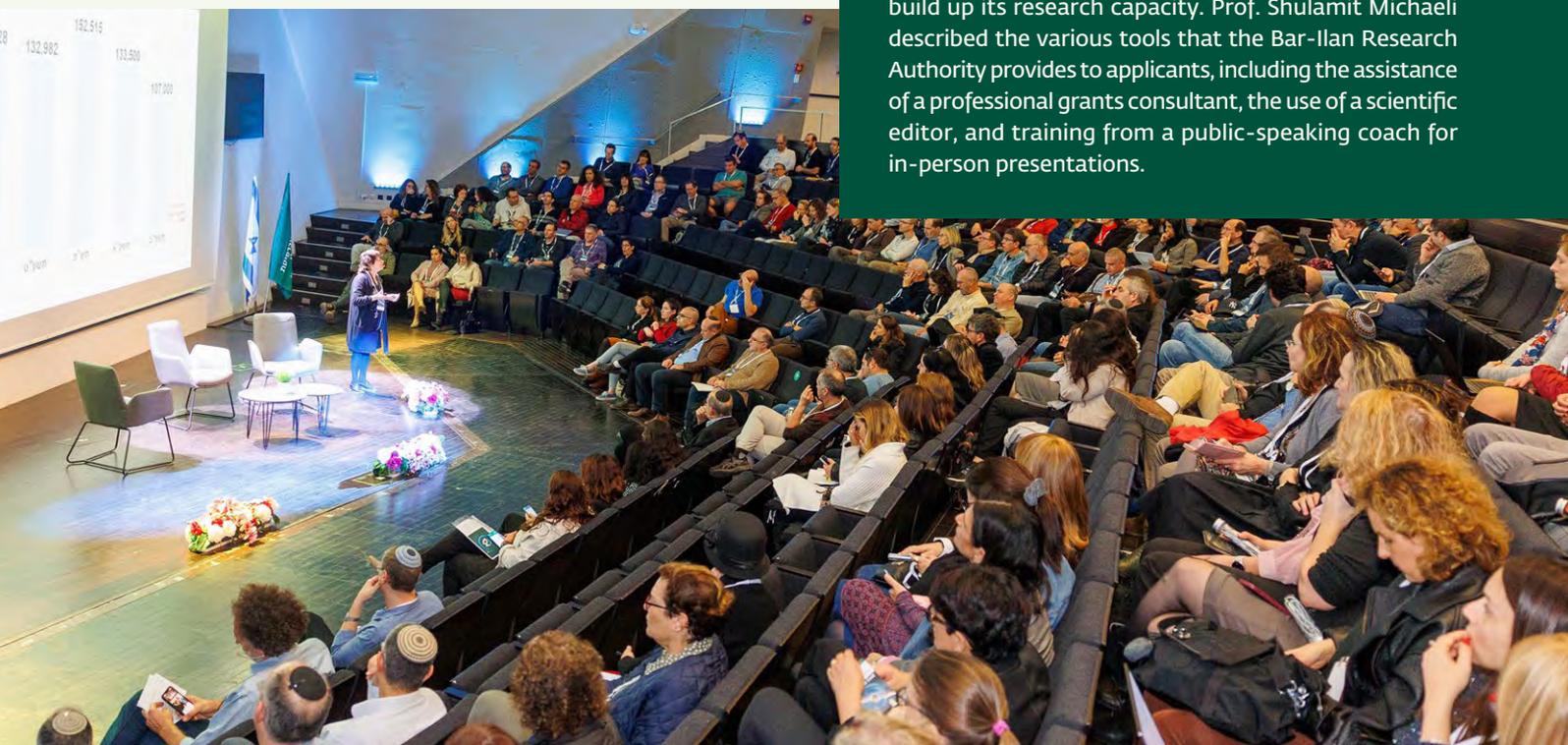


Dr. Yotam Kaplan
Developing Legal Tools to
Disincentivize Harmful Profit

Dr. Yotam Kaplan of the Faculty of Law was awarded 1.2 million euros to pioneer a legal initiative for tackling “profitable problems,” or environmental and societal ills such as climate change and fake news that persist by generating enormous profits for a select few. Kaplan’s strategy involves first exposing how commercial actors perpetuate these problems, and then developing legal measures to make it impossible for them to profit from harmful conduct.

Going for the Grant

This April, the Marketing and Business Development Division hosted its first Get the Grant Conference, aimed at empowering Bar-Ilan faculty to recognize the role of grants in not only advancing individual projects and careers, but also in securing the University’s ability to build up its research capacity. Prof. Shulamit Michaeli described the various tools that the Bar-Ilan Research Authority provides to applicants, including the assistance of a professional grants consultant, the use of a scientific editor, and training from a public-speaking coach for in-person presentations.





The Alexander Grass Computer Science Building

Where the Future Takes Place

Two years after breaking ground, Bar-Ilan completed construction of the new Alexander Grass Department of Computer Science Building, home to the future innovations that will advance Israel's security and prosperity.

And also, hopes computer scientist and Deputy President Prof. Moshe Lewenstein, home away from home for the department's students.

"A computer science degree is incredibly intense. Students spend long days and lots of nights studying—the experience is all-consuming," Lewenstein says. "So when we designed the new department's building, we wanted to create a holistic space that would function as a complete living and learning ecosystem."

The result is a structure whose features and design elements combine to advance the goals of comfort, collaboration, and creativity, beginning with the building's centerpiece: the Innovation Hub. An L-shaped space in the lobby lined with galleries for individual study, the hub includes 10 rooms

whose seating can be configured according to group and project needs. In addition, all dividing walls are glass, to encourage students to interact with others and feel part of the departmental community.

The first floor also includes a café, a courtyard, a kitchenette and dining area, and an auditorium for lectures and events.

The upper floors contain researchers' and graduate students' offices, but again, points out Lewenstein, there's a twist: "The offices are all mixed in together, without the usual separation by hierarchy. We wanted everyone in the department to feel that they're working toward the same purpose, and also to make sure that everyone meets and speaks with everyone else," he says. "Computer science is a field that thrives on cooperation, and we were determined to get people out of their comfort zones and into communication with colleagues."

Once they're out of their offices, he adds, they can meet in one of the upper floors' numerous "brainstorming spots": spaces open to the corridor that sport bean bags, sofas, and a wall-



size whiteboard for working through stroke-of-genius ideas.

Finally, the building's upper floors contain larger laboratories, where the department's various groups—in cyber security and cryptography; AI and robotics; algorithms and computer-science theory; game theory; and natural language processing—can conduct joint research, share ideas, and even just socialize.

As for the building's exterior, its window walls advance the theme of interconnectivity, both with the larger campus and the entire State of Israel. They may also become a favorite of the larger Bar-Ilan community, which can watch student drones in the Launching Lab during their test flights.

"If glimpses onto what's going on in the building encourage more students to study computer science, all the better," smiles Lewenstein. "The space is large enough to accommodate many talented students, and Israel needs lots of excellent computer scientists and computer-science graduates to fuel its high-tech industry."

Building Blocks

75K square feet

140 seats in the building's auditorium

50 seats in the seminar room

36 labs for faculty and student research

5 spaces for events and gatherings

2 combination study spaces and libraries

1 robotics lab, with a space for drone test flights

1 recording and editing studio for the Division of Teaching and Learning

1 center for visiting ed tech startups

The Goal Optimization using Learning and Decision-Making Lab

Even Better Than the Real Thing

How can you tell a good seeing-eye dog from a great one? Easy, explains Bar-Ilan computer scientist Dr. Reuth Mirsky: Great ones know how to disobey.

“Intelligent disobedience,” or the ability first to determine an unsafe command, and then to disregard it or insist on a different action, is a critical quality of the animals entrusted with the safety of the visually impaired. And that is precisely the quality that Mirsky seeks to develop in Golda, a seeing-eye robot.

“Robodogs have several key advantages over the real things,” says Mirsky, whose Goal Optimization using Learning and Decision-Making (GOLD) Lab—hence the robot’s name—studies cooperative artificial agents that can learn, adapt, negotiate options, and in turn be great teammates. “For starters, they don’t need to undergo the expensive and intense training that real dogs do. It’s simply a matter of installing the guiding software. They also don’t need to use the bathroom, to

sleep, and most of all, to retire. The opposite: They can simply be updated over time and as new technologies emerge.”

Pointing out that her quadruped aims to be more platform than real puppy, Mirsky explains that robodogs are actually a basis on which devices are interconnected, data is collected, and new technologies can be added all the time. By integrating GPS into Golda, for example, it can enhance its owner’s navigation of the world—and, she hopes, his enjoyment of it, too. “Real seeing-eye dogs can’t plan a route for their owners to a certain destination, but a robodog can. This can make life so much better for the visually paired.”

And perhaps for the rest of us, too: Mirsky and her students are also training Golda to be a “social robot,” or a robot designed to interact with humans or other robots by following social rules. This means, Mirsky says, that Golda would know not to bump into someone while guiding its owner on a busy street, or to trod on someone’s flowers, even if it’s the easiest way to get





Golda, the seeing-eye robot constructed by the Goal Optimization using Learning and Decision-Making (GOLD) Lab, was built by the robotics company Boston Dynamics and purchased with a grant from the Israel Innovation Authority. It is currently the leading robot of its type in Israeli academia, and the leading quadruped robot in the world.

somewhere. Mirsky's lab is also working on ways to enable its robodog to communicate information to their owners, like the fact of a new store opening on a daily walking route.

