

Australian Friends of the Hebrew University of Jerusalem Newsletter ____ Issue 62 Summer 2017 - 2018 HUMANITY - It is what the Hebrew University is built on

SAVE THE DATE



OUR FUTURE IS HERE

PLEASE JOIN US AT THE 2018 BOARD OF GOVERNORS 8-13 JUNE FOR AN EVENT TO REMEMBER!

Leading Hebrew University academics, including Nobel Laureates, to present!

Visit the laboratories where the magic happens!

Top international identities presenting TED-style talks!

Inaugural President's Business Leadership Forum network with colleagues new and existing from around the world!

Reception at President Rivlin's residence!

For more information, contact Ilana Den, **Federal Executive Director via** ilana@austfhu.org.au or 02 9389 2825.

100 YEARS OF KNOWLEDGE

Celebrating the Centennial Anniversary of the Laying of the Cornerstones

Pre-Board Program highlights:

FRIDAY, JUNE 8TH - SATURDAY, JUNE 9TH The President's International Business Leadership Forum

usiness leaders from around the world will join together D for a day of innovation and inspiration. Leaders will get an insider perspective of the Jerusalem world of high-tech and will network with local entrepreneurs and University leaders.

On Saturday, participants will enjoy an exciting day of adventure, taking part in unique tours throughout the country.

SATURDAY, JUNE 9[™]

Cinema, Cocktails and Celebration

The Opening Event of the Board of Governors will be held at the Jerusalem Cinematheque.

Guests will enjoy an evening celebrating Israeli cinema and cocktails under the stars.



The President of the State of Israel, Reuven Rivlin (centre), at the 2016 Board of Governors ceremony, where he was awarded an Honorary Doctorate

The Hebrew University is proud to be home to the Spielberg archives and the Sam Spiegel Film & Television School and is excited to kick off the Board of Governors at the Jerusalem Cinematheque, which is at the heart of the Jerusalem cultural scene.

SUNDAY, JUNE 10TH

100 Years of Knowledge and Vision

We will hold "HUJI Talks", where we will celebrate the past 100 years and look forward to the next 100.

Presidents Reception: Honouring Israeli Excellence

A reception will be held at President Reuven Rivlin's residence, where Israeli prize winners will be honoured.

Celebrating 100 Years of Knowledge and Excellence

Gala dinner celebrating 100 Years of Knowledge will be held at the Tower of David Museum and will feature an interactive spectacular multimedia show broadcast on the Old City walls.

MONDAY, JUNE 11[™]

Open Campus

The Edmond J. Safra Campus will be open to the public for an interactive day, where visitors are encouraged to enter labs, and witness where the magic happens.

Knowledge from our Visionaries

Lectures will be held by Nobel Laureates and Honorary Doctorate recipients.

TUESDAY, JUNE 12TH

Ceremony Rededicating the Cornerstone

Friends from around the world will join a ceremony rededicating the cornerstones of the University, which were laid in 1918. This ceremony will symbolise the important role that the Friends Organisations play in the continual development of the Hebrew University.

An Evening of Dance under the Stars

The evening will feature a captivating performance by the Bat-Sheva Dance Company: "Decca Dance," which will be held at Hebrew University's own Rothberg Amphitheater, choreographed by 2008 honorary doctorate recipient, Ohad Naharin.

WEDNESDAY, JUNE 13TH

Closing Event Celebrating 75 Years of the Robert H. Smith Faculty of Agriculture, Food and Environment

The closing event will be held in Rehovot at the Robert Smith Faculty of Agriculture, Food and Environment in honour of the 75th anniversary of the opening of the Faculty. The event will boast a festival-type atmosphere with live music, dancing, and food. In addition to Board of Governors participants, alumni will be invited to partake in the festivities.



Legendary American actress, director, singer, producer, composer, philanthropist and activist, Barbara Streisand, received an Honorary Doctor of Philosophy degree at the 2013 Board of Governors meeting

HAPPY HANUKKAH CHANUKAH CHANUKAH HANUKAH HANUKA CHANNUKA CHANNUKA CHANUKA However you spell it!



REUTERS RANKS HEBREW UNIVERSITY AMONG WORLD'S 100 'MOST INNOVATIVE UNIVERSITIES'

Hebrew University's Yissum Research Development Company, which brings discoveries to market, holds 10,000 patents for 2,800 inventions, and has licensed more than 900 technologies and launched 125 startups

The Hebrew University of Jerusalem has been ranked the 82nd most innovative university in the world in Reuters' annual ranking of the World's Most Innovative Universities. The Hebrew University was the top-ranked institution in Israel, followed by Tel Aviv University at 88 and Technion-Israel Institute of Technology at 89. The Hebrew University climbed 14 points from last year, when it was ranked 94th most innovative.

Reuters cited the Hebrew University's technology transfer company, Yissum Research Development Company, as bringing students' and researchers' technologies and discoveries to market, with 10,000 registered patents covering 2,800 inventions, more than 900 licensed technologies, and 125 startups launched.

"We are gratified by this recognition of the Hebrew University's innovation leadership," said Prof. Asher Cohen, President of the Hebrew University of Jerusalem. "A century ago this heritage of innovation began with our founding by the likes of Albert Einstein, Sigmund Freud and Martin Buber. More than half a century ago, we established Yissum to turn breakthrough academic research into commercial applications. And today, this culture of innovation continues through the efforts and excellence of our students, faculty and staff, whose work is creating a better world for people everywhere."

