AUSTFHU

HEBREW UNIVERSITY – THE INNOVATIVE WAY

Australian Friends of the Hebrew University of Jerusalem Newsletter Issue 67 Autumn 2019

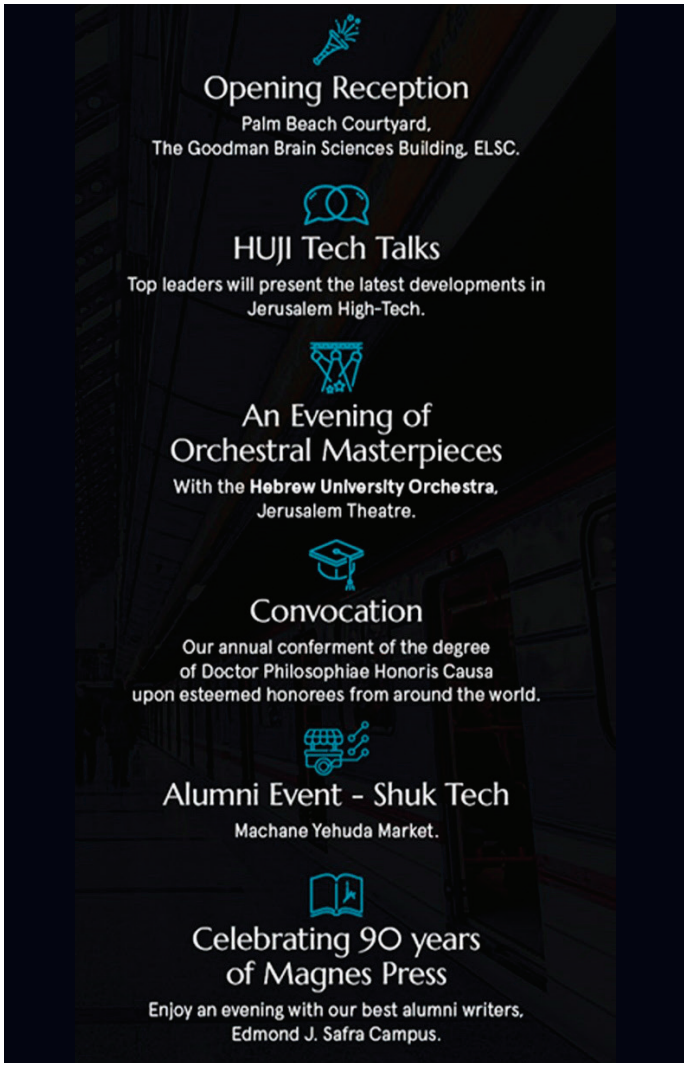
82ND ANNUAL HEBREW UNIVERSITY BOARD OF GOVERNORS: JUNE 14TH – JUNE 19TH

2019 HIGH-TECH JERUSALEM

Board of Governors
The Hebrew University of Jerusalem

This year's 82nd meeting of the International Board of Governors of the Hebrew University of Jerusalem will be dedicated to celebrating the exciting developments in the Jerusalem high tech arena.

We look forward to welcoming you in Jerusalem for an unforgettable week of lively events, mingling with faculty and friends, honouring our donors and celebrating our achievements as Israel's leading university.



NEXUS:ISRAEL INNOVATION FORUM: JUNE 12TH – JUNE 15TH

This is an exclusive four-day program beginning in Tel Aviv and concluding in Jerusalem, just prior to the Hebrew University's annual Board of Governors meetings (BOG).

The Forum will offer participants an insider's view of Jerusalem's high-tech ecosystem. It will focus on:

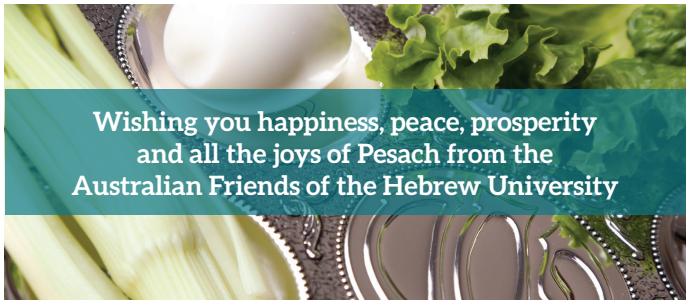
- High-Tech Innovation
- Cutting-Edge Food Technologies
- Jerusalem's Role at the Centre of the Start-Up Nation
- Israel's Economic Transformation
- Entrepreneurship