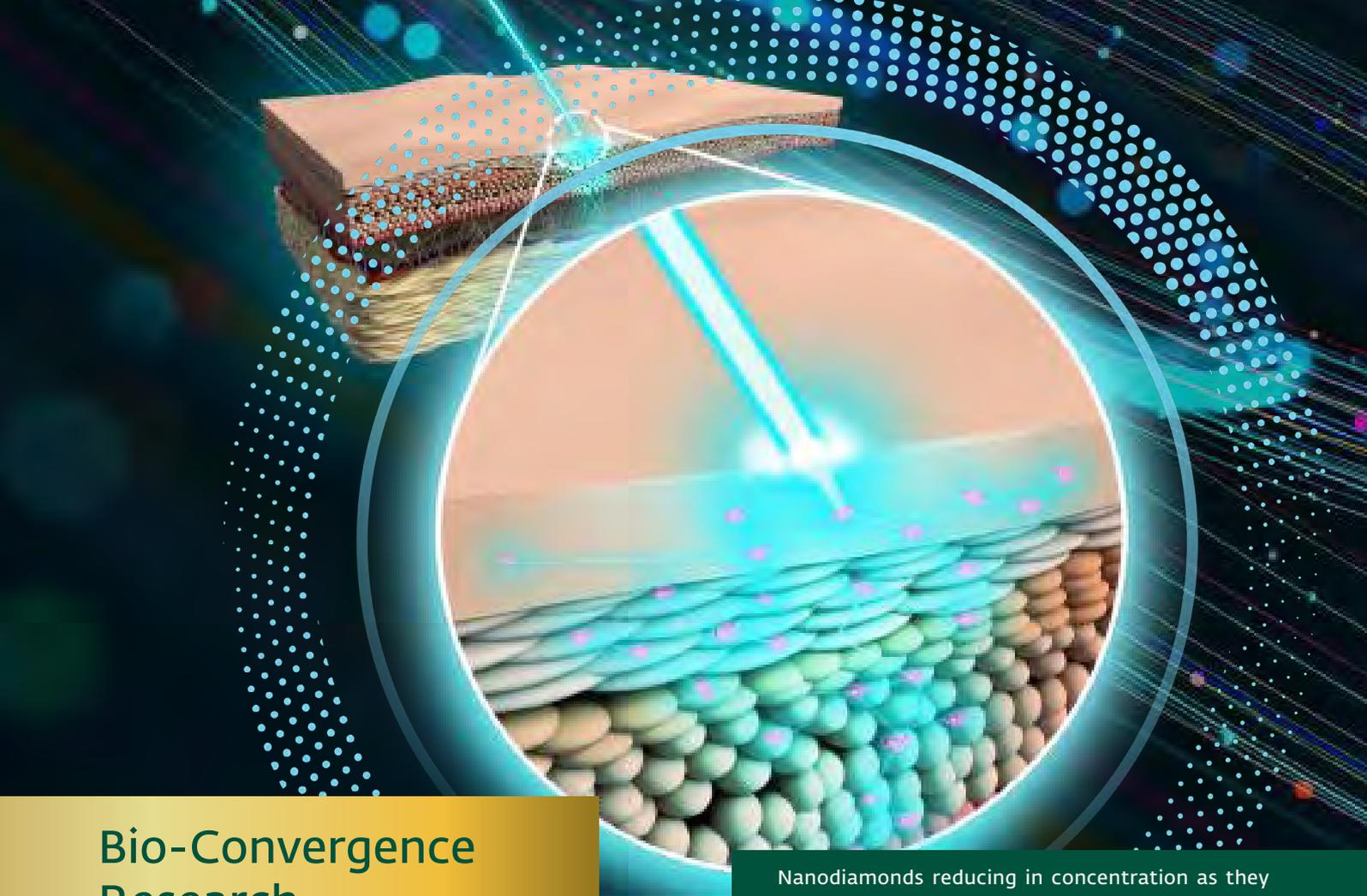
If anything, concludes Mirsky, the challenge will be to train the robodog not to bother its owner with too many options or too much information—rather, to recognize the line between being helpful and being a pest.

Is that even something a robot can learn?

“You’d be surprised,” laughs Mirsky, “at what we’re realizing we can teach robots to do.”



Dr. Reuth Mirsky



Bio-Convergence
Research

Nanodiamonds reducing in concentration as they
penetrate layers of skin

Smart Materials Save Lives

Drugs released automatically into the bloodstream at the first sign of inflammation. Scaffolds implanted into tissues and organs that trigger regrowth and repair. Particles that deliver medicine to specific sites in the body, thus maximizing the treatment's impact—and decreasing its toxic side effects. These are just some of the possible applications of so-called “smart materials,” or biomaterials that sense their environment and change their characteristics as a result, with vast implications for the future of medicine and efficacy of healthcare. And now, thanks to a new unit in the Institute of Nanotechnology and Advanced Materials, these materials will be synthesized at Bar-Ilan.

Part of the University's investment in the field of bio-convergence, or engineering inspired by nature, the Unit for the Synthesis of Smart Materials is dedicated to synthesizing and characterizing smart materials for use by researchers at Bar-Ilan and other universities. The unit will also develop on-demand solutions for research groups and support scientists

directly in the development of new medical devices, synthetic biological systems, and tools for diagnosis and therapy. Finally, the unit will collaborate with R&D players in the biomedical industry. For example, it has synthesized materials for by Nanocarry, a company based on the technology developed by Prof. Rachela Popovtzer of the Alexander Kofkin Faculty of Engineering: Using gold-covered nanoparticles, the company is developing a drug-delivery platform that overcomes the blood-brain barrier to treat brain disease. And nanoparticles based on research by Vice President of Research Prof. Shulamit Michaeli of the Mina and Everard Goodman Faculty of Life Sciences and Prof. Jean-Paul Lellouche of the Department of Chemistry have been used by Sol-Gel Technologies, a dermatology company developing topical drug products for the treatment of skin illness.



Prof. Dror Fixler



Prof. Orit Shefi

Better Together

Live-cell imaging, tissue engineering, and the digitalization of biological data: These techniques don't merely imitate, but also actively integrate biological systems. Known as "bio-convergence," this synergistic, hybrid field merges the knowledge and methodology of two or even three disciplines to create an entirely novel way of thinking about and doing scientific research. In turn, it is accelerating innovation and transforming biological observations into applications that save lives.



Prof. Dror Fixler, director of Bar-Ilan's Institute of Nanotechnology and Advanced Materials, and his doctoral student **Channa Shapira** are collaborating with **Dr. Hamootal Duadi** of the Alexander Kofkin Faculty of Engineering and **Prof. Jean-Paul Lellouche, Dr. Ronit Lavi, and Daniel Itshak** of the Department of Chemistry to produce diamond-based nanoparticles that can deliver medications through the skin by means of safe and non-invasive optical lasers.



Prof. Orit Shefi of the Faculty of Engineering is collaborating with **Prof. Amos Sharoni** from the Department of Physics and **Prof. Hagay Shpaisman** of the Department of Chemistry to develop 3-D delivery platforms made of biomaterials for inserting into the brain. Once there, they can help unveil the mechanisms underlying neural activity and can catalyze the creation of new neural networks in regions damaged by disease or injury.



Vice Dean Prof. Rachela Popovtzer of the Faculty of Engineering is collaborating with **Prof. Ehud Banin** of the Mina and Everard Goodman Faculty of Life Sciences to develop a biochip for the rapid, non-invasive, and microbiome-based monitoring and treatment of inflammatory bowel disease.



Prof. Gur Yaari of the Faculty of Engineering's Computational-Systems Immunology Lab is collaborating with **Prof. Omry Koren** of the Azrieli Faculty of Medicine to develop statistical tools for the processing and analysis of biological data related to the interplay between our microbiome and endocrine system. These tools will be used to develop therapies for the treatment of gastroenterological disease.



Physics



Engineering



Chemistry



**Life Sciences
and Medicine**



Data Science



UnBox Ventures' Healthcare Accelerator

The Nanocarry founding team. From left to right: COO Dr. Oshra Betzer, CEO Revital Mandil Levin, and CSO Prof. Rachela Popovtzer

From Research to Revolutionary Product

“Pregnancy is like a crystal ball,” says Sharon Handelman-Gotlib. “What happens during those nine months is an excellent predictor of women’s long-term health outcomes. That makes analyzing the risk of pregnancy complications critical not just for the fetus and the new mother, but for the whole woman, throughout her whole life.”

Handelman-Gotlib is one of Israel’s leading figures in fem tech, or technologies that enhance women’s health and well-being. She is also, as of last year, CEO of Shela (“Hers”), an end-to-end precision-medicine platform for predicting and preventing key pregnancy and postpartum complications, including gestational diabetes mellitus (GDM), preterm birth (PTB), and postpartum depression (PPD). Based on the research of microbiome expert Prof. Omry Koren of the Azrieli Faculty of Medicine and data scientist Prof. Yoram Louzoun of the Department of Computer Science, and founded together with Dr. Avi Tsur, director of the Women’s Health Innovation Center at Sheba Hospital and Dr. Adi Eshel, a nutritional expert and postdoctoral student in Koren’s lab, Shela was launched with the help of 949, the

healthcare accelerator of Bar-Ilan’s venture builder UnBox. By applying deep learning and Omics technology to large datasets, Shela promises to revolutionize neonatal care, placing advanced real-time, tailored, preventive-medicine tools in the hands of every expectant mother—literally, via a mobile app. Later, in its second stage of development, Shela’s app aims to offer women post-delivery and through to menopause a one-stop-shop for monitoring and improving health across a range of parameters, including nutrition, exercise, and even mental well-being.

“Because we’re able to diagnose patients with molecular precision,” explains Handelman-Gotlib, “we can tailor our prenatal and postnatal lifestyle recommendations to their exact health needs. We’re aiming to be a comprehensive, cost-effective, and convenient partner for women’s lifelong health journey, and a global leader in the fem tech space.”

Another Unbox company poised to disrupt the healthcare industry is Nanocarry Therapeutics, which aims to solve one of modern medicine’s greatest challenges: delivering

therapeutics to the brain. Through its breakthrough AxS bioengineered nanopatform, Nanocarry is able to treat brain tumors, metastatic cancers, and neurodegenerative diseases with therapeutic antibodies.

Originally developed by Dr. Oshra Betzer, a researcher in the lab of Vice Dean of the Alexander Kofkin Faculty of Engineering Prof. Rachela Popovtzer, the decade-in-the-making AxS nanopatform combines scientifically and clinically well-established safe components into a proprietary, universal, and adjustable delivery system capable of crossing the Blood Brain Barrier (BBB). By pioneering the use of the insulin molecule as a brain transporter—itself made possible by the proprietary bioengineering of gold nanoparticles—the AxS platform effectively delivers high quantities of therapeutic antibodies as well as a variety of cargo combinations directly to the brain, creating multifunctional drugs with significantly higher efficacy than conventional therapies.

“About 98 percent of all existing drugs can’t breach the blood-brain barrier. Within the therapeutic antibodies group, the number is even higher. Due to their large size and characteristics, only a tiny percentage of an injected dose of antibodies makes it to the brain,” explains Nanocarry CEO Revital Mandil Levin, who co-founded the company with COO Betzer and CSO Popovtzer in 2021. “This means that for the more than 450 million patients with brain disease, there is currently no viable therapeutic option. We believe we can turn this around, however, and offer therapies for brain diseases that were not possible before.”

Having completed tech transfer, manufacturing scale-up, and in vivo safety models, Nanocarry—which received pre-seed funding from investors including NFX, Sapir Venture Partners, the Israel Innovation Authority, and Bar-Ilan University—now aims to achieve proof of concept in its first platform-based product, designed to deliver HER2 therapeutic antibodies. These antibodies, which are extremely effective in controlling breast cancer, only work from the neck down; Nanocarry hopes to extend their efficacy to the treatment of breast-cancer metastases in the brain. Indeed, its future plans include extending the platform to other brain metastases, such as melanomas and cancer of the lung, as well as primary brain tumors, neurodegenerative illnesses, and other diseases of the brain.