"The Hebrew University of Jerusalem's Yissum Research Development Co brings students' and researchers' technologies and discoveries to market," said the Reuters profile. "Administrators claim that products based on its commercialized patents generate more than \$2 billion a year in sales. Successful developments include the drug Exelon, used to treat Alzheimer's disease; Doxil, for ovarian cancer; and Mobileye, a collision-warning system for vehicles."

"These highly successful innovations are excellent examples of the kind of transformational research that continuously originates from the Hebrew University," said Dr. Yaron Daniely, CEO & President of Yissum. "Our mission as one of the first technology transfer companies ever created is to ensure that Hebrew University's groundbreaking research continues to attract entrepreneurial and industry support, and translates to solutions addressing challenges faced across the globe today."





28 YEARS LATER: LIGO DETECTOR CONFIRMS 1989 HEBREW UNIVERSITY PREDICTION THAT NEUTRON STAR MERGERS PRODUCE GAMMA RAY BURSTS

Prof. Tsvi Piran at Hebrew University's Racah Institute of Physics led a team that published an accurate prediction in 'Nature' that was initially disputed or ignored

Watch video at https://youtu.be/KhfGqK6st_A

Two years ago, the LIGO gravitational wave detector stunned the world with the discovery of a merger of two black holes. This past August, LIGO did it again: with the help of a second detector called VIRGO, it discovered a new source of gravitational radiation. Seconds later, NASA's Fermi satellite detected a gamma-ray burst from the same direction. Several hours later, a telescope in Chile identified the source at a Galaxy located 120 million light years away. While this is an enormous distance for us, on a cosmological scale it is relatively close.

Since these initial discoveries, most of the telescopes in the world, including the Hubble Space Telescope, have observed this galactic event. The results, which have been kept secret until now (despite a partial leak), are reported in several scientific papers published in the prestigious journals *Physical Review Letters, Nature, Science* and the *Astrophysical Journal.*

These observations confirm a longstanding prediction made almost thirty years ago by a team headed by Prof. Tsvi Piran at the Hebrew University of Jerusalem. Piran is the Schwartzman Chair for Theoretical Physics at the Hebrew University's Racah Institute of Physics. The prediction, published in Nature in 1989 ("Nucleosynthesis, neutrino bursts and γ -rays from coalescing neutron stars"), suggests that when two neutron stars merge they emit, in addition to gravitational waves, a burst of gamma-rays. They also synthesise and eject to outer space rare heavy elements, like gold, plutonium and uranium. The merged neutron stars form a black hole in this process.

This prediction, which Piran and colleagues published in Nature, was met with scepticism and initially ignored. However, Piran continued to work on it, and indirect evidence in its favour mounted over the years. These last observations confirm it without any doubt.

"I am exhilarated by this confirmation of a prediction we made nearly thirty years ago," said Prof. Tsvi Piran following today's announcement confirming his prediction. "I also remember how difficult it was to convince the scientific community of our idea: at the time it was against the standard model that was published even in freshman textbooks on astronomy. When we made this prediction in 1989, we did not expect it to be confirmed within our lifetimes. But with continued curiosity and the development of new technologies, we are able learn ever deeper truths about the nature of our Universe."

LIGO's observations have now confirmed that the recent event involved a binary neutron star merger, and the formation of a black hole.

PROTEIN TO ATTACK CANCER CELLS DEVELOPED By MIT, HEBREW UNIVERSITY

Judy Siegel-Itzkovich, health and science editor at The Jerusalem Post

A joint project between the Hebrew University of Jerusalem and the Massachusetts Institute of Technology found a protein circuit that can target cancerous cells and leave healthy ones alone.

A protein "switch" that activates the immune system to attack cancer cells when it detects signs of the disease has been developed by researchers from the Massachusetts Institute of Technology and the Hebrew University of Jerusalem.

The switch stimulates an immune response only when it detects the cancer cells, without harming other healthy tissues, the researchers said.

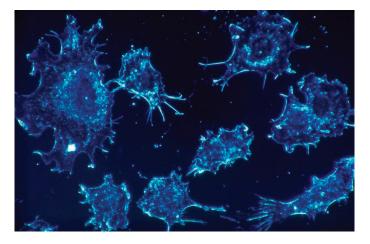
The important discovery has just been published in the journal *Cell*.

In a research collaboration between MIT and HU and headed by Dr. Yuval Tabach in Jerusalem, the researchers developed a method for finding short sequences of DNA that differentiate cancer cells from healthy tissue. The research itself was conducted by Dr Lior Nissim, MIT researchers, and Doron Stop, a HU doctoral student who is also a medical student in the Jerusalem faculty.

These DNA sequences, called "promoters," react to an existing state of the cell and change it by expressing proteins that are suitable for it – for example, in a situation of heat stress.

The team found that naturally occurring proteins in cells do not distinguish well between cancer cells and healthy cells. The researchers then developed a method that enables the design of promoters that discriminate between cancer cells and healthy cells.

They are continuing to develop them with DNA sequencing, and using machine-learning algorithms to distinguish between them thus creating a "guided missile" that attacks only malignancies. To the missile, various methods of killing cancer



cells could be added, including an immunotherapeutic "Trojan horse" approach.

"We are in the midst of a huge and growing revolution in which computers, biology and engineering will join together to change medicine," said Tabach. "Israeli academia has an essential part in the process. This project and others like it will enable targeting in the near future of a specific cell, and killing it either with the immune system or by initiating cell suicide."

To do this, the research team built a genetic circuit, encoded in DNA, to differentiate cancer cells from non-cancer cells. The circuit, which can be customized to respond to different types of tumours, is based on simple gates used in electronics that will create a circuit only when two existing inputs are present.

The method is based on the fact that cancer cells differ from normal cells in the profile of their gene expression.

