



YISSUM NEWSLETTER SUMMER 2025

RESILIENCE THROUGH RESEARCH

INNOVATOR'S WAY



Dear Colleagues and Friends,

These past months have underscored both the vulnerability and resilience of our region. In the face of these challenges, we remain determined to find opportunity amid adversity. In that spirit, we launched the Innovation Lab for National Challenges at the beginning of Q2 - a critical initiative to harness academic innovation to meet strategic national needs. The laboratory is already laying the groundwork for ongoing collaboration among the Hebrew University, industry, and key national stakeholders - including government ministries and research institutes. Together, we are advancing several projects that tackle pressing national priorities. The Hebrew University had been looking forward to celebrating its 100th anniversary this June. A week of special events was planned alongside the Board of Governors meetings to commemorate a century of achievements and to look toward the future. Unfortunately, these activities had to be postponed, and some may ultimately be canceled.

The broader academic community has not been spared either. The Weizmann Institute of Science was struck by an Iranian missile, damaging several buildings and laboratories. While we are grateful that there were no casualties, the destruction of vital infrastructure and the resulting disruption of research have been a blow to us all. Years of work and potential breakthroughs were lost. At Yissum and the Hebrew University, we stand in solidarity with our colleagues at the Weizmann Institute and reaffirm our commitment to ensuring that knowledge and discovery are never silenced by violence.

Despite these challenges, we continue to operate. We have welcomed new team members who bring passion and expertise to our mission of transforming Hebrew University research into global impact. These additions strengthen our ability to serve researchers and innovators, ensuring that bold ideas have the support they need to become reality.

Looking ahead, we're helping shape an Innovation District in Jerusalem—a strategic collaboration between the Hebrew University of Jerusalem, Shaare Zedek Medical Center, the Jerusalem College of Technology (Machon Lev), and the Azrieli College of Engineering. This district will anchor a dynamic ecosystem uniting academia, healthcare, and engineering, fostering interdisciplinary innovation and entrepreneurial growth. Yissum is honored to play a leading role in this forward-looking initiative to establish Jerusalem as a global hub of applied science.

As part of our internal evolution, we have launched a strategic reorganization of Integra Holdings, which is central to the commercialization of our life-science ventures. We're also improving our team's access to the University's research databases and integrating AI tools to generate actionable insights. This initiative will help our team refine how we work with researchers and more effectively identify opportunities to connect industry needs with the unique capabilities emerging within the University.

Together, we remain steadfast in our mission to turn ideas into real-world solutions. We look ahead with renewed strength and determination.

Best wishes, Alon Natanson, CEO, Yissum

SUPPORT HUJI TECHNOLOGIES



QUANTUM VECTOR MAGNETIC SENSOR

A quantum-optical magnetic sensor offers ultraprecise, fast vector field detection, using phasemodulated light and atomic vapor. Its global impact spans medical imaging, defense, and geophysical exploration.

>> <u>Read more here</u>

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PLATINUM DRUG FOR CANCER TREATMENT

A new technology is now available for partnership, offering a way to combine platinum-based drugs with a wider range of cancer therapies. This could make chemotherapy more effective and reduce side effects.



BIOCOMPATIBLE HYDROGEL FOR TISSUE REPAIR

Strong, flexible, and biocompatible nanocellulose hydrogel engineered for customizable tendon, ligament, & vascular repair, offering a scalable alternative to grafts with global potential in regenerative medicine and surgical care.

>> <u>Read more here</u>



NEW HAPLOID STEM CELL PLATFORM

Imagine a powerful platform to discover cancer drugs & target tumors...our new approach identifies drug targets that selectively kill cancer cells—while sparing healthy ones—enabling faster and more precise therapy.

>> Read more here

>> Read more here

SUPPORT HUJI TECHNOLOGIES CONT.



NKP46 ANTIBODY THERAPY

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NA novel antibody that blocks NKp46, a key immune receptor, may help treat Type 1 Diabetes, rheumatoid arthritis, and certain cancers by calming harmful immune responses and targeting diseased cells. Now open for partnership.



NANO SOLUTION FOR CROP PROTECTION

These tiny particles stop harmful weeds from attacking crop roots, protecting plants like tomatoes & carrots. This eco-friendly solution can boost harvests & help farmers grow healthier food. Supporting this tech will allow for greener farming & protecting global food crops.