“The first time Oshra saw in her mice brain scans that the antibodies from the AxS platform had not only succeeded in reaching the brain, but were also accumulating in the tumor there, she was crying tears of joy,” recalls Mandil Levin. “It was always a given that if you can deliver antibodies to the brain, you’ll sacrifice efficacy, and if you can maintain their strength, you’ll kill the patient through toxicity. But Oshra and Rachela, who came at the challenge from an engineering, as opposed to a purely biological background,” she concludes, “have literally built the trinity of targeted delivery, high efficacy, and safety into a solution to one of healthcare’s most intractable problems today.”



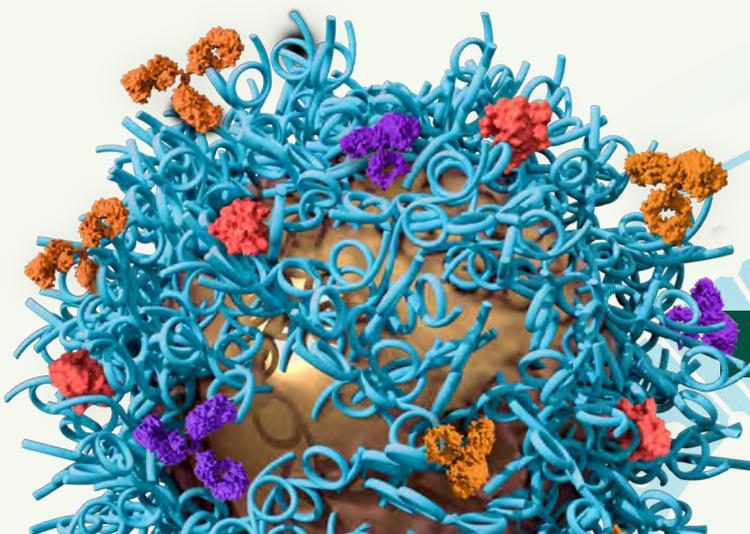
Sharon Handelman-Gotlib
Shela CEO



Prof. Omry Koren



Prof. Yoram Louzoun



Nanocarry's AxS nanopatform for brain delivery

Partners in a Vision

Bar-Ilan's community of significant supporters is advancing shared goals for Israel and ensuring impact for all humanity.

RESEARCH AND DISCOVERY

From enabling the recruitment of promising talent to the purchasing of equipment for scientific discoveries, our Research and Discovery gifts are a vital foundation for the development of new knowledge, approaches, and technologies.

The Adar Foundation
 The Adelis Foundation
 Sam and Ruth Alter
 The Applebaum Foundation
 Eyal and Yael Aronoff
 Azrieli Foundation
 The Hans & Gini Bachrach Foundation Pty. Ltd.
 Jeffrey Bly, Janice Feldberg, and Family
 Dr. Arik Carasso
 The Haron Dahan Fund for Bar-Ilan University
 Delek US
 The Estate Committee - Ministry of Justice
 The Exilarch's Foundation- Dangoor Family
 Willie and Mildred Fleischer Charitable Foundation
 The Forum of Companies Leadership for Growth and Employment, Ltd
 Samuel and Brenda Gewurz
 Stanley & Hana Goldberg Family Foundation
 Jonathan Goler and Jeff Mandelcorn
 Harvey Goodstein Charitable Foundation
 Paul and Edwina Heller Fund
 Nathan Hetz
 The Dalia and Eli Hurvitz Foundation Ltd
 KKL-The estate of the late Yona Kirschenbaum
 Alexander Kofkin
 The Koschitzky Family
 Frank and Dr. Kerri Lee (The Elias, Genevieve and Georgianna Atol Charitable Trust)
 M.E.H. Fund (a fund in memory of the late Margot and Ernst Hamburger)
 Meitar - Law offices
 The Irving Moskowitz Foundation
 ONEAI
 The Russell Berrie Foundation
 The Sagol Family
 Samueli Foundation
 Yaakov Shahar, Mayer Cars and Trucks co. Ltd
 Metropia/ Howard Sokolowski and Linda Frum
 Harold Spring and Francesca Trotta
 Jane Stern Lebell
 Romie and Esther Tager
 David and Bernice Walerstein
 The Wolfson Family Charitable Trust
 The Wolfson Foundation
 Yandex Israel Ltd
 Alan Zekelman

As well as enabling promising Israeli postdocs to return to their home country, gifts of note include support for innovative research in the brain and life sciences; engineering; and law, with an emphasis on conflict resolution. In addition, funds were provided for an advanced microscope for energy research, and for the establishment of the Lord Rabbi Jonathan Sacks Institute, which will work to promote research, education, and professional networks that advance a just and inclusive Jewish state.

COMMUNITY IMPACT

Gifts for Community Impact offer the wealth of knowledge and training on campus to individuals and communities in need, as well as extend the reach of Bar-Ilan deep into Israeli society.

Joseph Alexander Foundation
 Anonymous, Australia
 Association for Blind and Prevention of Blindness
 Aviv Foundation
 Bank Leumi Le Israel B.M
 The David Berg Foundation
 Zita and Mark Bernstein Family Foundation
 The Aaron and Marie Blackman Foundation
 Boeing Israel
 The Brachfeld Family
 Yoel Carasso - Beyachad Foundation
 Dayan Family
 Meny Dolev
 Tuvia Erlich
 Paul E. and Margaret Feder Family Foundation
 Sylvain Goldberg
 Hadassah Women's Zionist Organization of America
 The Irving Harris Foundation
 Hitter Family Foundation
 Israel Discount Bank Ltd
 Emanuel Kronitz
 The Leir Foundation
 David Muskal
 Dr. Gitta Nagel
 Novo Nordisk
 Gail Propp
 Dr. Marc and Karen Rivo
 David Rubner
 Sam and Dora Ruvkun Advanced Planning Endowment for Projects
 The Danielle Sonnefeld Foundation
 Jerome L. Stern Family Foundation
 Johanne and Norman Sternthal
 Lillian and Moises Tabacinic
 Weil Family
 The Charles Wolfson Charitable Trust
 Freddy Zinger

Among the gifts that increased our impact on the Israeli and global Jewish communities were support for our optometry and law clinics, which offer the highest-quality health and legal services to disadvantaged populations, and for the Lookstein Center for Jewish Education, which equips Jewish educators around the world to inspire students' interest in their tradition and identity. Also, we received major gifts for programs at the Azrieli Faculty of Medicine, including for The Russell Berrie Galilee Diabetes SPHERE, and ROM Galil, which brings outstanding young doctors from Israel's center to its northern periphery.

JEWISH IDENTITY

Jewish Identity gifts engage a new generation of Jews with their rich tradition, texts, and history, and prepare them to shape the future of a vibrant Jewish and democratic state.

Anonymous, USA
 Eric and Judy Breuer
 Marcos Metta Cohen
 The Haron Dahan Foundation
 Daniel and Lisa Gildin
 Drs. Mordecai z"l and Monique Katz
 Dr. Shmuel and Evelyn Katz
 Ephraim Kriel
 The Matanel Foundation
 Estate of Nina Moinester
 The Posen Foundation
 Qualita
 Yehudit Rachmani
 Selim Salti
 Schusterman Family Philanthropies
 Julius Stulman Foundation
 Haim Taib - Menomadin Foundation
 Rabbi Roy and Loretta Tanenbaum
 UJA Federation of New York
 Vital Transformation
 Herbert and Helene Wallenstein
 Yad Hanadiv

SCHOLARSHIPS AND STUDENTS

Scholarships offer access to transformative education and pave the path to professional opportunity, while gifts to outstanding students encourage their pursuit of excellence in their fields.

Stephanie and Gilad Abrahami
 Roger Ades
 Altshuler-Shaham Investment House
 Anonymous, Israel
 Arison Foundation
 ATIDIM
 The Grace Shua and Jacob Ballas Charitable Trust
 Shlomo Bar
 Gabi Barone
 Roni Benin-Bar
 Dennis and Edith Berger
 Israel and Henia Breslauer
 Gabi Buganim
 Teófilo (Tofi) Turqufe Cohen
 Crown Family Philanthropies
 Zoltan Erenyi Charitable Fund

The Gabi Cohen Foundation for Higher Education
 Alexander Grass Foundation
 Steve Halaj
 Sami and Anita Hazan
 Stephen M. and Mindy Hoffman
 Ben and Aliza Hosiosky
 ISEF
 Drs. Mordecai z"l and Monique Katz
 Henry Kister
 KLA
 The Philip and Harriet Klein Foundation
 Beverly Lewin
 Sefi Mei-Zahav
 Elaine S. Mintzes Estate Trust
 The Morris Family Foundation
 Moshal Program
 ONE
 Reality Investment Funds
 Robert Rom
 Salomon Sadovitch
 Alice Schoenfeld
 The Schulich Foundation
 Rami Shavit, Hamashbir
 Daniel and Andrea Shindelman
 Irving I. Stone Foundation
 Weisfeld Family Charitable Foundation

Notable gifts this year include support that enables motivated Ethiopians to fulfill their academic potential and achieve economic mobility, and support for new students who recently completed military service to their country. Additional scholarships encourage gifted candidates from the periphery to pursue a degree in mathematics, and facilitate the choice by outstanding STEM students to study nanoscience and cyber security.

BUILDINGS AND GROUNDS

From spaces for research and education to ones for reflection, relaxation, and creating community, our Buildings and Grounds gifts help Bar-Ilan advance all its goals simultaneously.

Dr. Alice Bessman
 Sara O. Briller
 Alberto Dayan
 Edmond de Rothschild Foundation
 Ellen Fawer
 The Feldman Family
 Jaime Feldman
 Friedman Family Charitable Trust
 Estate of Zachary Fromberg
 Jayme Garfinkel
 David and Susan Gradel
 Iranian American Jewish Federation of New York
 Howard S. and Deborah Jonas Foundation
 Robert Korda
 Leo and Beatriz Kryss
 B.L. Manger Foundation
 Picciotto Family
 Ingeborg and Ira Leon Rennert
 Family of Milan and Blanca Roven z"l
 Estate of Edward Shade
 Avi Stern
 The Dyna and Fala Weinstock Charitable Trust

“If we wish to continue our spiritual heritage...we must make of our schools in our homeland... real educational institutions, in keeping with the nation’s ideals and principles.”

Rabbi Meir Bar-Ilan





A Commitment to
Excellence in Education



The Division of Teaching and Learning

Learning: Different and Smart

AI software for enriching course discussion, and apps that measure aptitude instead of traditional exams: Nothing is too innovative for the Division for Teaching and Learning, founded to make a Bar-Ilan education more engaging, effective, and accessible to all. Now, one year in, the division's ambitious range of activities underscores the University's commitment to excellence in instruction—and to preparing exceptional graduates for Israel.