The researchers developed synthetic promoters – DNA sequences – designed to initiate gene expression, but only in cancer cells. The circuit is transferred to cells in the affected area via a virus, and focuses on tumours more accurately than existing treatments, as it requires two cancer-specific signs before it responds.

The researchers were able to build a system that works only in specific cancer cells. They attached an "alarm mechanism" to the system, which activates the immune system and infiltrates the system with virus vectors for a mouse with cancerous growths.

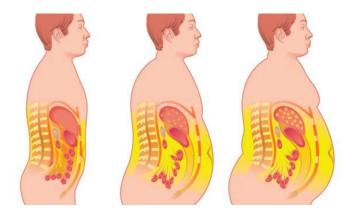
In response, only the cancer cells activated the alarm system that caused the immune system to attack the tumour. Moreover, the researchers have shown that the circuit can also focus on other types of cancer cells.

Therefore, the researchers hope the system will also be used to treat other diseases, such as rheumatoid arthritis, inflammatory bowel disease and other autoimmune diseases.

REDUCING ENDOCANNABINOID SYSTEM'S ACTIVITY MAY HELP PROTECT THE KIDNEY HEALTH OF INDIVIDUALS WITH OBESITY

New study provides insight on the mechanisms behind the development of kidney damage due to obesity, points to a potential target for protecting the kidney health of individuals with obesity

Highlights: Structural and functional changes in the kidneys develop early in the course of obesity. A particular receptor in kidney cells plays an important role in obesity-induced fat accumulation, dysfunction, injury, inflammation, and scarring in the kidney. The receptor acts through a certain signalling



pathway. Targeting this receptor or the signalling pathway may help protect the kidneys of individuals who develop obesity.

Obesity-related kidney dysfunction develops early in the course of obesity, justifying the search for novel regulators that could be targeted for therapy. Obesity can cause structural and functional changes in the kidneys, which may help explain why individuals with obesity face an elevated risk of chronic kidney disease and its progression to kidney failure. Although multiple metabolic factors have been proposed to contribute to obesity-induced kidney problems, the underlying mechanisms are not completely understood.

To investigate, a team led by Dr. Joseph (Yossi) Tam, DMD, PhD and the PhD student Shiran Udi, MSc, at the Hebrew University of Jerusalem's Institute for Drug Research in Israel, examined the kidney cells that are responsible for the reabsorption of nutrients, while allowing other substances of no nutritional value to be excreted in the urine. These kidney cells, called renal proximal tubular cells or RPTCs, are especially sensitive to the accumulation of fat, or lipids — an effect called lipotoxicity.

The researchers examined the potential role of endocannabinoids, lipid molecules that interact with the cannabinoid-1 receptor (CB1R) and are abundantly expressed in the brain and periphery, including the kidney. Endocannabinoids act on the CB1R receptor in RPTC renal cell lipotoxicity.

The research shows that manipulating the cannabinoid-1 receptor (CB1R) specifically in the RPTC renal cells may provide a novel therapeutic intervention for treating obesity-induced nephropathy.

"This work provides a novel approach to slow the development of renal injury through chronic blockade of peripheral CB1Rs," said Dr. Tam. "It also supports strategies aimed at reducing the activity of the endocannabinoid system, specifically in the kidney, to attenuate the development of RPTC dysfunction in obesity."

ROSETREES TRUST INTERDISCIPLINARY PRIZE AWARDED TO HEBREW UNIVERSITY SCIENTISTS

Yaakov Nahmias and Nir Friedman win prize for a bold new model of human metabolism

The Rosetrees Trust Interdisciplinary Prize for 2017 has been awarded to two scientists from the Hebrew University of Jerusalem, Prof. Yaakov Nahmias and Prof. Nir Friedman. This is the first group from outside the United Kingdom to win the prize. The award was presented at the 30th Rosetrees Trust Anniversary Symposium on September 14 at the UCL Institute of Child Health in London.

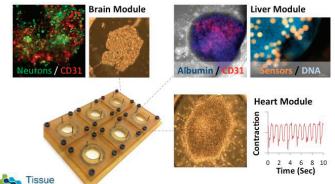
The Rosetrees Trust is a private, family funded charity, formed in 1987 to support medical research. Rosetrees provides grants to fund outstanding research projects across all areas of human health and disease.

Profs. Nahmias and Friedman won for their research proposal to engineer a platform that mimics the physiological dynamics of human metabolism. The circadian rhythm or "body clock" is a daily cycle that regulates many physiological processes, such as telling our bodies when to eat or when to sleep.

With funding from the Rosetrees Trust, the two scientists will lead a team of Hebrew University researchers in combining Prof. Nahmias' groundbreaking organ-on-chip platform with

Tissue Dynamics® Multi Organ on Chip

Smart Microphysiological Platform



Dynamics

The Human on Chip platform developed by Prof Yaakov Nahmias at the Hebrew University of Jerusalem. The device records the metabolic activity of human liver and brain tissues as well as the rhythm of a microscale human heart

Prof. Friedman's key understanding of molecular networks. This interdisciplinary partnership will unravel the complex interplay between changing metabolism and its underlying genetic regulation in human cells, replacing current animal models that lack clinical relevance. The research will be instrumental to drug development, offering a route to the rational design of therapeutics for obesity, fatty liver disease and type 2 diabetes.

Prof. Yaakov Nahmias said, "The Rosetrees Trust Interdisciplinary Prize is instrumental in bringing scientists of different disciplines together. It will enable us to not only build a groundbreaking model of human physiology on a chip, but also to leverage the advanced computational resources needed to understand the vast amount of data our platform will generate, in the hope of developing critical new therapies for metabolic diseases such as obesity and diabetes."