>> <u>Read more here</u>

>> <u>Read more here</u>

NEW PARTNERSHIPS

SHAPING THE FUTURE OF BIOTECH WITH TEVA PHARMACEUTICALS

AION Labs is proud to be featured in Teva Pharmaceuticals' 2024 Healthy Future Report. This recognition highlights the strategic partnership between AION Labs & Teva, built on a shared commitment to advancing drug discovery through AI & cross-industry synergy. As part of Teva's innovation model—connecting internal R&D with external entrepreneurial potential—AION Labs has launched eight biotech startups, including a recent investment in Cellyrix Therapeutics. With two more startups planned for 2025, the partnership continues to demonstrate the power of global cooperation in driving next-generation healthcare solutions.





COMPANY NEWS



SAVOREAT ACHIEVES MAJOR MILESTONE WITH ROBOT CHEF 2.0

SavorEat has reached a significant milestone with the successful UL certification of its Robot Chef 2.0, following prior NSF and EMC approvals. This achievement paves the way for the company's expansion into its primary target markets, as live demonstrations and commercial outreach began in May 2025 in Chicago. The Robot Chef 2.0 was developed under the leadership of Prof. Oded Shoseyov, a renowned researcher from the Faculty of Agriculture, Food and Environment at the Hebrew University of Jerusalem.

This innovation reflects the power of academic-industry collaboration to solve real-world challenges. Designed to produce personalized, plant-based meals on demand, the Robot Chef introduces a scalable solution for institutional and foodservice kitchens that are increasingly seeking sustainable and efficient alternatives to traditional cooking. Its potential global impact is far-reaching—addressing critical issues such as labor shortages in commercial kitchens, the rising demand for healthy, customized nutrition, and the urgent need to reduce food waste and environmental strain in the food production chain. With its unique technology, SavorEat is poised to redefine the landscape of food preparation worldwide.



NEWS FROM INLAND OCEAN (FORMERLY EVERBLUE LABS)

Inland Ocean is pioneering land-based aquaculture with its proprietary, zero-discharge recirculating aquaculture system (RAS), which is particularly designed for premium fish like Atlantic salmon. Their system integrates patented off-flavor elimination technology, full water recycling, and modular scalability. Over the past year, the company has successfully piloted its system with various species, launched a larger-scale facility in collaboration with Israel's largest fish farm, initiated industrial-scale Atlantic salmon farming, secured land and permits for a flagship U.S. site in Texas, and laid the groundwork for a franchise-based expansion model alongside preparations for a \$15 million Series A funding round.

The pilot & industrial facilities have demonstrated the system's commercial viability with strong biological results & excellent fish quality. A key innovation is their patented bioreactor that continuously removes off-flavor compounds, maintaining high product quality without traditional purging. Their Texas flagship site benefits from strategic advantages like low energy costs & market access, & will serve as a showcase for U.S. scaling. Inland Ocean's business model centers on a modular, franchise approach, enabling rapid expansion through local partnerships, while centralized governance ensures consistency. The company has already raised \$4 million & is positioning for broader U.S. market entry.

CO. NEWS CONTINUED



HEQA SECURITY AND KOREA TELECOM JOIN FORCES TO ADVANCE QUANTUM-SAFE TELECOM INFRASTRUCTURE

HEQA Security, a Yissum spinout based on the research of Prof. Hagai Eisenberg from the Racah Institute of Physics, Faculty of Science at the Hebrew University, has announced a strategic collaboration with Korea Telecom (KT), one of Asia's largest telecom providers, to advance quantum key distribution (QKD) technologies for secure communications. This partnership aims to integrate HEQA's scalable QKD solutions—such as the Sceptre Link and Sceptre Duo—into KT's infrastructure, enhancing resilience against quantum-era cyber threats.

The collaboration emphasizes interoperability and practical deployment, with a showcase planned at Quantum Korea 2025. HEQA's presence in South Korea is bolstered by local partners Hanwool Material Science and JinInfra, ensuring strong regional support and implementation capabilities. This partnership signals growing international demand for quantum-secure infrastructure and marks a major step toward global adoption of Israeli quantum technology in securing the future of digital communications.



ISRAELI RESEARCHERS WIN BIG IN ERC ADVANCED GRANTS – HUJI Shines with three recipients

Prof. Dorit Aharonov of the Hebrew University and Chief Scientist at Yissum spinout Qedma has been awarded a prestigious ERC Advanced Grant from the EU's Horizon Europe program. Her groundbreaking research addresses two major challenges in quantum computing: expanding the limited set of known quantum algorithms and developing a theoretical framework to harness noisy quantum systems for productive use. These insights could lead to significant advances in cryptography, materials science, and optimization—well before large-scale quantum computers become a reality.

