

YISSUM NEWSLETTER Spring 2025

DESIGNING THE FUTURE

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Dear Colleagues and Friends,

Reflecting on my first quarter at Yissum, I find myself increasingly aware of the depth, originality, and energy that exists within our research community and its surrounding network. This role offers a unique vantage point from which to observe not only the excellence of Hebrew University's scientific output but also the real potential to translate that excellence into meaningful, lasting impact.

Yissum was established to help bridge the gap between research and application—to ensure that important discoveries don't remain on the shelf but become tools, solutions, and products that matter in the real world. This is not a slogan but a working principle that guides how we operate, build relationships, and make decisions.

In this spirit, the Fellowship Program we recently launched—together with the Rector, the Vice President for R&D, and ASPER-HUJI Innovate—this is a practical example of how we want to work: engaging researchers directly, giving early-career scientists a seat at the table, and letting business development grow from the scientific core outward. These doctoral and postdoctoral fellows bring new perspective and capacity, and the experience they gain will follow them into their careers, strengthening the entire ecosystem.

We also established the Lab for National Challenges, born of a difficult moment but rooted in our long-term belief that academia has a central role to play in national resilience. The Lab focuses on applied research projects addressing urgent, complex problems identified in the wake of October 7th. It's an opportunity to demonstrate how scientific rigor and thoughtful collaboration can contribute to solutions that are both immediate and durable.

Internally, we're gradually modifying how we work—introducing AI-based tools to surface insights from our IP portfolio, forecast market trends, and support decision-making. These applications won't replace people, but they can help us work smarter, identify opportunities earlier, and respond faster.

Looking ahead, we will continue to invest in strengthening Yissum's role as an active partner to researchers and a reliable connector to the industry. We will keep refining our internal capabilities, making sure our team has the tools and skills it needs. And we will continue expanding our reach beyond Israel's borders not as a buzzword, but because the problems worth solving are global, and so is the talent to solve them.

As we approach Passover—a time for reflection, resilience, and new beginnings—we do so with a clear sense of direction. We know that the challenges are real, but so is the opportunity. And with continued partnership across the University and beyond, we are committed to making the most of it.

NEW STAFF



Amir Yavniely has joined Yissum as the Head of Innovation Lab for National Challenges. In this role, he will focus on identifying opportunities where Hebrew University researchers can provide impactful solutions to major challenges on both national and global scales. With extensive experience as a founder, CEO, investor, and innovation leader across various startups as well as business diplomacy entrepreneurship. Amir brings a strong track record of strategic, data-driven leadership and cross-border collaboration. His background as a submarine commander and major technological and operational manager makes him uniquely positioned to bridge academic research with real-world needs.

We're excited to welcome Dr. Anat Iosub Amir as Yissum's new VP Business Development of Healthcare. An accomplished leader at the intersection of science, innovation, and venture capital, Anat brings extensive experience from working with over 40 health-tech startups and serving on the boards of cuttingedge companies like CytoReason, PolarisQB and Sweetch. As a Hebrew University alumna with a PhD in Chemistry and an MBA —both earned with distinction—Anat returns to HUJI to help translate groundbreaking research into real-world healthcare solutions.





Dan Fisher has joined as the new General Counsel at Yissum. Dan brings over a decade of legal experience in the corporate and venture capital space, having advised entrepreneurs and startups from ideation to exit/IPO, as well as VCs and multinational corporations in investments in the Israeli tech sector. He serves as a partner at Gornitzky & Co.'s Technology and Life Sciences practice, specializing in financing rounds, M&A, licensing and other commercial transactions. Aside of his main role as General Counsel at Yissum, Dan will remain a partner (in a reduced position) at Gornitzky & Co.

Dan holds an LL.B. from Bar-Ilan University (2012) and is a member of the Israel Bar Association since 2013. In 2025 he was recognized as a Next Generation Partner in Hi-Tech and Startups by The Legal 500. His strategic mindset and deep understanding of both legal and business needs will be invaluable in advancing Yissum's mission to bring Hebrew University innovations to the world.

SUPPORT HUJI TECHNOLOGIES



NON-INVASIVE PREGNANCY TEST FOR COWS

Milk-based test enabling early, stress-free pregnancy detection, improving herd management and productivity. Scalable worldwide, it supports sustainable farming and food security and increasing efficiency.

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

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OPTICAL HALL WAFER INSPECTION

A new system uses the optical Hall effect for ultrasensitive, non-contact detection of defects in semiconductor wafers—offering 100× greater sensitivity than current methods and easy integration into production lines.