US1.5 MILLION EINSTEIN AUCTION BREAKS RECORD

Article by Benyamin Cohen, "From the Grapevine"

Note to Japanese bellhop is largest Einstein auction in recent history.

When Albert Einstein was staying at a Japanese hotel in 1922, he found himself without any cash for tips. So he scribbled two notes and handed them to the bellhop, reportedly telling him, "One day these will be worth something."



Gal Wiener, owner and manager of the Winner's auction house in Jerusalem, displays two notes written by Albert Einstein. (Photo: Menahem Kahana / Getty Images)



Albert and Elsa Einstein at the University of Commerce, Tokyo, with Japanese faculty.. (Photo: Albert Einstein Archives/HUJ)

The world's favourite genius certainly knows how to make a prediction. Those two notes sold at auction in Israel on Tuesday for \$1.56 million, the largest sale of Einstein memorabilia in recent history. Einstein documents usually sell in the vicinity of \$100,000 to \$200,000. Those are typically letters typed by Einstein and have his signature on the bottom. The notes that were sold this week were in Einstein's own handwriting.

"I just sent the seller an email," auctioneer Gal Wiener told From The Grapevine. "I told him, 'Congratulations! You just became a millionaire."

The next most expensive document is likely the 1987 auction of hand-written paper where Einstein spelled out his famous formula, E=mc2. That scribble and its accompanying pages sold for \$1.2 million. At the time, the price was a record auction for any manuscript sold in the U.S. and for any unillustrated text manuscript sold anywhere in the world.

In the two pages at the Japanese hotel, Einstein offered his basic theory of happiness. The first note is translated to: "A quiet and modest life brings more joy than a pursuit of success bound with constant unrest." Einstein also handed the bellhop a second note that is translated to: "Where there's a will, there's a way."

Einstein bequeathed his papers to Hebrew University in Jerusalem, a school he helped establish. It is home to the official Albert Einstein archives, which just announced it will be opening the archives to the public. But items that belonged to others, like the notes auctioned off this week, are often sold to collectors.

Six decades after his death, Einstein memorabilia continues to flood the marketplace. "The interest in Einstein does not fade into history," said Hebrew University's Hanoch Gutfreund, who helps run the Einstein archives. "If anything, the interest in Einstein increases with time. It's greater now."



GERMAN-ISRAELI ACCELERATOR SPEEDS UP CYBERSECURITY INNOVATION & COLLABORATION

A new initiative to accelerate cybersecurity innovation and collaboration between Germany and Israel has been launched in Jerusalem.

The Hessian Israeli Partnership Accelerator for Cybersecurity (HIPA) brings together top talents in cybersecurity from Israel and Germany to jointly work on cybersecurity projects in areas such as network technologies, internet infrastructure and software security. The overarching goal is to trigger the creation of innovation and businesses in cybersecurity in Israel and Germany.

HIPA connects the participants with entrepreneurs, researchers, mentors, customers and influencers, and the in-depth technical and business training provided is expected to give the start-ups emerging from HIPA exceptionally high chances of succeeding in the market.

The accelerator program began with one week of in-depth entrepreneurship and cybersecurity training in Jerusalem (October 29 to November 5, 2017), which will be followed by two months of targeted research and development activities. The results will be reviewed and finalized in one week of technology training in Darmstadt, Germany, and presented in team pitches at a conference in Berlin, Germany (January 2 to 9, 2018).

Almost half of the researchers at the Hebrew University's School of Computer Science and Engineering are currently involved in various aspects of cybersecurity research. Israeli scientists in general, and researchers from the Hebrew University in particular, have always played a major role in securing the Internet and ensuring its robustness.

"Cyber-attacks are a constant threat to state and financial entities, as well as to each and every one of us," said Prof. Danny Dolev, the Berthold Badler Chair in Computer Science and head of the Cyber Security Research Center at the Hebrew University. " At the Hebrew University we are researching many aspects of cyber protection, including protection of Internet data routing, cloud computing, Bitcoin, the smart grid, and more. Our collaboration with Fraunhofer deepens the research into these issues and will enable researchers from both countries to collaborate on the creation new tools for dealing with cyber-attacks." "The establishment of a joint project centre with Fraunhofer is a vote of confidence in the Hebrew University's scientific excellence and in Israel's position as a global innovator in cybersecurity," added Prof. Yair Weiss, head of the Rachel and Selim Benin School of Computer Science and Engineering at the Hebrew University.

COMPOUND IN CANNABIS COULD EASE ASTHMA

Prof. Raphael Mechoulam, 'father' of medical cannabis, turns focus on asthma at Hebrew University's Multidisciplinary Center on Cannabis Research.

By Brian Blum, ISRAEL21c

ebrew University Prof. Raphael Mechoulam, known as the "father" of the medical cannabis industry, will lead a team investigating the benefits of non-psychoactive cannabis components for treating asthma and other respiratory conditions.

In 1964, Mechoulam, was the first scientist to successfully isolate the THC component in cannabis. He was then a young researcher at Israel's Weizmann Institute of Science.

Of the 140 cannabinoid molecules in the cannabis plant, the two main components are THC (the psychoactive component) and CBD, which has anti-inflammatory properties. CBD is the focus of much of Israel's burgeoning medical cannabis research on diabetes, heart disease, autism, fracture healing and inflammatory bowel disease.

Mechoulam will conduct studies on CBD and asthma together with Prof. Francesca Levi-Schaffer at the Hebrew University's recently established Multidisciplinary Center on Cannabis Research. The research has been commissioned by CIITECH, a UK-Israeli biotech startup headed by Clifton Flack, who cofounded iCAN-Israel Cannabis. The latter is beginning clinical testing on a cannabis formulation for insomnia.