Teaching as Team Effort

In its first year of operations, the division recruited nine new team members, bringing the total number of staff to 12. All these hires, which include experts in pedagogy, ed-tech, and the learning-management platform Moodle, “bring a rich background in teaching technologies to the division, which will draw from and adapt their successful experience in educational innovation,” say Vice Rector Prof. Arie Reich and Division Head Yuval Schreibman.

Kicking Courses up a Notch

Last year, thanks to a NIS 4.5 million competitive grant from Israel's Council for Higher Education, the division announced its third call for proposals from Bar-Ilan faculty for making existing courses more interesting. Selected courses were studied carefully by the division team, and digital content—from TED talk-style videos and interactive tasks to digital escape rooms and VR—incorporated into their syllabi to enhance the learning process. From the nearly 300 proposals submitted thus far, the division has thus far revamped 70 courses across every discipline.

Embracing the Future of Education

Recognizing that the generative-AI train has definitively left the station, the division is helping both faculty and students adapt to a post-Chat GPT world. Alongside a series of workshops with the deans from all faculties, the division is developing recommendations for student assignments, such as having

students read their papers aloud in class, or choosing essay questions that relate more closely to classroom conversations. At the same time, the division is developing ideas for using Chat GPT to enhance teaching, and to encourage more meaningful thought and writing, too.

Taking Stock for Better Scores

Gone are the days when a year's worth of learning could be summed in a single score: Now, all Bar-Ilan courses must include a mid-term as well as a final, so that "lecturers and students alike can assess the level of learning along the way, and make target areas that need work," Reich explains. To help faculty make adjustments in line with the new emphasis on assessment, the division has developed a standard digital template for all syllabi, replete with required fields for interim quizzes and exams.

Picking up the Pedagogical Pace

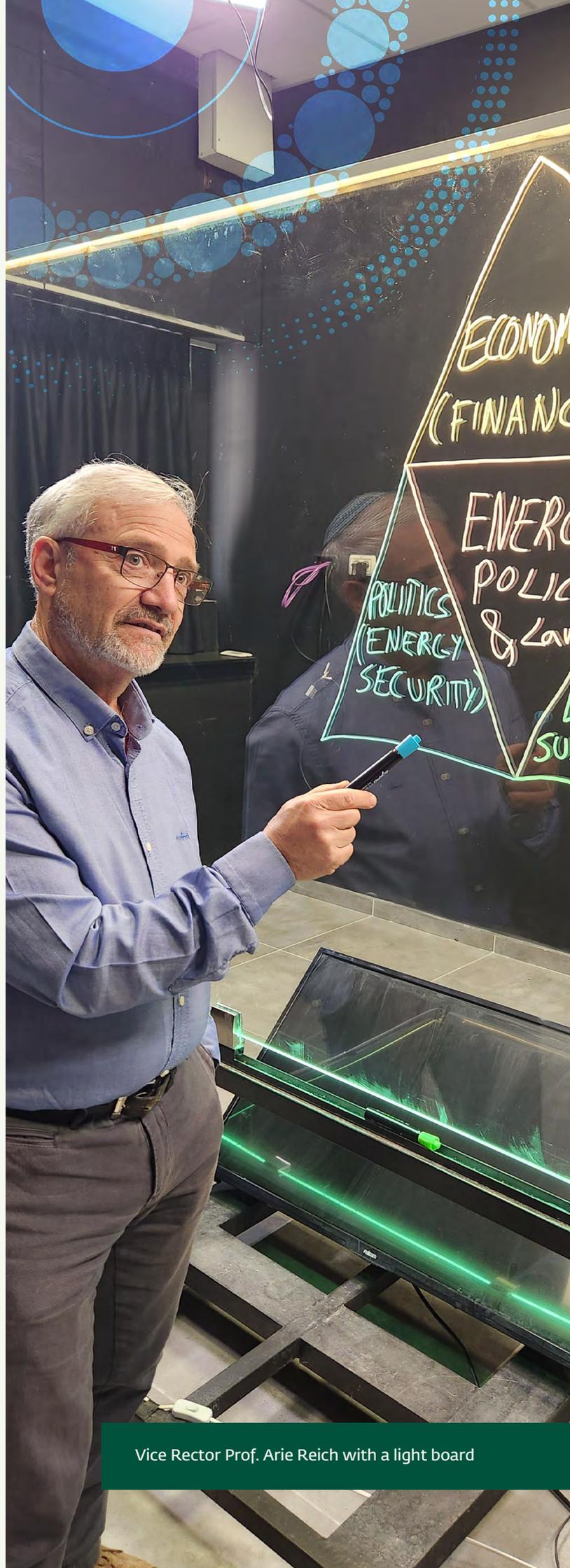
"We found that when courses lasted a full year, students could disappear in the middle, either figuratively or literally," Reich says. "By moving to a semester-long format, we ensure that the pace of learning is more intensive, faculty energy remains high, and students stay more engaged from the first class to the last." Another benefit: Faculty gain more data on what works and what doesn't in their courses, and have more incentive to focus their efforts on the material that matters the most.

Opening New Doors to a Bar-Ilan Degree

In the coming years, the division plans to offer an alternative admissions process: Candidates who successfully complete three Bar-Ilan MOOCs (Massive Open Online Courses) offered by the Faculty of Jewish Studies or the Faculty of the Humanities, and then go on to receive an average of at least 85 on the courses' in-person exams, can gain automatic entry to one of these faculties' departments. As an added bonus, students can apply these course credits to their degrees—and the costs of the courses to their tuition.

Connecting the Classroom and the (Real) World Outside

To strengthen the academia-employment spectrum and ensure that graduates are equipped for the modern workplace, Israel's Council of Higher Education, together with the Aluma Association and the Edmond De Rothschild Foundation, awarded NIS 1.5 million on a yearly basis to Bar-Ilan for activities that help bridge the classroom to a range of future careers. Along with developing new courses that incorporate practical experience, training, and soft skills, the Division for Teaching and Learning will work to connect existing courses across all disciplines to growing needs and real positions in Israeli industry.



Vice Rector Prof. Arie Reich with a light board



The Immersive Room

Learning All Around

When most parents think of what they'd wish for their children's development, the answer is probably "less screens." Prof. Adina Shamir, founder and director of Bar-Ilan's Laboratory for Technology in Special Education, has a surprising answer for them: She agrees.

"Much of the technology in children's lives today encourages passivity. From the computer on which they do assignments at school to the iPad on which they watch YouTube at home, the common denominator is a static screen and unchanging content, which children can't affect, but only consume," explains Shamir. "Yet we know that children learn best when they're engaged, both with their learning and their surroundings. If technology can be used to facilitate that engagement, it can be a powerful thing."

Fortunately for students, Shamir speaks from experience: As part of her studies on the impact of educational technology on students with special needs, she established Israel's first Immersive Room, a part-research lab, part-therapeutic institute for young children with language delays and their families. Directed by Shamir and run by a research staff comprising world leaders in the field, the room is a

360°-projection, multi-sensory environment that transforms the walls, floor, and even ceiling into virtual windows onto new worlds—including, perhaps most importantly, students' inner ones, too.

"When students are in the Immersive Room, they're not only able to see and feel what it's like to be in a certain place. They're also in a space that sees and feels them, too," Shamir says. "Through features like touch screens and hot spots, the room provides sense of synchronicity with their emotions. For students with learning disabilities, emotions are even more important to the learning experience."

Indeed, Shamir's team of researchers has demonstrated that even just a few sessions in the Immersive Room can be enough to help children with developmental language deficiencies improve their pronunciation and sentence structure. "Along with giving immediate feedback, the room heightens their motivation to learn and holds their attention for sustained periods. The result is much more active and effective learning." In addition, she points out, the room's screens can support customizable content, which is targeted to children's specific educational needs.



The Bar-Ilan Faculty of Education's Immersive Room is a 360°-projection, multi-sensory environment that transforms the walls, floor, and even ceiling into virtual windows onto new worlds.

To ensure that the learning is retained over the long term, the Immersive Room is used not only for research and education, but also—critically—for training, or what Shamir calls an “ecological approach” to learning: Throughout the year, the room welcomes professional-development sessions for students' kindergarten teachers and for their parents. During these sessions, both groups are taught how to use technology to maximize children's learning potential and address their learning difficulties.

“This project has allowed me to help so many children in Israel and advance the field as a whole. I feel blessed,” says Shamir, “to be able to give so much back to the community.”



Prof. Adina Shamir



The Atidim-IDF Mathematics Program

Raising the Periphery to the Power of Higher Ed

If, as the saying goes, the periphery's students can't come to Bar-Ilan, Bar-Ilan is determined to go to the periphery. Especially if, as in the case of a new collaboration with Atidim, it means preparing bright and motivated young people for meaningful service to their country.

Atidim ("Futures") is a national organization that works to develop Israel's human capital and close its socioeconomic gaps through educational opportunities. And now, through a collaboration with Bar-Ilan's Faculty of Exact Sciences, it can grant disadvantaged young people with exceptional mathematics potential the advanced training required for top positions in the IDF's Military Intelligence. Beginning last July, 18 high-school juniors from Israel's geographic and socioeconomic periphery began a two-year course of online studies with faculty from the Department of Mathematics. When they graduate from high school, they'll spend a third year studying full-time on campus, after which they'll have earned a bachelor's degree. Featuring full scholarships, fully subsidized accommodations in Bar-Ilan dorms, and three years of intensive summer school, the program "paves students' path to the military's technological units, themselves often

steppingstones to careers in Israel's high-tech industry," says Dean of the Faculty Prof. Uzi Vishne. "As such, it's a path to personal fulfillment and purposeful citizenship."



Prof. Uzi Vishne

The Leaders Management Program

Leveraging Potential into Leadership

Businesses have long recognized the benefits of promoting talent from within, from hard work and boosted morale to uninterrupted productivity. At the same time, few institutions prioritize setting future managers up for success. Recognizing that the skills needed to succeed as managers are different from those that make for great researchers, Bar-Ilan CEO and Senior Vice President Zohar Yinon and Chief of Human Resources Maor Pinko created the “Leaders” program to identify and nurture staff and faculty members with the potential to become high-level managers and fill top academic positions in the University. Consisting of 12 sessions over the

course of almost nine months, the program offered 16 hand-picked participants—12 of whom were senior researchers, and four administrative staff—an opportunity to study leadership, personal development, and entrepreneurship with successful managers from Bar-Ilan, as well as to gain in-depth knowledge of the University’s core values, departments, and initiatives. Course speakers and topics included innovation in teaching and learning with Vice Rector Arie Reich, and trends and challenges in higher education with Faculty of Law Prof. (emeritus) Yaffa Zilbershatz, former chairman of Israel’s Council of Higher Education.



CEO and Senior Vice President Zohar Yinon holds a certificate from *Globes Israel* declaring Bar-Ilan one of the country’s “Best Places to Work in 2023.”