The NEXUS:ISRAEL Innovation Forum includes:

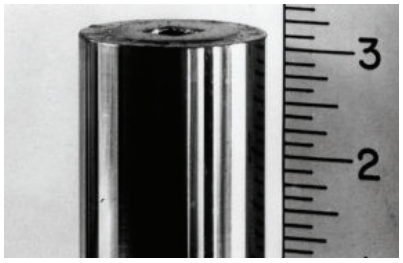
- Private event including dinner at the unique Karandagi Hosting House in Florentine with participation of Prof. Eugene Kandel and Hebrew University alumni entrepreneurs.
- Private visit & program at The Peres Center for Peace & Innovation
- Traditional Yemenite lunch at the Maganda restaurant
- Experience a unique Food Tech Workshop, at the Robert H. Smith Faculty of Agriculture, Food and Environment Rehovot on June.13th.
- Exclusive dinner at Menachem Begin Heritage Center in Jerusalem
- Traditional Shabbat dinner at the King David hotel in Jerusalem with our Young Researchers in high-tech fields
- An adventurous Archaeology and Wine Tour in the Judean Lowlands adventure on Saturday

Go to hubog-2019.com to view a detailed itinerary and to register. Once registered for the Forum, you are eligible to stay and participate in all of the BOG programs and activities for an additional $200.

For further information, please contact Rob Schneider, ceo@austfhu.org.au or at 02 9389 2825.



HEBREW UNIVERSITY DEVELOPED WATER PURIFICATION OF NUCLEAR WASTE



New cesium-137 radiation source as it appears in its final state. (Photo: ENERGY.GOV via Wikimedia)

Researchers at the Hebrew University in Jerusalem have developed a new and unique material that can bind the radioactive isotope Caesium-137 in water, thereby purifying it.

This toxic isotope appeared after the nuclear explosion in Chernobyl in 1986, and the nuclear disaster in Fukushima in 2011. The new material is efficient, easy to prepare and does not require a large financial investment.

The Hebrew University research was carried out by the doctoral student Raval Bengiat in the laboratory of Prof. Yossi Almog, in collaboration with Prof. Danny Mandler of the Institute of Chemistry at the Hebrew University.

One of the major problems with radioactive materials is pollution of soil and water with radioactive waste. This waste emits dangerous radiation even in minimal amounts, and its treatment is complicated and costly. Caesium-137 is able to be absorbed in bones and muscles.

In fact, only half of the material will break down after 30 years, continuing to be a dangerous pollutant that emit radiation for decades. Cesium salts, such as sodium and potassium, are highly soluble in water and do not tend to react with many substances, which makes it difficult to purify water from cesium contamination.

There are some chemicals that can bind cesium salts from aqueous solutions and sink them, but these are expensive and their use is limited.

The Hebrew University researchers were able to develop a new substance that can bind cesium ions in water, and as a result sink them into a non-soluble and stable complex. The results of the study show that the new material can be mixed with cesium-contaminated water, filtered from the sediment containing the contamination and thus become purified.

Prof. Almog describes the new material: "For about a decade, we have been studying a group of substances which are able to bind different ions and salts. In the framework of the study, a large variety of them was prepared and their characteristics were studied, especially their potential in the field of analytical chemistry."

"The molecule of one of these, known as the Alloxan Tray, included an unknown spatial array of six carbonic groups, which, according to their spatial location, we expected to correspond exactly to the binding of cesium ions, which are the largest single-atom ions," Prof. Almog explained.

"Indeed, the Alloxan tray reacted with cesium ions in aqueous solutions and formed an insoluble complex with them that sank out of the solution and could be easily separated," he said, stressing that "beyond the successful sedimentation of cesium ions, the new compound has a significant advantage – ease of preparation. The Alloxan tray can be prepared with high utilization of available, inexpensive materials."

As originally published in the JewishPress.com by David Israel – January 28, 2019

AI TOOL HELPS RADIOLOGISTS CLEAR DANGEROUS DATA BOTTLENECK

It's not every day that TIME magazine calls you a genius.

"They're not calling me a genius," Elad Walach protests. "They're referring to the company!"

Walach is the 30-year-old CEO of Aidoc, a two-year-old Tel Aviv-based startup that is saving lives through medical imaging.