Allergic diseases including asthma, allergic rhinitis, atopic dermatitis and food allergies affect approximately 20 percent of the global population.

Mechoulam's asthma research aim is to identify "a possible inhibitory effect of a derivative of cannabidiol (CBD) on allergic airway inflammation."

While asthma and allergies are generally well controlled by steroids or symptomatic drugs, some patients are steroidresistant and have thus been labelled as "unmet clinical needs" by the World Health Organization. "We are looking forward to investigating whether the anti-inflammatory properties of CBD will work in treating this disease," Mechoulam said.

Flack added, "Cannabis could well become this century's wonder drug and we're honoured to have the opportunity to support Professors Mechoulam

and Levi-Schaffer on this preclinical research project."



NEWS FROM AROUND AUSTRALIA

ALUMNI SPOTLIGHT

Welcome to the second in our series on Alumni now residing in Australia.

DORIT SAMOCHA-BONET

Dorit Samocha-Bonet was born and raised in a small suburb of Tel Aviv, Ramat-Gan. During her childhood she loved classical ballet and during high school she practiced 5 days a week in a ballet studio in Tel-Aviv. While dancing, she became interested in nutrition and eating disorders, a prevalent condition amongst ballet dancers.

After completing a BSc (Cum Laude) degree in Nutritional Sciences at the Faculty of Agricultural, Food and Environmental Quality Sciences, Hebrew University (Rehovot) in 1992, Dorit joined the Nutrition and Dietetics Department at Tel Aviv Medical Centre as a clinical dietician. In 1996 she completed a MSc (with Honours) in Clinical Biochemistry, at the Faculty of Medicine, Tel Aviv University.

As a clinical dietician, Dorit realized the constant battle and enormous efforts people put towards achieving a recommended body weight, and came to terms with the fact that only a minority of her patients could maintain a reduced body weight in the long term. After the birth of her second child, she decided to turn to research into obesity and metabolic disease and embarked on a PhD in Physiology & Pharmacology at the Faculty of Medicine Tel Aviv University. Her PhD focused on the interrelationships between obesity, blood viscosity and oxidative stress.

After completing a PhD (2006), she relocated to Sydney with her husband and 2 children. She took a career break of 1 year to care for her children, and in 2007 she took a postdoctoral position at the Diabetes & Metabolism Division at the Garvan Institute of Medical Research (2007) with Professor Lesley Campbell, the Director of the Diabetes Centre at St Vincent's Hospital (Darlinghurst) at the time, and clinical researcher at the Garvan Institute Diabetes Division.

In 2011 Dorit was awarded the Skip Martin Early Career Fellowship from the Australian Diabetes Society and in 2013 she established the Clinical Insulin Resistance group within the Diabetes and Metabolism Division at the Garvan Institute.

Dorit is interested in the molecular mechanisms involved in the development of insulin resistance, a condition preceding frank type 2 diabetes, whereby the body tissues fail to respond to the key regulator of blood glucose, the hormone insulin. Her group performs detailed clinical studies in individuals at risk of developing type 2 diabetes, using gold-standard techniques to characterise body fat distribution and glucose regulation.

Since starting her research career as a PhD student, the global rate of obesity has increased dramatically, along with the rates of diabetes and obesity-related cancers. In Australia approximately 65% of adults are overweight (as defined by a body mass index [BMI] ≥25 kg/m2), of which almost 30% are considered obese (BMI >30 kg/m2). These high rates correspond with a surge in prediabetes and diabetes. In a collaborative study with colleagues at the Weizmann Institute of Science (Rehovot), Dorit is now actively seeking untraveled paths to improve health outcome in prediabetes and type 2 diabetes.

SHAI ZARIVATCH

Shai Zarivatch is the Israeli Trade Commissioner to Australia, having taken over the role earlier this year. His main responsibility is to continue to build a bridge for Israeli companies looking for business or investment opportunities in Australia, as well as to realising Australia as a market destination for them.

With a Bachelors and Masters degree in Political Science Israel from the Hebrew University of Jerusalem – majoring in Economics and Finance and Public Administration (cum laude) respectively and an impressive career thus far, Shai is well on his way to introducing his next vision: more Industry 4.0 solutions by Israeli companies and start-ups into the future of industry and manufacturing in Australia. This new revolution in digitalisation, virtual reality, the Internet of Things, robotics, artificial intelligence and cybersecurity is the next big growth sector and Israel is at the forefront of this, particularly in cybersecurity, where at least 50% of all investments are made there. The sectors Shai is focusing on are cybersecurity and fin-tech but agri-tech, food-tech and medi-tech also feature on his agenda.

Prior to arriving in Australia, Shai was employed by Israel's Foreign Trade Administration at the Ministry of Economy, responsible for managing and directing the international trade policy of the State of Israel. Previous roles included Director of the Economic and Trade Department at the Embassy of Israeli in Singapore and Assistant Director to The Israel Ministry of Justice, The Comptroller Division.

Shai is enjoying Sydney and Australia, getting to partake in his favourite sports, including competitive fencing, playing and coaching basketball and tennis and outdoor hiking. He plays competitive chess and enjoys reading WW2 literature and anything on conflict resolution and Middle East politics. He was selected as one of Harpers' Bazaar magazine's "Men of Substance" in Singapore, (March 2010) edition.