Innovation U

Bar-Ilan's Digital Transformation

From upgrading its ILANET student-software management system to migrating its ERP, Moodle, and BI systems to the cloud, Bar-Ilan is increasing its digital capacity, enhancing its organizational efficacy, and delivering better results to growing audiences.

Server Room Renovation

Substantial renovations to Bar-Ilan's server room will improve the University's capacity for advanced, high-power computational research. Project set to be completed by the second half of 2024.

Oracle ERP Migration

Moving Bar-Ilan's Oracle ERP (On Prem) Finance, HR, and purchasing system to the cloud will reduce administrative needs, improve accessibility, and allow for integration with other cloud services.

Moodle Migration

Uploading the University's learning-management system to the cloud will improve student and faculty interface and ensure, in the event of an emergency, learning continuity.

Portal App Development

The new, fully customizable university portal app brings access to all student and faculty services into one convenient place. It also provides access to all University media, as well as alerts and updates.

Form Digitization

The digitization and merger of Bar-Ilan's nearly 1,500 forms improves the efficiency of administrative services, improves coordination between departments, and frees up personnel for more meaningful activities.

CRIS Optimization

Improvements to Bar-Ilan's database for faculty research activity will ensure more—and more accurate—digital attributions to Bar-Ilan publications. Along with raising the University's profile, these attributions will lead to increased research funding from Israel's Council for Higher Education.

Website Upgrade

Upgrades to more than 70 websites in the Bar-Ilan domain improved usability and SEO, enabled the integration of more media, and strengthened the University's branding across all departments, schools, academic centers, and units.

Moving in Place

ALEXANDER KOFKIN
FACULTY OF ENGINEERING
Construction of six new research laboratories
Feldman Family

Bar-Ilan Capital Projects

New structures, renovated spaces, and landscape upgrades: Last year's myriad physical-infrastructure improvements helped make Bar-Ilan a better place to learn, work, and visit, as well as move it farther toward its goal of impact.

THE JIM JOSEPH EDUCATION BUILDING

Construction of the University's Immersive Room, a new teaching laboratory for special-needs education research

THE ALEXANDER GRASS COMPUTER SCIENCE BUILDING

Completion of the new home for Bar-Ilan's Department of Computer Science

GAN MORDECAI UPGRADE

A dedication of the garden in between Jewish studies and computer science in memory of *Mordecai Katz z"l*

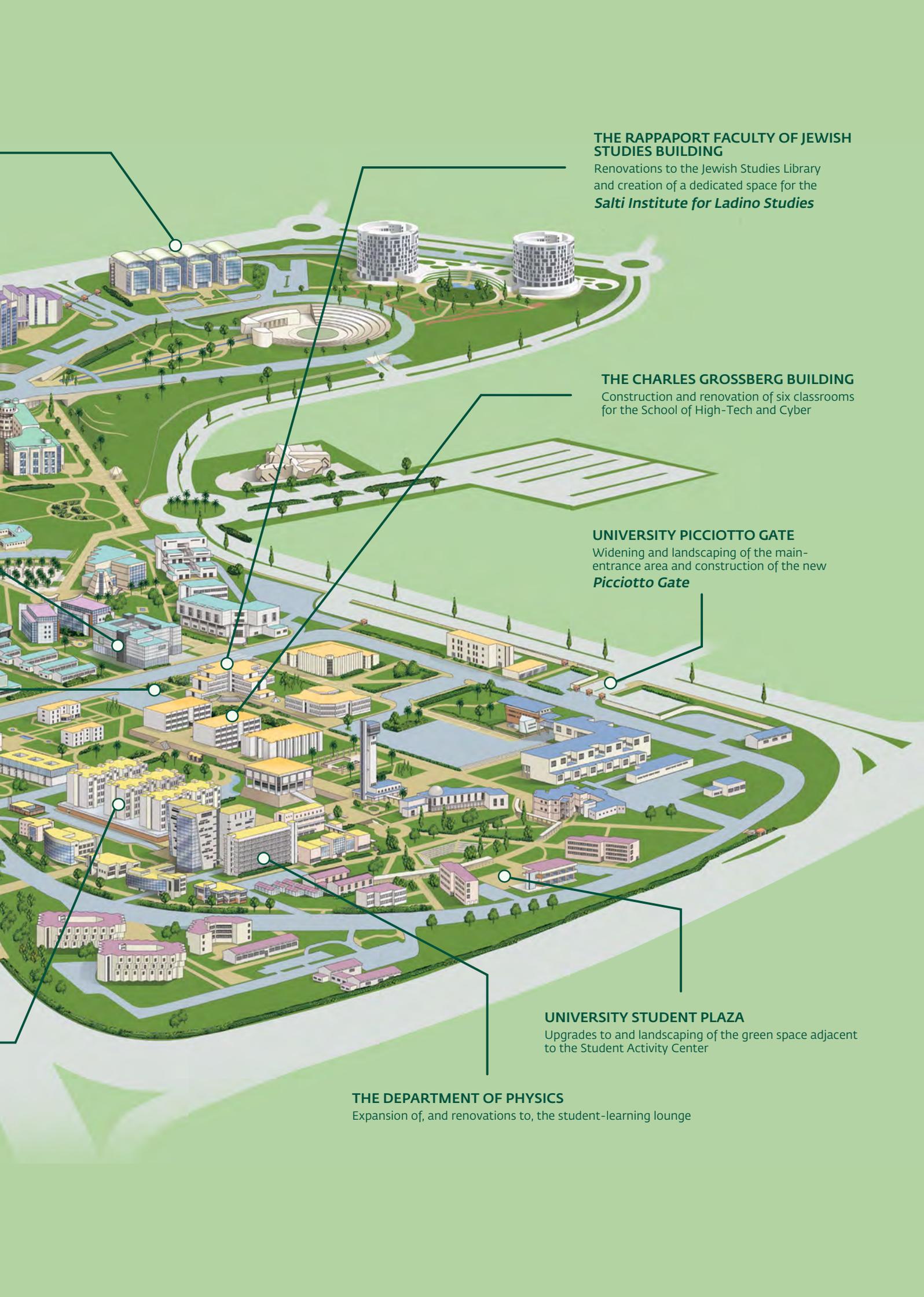
THE ALIZA AND MENAHEM BEGIN BUILDING

Renovations to the University's Research Authority

THE MINA AND EVERARD GOODMAN LIFE SCIENCES BUILDING

Construction of a new life-sciences teaching laboratory, new offices for the dean and faculty managerial staff, research laboratories, and a new laboratory for the School of Optometry and Vision Science





THE RAPPAPORT FACULTY OF JEWISH STUDIES BUILDING

Renovations to the Jewish Studies Library and creation of a dedicated space for the *Salti Institute for Ladino Studies*

THE CHARLES GROSSBERG BUILDING

Construction and renovation of six classrooms for the School of High-Tech and Cyber

UNIVERSITY PICCIOTTO GATE

Widening and landscaping of the main-entrance area and construction of the new *Picciotto Gate*

UNIVERSITY STUDENT PLAZA

Upgrades to and landscaping of the green space adjacent to the Student Activity Center

THE DEPARTMENT OF PHYSICS

Expansion of, and renovations to, the student-learning lounge





“Civilization is built on a number of ultimate principles...[including] the equality of all good citizens before the law. In a word: justice.”

Max Nordau

A Just and
Inclusive Society



The Russell Berrie Galilee Diabetes SPHERE

Putting Better Health in Reach for Israel's Northern Periphery

In a study by the Taub Center for Social Policy Studies published this February, researchers discovered that the key determinant of Israeli patient outcomes isn't one's level of income, or even his education. Rather, it's something much simpler, and arguably more sobering: Namely, where in the country that patient lives.

Conceding that wealthier people lead on average healthier lives, the study's authors nonetheless pointed to inferior health provision outside of Israel's center as a likely cause of the stark differences in mortality along geographic lines. For Dr. Sivan Spitzer, deputy director of the Azrieli Faculty of Medicine's ambitious, ten-year initiative to close the alarming gaps in diabetes prevalence between Israel's center and northern periphery, the findings merely confirm what she and the faculty have long recognized as structural health inequities in the economically disadvantaged Galilee. And yet, she believes, there's good reason for hope: By locating the problem firmly in place, we can begin to develop effective and sustainable solutions—for both the one million Israelis expected to be diagnosed with diabetes by 2040, and for the vast majority of the 463 million diabetics around the world who live in low-income countries.

Spearheaded by a \$20 million gift from The Russell Berrie Foundation and directed by Prof. Naim Shehadeh, director of the Rambam Health Care Campus' renowned Institute of Diabetes, Endocrinology, and Metabolism and president of the Israel Diabetes Association, SPHERE (the Social and Precision-Medicine Health Equity Research Endeavor) creates goal-oriented, diabetes intervention and care ecosystems through collaborations between local health-management organizations, hospitals, and municipalities. Indeed, as the largest healthcare project in Israel's history, SPHERE is also the first to place community agencies at the very center of a model for treatment.

"It's natural to work with health-management organizations and health clinics when you're trying to achieve better health outcomes," says Spitzer. "But if you look at the most important factors influencing health, only 20 percent are related to healthcare systems, whereas 50 are connected to the particular realities of your community. We understood that if we're going to be successful, we need to make municipal agencies the key."

By advancing simultaneously across three, interrelated pathways—Prevent, Control, and Care—SPHERE aims to

achieve three main goals by 2032: a 50 percent reduction in the conversion rate from pre-diabetes to diabetes; a marked increase in the number of diabetes patients whose glucose levels are considered “well-controlled”; and, in light of the growing epidemic of childhood obesity, a decrease in the percentage of children defined as “at risk” for diabetes. Now completing its first year of operation, SPHERE has already made astounding progress in the initiative's pilot cities.

Activities included making a persuasive business case for local governments' partnership in a healthcare initiative (“There's a real economic incentive for cities to improve the health of their residents,” Spitzer explains) and creating an initiative liaison in each of the pilot cities' municipalities. Called “BARAKS” (the Hebrew word for lightning is an acronym for “health, authority, and community”), these coordinators work with an on-site SPHERE mentor to integrate diabetes prevention, control, and care practices into all municipal activities. Moreover, they help develop an ecosystem with local healthcare providers, NGOs, and religious leaders.

In addition, this March, SPHERE launched its innovative “City MRI,” a mapping tool that collects data from each city's health, education, recreation, and other sectors for use in developing plans for strategic community change. And this summer, the “one stop shop” mobile testing clinic, replete with all the necessary tests for monitoring the progression of the disease, will be dispatched directly to the five pilot towns, and the results sent to patients' primary-care physicians to ensure the appropriate follow up.

