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With 60 world class lab groups and 250 clinicians, TAU is on the frontlines of innovative cancerfighting research.



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Dear Friends.

One of the best parts of my job as a university president is the almost daily encounter with passionate curiosity. Whether it's "Open Day" on campus that brings in thousands of potential Tel Aviv University applicants; or the hundreds of research projects each year across the humanities, sciences and arts; or the dozens of international symposia that draw the world's greatest experts – each time I am delighted anew by the wonderful questions that people ask.

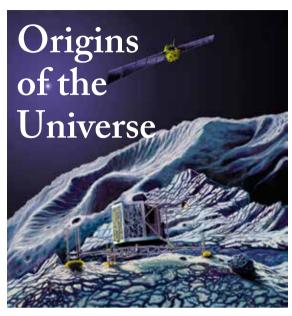
Spurring intriguing questions, though, is just the beginning. We need to provide our faculty and students with the finest conditions for grappling with the challenges and issues they raise.

Tel Aviv University has leaped forward this year with new, cross-discplinary study programs in subjects ranging from photography to materials science. We have poured many millions of dollars into labs, advanced equipment, grants and scholarships. And we are now in the planning stages for several new buildings that will house faculty recruits and provide vitally needed teaching and research space. These efforts, and the support of our friends locally and worldwide, will ensure that curiosity and inquisitiveness continue to flourish at Israel's most dynamic university.

Yours sincerely,

Professor Joseph Klafter President, Tel Aviv University

Joseph Kleft



Rendering of the Rosetta satellite and probe landing on the comet



For the first time in history a space probe has landed on a speeding comet. The event, which took over 3 decades of testing and planning and involved 4 billion miles of space travel, culminates 35 years of research by Prof. Akiva Bar-Nun of TAU's Department of Geosciences, Raymond and Beverly Sackler Faculty of Exact Sciences, and other scientists working for the European Space Agency (ESA) and its Rosetta mission. Bar-Nun's lab team is the only one in the world that can produce and study large ice samples that resemble cometary ices, which are believed to hold clues about the formation of the solar system 4.5 billion years ago as well as about the emergence of life on Earth. Although the probe is now dormant, the Rosetta satellite is active and detecting new types of gases emanating from the nucleus of the comet.

Human Side of Medicine

Medical practitioners' communication and teamwork skills are equally important as their clinical skills, says Prof. Amitai Ziv, Associate Dean at the Sackler School of Medicine and Founder and Director of the Israel Center for Medical Simulation. As a former combat pilot in the Israeli Air Force, Prof. Ziv took his experience practicing for every type of scenario on flight simulators, adapted it to the field of medical training, and founded the Center. Located at the TAU-affiliated Chaim Sheba Medical Center, the

Center for Medical Simulation prepares more than 10,000 health professionals annually to effectively cope with routine medical scenarios, emergency preparedness, and extensive mass-casualty situations. It provides a hands-on environment for people to learn without putting patients' lives at risk through role playing and computerized full-body physiological simulators. Ultimately, this type of instruction in patient safety aims to significantly lower the number of medical errors that occur each day around the world.



The Prehistoric Recycling Man

Recycling as we know it today is mainly a 20th century phenomenon and increasingly important for the health of our ecosystem. However, Prof. Ran Barkai and Prof. Avi Gopher of the Sonia and Marco Nadler Institute of Archaeology have discovered that recycling was already an inseparable part of human evolution hundreds of thousands of years ago. Their work at the Qesem Cave, located just 7.5 miles east of Tel Aviv, has unearthed the early appearance of recycling as a basic survival strategy for prehistoric man during the Stone Age – approximately 400,000 years ago. Just as today we recycle materials to manufacture new items, prehistoric man collected discarded broken tools made of flint and bone to create new utensils and knives. After 14 years of work at the Qesem Cave, archaeologists have penetrated about 32 feet below the original ceiling, finding thousands of recycled tools along the way.





Student interns practicing on a medical simulator

A 400,000 year-old flint tool showing the difference between the smooth patina of the old tool and its newer cutting edge



Nanotubes May Treat Blindness

New efforts to create a prosthetic retina could treat blindness caused by retinal degeneration. According to a study published in *Nano Letters*, the key may lie in a revolutionary device developed by an international team led by Prof. Yael Hanein, a member of TAU's School of Electrical Engineering and Head of TAU's Center for Nanoscience and Nanotechnology.