Shai Zarivatch has been appointed as Israel's new Trade Commissioner to Australia and New Zealand. (Photo: Shane Desiatnik, Australian Jewish News)



MOUNT SINAI COLLEGE AND THE AUSTRALIAN FRIENDS OF THE HEBREW UNIVERSITY CO-HOSTED AN EVENT TO PROFILE A YOUNG ISRAELI STUDENT OF ETHIOPIAN ORIGIN, ZURESH WABBE.

Zuresh was introduced by Mr Chaim Guggenheim, VP Development at The Feuerstein Institute in Israel, who is accompanying her on her visit to Australia.

Despite a difficult move to Israel in 1998, seeing her family living in a crowded absorption camp with several other immigrants and not speaking the language, compounded by Zuresh looking and sounding different at school and coming from a cultural background which was very dissimilar to her classmates, she strived to succeed, learned Hebrew and English and slowly rose to the top of her class.

Zuresh first discovered The Feuerstein Institute (TFI) during her army service. She was selected to participate in the Amir program, which provides specialised training rooted in the Feuerstein Method to Ethiopian Israeli cadets who demonstrate great potential, despite underperforming on the army entrance exams. Zuresh was a model student, and through the program, was able to achieve the status of Lieutenant in the Air Force. She also served in the elite officer training program.

Zuresh's family highly values education. All her siblings have earned secondary degrees from colleges and vocational schools. Zuresh has been a social activist from a young age, with a particular interest in at-risk youth. Her passion made psychology the obvious choice for a future profession. However, despite earlier academic achievements, she was unable to attain the score of 700 on the university entrance exam required for admission to Hebrew University of Jerusalem's Faculty of Psychology. Determined to get into her "dream university" and study the subject she was passionate about, she returned to Feuerstein and applied to the Aim Higher program. She was accepted into the school and program of her choice. Zuresh was provided with full academic, financial, cognitive and social support - factors she attributes to her academic success. She plans to further her education and pursue a Master's degree in Psychology. Her goal is to "give back" to her community by working with child immigrants from Ethiopia. Special thanks to Helen Meyer, accredited Feuerstein Mediator at Mount Sinai College. For information on the Feuerstein Method, visit http://www.icelp.info/feuerstein-method.aspx

AUSTRALIAN BUSINESS LEADERS, STUDENTS FROM MORIAH COLLEGE AND NOTABLE VISITORS AT THE HEBREW UNIVERSITY

On 2 November, a group of Australian business leaders, hosted by the Australia-Israel Chamber of Commerce and led by David Gonski AC, visited the Mount Scopus campus of the Hebrew University of Jerusalem as part of their mission to "explore business and investment opportunities in Israel, as well as understanding its unique entrepreneurial culture and innovative ecosystem".

The group was addressed by the Chancellor of the Hebrew University, Professor Menahem Ben-Sasson; Senior Vice President for Business Development at Yissum – Hebrew University's technology transfer company – Aviv Shoher, a graduate of the Hebrew University in Physics and Entrepreneurship Yonatan Avraham, who has founded several successful start-ups and Ilana Den, Federal Executive Director of the Australian Friends of the Hebrew University of Jerusalem.

On 29 October, a group of Moriah College Sydney Year 11 students visited the Hebrew University of Jerusalem's Edmond J Safra campus and learned about the commercialisation of academic research and development from Yissum, the University's technology transfer company and one of the global leaders in this field. They were also amazed by a visit to the University's Center for Functional and 3D Printing, where Dr Michael Layani, researcher at the Institute of Chemistry of Hebrew University of Jerusalem - whose field is material science and functional and 3D printing -showed them the impressive equipment and explained how the Center is moving in the direction of functional printing by combining the expertise of the various researchers at the University, in scientific disciplines ranging from chemistry, physics, computer science, biology, agriculture and medicine to art and design. They are also planning to break new ground in various disciplines by integrating 3D and functional printing into various industrial manufacturing processes, such as in printed electronics, food, medical implants, vehicles, security and even architecture and the construction of buildings.

The students then proceeded to the offices of Mobileye and OrCam, both founded by Hebrew University Professor Amnon Shashua. Mobileye is the leading supplier of software that enables Advanced Driver Assist Systems (ADAS), with more than 25 automaker partners including some of the world's largest. Beyond ADAS, technology has rapidly evolved to also support the three pillars of Autonomous Driving – Sensing, Mapping, and Driving Policy. As a result of this broad and well-advanced product offering, Mobileye has achieved a partnership to develop production-ready Fully Autonomous Vehicles with BMW and Intel, with production launch planned for 2021. Mobileye was recently sold to Intel





Moriah Students at the Hebrew University

Hi Ilana,

Greetings from Jerusalem. I trust this finds you well.

I had a lovely visit to the two campuses this morning, organized by Dana and of course initiated by you.

I enjoyed meeting Dana, and we kept on switching from English to Ivrit throughout the visit.

Likewise it was wonderful to meet Yevgenia, an immigrant from Ukraine, who came on her own to Israel three and a half years ago.

She described how she saw the ad for the scholarship in a newspaper, how pleased she was to receive it, especially as she really wanted to study at HU. She also spoke of her studies in Linguistics and Roman History.

It was wonderful to see the plaque in Mum and Dad's names.

We also enjoyed learning about Albert Einstein and some of the aspects of the work at the Archive/Library. Mr Ronnie Gross, the CEO, related and explained many aspects of the work of the centre, and about Einstein's involvement with the birth and the early years in the Hebrew University.

We visited the amphitheatre where the Opening Ceremony took place.

I made it well in time to meet up with the Tour at Ammunition Hill.

Toda raba for your help, and I am so pleased for the experience.