MAGNESIUM-ENHANCED CHEESE PRODUCTION

Increase cheese protein yield by 33%, is now possible. This new innovation can enhance food safety, prevent bacterial contamination, and enhance product safety while adding nutritional benefits. Say cheese and yes to partnering!

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



2D PEROVSKITE-BASED PRESSURE SENSORS

Flexible, self-powered pressure sensors made from 2D perovskites offer fast response, wide sensitivity range, and low-cost fabrication—ideal for robotics, medical, and environmental applications.

>> Read more here

>> Read more here

SUPPORT HUJI TECHNOLOGIES CONT.



ENHANCED DELIVERY OF CANNABINOIDS

New formulation that significantly improves the delivery of lipophilic molecules—such as cannabinoids—into and across the skin. This advancement offers a non-invasive, efficient method and enhances therapeutic efficacy.



>> Read more here

SMART GENE CIRCUITS FOR CAR-T THERAPY

Discovery of a synthetic gene circuit, enabling precise control of T cell activity, enhancing tumor targeting while minimizing damage to healthy tissues. This innovation could lead to safer and more effective cancer immunotherapies.

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

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In anticipation of the Hebrew University proudly marking its 100th anniversary in 2025 — a century of groundbreaking research, academic excellence, and global impact, several events are planned.

The annual <u>Board of Governors</u> meeting will be held from June 13–17, 2025 in Jerusalem. We look forward to welcoming our alumni, philanthropists, researchers, and supporters from around the world to mark this historic milestone together. In addition, we hope to see you at the Kaye Awards ceremony.

If you are planning to attend and would like to meet with us or tour Yissum, the University's technology transfer company, we warmly invite you to get in touch to coordinate a visit. Email <u>info@yissum.co.il</u>.

GONE GLOBAL





SALISTICK NOW SOLD IN GERMANY

Salistick[™], the world's first saliva-based pregnancy test, is now launching in Germany. Its non-invasive design marks a global step forward in accessible, user-friendly diagnostics.



COLLPLANT EXPANDS IN EUROPE & ASIA

CollPlant is expanding global access to its tendon-healing Vergenix[™]STR product with new distribution deals across Europe and Asia (specifically the Netherlands, Turkey, and India).

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



PRE-CURE & PHARMASEED: ADVANCE DRUG DEV.

Yissum's portfolio company Pre-Cure has partnered with Pharmaseed to streamline drug development by combining 3D cancer models with advanced preclinical platforms. The collaboration offers predictive models and PDX systems to support a smooth transition from discovery to clinical success.

Visit SolCold's website by clicking here.

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



SOLCOLD TESTS GLACIER 110 IN SOUTH AFRICA

SolCold has launched its Silo Project in South Africa, applying its Glacier 110 coating to a grain silo to test passive cooling in extreme heat. With support from AB InBev and partners, the project aims to showcase energy-free temperature reduction under the summer sun.

INVESTOR HIGHLIGHT



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NEW INVESTMENT BOOST:

ESIL BACKS SOLRA PV IN TRANSFORMING INDOOR ENERGY HARVESTING

We're thrilled to share that Solra PV, a promising cleantech company from the Hebrew University of Jerusalem, has received strategic investment and support from the Environmental Sustainability Innovation Lab (ESIL). This marks a significant step forward in the company's mission to revolutionize how we power our indoor environments.

Solra PV is tackling a global challenge: billions of IoT devices rely on disposable batteries, contributing to massive environmental waste and operational inefficiencies. Solra's solution—perovskite-based photovoltaic cells optimized for artificial indoor light—offers a sustainable, maintenance-free alternative that turns everyday lighting into usable energy. Developed in the lab of Prof. Lioz Etgar at The Hebrew University, this breakthrough technology is designed to power next-generation devices with no need for constant battery replacement.

With this new investment, ESIL—represented by Yousef Farraj and Bat-El Cohen Wiezel—joins a growing list of supporters advancing Solra's commercialization and global impact. "ESIL's support is instrumental in accelerating SOLRA-PV's path to commercialization. Their business development expertise and industrial connections provide us with the resources and network needed to validate and scale our technology towards bringing self-powered electronics to the market," said Yousef Farraj, SOLRA-PV's CEO.

Special thanks also go to those who have championed the project along the way, including Amir Horowitz, Reut Barkan, Roni Elhalal Givon, Eliko Angel, Pierre Kohn, Pete Hinde, Shira Levy, Israel Lichtig Ayalon, Alain Vaniche, Netta Benari, Shlomi Basson Chai, Avital Hanan Brand, and the Israel Innovation Authority led by Dror Bin, Asaf Almagor, and Ronit Eshel.