Finally, SPHERE also advanced along its fourth pathway, Cure, awarding grants of approximately \$800,000 for basic research by Azrieli Faculty members on the genetics of type 1 diabetes, microbiome, and beta-cell regeneration. And while Spitzer admits that science is still a long way from eradicating this devastating disease, she is confident that, on the basis of the first year's progress, SPHERE will achieve its goal of affecting the lives of nearly 60 percent of Israel's Galilee within the next decade.

“We're building northern communities' capacities to encourage, facilitate, and reflect better health behaviors in day-to-day life,” Spitzer concludes. “For people in Israel's geographic and socioeconomic periphery, it's a means to put healthier lives within their reach.”

Fighting Diabetes with Data: The SPHERE Municipal Health Dashboard

Featuring more than 160 health indicators, SPHERE's digital Municipal Health Dashboard provides real-time insights about the overall health and particular health behaviors of residents in the five pilot cities. Equipped with the dashboard's data, municipalities will have a clearer picture of the specific challenges their communities face. Together with a SPHERE urban planner and social-prescription platform coordinator, municipal leaders will then design evidence-based interventions for encouraging better health choices and preventing the conversion to diabetes. They will also develop a range of targeted “touch points” to reinforce the healthy-lifestyle message.



Prof. Naim Shehadeh



Dr. Sivan Spitzer



The Azrieli
Faculty of Medicine
Bar-Ilan University

The Russell Berrie
Galilee Diabetes
SPHERE

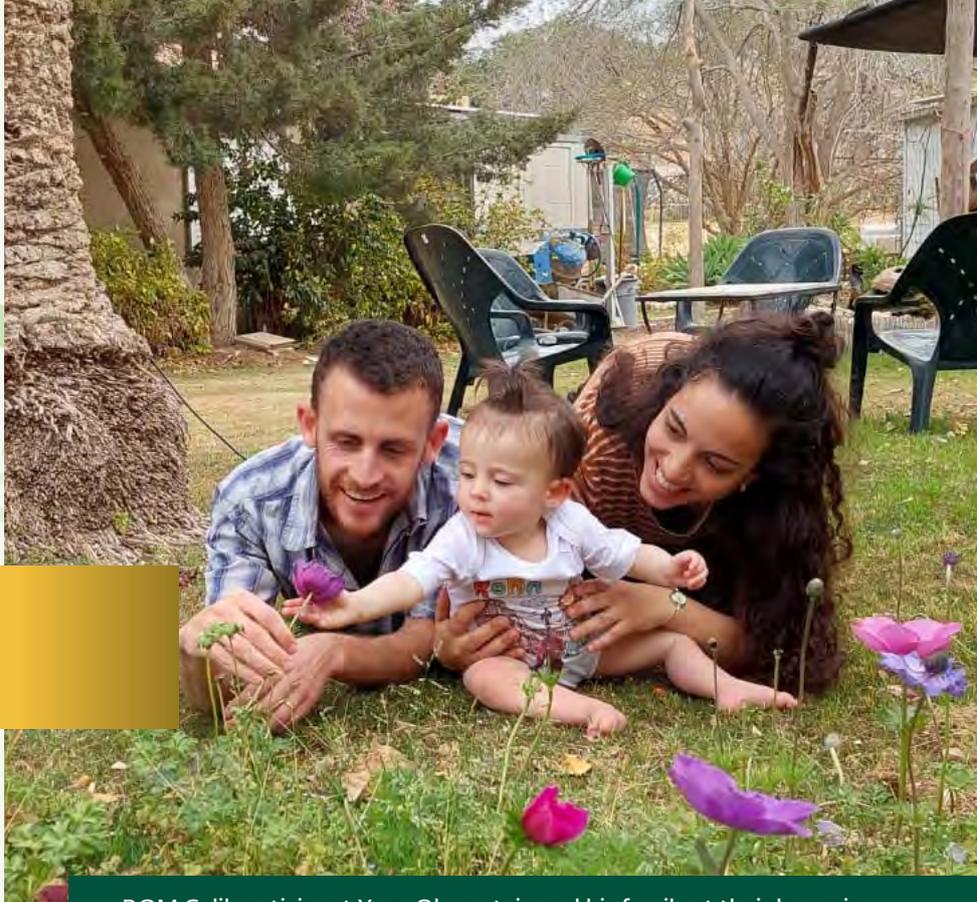
"سفيرا"
مشروع السكري في الجليل
على اسم راسل بيرري

ספרת
הסוכרת בגליל
ע"ש ראסל ברר



ROM Galil Family Physician Program

All in the Family



ROM Galil participant Yoav Ohrenstein and his family at their home in Gilon, a small community settlement near Carmiel.

Like most of the world's rural populations, the Galilee's sizeable minority communities are more likely to suffer from major illnesses than residents of the country's urban center. They also, when compared to their urban counterparts, have significantly worse patient outcomes. Yet while a critical component of closing the health-equity gap lies in more access to primary care, it is precisely primary-care physicians the North lacks the most. What's worse, this shortage reflects a dual challenge: persuading exceptional doctors to make their homes up North, and persuading them to choose primary-care medicine at all.

Recognizing that today's medical culture pushes students toward specialization—and generally devalues an interest in advancing community health—the Azrieli Faculty of Medicine has devised a comprehensive program aimed at addressing both problems simultaneously.

ROM Galil, an initiative of the faculty's Office of the Dean that began last year, offers a small cohort of students in each class who are committed to the field of primary-care medicine and to practicing in the North for at least four years after the completion of their degree a full scholarship for tuition and living expenses, as well as tailored courses, individual mentoring, and added exposure to the region. For instance, participating students take special courses on the social determinants of health in underserved populations, with the goal of seeing patients in the context of their community. In addition, they take courses in POCUS (Point of Care Ultrasound), medical care in the field, and doctor-patient communication. They also complete pre-clinical coursework in the humanities as well as the sciences; clinical work at both faculty-related hospitals and

health clinics; and an immersive, community-focused clerkship for the continuum of family care.

Finally, the initiative—currently supported by generous partners in Israel and the United States—will take a proactive approach to integrating graduates into the region successfully: Whether a job for a spouse or help with a child's special needs, the initiative's community-based partners will work to help top-notch medical students become satisfied Northern residents. In turn, they will increase the chances of these doctors staying, and filling a vital healthcare need.

The initiative's first cohort of eight participants was selected from among the faculty's first year-students, and screened by a committee that included faculty members, a psychologist, a community representative, and a family practitioner. They include six students who grew up in the North, including one from its Druze community, and a student from a remote kibbutz in the Negev, who expressed his deep awareness of the role of a family doctor in improving not just patient health, but the well-being of an entire community.

By offering motivated young physicians a wide scope of practice and continuity of care with their patients, ROM Galil also promises them access to more professional rewards and joys—and the opportunity to be part of an ambitious, forward-thinking revitalization of a region. As all eight participants look forward to another outstanding year—this one marked by entry into clinical rotations—there is little doubt the new exposures and challenges will be met with remarkable success.

ETGAR for Advancing Health Equity

From Hospital to Home and Beyond

For most physicians, discharging a patient from the hospital means discharging responsibility for his care. Thanks to a mandatory course in Azrieli Faculty of Medicine, however, a new crop of Israeli doctors will view discharges as merely the start of a journey—and one, more importantly, in which they have a role to play, too.

ETGAR (“Challenge”) was established by the Azrieli Faculty to address disadvantaged populations’ high rate of hospital readmissions, which not only result in higher costs for the healthcare system, but also reflect a lower proportion of positive patient outcomes. By training medical students to communicate with patients more effectively and understand the effect of social determinants on health outcomes, ETGAR helps ensure a more successful transition to the home setting, and helps tomorrow’s doctors reduce the country’s health inequities.

“In a study of hundreds of readmitted patients, we realized that many simply didn’t understand their discharge papers, which contain the medical instructions they need to manage their healing on their own,” explains Dr. Sivan Spitzer, director and co-founder, together with Azrieli Faculty professor emeritus Mary Rudolf, of ETGAR. “To compound matters, the discharge process is often rushed and the instructions objectively unclear. It’s no wonder that there were medication discrepancies in nearly half the cases, nor that some patients ended up right back where they began.”

To address the issue, ETGAR teaches students to write instructions that patients can read, and to speak to patients in ways they can understand. In many cases, that means translating into more straightforward terms; in others, it means translating—literally: ETGAR also invested in a student-run staff that can translate into Arabic and Russian. “The simple addition of a line of translated text can make the difference to a patient’s feeling of confidence about taking responsibility for his care,” Spitzer says.

As part of the course, students also conduct a follow-up home visit in which they assess the patient’s medical compliance and overall welfare. Recognizing the importance of reinforcement to ensuring successful outcomes, Spitzer plans in the coming years to build out the follow-up component, both by increasing the number of visits and calls and including other members of the local community. By involving not only health services but also municipalities in the healing process, she believes that ETGAR can ensure still more positive outcomes for individual patients and engage a larger number of northern residents.

In recognition of its impact on the North and its enhancement of Israeli healthcare, Bar-Ilan recently selected ETGAR as its flagship program for the fourth consecutive year.

“One empowered patient at a time,” concludes Spitzer, “we can change the face of the Galilee.”





The Center for Insolvency Mediation

From Conflict to Civil Discourse

When most people think of the typical subjects of mediation, they might picture a divorcing couple, or perhaps business partners in dispute. What they rarely imagine, however, is a corporate entity in financial straits—which is, says Adv. Amos Gabrieli, precisely the reason why the Bar-Ilan Faculty of Law's new Center for Insolvency Mediation is so necessary.

"The default path for most companies in financial trouble is a lengthy, costly, and often demoralizing legal process. And the result is that resources that might have helped to turn a viable business around are often directed toward—or exhausted by—the process itself," says Gabrieli, an experienced mediator and postdoctoral student in Bar-Ilan's Faculty of Law. "By giving the country's top lawyers the tools from within their own fields to

address insolvency through mediation, we can help shift the legal culture in Israel from one characterized by cynicism and aggression to one that's more civil, and more beneficial to all parties as a result."

Founded last year by Gabrieli and Bar-Ilan CEO and Senior Vice President Zohar Yinon, together with Adv. Guy Gissin, SRI Global Group CEO and owner Nir Zichlinsky, and Faculty of Law mediation scholars Profs. Michal Alberstein and David Hahn, the first-of-its-kind center offers mediation services to small and mid-size companies at every stage of the insolvency process; trains a select group of outstanding lawyers in conflict resolution and insolvency mediation; and brings the country's lawyers together for an annual conference that "grows the



Adv. Amos Gabrieli
Photo by Alon Sigavi



Prof. Michal Alberstein



Prof. David Hahn

awareness and appeal of this approach among leaders in the field,” says Gabrieli.