Aidoc applies proprietary artificial intelligence to the millions of images generated every year by CT scans in order to catch serious issues before a human radiologist even has a chance to review the results.

Aidoc has already received US and European approval to assess scans of brain hemorrhages and spinal fractures.

TIME included the startup on its list of "50 Genius Companies of 2018," a prestigious cohort that includes well-known names such as Amazon, Airbnb and Apple (and that's just the As).

Aidoc's always-on AI software reviews CT results as soon as they come out of the machine. If an abnormality is detected, an alert appears on the radiologist's screen immediately.

"The radiologist doesn't have to click anything for this to happen; that's why it's being used on a daily basis," Walach tells ISRAEL21c.

The need for a solution like Aidoc is only getting more acute. In its article, TIME refers to a "looming data thrombosis" where medical information is projected to reach a total of 2.3 trillion gigabytes by 2020.

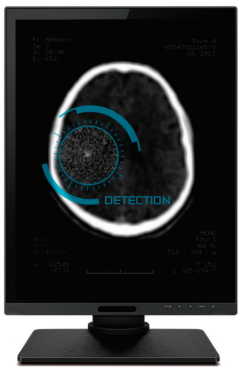
Aidoc has analyzed 40 terabytes of data a day just in the last six months. That's too much for human radiologists – but it's the bread and butter of machine learning and computer analysis.

Walach says radiologists using Aidoc can reduce turnaround time by up to 60 percent. The product is now used in 50 medical institutions including large university hospitals in the United States and Europe. Sheba Medical Center in Israel was one of Aidoc's earliest adopters.

Walach says that nearly 300,000 patient scans have been analyzed, saving some 50,000 hours of human work. Aidoc software detected 140,000 abnormalities and prioritized 46,000 cases.

With $13 million raised, Aidoc is growing fast. Although currently the software only works with CT scans, regular X-rays as well as high-tech MRIs will be added in 2019, pending regulatory approval.

The Aidoc team, from left, Michael Braginsky, Elad Walach and Guy Reiner. (Photo: courtesy)



Aidoc automatically pinpoints areas of concern on the CT scan. (Photo: courtesy)

ANONYMOUS DATA

Aidoc charges clients an annual fee based on the size of the institution. "It's not per scan," Walach points out. "We don't want our customers to worry about using it more or less because of the price."

Along with clear benefits, the growing use of medical data brings concurrent privacy concerns. For Aidoc to work its magic, a patient's scans must be compared with hundreds of thousands of existing images across dozens of computers running remotely. Walach says that Aidoc makes sure to anonymise all data it analyses.

"The data is fully owned by the hospital," he adds. "It's uploaded to the cloud just for computational purposes."

Israel's expertise in security helps. "We have a lot of manpower here with this kind of background," Walach says. "It helps us ensure our infrastructure is highly robust."

Aidoc was launched in 2016 by three graduates of the IDF's elite Talpiot program who "were passionate about using the same set of skills we had from the army to contribute" in civilian life, Walach says. "The healthcare space resonated for all of us."

It didn't hurt that Walach's father worked for IBM's Watson division, which is using the power of IBM's most powerful computing system to advance healthcare. Family dinner-table conversations influenced the younger Walach's professional direction, he says.

Aidoc now has 50 people on staff with offices in Israel, New York and Europe. More regulatory approvals are coming, Walach says, including for chest and abdomen imaging.

EASING A BOTTLENECK

Are radiologists in danger of being replaced by this new technology? Hardly. As medical imaging becomes more common, the workload for radiologists has soared. In smaller, rural facilities, there may be no staff radiologist at all.

"The number of radiologists is stagnant, creating a bottleneck," Walach says.

While Walach says it takes three hours on average for a scan to be read, in some cases, "a patient could wait up to 24 hours for a radiologist to interpret the images."

As a result, an entire business of outsourced "tele-radiologists" has cropped up, where a radiologist in Israel or India will read the scan of a patient remotely.

Products like Aidoc enable radiologists – wherever they may be – to be more effective and for emergency cases to be flagged so the patient can be treated on the spot.

Walach quotes the chairman of the radiology department at one Aidoc client hospital, who told him, "You gave me the peace of mind that there were no patients with a brain bleed waiting for their scans to be read."

Or as Aidoc's new director of sales and strategy for North America Tom Shearer says, "AI isn't the future for medical imaging. It's the present."