Yissum proudly extends our congratulations and best wishes to the Solra PV team. We're excited to watch their continued growth and impact, and we look forward to seeing more of our portfolio companies connect with visionary investors like ESIL to bring Hebrew University innovations to market.

Stay tuned—this is just the beginning.

Visit Solra's website by <u>clicking here</u>.





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IMPACTFUL VISITS



Strengthening Industry-Academia Collaboration: Elbit Systems Visits Yissum

We were pleased to host Elbit Systems at Yissum, on the Hebrew University's Givat Ram campus, for a focused summit exploring the power of academic research in driving technological innovation and national resilience. As Israel continues to navigate complex challenges, these collaborations between industry and academia are more critical than ever. During the visit, Hebrew University researchers presented cutting-edge developments in AI, physics, chemistry, and material science. The discussions covered a wide range of breakthrough technologies, including metamaterials, silicon photonics, 3D modeling, advanced positioning, and ultra-wideband optical detection. These innovations have the potential to influence not only defense but also aerospace, healthcare, and smart infrastructure—showcasing the far-reaching impact of our research.

This visit reflects Israel's continued leadership in science and technology, and Yissum's ongoing commitment to translating academic excellence into real-world solutions. For those interested in exploring collaboration opportunities—whether in Israel or globally—please reach out to Anna Pellivert <u>anna@yissum.co.il</u>.



Pictured Left to Right: Prof. Hadar Steinberg, Director NanoCenter Dr. Amnon Dekel, Executive Director, ASPER-HUJI Innovate Prof. Amir Capua, Spintronics Lab Prof. Oded Shoseyov, Protein Engineering | NanoBiotech Anna Pellivert, VP, BD, Physical Sciences, Computer, Social Sciences

Tamar Vogel, Marketing & Communication Dpt. Manager of Yissum Dr. Yossi Vardi, pioneering Israeli entrepreneur and investor

Spotlight on Innovation: NanoSharks Conference Draws Over 350 Attendees

Yissum was proud to take part in NanoSharks 2025, a dynamic competition and conference hosted by the Hebrew University's Center for Nanoscience and Nanotechnology. Held earlier this month, the event brought together over 350 participants, including researchers, students and industry leaders —all converging to explore the next wave of nanotech innovation.

NanoSharks featured a fast-paced pitch competition where top researchers presented cutting-edge nanoscience projects to a panel of expert judges and potential collaborators. From novel drug delivery systems to next-gen materials, the projects reflected the immense talent and creativity within the HUJI community.

PAST WEBINARS



The recent webinar featuring Professor Gali Umschweif-Nevo of the Hebrew University of Jerusalem drew over 100 participants from around the world, highlighting the growing interest in cutting-edge mental health research. Prof. Umschweif-Nevo, a leading expert in neuropharmacology, shared groundbreaking insights into molecular biology and pharmacology, with a focus on her innovative approaches to treating depression and Post-Traumatic Stress Disorder (PTSD).

Throughout the session, she addressed key challenges in developing effective therapeutic strategies for mental health disorders and discussed the future of treatment through the lens of her research. With an impressive academic background including a Ph.D. in Neuropharmacology from Hebrew University and postdoctoral work at Rockefeller University—Prof. Umschweif-Nevo's work has been widely published in top journals such as Molecular Psychiatry, Biological Psychiatry, and the European Journal of Neuroscience. The webinar offered attendees a unique opportunity to learn from one of the field's most respected and forward-thinking researchers.



Yissum and AFHU were pleased to present Dr. Raphael Benhamou in a webinar highlighting his groundbreaking research on RNA-targeted therapies. An Assistant Professor at Hebrew University's School of Pharmacy, Dr. Benhamou discussed his work designing small molecules that bind to RNA, with potential applications in treating cancer and infectious diseases. Despite ongoing challenges in Israel, the event showcased HUJI's continued commitment to scientific innovation and concluded with an engaging Q&A session.

Watch the webinar by <u>clicking here</u>.

We thank AFHU for their partnership.



WPCOMING EVENTS

HU WEBINAR: APRIL 22

8 PM Israel time The Future of Food and Believer Meats with Prof. Yaakov Nahmias

Prof. Yaakov "Koby" Nahmias is a leading bioengineer and founder of two biotechnology startups—Tissue Dynamics and Future Meat Technologies—both licensed by Yissum, the tech transfer company of the Hebrew University. His innovations include 3D cell printing and human-on-chip systems. Nahmias is a Technion graduate and the founding director of the Grass Center for Bioengineering.



Click here to register.

Women Leading Tech: From Ancient Stones to Leading Innovation

Israel

Date: Tuesday, September 16, 2025 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.

More details and a formal invitation with RSVP details will follow.

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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