Along with its training and outreach activities, the center, which is directed by CEO Dr. Aviva Adler, also engages in academic research on insolvency mediation. The goal, explains Alberstein, is “developing a legal language for this approach to settling disputes, which currently doesn’t exist in the world of business. Once lawyers have this language at their disposal, they can choose to be more open and creative in their thinking about what will get the best results—not just for them, but all parties involved.”

As for whether Israel’s lawyers will indeed choose this path, if the number of applicants to the center’s first training course is

any indication, the answer is a resounding yes.

“We recognized that if the most prestigious and successful lawyers embrace this approach first, we’re more likely to get buy-in from the rest of the field down the line,” Gabrieli says. “And yet, even though we sought applicants with impressive qualifications and significant experience in the field, we still received far more applicants than we could admit.” The response, he insists, is proof that the country’s legal culture is ripe for just this kind of innovation.

“Lawyers are people, too, and many of them are worn out from the conventional, cut-throat approach,” concludes Gabrieli. “That’s why we built this center, and I have no doubt that they will come.”

The Bar-Ilan Course for Women's Senior Management Training

Equality in Higher Ed



Prof. Orna Sasson-Levy

To motivate senior women researchers to aspire to leadership positions at Bar-Ilan, the University's Unit for Gender Equity—part of the Office of the President—together with organizational consultant Dr. Efrat Cohen-Touati launched a course this past October to train women for senior management roles. The 10-session series, whose 17 participants hailed from every faculty, offered an introduction to the various managerial positions in academia and their qualifications, as well as information on the specific skills and qualities required of academic managers. Along with the University's vice presidents, vice rector, deans, and dean of students, course speakers included Faculty of Law Prof. Yaffa Zilberschatz, the former chairman of the Council of Higher Education (CHE); former council CEO Michal Neuman; and public-sector leader

Galit Shaul, head of the Emek Hefer Regional Council. The course also featured a day of outdoor training designed to strengthen group dynamics and explore the transition from research to management.

Organized by Presidential Advisor for Gender Equity Prof. Orna Sasson-Levy with the support of Deputy Director General of Administration and Human Resources Maor Pinko, the series has already been credited by participants with its first success: the creation of a network of senior women researchers who are determined to maximize their own professional potential, and to bring more equality into higher ed.

Participants in the Bar-Ilan Course for Women's Senior Management Training





The Seminar on Female Researchers' Media Empowerment

Speaking Up for Themselves

Renowned television journalist Rina Mazliah is the first to admit: Television is a superficial medium. Nonetheless, as she explained to a lecture hall of Bar-Ilan female researchers last April, it's a very effective tool for spreading messages.

The "messages," in this case, are the value of academic research, from scientific discovery with the potential to save lives to scholarship that informs the public discourse. Yet while both male and female academics are engaged in media-worthy research, males consistently outnumber females when it comes to media interviews.

At the initiative of President Prof. Arie Zaban and Vice President for Research Prof. Shulamit Michaeli, the first annual Seminar on Female Researchers' Media Empowerment aimed to shift the balance by first explaining the professional benefits of media appearances, and then demystifying the interview

process. The seminar, which was organized by Vice President of Marketing Naama Gat and Spokesperson Anat Lev-Confortes, who also acted as moderator, went on to address the key concerns that keep female researchers from the spotlight.

Echoing Mazliah's insistence that interviews are "female academics' obligation to the community," Zaban emphasized that media exposure isn't just an important opportunity to advance their individual work. Speaking to hundreds of female researchers, postdocs, and doctoral students, Zaban explained that interviews also make "an irreplaceable contribution to tomorrow's generation of women academicians, who need to hear female voices coming from the academy today."

Interfaith Beit Midrash

Sharing the Faith

Many Israelis believe that religion is at the core of their country's national conflict. According to one *beit midrash* ("house of study"), however, religion can be a solution, too. Currently in its fifth year, Bar-Ilan's Interfaith Beit Midrash brings Jewish and Arab students together to study a given topic by means of each faith's canonical texts. Founded and directed by Prof. Zehavit Gross, dean of the Faculty of Education and director of the Josef Burg Chair in Education for Human Values, Tolerance, and Peace, the Interfaith Beit Midrash embodies a "pedagogy of contestation," an approach Gross developed to leverage ideological disagreement into healthy discussion and productive debate. Through the havruta model of learning in pairs, guided study with both rabbis and imams, and an open conversation among all participants, the Interfaith Beit Midrash works both

to create an inclusive discourse on campus, and to bring the value of mutual respect into Israeli society.

"The Interfaith Beit Midrash is a kind of social laboratory, where we explore questions of diversity, inclusion, equality, and social justice," says Prof. Gross. "We hope participants will feel more open to multicultural encounters as a result, and will be motivated to act as agents of change in Israeli society."





Introduced by Major General (Res.) Uzi Dayan, the former MK and chairman of Israel's National Security Council (front row, far right), the Interfaith Beit Midrash was led Prof. Zehavit Gross, UNESCO Chair for Values in Education, Tolerance, and Peace at Bar-Ilan (second row); Sheikh Ayyad Amar, imam of the Kfar Qasim mosque (front row, far left); and Rabbi Avi Giser, chairman of the Chinuch Mamlachti Dati council and rabbi of Ofra (front row, middle).





From left to right: Prof. Arie Zaban, president of Bar-Ilan; Eliot Sacks; Lady Elaine Sacks; Brian Sacks; Joanna Benneroch, chief executive of The Rabbi Sacks Legacy; Prof. Jonathan Rynhold; Prof. Hanoch-Ben Pazi; Dr. Miriam Feldman-Kaye.

The Jonathan Sacks Institute of Bar-Ilan University

Creating a Living Legacy

In his 2007 work *The Home We Build Together*, the international religious leader, philosopher, award-winning author, and Chief Rabbi of the United Kingdom and the Commonwealth Lord Jonathan Sacks argued that much of the divisiveness that defines modern society may be traced to the lack of dialogue between communities. For a society to flourish, he believed, it must have a culture of conversation, and those conversations must acknowledge difference even while striving to create the common good.

It was just this sort of conversation that, six years earlier, brought Rabbi Sacks to Bar-Ilan, where he engaged in both deep and wide-ranging discussion with the late Israeli writer Amos Oz. Organized by Prof. Jonathan Rynhold of the Department of Political Studies—whose founders, Profs. Charles Liebman and David Elazar, themselves left a lasting imprint on Sacks's philosophy—the event would become the first in Rabbi Sacks's long tradition of inviting leading intellectuals of all backgrounds and from across the religious and ideological spectrum into

conversation on the major concerns of the day. It is fitting, then, that last year, when The Rabbi Sacks Legacy Trust sought an institution in Israel to carry forward Rabbi Sacks's vision, it chose from nearly 50 prestigious applicants to partner with the Department of Political Studies at Bar-Ilan.

“When we first announced that the Jonathan Sacks Institute of Bar-Ilan University would be housed in the Department of Political Studies, many people expressed surprise that it wasn't a project of the Faculty of Jewish Studies instead,” says Rynhold, who will serve as the institute's director. “But Rabbi Sacks was not only a Jewish leader. He was also a philosopher who spoke to the most vital social, political, and moral issues in our society. Therefore, while Prof. Chanoch Ben-Pazi and other researchers from the Jewish Studies faculty will play an important role in developing the institute, we all understood that the best place for studying and spreading Rabbi Sacks' teachings is one whose mission is to address the same broad, political and moral issues that were addressed by Rabbi Sacks himself.”

Set to launch in October of 2024, the institute will work to achieve two core objectives: first, ensuring that Rabbi Sacks' ideas are integrated into academic and the wider intellectual discourse; and second, developing an alumni network guided by Rabbi Sacks' views and capable of influencing Israel, the Jewish people, and the world. It will advance its objectives by means of six components that "address every academic audience, from undergraduates to professors at the cutting edge of research," Rynhold explains. They include the addition of courses grounded in Rabbi Sacks's writings to the University's mandatory Basic Jewish Studies curriculum, master's and doctoral scholarships for research about and inspired by Rabbi Sacks, and a new political studies bachelor's degree in Democracy, Citizenship, and Leadership. The degree, which will award 18 scholarships—including four to outstanding Haredi students and four to outstanding Arab students each year—will include annual post-graduation events and activities that solidify participants' commitment to shared values and leverage the potential of the community.

"Rabbi Sacks was deeply concerned with the threat to a free democratic society posed by rampant individualism on the one hand and religious extremism on the other," says Rynhold. "He believed that our ability to overcome these challenges depends on a certain type of civic discourse, one that we will model in our classrooms and on campus, and which our graduates will then spread throughout the entire country. In this way," he concludes, "we will merge academic excellence with an outward-facing message about the role Judaism can play in creating a more cohesive society at home, and a promoting a better world for all."



From left to right: Prof. Adam Ferziger, Director Rabbi Samson Raphael Hirsch Chair for Research on the Torah with Derech Erez Movement in the Israel and Golda Koschitzky Department of Jewish History and Contemporary Jewry; Rabbi David Wolpe, Max Webb Senior Rabbi of Sinai Temple in Los Angeles; Prof. Hanoch-Ben Pazi; and Prof. Michal Govrin of Tel Aviv University.

Rabbi, Lord, Professor: The Jonathan Sacks Conference

In January, political thinkers from around the world came to Bar-Ilan for a first-of-its-kind conference celebrating—and furthering—the intellectual legacy of the Rabbi Jonathan Sacks. Organized by Prof. Hanoch Ben-Pazi and Dr. Miriam Feldmann-Kaye of the Department of Jewish Philosophy and head of the Department of Political Studies Prof. Jonathan Rynhold, the conference, titled "Rabbi, Lord, Professor," was sponsored by The Jewish News and held in partnership with The Rabbi Sacks Legacy. The three-day event featured keynote speeches by the Harvard political scientist Robert Putnam, with whom Rabbi Sacks shared a deep belief in the role of trust in building healthy communities, and Israeli intellectual Dr. Micah Goodman, who spoke about the later thought of Rabbi Sacks as an indictment against postmodernism. The conference was attended by more than 1,000 guests, including the late Rabbi Sacks' wife Lady Elaine Sacks and his younger brothers Eliot and Brian Sacks. It also featured more than 40 speakers from Israel's universities, the University of Oxford, Harvard University, McGill University, the University of Chicago, the London School of Jewish Studies, and more.



Prof. Hanokh Ben-Pazi



Prof. Jonathan Rynhold



**Dr. Miriam
Feldmann-Kaye**

An aerial photograph of a coastal city, likely Tel Aviv, viewed from an airplane. The image is overlaid with a semi-transparent blue layer. The text is positioned on the left side of this blue area. The city below shows a mix of urban development, green spaces, and a coastline with waves. The sky is filled with soft, white clouds. In the bottom right corner, there are decorative geometric shapes: a series of small blue dots forming a diagonal line, and several larger, overlapping blue circles and triangles of varying shades.