NEW FINTECH CENTRE LAUNCHED AT HEBREW UNIVERSITY

The fintech centre is funded by a $1.3 million donation from Israeli fintech entrepreneur David Gershon

A new fintech centre opened at the Hebrew University of Jerusalem. The centre was funded by a $1.3 million (NIS 5 million) donation from Israeli entrepreneur David Gershon.

In a statement, Gershon said the goal of the centre is to assist Israeli fintech start-up with strategic growth and marketing abroad and to help raise a new generation of fintech entrepreneurs. Calcalist first reported on the planned centre in October 2017.


David Gershon. Photo: Amit Sha'al

Gershon co-founded financial services company SuperDerivatives Inc. in 1999. The company's options pricing system was quickly adopted by banks worldwide, and in 2014, it was bought by Intercontinental Exchange, which owns the New York Stock Exchange, for $350 million.

Today, Gershon is a professor at the Hebrew University's finance and banking department.

THE HEBREW UNIVERSITY OF JERUSALEM JOINS U OF I SYSTEM-LED RESEARCH CENTRE

The Hebrew University of Jerusalem, a globally recognised leader in education and innovation, has signed an agreement to partner in a new research institute led by the University of Illinois System that will foster broad-based collaboration to solve the world's greatest challenges.

The Hebrew University, which produces a third of Israel's civilian research, will bring unique expertise to the Discovery Partners Institute (DPI) in three vital areas – entrepreneurship, food and agriculture, and computing, including big data, artificial intelligence, and cybersecurity.

DPI, a purpose-driven, collaborative research centre led by the U of I System in downtown Chicago, will be home to thousands of students and more than 100 top researchers. They will work with academic, business and tech partners around the world on breakthrough discovery to drive economic growth and prosperity in Chicago, the state of Illinois and beyond.

The Hebrew University, which has eight Nobel laureates among its faculty and alumni, joins prestigious academic partners at DPI that also include Northwestern University, the University of Chicago, Tel Aviv University, and Ramaiah Medical College in India.

"The Hebrew University is a global powerhouse in education, innovation, and entrepreneurship and is a perfect partner to help DPI achieve its ambitious mission to fuel massive new waves of breakthrough discovery and drive a new era of economic growth and social progress," said Tim Killeen, president of the U of I System. "They bring world-class talent to the table in the very disciplines that will be the core of DPI's focus – technology, health sciences, and agriculture."

Hebrew University President, Professor Asher Cohen, and Tim Killeen, President of the U of I System

Hebrew University President, Professor Asher Cohen said the collaborations will lead to new discoveries, startup ventures and products that will advance global economic growth.

"The Hebrew University and the University of Illinois System are both committed to innovation and entrepreneurship," Cohen said. "We are proud to become an international partner of the Discovery Partners Institute, a visionary centre designed to address global challenges."

Under the agreement signed Wednesday by officials from both universities, research and instructional space will be created within DPI for Hebrew University faculty and students, as well as for joint research and educational programs. Faculty and students also will collaborate from the university's six campuses in Israel via a broad range of state-of-the-art telepresence technologies.

PUTTING THE SQUEEZE ON FRUIT-JUICE SUGARS

By Naama Barak

Once upon a time, Israel's most famous export was Jaffa oranges. Fast-forward a good few years, and Israel's turned into something much juicier – Startup Nation. Now, in a delicious twist of innovation, these two opposite ends of the country's claim to fame are coming together to produce a much healthier spin on our all-time favorite.

It's an unfortunate truth that while orange juice is full of vitamins and minerals, it's also packed with sugar – one serving contains almost 1 ounce of the stuff. Plus, the juicing process leaves the juice devoid of the natural fiber found in the whole fruit, so that healthy-feeling glass of OJ isn't actually all that good for us.

This is the problem the Better Juice startup wanted to solve. The four-person, Ashdod-based enterprise collaborated with the Hebrew University of Jerusalem to develop an innovative technology that reduces the load of simple sugars in 100% orange juice without taking away the all-orangey taste of the drink.

"Fruit juice is well-known for its healthy ingredients, like vitamins, but people reduce their consumption due to its high sugar content, says Eran Blachinsky, Better Juice's founder and CEO.

"Physicians and dieticians recommend taking vitamin pills instead of juice, since they have only the good and not the bad. We at Better Juice have a solution to take out the bad sugar, leaving the good vitamins intact – thus making a Better Juice."