She is joined by two other Hebrew University recipients: Prof. Eli Nelken, whose work explores how the brain supports ongoing learning without erasing past knowledge, with implications for neuroscience and AI; and Prof. Tamar Ziegler, whose research at the intersection of ergodic theory, number theory, and algebraic geometry deepens our understanding of complex mathematical structures. Together, their achievements reflect the university's strength in pushing the boundaries of quantum science, brain research, and mathematics.

» IT'S THE JOURNEY

FROM THE LAB TO THE WORLD:

SUPPORTING BREAKTHROUGH IMPACT WITH PROF. JONAH WAISSMAN

Yissum is proud to welcome Prof. Jonah Waissman, a rising star at the Institute of Applied Physics at the Hebrew University of Jerusalem. As the head of the Low-Dimensional Quantum Materials & Thermal Transport Lab, Prof. Waissman is exploring the cutting edge of quantum and nanoscale science. His research focuses on how heat and energy behave in ultra-thin materials—like graphene, carbon nanotubes, and quantum dots—with the aim of unlocking new physical phenomena and enabling energy-efficient technologies for quantum computing, advanced electronics, and precision sensing.

At the core of Prof. Waissman's early success in navigating the path from academic research to applied innovation was his new collaboration with Anna Pellivert, Yissum's VP of Business Development for Physical Sciences, Computer & Social Sciences. Recognizing the transformative potential of his work, Anna provided strategic insight and a clear roadmap for engaging with Yissum's ecosystem. Through expert guidance and carefully curated connections, she ensured that Prof. Waissman's journey into commercialization began with both clarity and momentum.



The lab's unique capabilities—such as graphene-based electronic thermometers, advanced cryogenic measurement platforms, and wafer-scale fabrication techniques—position it as a global leader in thermal transport research. These technologies are not only pushing the boundaries of fundamental science but are also creating new opportunities in computing, nanoelectronics, and industrial metrology. With Yissum's support, Prof. Waissman is now working to translate these innovations into real-world applications through licensing, partnerships, and co-development initiatives.

Yissum exists to turn discovery into impact.

For researchers like Prof. Waissman, protecting their scientific breakthroughs through intellectual property is not optional—it's essential. Securing a patent is the foundation for future engagement with industry, funding, and technology transfer.

At every stage, Yissum is here to help—from strategic advice to commercial matchmaking—ensuring that the journey from lab to world is both successful and meaningful.

Visit Prof. Jonah Waissman's website by clicking here.

Learn about this lab capability by <u>clicking here</u>.

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RECOGNITIONS



PROFESSOR SHLOMO MAGDASSI CELEBRATES 40 YEARS OF INNOVATION AT THE HEBREW UNIVERSITY

Professor Shlomo Magdassi, a Fellow of the National Academy of Inventors is one of Israel's foremost scientific innovators, is celebrating 40 years of pioneering research and academic leadership at the Hebrew University of Jerusalem. A world-renowned expert in nanotechnology, colloid science, and materials chemistry, Professor Magdassi has left a profound mark on multiple scientific fields. His groundbreaking work has led to innovations in inks for 3D printing, delivery systems, 2D and 3D printing and solar energy applications, placing Israeli science and technology at the forefront of global innovation.

Over the decades, Professor Magdassi has not only produced a prolific body of academic research publishing hundreds of peer-reviewed articles and securing numerous international patents—but has also translated science into commercial success. He has founded and co-founded multiple startups, including companies focused on functional inks, smart coatings, and biomedical applications. Many of these ventures have emerged through collaborations with Yissum, the Technology Transfer Company of the Hebrew University, where his work has consistently served as a model for impactful commercialization. His ability to transform academic discoveries into market-ready solutions has made him one of the university's most successful inventors and a cornerstone of Yissum's innovation portfolio.

Based on his connections to the industry, Professor Magdassi was appointed to Vice Dean for Innovation & Industry at the Hebrew University. Through his scientific excellence, entrepreneurial drive, and collaborative spirit, Professor Magdassi continues to shape the university's innovation ecosystem mentoring the next generation and proving that impactful science can begin in the lab but reach far beyond.

Professor Magdassi's influence extends well beyond Israel, with his technologies and collaborations impacting global industries across Asia, Europe, and the Americas. He is frequently sought after as a partner, advisor, and speaker by international academic institutions and leading companies alike. Despite his global reach, he often emphasizes the importance of his long-standing relationship with Yissum, crediting the organization's support, professionalism, and vision as key enablers in translating his ideas into real-world applications. His gratitude for this partnership reflects a deep commitment to the Hebrew University's mission of advancing science for the benefit of society worldwide.