**“Nothing prevents us
from being and remaining
the exponents of a united
humanity, when we have
a country of our own.”**

Theodor Herzl



A Cosmopolitan **Country**

The Erasmus Mundus Program

All Neural Pathways Lead to Bar-Ilan

Support for Israel is in short supply on today's college campus, both on account of a hostile and vocal minority and an uninformed majority with no real stake in the discourse. Yet thanks to Bar-Ilan's leadership of a new Erasmus Mundus program, Europe's top universities are about to gain a new and impressive group of Israel ambassadors: the next generation of brain researchers and neuro-tech entrepreneurs.

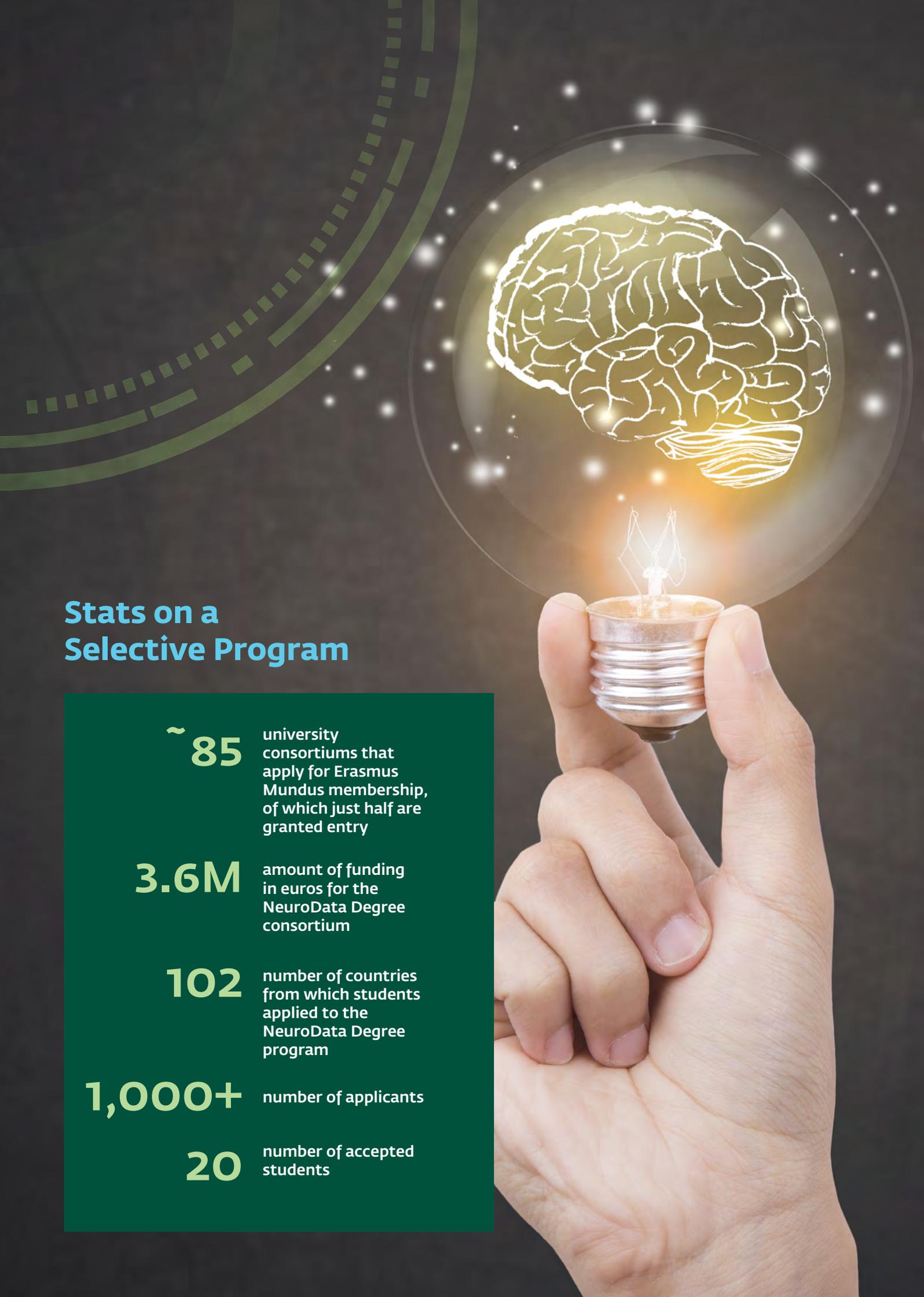
The NeuroData Joint Master's Degree, part of the European Union's elite Erasmus Mundus program for transnational study, is a collaboration between five leading universities in Europe and Bar-Ilan, which was selected to coordinate the program. Combining neuroscience with the computational skills required to understand how we process information, the two-year degree is designed to prepare graduates who can help develop new technologies for diagnosing and treating brain disorders and injury. Significantly, while students can spend their second year at any of the consortium's other member institutions—the University of Lisbon in Portugal, the University of Jyväskylä in Finland, the University of Zagreb in Croatia, the Vrije Universiteit Amsterdam in the Netherlands, and University of Padua in Italy—all accepted applicants must spend their first year at Bar-Ilan.

"This innovative degree will bring to Bar-Ilan some of the world's most outstanding students of brain science, most of whom would never otherwise come to the Jewish state," explains Prof. Alon Korngreen of the Leslie and Susan Gonda

(Goldschmied) Multidisciplinary Brain Research Center, who will act as the director of the consortium. "In turn, they will bring to universities and companies around the world not only a solid grounding in a field that's reshaping the future of medicine. They will also bring a new perspective on and connection to Israel, which we hope they'll share with fellow students and scientists everywhere."



Prof. Alon Korngreen



Stats on a Selective Program

~85

university consortiums that apply for Erasmus Mundus membership, of which just half are granted entry

3.6M

amount of funding in euros for the NeuroData Degree consortium

102

number of countries from which students applied to the NeuroData Degree program

1,000+

number of applicants

20

number of accepted students



A member of Ukraine's National Young Mathematicians Team joined in a student meeting with Pres. Isaac Herzog and his wife Michal, who visited Bar-Ilan in October for the event "Promoting Progress: Sustainability, Environment, and Renewable Energy."

The Bar-Ilan University International School

Dreams Without Borders

From the moment overseas students begin their application to Bar-Ilan, the International School pledges to do everything possible to smooth the process of coming to Israel. When war broke out last February between Russia and Ukraine, however, that promise took on a whole new meaning—and a great deal more urgency. “One student whom we had accepted for an undergraduate degree was from Kherson, the site of the worst of the fighting in the war’s early days, and which was captured by Russian forces right away,” explains Ofer Dahan, executive director of the International School. “Extracting him meant coordinating with on-the-ground representatives from the Jewish Agency, the International Fellowship of Christians and Jews, and the Israeli Consulate, who helped us get him across the border to Poland. We were able to bring another student by way of Finland, one from Italy—wherever we could get them fast and safely before bringing them to Bar-Ilan.” Altogether, the International School managed to bring 38 Ukrainian and Russian students to campus, ten of whom are working toward doctoral degrees. To ease their transition, and in acknowledgment of the difficulty their families face back home, the International School provided full scholarships for B.A. and M.A. students’ first years, and generous living stipends for those pursuing doctoral degrees.

Along with students pursuing an academic degree, Bar-Ilan also brought eight additional Ukrainians: the members of the National Young Mathematicians Team. “When we learned that these gifted young students, who have so much to offer both their country and the world, would be unable to pursue their studies on account of the war, we determined to bring them here to Bar-Ilan,” explains Prof. Moshe Lewenstein, deputy president of Bar-Ilan and director of its international operations. “Along with a safe and supportive environment, the University can provide them with the training they need to maximize their potential—and one day, we hope, give back to their own community.” Thanks to funding from the Israeli cryptography company StarkWare, Google Israel, and the Israeli Friends of Bar-Ilan, the International School arranged for visas and furnished housing, and prepared an interdisciplinary academic curriculum involving math, computer science, physics—and Hebrew. Prof. Rachel Dekel, academic head of the International School, said that “we were delighted when all eight students decided to apply for B.A. studies at Bar-Ilan this year.”

“It’s heartbreaking that these young people needed to leave home to fulfill their dreams, let alone lead a normal life,” said President Prof. Arie Zaban. “But we were determined to give them the chance to do both.”



Prof. Moshe Lewenstein



Prof. Racheli Dekel



Ofer Dahan



Ukraine's National Young Mathematicians Team with their coach at Bar-Ilan.



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Dean of Students
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 Research Fields: Brain stimulation, figurative language, intervention programs in clinical populations



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 Research Fields: Virology, Herpesviruses, and Viral Oncogenesis



PROF. GIL DIESENDRUK
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 Department of Psychology and Leslie and Susan Gonda Multidisciplinary Brain Research Center
 Research Fields: Cognitive Development and Social Categorization



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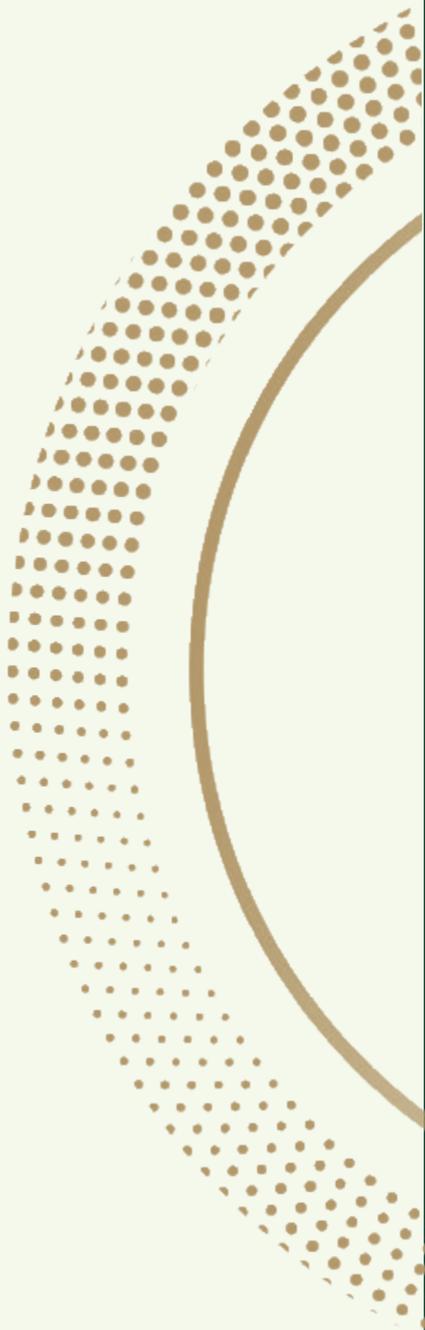


DR. ORLY PERL
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Impacting tomorrow,
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