The company's patent-pending enzymatic technology uses natural ingredients to convert simple sugars like fructose, glucose and sucrose into non-digestible fibers and sugars. These, according to Better Juice, have been shown to have a number of health benefits.

"Our innovation is in having a solution to reduce all types of sugar in juices with a cost-effective technology, without altering the other juice ingredients. We use non-GMO micro-organisms with a sustainable technology," Blachinsky explains.

But does it still taste the same?

"One cannot reduce sugars without reducing sweetness," Blachinsky admits. "The bio-converted molecules and the dietary fibers have some sweetness – less than sugar, but still sweet. Therefore, bio-converting all the sugars doesn't eliminate the sweetness, it only reduces it."

Better Juice says that its edge over other attempts to reduce sugar content lies in the fact that the solution involves one simple step in the juice-making process, enabling the product to be competitively marketed.

"Up to now, there were few technologies treating only one type of sugar in a very expensive way, or fermenting the juice and destroying its natural taste," Blachinsky says of the competition.

The company plans on marketing its product to fruit-juice producers and eventually to cafés and restaurants.

"Our goal is to give a solution to any sugary natural product – any fruit, honey, maple syrup and more. There are a few collaborations with big corporations that are 'cooking' now. Hopefully one will succeed."

Blachinsky's journey toward Better Juice spanned over a decade. He received his PhD in biology from the Hebrew University in 2006, and since then held various positions in the industry, working on biotechnology products and fruit processing.

The Hebrew University is Israel's top-ranked academic and research institution, and among the top 100 worldwide. Serving more than 23,000 students from 80 countries, it ranks 12th worldwide in biotechnology patent filings and commercial development.

Yissum, the technology transfer company for the Hebrew University, has registered more than 10,000 patents covering nearly 3,000 inventions and will play an important role in DPI's efforts to spin innovation into businesses and jobs.

Israeli company Better Juice brings together oranges and high-tech to create a healthier glass of OJ (Photo: via Shutterstock.com)

The transfer company's achievements include a medication effective in treating mild and moderate Alzheimer's disease, and technology that gives motorists warnings for collision prevention. The university also is actively establishing international strategic partnerships throughout the United States and other countries. More international centres of cooperation will be announced in the near future.

The institute also will be the centrepiece of the Illinois Innovation Network (IIN), a virtually connected statewide enterprise of university and business partners that will use education and research initiatives to launch new companies, strengthen the workforce and lift communities.

Last spring, the Illinois General Assembly approved $500 million in state capital funding to launch DPI and IIN.

A BUDDING NEW LAB

For 50 years, the Hebrew University of Jerusalem (HU) has been a hub of cannabis research. "All eyes are on Israel for cannabis research," said Yotam Hod, CEO of the Lumir Lab, a new laboratory located in the Biotechnology Park at the Hebrew University's Ein Kerem campus.

The Lumir Lab is developing a revolutionary cannabis-based treatment for endometriosis. Israeli firm Asana Bio Group Ltd. has invested $2.3 million in the lab.

Professor Lumir Hanus, a pioneer in cannabis research, will head the scientific team at the Lumir Lab. For the last 30 years, he has worked at HU alongside 88-year-old Professor Raphael Mechoulam, who isolated the psychoactive component of cannabis in 1964 and is considered the founder of the field. The Lumir Lab highlights the two scientists' accomplishments over decades at the Hebrew University.

"We have been flooded with demand from pharmaceutical companies in legal cannabis markets around the world," said Mr. Hod.

The lab has begun preclinical trials for the treatment of endometriosis, a condition which affects 180 million women worldwide. Studies have shown that cannabinoids are effective in alleviating symptoms of the disease. The lab is working with Gynica, an Israeli research and development company focused on cannabis-based women's health products.

Mr. Hod said it could take two years to have sufficient data to put a clinically-valid product on the market. Although the lab is a private company, he expects to collaborate with the Hebrew University in the near future.

Because cannabis is illegal under federal law in the United States, scientific inquiry at U.S. universities is limited.

"The regulatory framework in Israel and our expertise are drawing attention to our lab from companies worldwide," Mr. Hod said.

TREATMENT FOR OBESITY AND FATTY LIVER DISEASE IN REACH?

WikimProfessor Amiram Goldblum. (Photo: Hebrew University)

Hebrew University Professor Amiram Goldblum's Discovers 27 New Molecules with Significant Therapeutic Potential.