Warm wishes from Sandy and myself,

Yael



Yael Shudnow viewing the plaque in memory of her parents, Rachel and Meyer Musleah

for an unprecedented sum of US \$15.3 billion, making it the largest Israeli exit in high-tech. OrCam's mission is to harness the power of artificial vision by incorporating pioneering technology into a wearable platform which improves the lives of individuals who are blind, visually impaired, have a reading disability or people with other conditions. The breakthrough OrCam MyEye device provides a visual aid through a discreet, wearable platform and easy-to-use interface. An artificial vision innovator powered by leading minds in the Computer Vision and Machine Learning fields, OrCam's team includes dedicated software, computer and electrical engineers, hardware design experts, and a passionate customer service team – including sighted, low vision and blind members.

The six students were prize winners of a week's Scholars in Entrepreneurship trip to Israel, for which they qualified by producing a 2 - 3 minute film pitch outlining an innovative and impactful idea that is motivated by a passion for a cause or issue. Their ideas included app designs and technology innovations to assist hearing impaired individuals, cater for people with mobility challenges, lower road trauma statistics among young drivers, bring clean water to third world countries, correct posture, and to explore learning during deep sleep.

NEWS FROM AROUND AUSTRALIA

AUSTRALIAN FRIENDS OF THE HEBREW UNIVERSITY OF JERUSALEM, ISRAEL APPOINT NEW EXECUTIVE

At the Annual General Meeting of the Australian Friends of the Hebrew University, Jerusalem Limited, Michael Dunkel, who has been involved with the Friends since the 1960's in various leadership roles, was appointed as Federal President, succeeding Robert Simons OAM after a 26-year period at the helm. Mr Dunkel is a well-known Sydney lawyer and member of the Community and the Hebrew University of Jerusalem is an institution close to his heart.



L-R A/Prof Peter Winterton AM, Rachele Schonberger, Robert Simons OAM, Michael Dunkel, Robert Greenfield and Dr Rolene Lamm

Robert Simons OAM remains involved as Honorary Chairman, while Robert Greenfield joins the Friends as Honorary Treasurer, bringing with him a wealth of experience in the commercial and finance spaces and most recently, Joint CEO of the NSW Board of Jewish Education.

Rachele Schonberger and Dr Rolene Lamm lead the NSW and Victorian Divisions of the Friends respectively as State Presidents. A/Prof Peter Winterton AM was re-elected as President of the WA Division, Philip Moses was elected Vice President and Jonathan Goodman was re-elected as Honorary Secretary.

Retiring from his role as Federal President, Robert Simons said: "On my retirement as Federal President at the recent Federal AGM on November 20th I look back on my 26 years as Federal President of this wonderful Friend's organisation. It has indeed been an honour and privilege to work with so many wonderful people both here in Australia and especially in Israel, from Chairmen to Presidents to Chancellors, Rectors and all the other wonderful and committed staff who make up the Hebrew University of Jerusalem. I wonder at our amazing success with the many excellent fundraising and campaign events, these have always been a challenge. I take great pride in the fact that we have been significantly responsible as a Friends organisation in Australia and as I wander through the magnificent grounds of the University on Mount Scopus and at the Edmond J Safra campus.

I take great pride in the achievements of our organisation in providing the many facilities that one passes, from computer centres to libraries to student admission buildings and most importantly just passing by the many students who are learning at the university because of the many scholarships we have been able to offer over the years. I am very proud of our organisation's achievements over the period of my leadership and involvement and wish my successors every success in the future and for the Friends' organisation that I know will grow from strength to strength under the leadership of Michael Dunkel."

Ilana Den, Federal Executive Director of the Australian Friends of the Hebrew University, added: "We are immensely proud of the strong leadership of the Friends of the Hebrew University in Australia and are recognised by the University as one of the leading fundraising countries globally on a per capita basis. We look forward to continued success in supporting the University to remain one of the top universities worldwide."

NEW SOUTH WALES

COMMITTEE FOR STUDENT SUPPORT

We were most fortunate to hear from Anne Crofts, recently returned from the 100th Celebration in Beer Sheva of the Light Horse Charge, at our luncheon held at the home of President, Irene Selecki in November. Mrs Crofts detailed the history of this milestone and spoke of her moving experiences at the Beer Sheva commemoration. The friendship between Australia and Israel was most certainly strengthened by this memorable event.

HONOURS CLUB

Child survivor, Alice Loeb, addressed our September meeting on her experiences during the holocaust. Alice has led groups at the Sydney Jewish Museum and speaks to schools, conveying her message of tolerance and that love will always triumph over hate!

Following the interest in the talk at our North Shore meeting, our Rose Bay group were fortunate to hear Jeffrey Landers speak on "Living with Low Vision", where OrCam, technology developed by founder HU Prof Amnon Shashua, was featured.

Those present at our November meeting were enthralled to learn about HIPPY (Home Interaction Program for Parents and Youngsters), the program created by HU Prof Avima Lombard, which is now celebrating 50 years. Marian Pettit, National Manager HIPPY Australia, Brotherhood of St Laurence, described the positive success and impact of this innovative program, particularly in indigenous communities.

At the North Shore September and October meetings, we were privileged to hear Peter Price AM, Chairman of Crime Stoppers Australia and Peter Nash, founding member of the first Australian Jewish Genealogy Society. Peter Price's talk on Cyber Crime is, sadly, most relevant in our day and age.



Marian Pettit, National Manager HIPPY Australia



Dr. Lynne Swarts with the Chair of the Department of Art History at The Hebrew University, Dr. Lola Kantor-Kazovsky, after her talk to staff and students



L-R Ilana Den, Federal Executive Director and Robert Simons OAM, Honorary Chairman of the Australian Friends of the Hebrew University; Prof. Wayne Horowitz, Dr Gil Davis, Macquarie University and Mark Ginsburg, President of North Shore Temple Emanuel

Peter Nash is the author of "Escape from Berlin', which was the subject of his talk.