MPACTFUL VISITS

LEAD III Explores Innovation, Leadership, and Hebrew University Connections in Israel



At the start of June, LEAD III—a dynamic leadership development program of American Friends of the Hebrew University (AFHU)—visited Israel to deepen its focus on the people who make Hebrew University extraordinary: its students, staff, alumni, and board members.

A major highlight of the visit was a stop at the Peres Center for Peace and Innovation in Tel Aviv, where the group met with CEO Efrat Duvdevani. A proud Hebrew University alumna and a member of the Israeli Board of Governors, Efrat shared her unique perspective on bridging public service, innovation, and institutional leadership. The setting provided a perfect backdrop for LEAD participants to connect with the broader influence of Hebrew U in Israeli society and beyond.

Another key moment was a deep dive into Hebrew University's innovation ecosystem, led by Yissum, the university's technology transfer company. Participants heard from Yosef Haber, Director of Alliances and Portfolio Companies, and Tamar Vogel, Manager of the Marketing & Communications Department, about how bold academic research is transformed into real-world impact through commercialization partnerships. As the sign outside Yissum's building proudly declares, it all begins with a commitment to "dream big."

The group also heard from Amnon Dekel, Executive Director of Asper HUJI Innovate, Hebrew University's center for innovation and entrepreneurship. He shared the center's mission: to empower students, researchers, and alumni to develop entrepreneurial skills and launch ventures that address real-world challenges. Asper HUJI Innovate works in close partnership with Yissum, serving as a funnel into the university's broader innovation ecosystem—where ideas nurtured at the center can be guided toward development, validation, and ultimately commercialization. Together, the two entities form a powerful bridge between campus creativity and global impact.

Throughout the visit, LEAD III participants engaged with trailblazers shaping Israel's future and reaffirmed their commitment to Hebrew University's mission. The journey underscored the powerful role that alumni, faculty, and students play in driving innovation and global progress. Special thanks to Shai Yusipov, Visitors and Outreach Specialist from the Division for Advancement and External Relations, for thoughtfully organizing this memorable experience.

»» NEW PORTAL

New Digital Invention Disclosure Form Now Available



We're excited to announce that Yissum has launched a new digital platform for submitting Declarations of Invention.

Instead of using the old Word document, researchers can now easily complete and submit the form online — making the process faster, clearer, and more efficient.

This new online system is especially beneficial for researchers at the Hebrew University, offering secure, 24/7 access from anywhere in the world. Whether you're working on campus, collaborating internationally, or traveling for conferences, you can now submit your invention securely and conveniently at your own pace. The platform streamlines the process, reduces paperwork, and provides real-time confirmation and tracking—ensuring that your innovation is recorded without delay.

By enabling global access and removing logistical barriers, this new tool supports the fast-paced, international nature of academic research. It also facilitates closer alignment between researchers and Yissum's commercialization team, helping us provide quicker feedback, stronger IP protection, and more tailored support. Ultimately, our goal is to help you move from breakthrough to impact more smoothly and effectively—maximizing the real-world value of your scientific discoveries.

To access the new form and submit your invention, click here.

As always, we're here to support you at every stage of the commercialization process. For any questions or assistance, feel free to contact us.

>>>**UPCOMING EVENTS**

Women Leading Tech: **From Ancient Stones to Leading Innovation**

Israel Date: Tuesday, September 16, 2025 INNOVATE Time: 18:00-21:00 Location: Hebrew University of Jerusalem Harman Open Space (Harman-3, Room 70), Givat Ram, Jerusalem

Join us for an evening focused on technology, science, and entrepreneurship—set at the intersection of tradition and innovation in the heart of Jerusalem.

Reserve your spot today by clicking here!

ליל המדענים והמדעניות 2025

Save the Date: A Night of Science at Hebrew University Location: Givat Ram Campus Date: Thursday, September 18, 2025 Time: 4:00 PM - 10:00 PM

Join us for an exciting Night of Science at the Hebrew University's Givat Ram campus—a vibrant evening celebrating discovery, creativity, cutting edge of research and innovation. This dynamic event brings together scientists, entrepreneurs and families for hands-on experiences, live demos, and fascinating talks.

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To maximize the impact on human society that is inherent in the scientific spark of the researchers at the Hebrew University







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