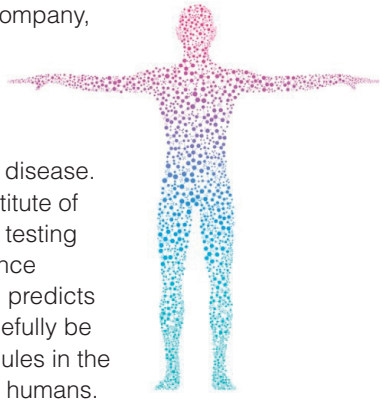
Professor Amiram Goldblum and his team at the Hebrew University of Jerusalem's Institute for Drug Research have discovered 27 new molecules. These molecules all activate a special protein called PPAR-delta and have the potential to treat fatty liver disease, obesity, diabetic nephrotoxicity, and to heal wounds.

News of these findings was published today in Scientific Reports, a Nature journal, and was made possible thanks to a new, award-winning algorithm that Goldblum's team developed. This algorithm sifted through a database of 1.56 million molecules and picked out 27 with a strong therapeutic potential, as determined by biologists at the Novartis Genomic (GNF) Institute in San Diego.

To date, these new molecules are undergoing pharmaceutical evaluations to treat two main health conditions. The first is Fatty Liver Disease, also known as NASH (Non-Alcoholic SteatoHeptatis). This disease currently has no cure and is a leading cause of liver cancer in the Western world. The second is obesity. PPAR-delta activation has the potential to increase physical endurance and trim waistlines by getting muscle cells to burn more fat. Future evaluations will hopefully include testing treatments for improved wound healing, and to prevent kidney toxicity in diabetics.

Professor Goldblum is cautiously optimistic about these findings. "With such a large group of highly active molecules, there is a high probability to find treatments for several common diseases. However, we should wait till all the experiments are done before we get our hopes up too high," he shared.

To date, there is much pharmaceutical interest in Goldblum's new molecules. Integra Holdings, Hebrew University's biotech company, determined that 21 of the 27 have the potential to reach pharmaceutical success, especially as a possible cure for Fatty Liver disease. Additionally, Israel's Heller Institute of Medical Research is currently testing PPAR-delta's physical endurance properties on mice. Goldblum predicts that in a few years we will hopefully be seeing several of these molecules in the pipeline for clinical studies on humans.



WHY WINEMAKERS FROM AROUND THE WORLD ARE TURNING TO ISRAEL

From climate research to high-tech drones, food scientists are on a mission to create the perfect grape.

Attendees at a wine festival in Tel Aviv are tasting why Israel is becoming a leader in the industry. (Photo: David Silverman / Getty Images).Why winemakers from around the world are turning to Israel. From climate research to high-tech drones, food scientists are on a mission to create the perfect grape.

Israel's Nana Winery has created their own blend. Drive three hours south of Jerusalem towards the southern tip of Israel – between ancient stone terraces and barren golden hills – and a surprising sight rises above the horizon: a lush wine vineyard spanning dozens of acres. The pastoral carpet of green stands out amidst the sandy surroundings.

The Nana Estate Winery is just one of approximately 250 wineries that have, quite literally, cropped up in Israel in recent decades. Together, they've turned the small Mediterranean country into not only a wine lover's paradise, but also a haven for viticulture experts.

Which brings us to Zohar Kerem. The 57-year-old heads up Hebrew University's master's program in winemaking. To earn the degree, students spend 20 months taking classes in everything from agricultural studies to business management. It's all capped off with an excursion to the University of Bordeaux in France where they get firsthand experience in one of winemaking's most storied regions.

On the day we catch up with him, Kerem finds himself in San Francisco – part of a five-city U.S. tour to promote the program and recruit new students. Apparently, talking about wine at 9 AM is nothing new for the professor. Especially one whose last name is the Hebrew word for vineyard. "It was my destiny. It was written in my cards," he laughs, clarifying that, "I didn't change my name in order to become a wine researcher."

Kerem, who grew up in the fertile plains of Israel's Jezreel Valley, began his career as a chemist before pivoting to food science. Like the wine he studies, his research is bold and complex: One day he may be looking into the health benefits of drinking wine, while on another he's focused on how Israel's unique climate can serve as a laboratory for liquor. It's the latter that has him particularly jazzed today.