SIR ZELMAN COWEN UNIVERSITIES FUND ACADEMIC EXCHANGE – DR LYNNE SWARTS

In November Dr. Lynne Swarts, Honorary Research Fellow with the Department of History at the University of Sydney, visited Israel to carry out research and to teach at the Hebrew University in Jerusalem. Her trip was undertaken with a grant from the Sir Zelman Cowen Universities Fund as a Hebrew University Exchange Fellow. She met with many scholars who have researched the art of Ephraim Moses Lilien, the focus of her own research and one of the first major Zionist artists. Her forthcoming book, with Bloomsbury Academic Press due out next year, is on his female images.

Lynne lectured in the Faculty of Art History and the Centre for Jewish Art. As part of the result of the trip, a conference on Lilien is planned to take place at the Israel Museum in late 2018, a collaboration between The Hebrew University and The University of Sydney. The Acting Director at the Israel Museum and National Library, Yigal Zalmona has pledged his support.

In September, Prof. Wayne Horowitz, professor of Assyriology at the Hebrew University's Institute of Archaeology visited Sydney and an evening was co-hosted by the Friends, along with Macquarie University at the North Shore Temple Emanuel, where Prof. Horowitz regaled a large audience with his presentation, "All About Rainbows: Looking for Noah and his Ark in an Ancient Context". Prof. Horowitz is instrumental in working with Macquarie University's Dr Gil Davis on a Biblical Archaeology course each January/February at the Hebrew University.

VICTORIA

VICTORIAN AGM EVENT WITH DR SUSAN MCMINN

The Victorian Division held their AGM on Wednesday eve 15th November with a cocktail event at the Lamm Jewish Library of Australia.

Dr Rolene Lamm has assumed the role of Victorian President after having been co-President with Grahame Leonard AM for the past year.

Grahame completed a three year term of presidency of the Victorian branch. He was presented with a silver inscribed Chanukkiah to acknowledge his contribution to the organisation.

Robert Simons OAM, the outgoing Federal President, attended this event and spoke eloquently about the university and the current projects for Australian Friends to support. Robert was presented with a gift from the Victorian Friends to mark his outstanding dedication and leadership over twenty six years.

Dr Rolene Lamm gave a report of the activities of the Victorian branch over the past year and a vision for the future.

The attendees were treated to a fascinating address by Susan McMinn who had been given a research grant by the Australian Friends of the Hebrew University. During her time conducting research at HU, Susan developed art work conceptualising WW1 historical narratives, focussing on the



Grahame Leonard AM with Dr Rolene Lamm

suffering and fate of the Australian horses during the Beer Sheva campaign. Susan showed a PowerPoint presentation of her art work from this time and played the animated film she had developed of the Australian light horse brigade.

WESTERN AUSTRALIA

VOICES CONCERT IN PERTH

The Churchlands auditorium was abuzz with excitement ahead of the anticipated music event on Tuesday 14 November.

Oshy Tugendhaft dazzled the audience with 'Voices – Africa to Israel in Song'.

Oshy sang with the dynamic Black Yoghurt – a South African vocal trio, an amazing all- star band and a choir of 12 backing

singers – some of whom are accomplished cantors themselves. This musical extravaganza was the perfect collaboration between pop culture and traditional Jewish sounds, and between performers of different ethnicity, age and religion. The Black Yoghurt rendition of *Tula tu tula baba tula sana* moved many to tears.

All up, the energy, vibe and atmosphere were electric.

VOICES is a not-for-profit project. All singers and performers donated their time and talent.

All proceeds from the Perth concert were kindly donated to the Australian Friends of the Hebrew University, WA Division. Proceeds from the concerts in Melbourne and Sydney were donated to UIA and The Friendship Circle respectively.

The Australian Friends of the Hebrew University was established for the benefit of the Hebrew University of Jerusalem. It seeks to raise funds and awareness within the Jewish and general Australian community of the Hebrew University and its academic and research excellence.

Thank you to everyone who organised and attended VOICES and supported the Australian Friends of the Hebrew University.



L-R: Oshy Tugendhaft with Mr & Mrs Leeb

AUSTRALIA'S NEW ISRAELI AMBASSADOR IS A PROUD ALUMNUS OF THE HEBREW UNIVERSITY



Rachele Schonberger (R), President of the Australian Friends of the Hebrew University's NSW Division and Ilana Den (L), Federal Executive Director were privileged to meet Ambassador Mark Sofer, Israel's new ambassador to Australia, who visited Sydney to meet members of the Jewish community's leadership.

Ambassador Sofer graduated from the Hebrew University of Jerusalem with an MA in international relations and in 1981, joined the Israeli Foreign Ministry. He has held diplomatic positions in Peru, Norway, and New York City. He served as ambassador to Ireland from 1999-2002 and was policy adviser to Foreign Minister Shimon Peres in the early 1990's. Under Ambassador Sofer's tenure as ambassador to India, the ties between India and Israel improved further. Ambassador Sofer is credited with pioneering efforts to reach out to Muslims in India.

As a proud alumnus of the Hebrew University of Jerusalem, we look forward to Ambassador Sofer's future involvement in our activities in Australia and warmly welcome him.



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?



Become our Facebook friend – join us on Facebook www.facebook.com/AUSTFHUpage

Instagram: australian_friends_of_the_hu

Twitter: AustFriendsHU Please contact us; we would love to assist.

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