Visitors attend a wine tasting session among the barrels at the Yarden Vintage 2010 International Wine and Gourmet Festival in Israel. (Photo: David Silverman / Getty Images)

The rolling vineyards in northern Israel provide a cooler climate for grapes to grow. (Photo: Noam Armonn / Shutterstock)

"In Israel, you can experience many different climate regions within a radius of 200 miles," he tells From The Grapevine. "You can see climates that are ranging from very cold to very warm, from very dry to very humid, soils that are basalt and lime and gravel. You can see all of this in close proximity."

Having all of that at your fingertips allows Israeli vintners to experiment, to see how different varietals perform in specific climates. That type of research is of particular importance in recent years as hotter temperatures are making extreme weather more frequent. "It's not only warmer temperatures, but it's the distribution of rain days," Kerem explains. "So now we may have a few strong storm days, and then a long time with no rain at all."

Climate change is impacting the world's leading winemaking countries – like France and Italy – and they are increasingly turning to Israel as a resource for how to better grow grapes in such arid temperatures. Drip irrigation techniques, which were modernized in Israel more than half a century ago, are continuously being refined. WiFi-connected drones now fly over vineyards to study every single water drip in the process, allowing winemakers the ability to irrigate specific vines. Several Israeli startups are focusing on other agricultural and fertilization technologies.

What's more, Kerem and his colleagues are researching the archaeology of Israeli wine, which dates back for centuries. As an example, he points to an epidemic called the "phylloxera plague" which destroyed most of the grape vineyards in Europe more than 150 years ago. New roots had to be shipped in from America to graft with the European vines to help them grow again. Meanwhile, many of the vines in Israel proved resistant to the disease.

Studying why could lead to the introduction of new varietals of wine, if not new flavours entirely. A pinot grown in one country will taste different when grown in other conditions. "There are varietals that are known to work well in different geographical regions, and we try to introduce them to different climate zones in Israel and see how they perform there," Kerem explains.

Zohar Kerem teaches Israel's only accredited winemaking class. (Photo: Courtesy Hebrew University)

The master's students he oversees are each given their own row to tend to in a vineyard in Israel. "It's a scientific experiment, which we then harvest and try to see what the differences are," Kerem says. With 20 rows of cabernet, for example, they can try different levels of irrigation to see

which produces the best wine. As all the classes are taught in English, many of the students come from outside of Israel. The hope is that upon completing the program, they return to their home countries and take what they learned from Israeli winemaking to the wider industry.

Varietals from Israel are already competing with the likes of wine from Napa and France in international competitions, which makes it an exciting time for wine enthusiasts. "I wasn't born with a glass in my hand," says Kerem, who admits to catching up by trying a new wine every week.

When asked if he prefers a cabernet over a chardonnay, a merlot versus a zinfandel, Kerem pauses for a moment. He swirls the question around as if tasting something new. "I think my favorite wine is the wine that raises discussion, the wine that lets you just enjoy and relax and think about the wine. Wine that has something in it that makes me daydream for a second – this will be the wine that I'm interested in."

NEWLY DISCOVERED CAVES MAY HOLD MORE DEAD SEA SCROLLS

Though no new manuscripts found so far, archaeologists are hopeful after unearthing objects at Qumran used in the storage of ancient scripts.

Two scrolls from the Dead Sea Scrolls lie at their location in the Qumran Caves before being removed for scholarly examination by archaeologists. (Photo: public domain via wikipedia)

Archaeologists believe a pair of recently discovered caves at the site where the Dead Sea Scrolls were found may contain additional religious texts from antiquity.

Though no new manuscripts have yet been unearthed in the newly discovered caves at Qumran, archaeologists have discovered a number of objects indicating scrolls were stored there, among them jars, wrappings, and possible scroll fragments.

"This cave was robbed by Bedouins maybe 40 years ago," archaeologist Randall Price explained to National Geographic, referring to one of two caves known as 53b and 53c.

Fortunately for us, they didn't dig very deep. Our hope is that if we keep digging, we hit the mother lode," he added.

Price, a professor Liberty University, is leading the dig at Qumran along with Oren Gutfeld of the Hebrew University of Jerusalem.

The two were part of a team last year that discovered Cave 53, the twelfth such cave of its kind to be found at Qumran, and though no scrolls were found there, researchers found a blank piece parchment and storage jars identical to those discovered in other caves at Qumran.

Next to that cave, archaeologists uncovered Cave 53b in January and came across a bronze cooking pot dating to the first century BCE and a nearly intact oil lamp from the Hellenistic-Hasmonean period.

Archaeologist Ahiad Ovadia digs carefully in cave 12 near Qumran. (Photo: Casey L. Olson and Oren Gutfeld, Hebrew University)

They also found pottery such as storage vessels, cups, and cooking pots, as well as pieces of textiles, braided ropes, and string.

"The significance of this discovery involves the new evidence it provides that the caves south of Qumran represent sealed loci, despite the attempts by Bedouin to loot these sites," Price and Gutfeld wrote in an abstract to a paper for the American Schools for Oriental Research.

"Also significant is the relation of these caves to the Qumran community, and how the scroll cave found in 2017 is associated with the new cave found in 2018," they added.

Price told the Live Science website they have not yet examined all of the pottery found in 53b and therefore do not yet know if scrolls were stored there.

The Dead Sea Scrolls, a collection of 2,000-year-old Hebrew and Aramaic scrolls, were found 70 years ago by a Bedouin shepherd in cliffs near the Dead Sea. In total, 900 manuscripts and up to 50,000 fragments were uncovered in 11 caves.

They are believed to have been written sometime between 150 BCE and the destruction of the Second Temple during the Roman conquest in 70 CE by the Essenes, an ascetic sect from that period.

Since 1967, the State of Israel has been the repository for the vast majority of the scrolls.

HEBREW UNIVERSITY TO OPEN TECH CENTRES IN CHICAGO, CHINA AND PARAGUAY

The Hebrew University in Jerusalem announced this week that it will open three tech centres in Chicago; Asunción, Paraguay; and Shenzhen, China.

The centres will encourage cooperation between Hebrew University researchers and local industries, according to a statement.

"In Chicago, the university's technology transfer company, Yissum, will partake in the Discovery Partners Institute, a joint education, research and innovation institute led by the University of Illinois System, its

The Shenzhen skyline from the Nanshan District, China, 2016. (Photo: Simbaxu/Wikimedia Commons)

three universities and other partners," reported The Jerusalem Post.

"In Paraguay, Yissum has partnered with HC Innovations to advance innovation and commercialization activities in South America."

"In China, Yissum will team with the China Israel Innovation Centre Ltd., affiliated with Tsinghua University in Shenzhen," added the Post.

The Hebrew University statement added that similar centres will open in the future.

ADDITIONS TO THE TEAM AT THE AUSTRALIAN FRIENDS

The Australian Friends is delighted to welcome two new team members. They are Andrea Frankel who has been appointed Office Manager and Jamie Wise who has been appointed Student Liaison and Marketing Officer.

Andrea Frankel, Office Manager, Australian Friends

Andrea has worked in Australia for many years in Not for Profit Jewish Community Services and most recently served as the Office Manager of the Zionist Council of NSW. Prior to that she was involved in the education sector. Hailing originally from South Africa, Andrea had a long career in Personnel Management and Training.

Aside from managing the AUSTFHU office, Andrea will also edit the organisation's quarterly newsletter "Innovative Way"

Andrea says "I am thrilled to be able to combine the Educational and Community services skills and passion that I have gained in my career to pursue this role in supporting the Hebrew University."

Rob Schneider, AUSTFHU CEO said that "the organisation is most fortunate to have a person of Andrea's skills on board and we look forward to her helping us to enhance the presence of the Hebrew University in Australia."

Jamie Wise, Student Liaison and Marketing Officer, Australian Friends

The other new appointee is Jamie Wise who recently commenced her role as Student Liaison and Marketing Officer with the Australian Friends. Jamie is currently in her second year of studying a Bachelor of Public Communication, majoring in Public Relations.

Her role with the Australian Friends involves preparing promotional material to disperse across conventional print and social media. In addition, she liaises with past, present and future Australian students at the Hebrew University and is aiming to facilitate the growth of a strong alumni network. She will work closely with Australian universities to encourage this engagement.

Rob Schneider said "Jamie is a welcome addition to the organisations ranks as she connects us with the next generation and plays a pivotal role in promoting the many study opportunities that the Hebrew University can offer to students from Australia."

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CONTACT US

- Do you want to know more about the activities of the Friends?
- Interested in upcoming events?
- Going to Israel soon and keen to visit the Hebrew University?
- Interested in studying at the University, or do you know someone who is?

Please contact us; we would love to assist.

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