Made entirely of nano-components, the artificial retina is a wireless flexible film that could replace the cumbersome, and often less effective, devices currently used to treat visual impairment. Testing so far has proven its ability to replicate the natural process of vision by sensing light and sending visual signals to the wearer's brain, which then stimulate the neurons associated with sight.

"Compared to the technologies tested in the past, this new device is more efficient, more flexible, and can stimulate neurons more effectively," said Prof. Hanein. "Our prosthetic is also more compact, unlike previous designs that used wires or metals while attempting to sense light."

Gauging Attitudes toward Migrants

With the spike in migration across Europe's borders, attitudes to migrants vary from openly hostile to tolerant. Traditionally, it was believed that negativity toward migrants was based on the threat of competition – for jobs, housing, welfare benefits, medical services and social acceptance. Now, a study

by new faculty recruit Dr. Anastasia Gorodzeisky of the Department of Sociology and Anthropology, Gershon H. Gordon Faculty of Social Sciences, has found that negative attitudes to migrants are based not only on fear of competition but also on traditional racial prejudice and stereotypes. "There's a direct correlation between socioeconomic





Your personality type may predict your next real estate move. A new study co-authored by Dr. Danny Ben-Shahar of TAU's Faculty of Management delves into the effects of personality traits on real estate decisions and finds an unmistakable link between the two.

Using a popular personality assessment test called "the Big Five," Ben-Shahar and colleagues measured basic personality traits such as openness, extroversion and neuroticism. Then, they asked five questions about real estate preferences, including preferred type and duration of a mortgage and whether to rent or buy. The results indicated a clear trend: Neurotic people preferred the immediate security of homeownership with minimal loans, while those with high openness scores — people who are imaginative and artistic — tended toward fixed-rate mortgages, which are paid off over the long-term.

The research, published by the *Journal of Behavioral and Experimental Economics*, also shows a strong correlation between regional "personality types" in the US and statewide real estate trends. For example, South Carolina, which scored high on openness, had a greater share of fixed-rate mortgages.





Migrants in a Tel Aviv neighborhood

background and level of tolerance," says Gorodzeisky, noting that negativity tends to thrive among blue-collar workers. The study was co-authored with Prof. Moshe Semyonov, a former Dean of the Faculty of Social Sciences and incumbent of the Bernard and Audre Rapoport Chair in the Sociology of Labor. In Israel, the situation is made

more complex by the issue of religiosity: the most hostile groups to migrant workers tend to be more religious, while secular groups such as immigrants from the former Soviet bloc have proven more tolerant in their attitudes. The key to improving negativity toward migrants lies in intensive education toward tolerance, concludes Gorodzeisky.

Do's and Don'ts of Venture Policymaking

It seems as if every country in the world these days wants to become the next "Silicon Valley." National strategies for promoting entrepreneurship range from headline-grabbing programs such as Startup Chile, to tax breaks for company founders in Lithuania, to long-term investments in schooling such as the British government's recent addition of computer programming to the national curriculum. However, according to Dr. Robyn Klingler-Vidra, head of the Policy Research Strand at TAU's Coller Institute of Venture and a faculty member at King's College London, recent studies have shown that public subsidies have a negative impact on entrepreneurship. Despite the perceived necessity - and ubiquity - of governmental promotion of venture investment, few public policymakers have succeeded in effectively supporting the venture ecosystem. Dr. Klingler-Vidra has formulated three do's and

don'ts to help policymakers navigate the challenging landscape of venture policymaking: *Do* build on local competitive advantages; *do* have a long-term vision; and *do* co-invest with the private sector. *Don't* over-engineer support; don't fund activities that are unlikely to become self-sustaining; and don't concede tax revenues unnecessarily. With this formula, Dr. Klingler-Vidra says, governments can successfully facilitate local entrepreneurial activity.



By Sandy Cash

Batt

One was called "Bruce Willis" by lab-mates for her die-hard determination to succeed. Another is developing tiny disease-killing "missiles." Meet some of the bold scientists and clinicians on the front lines of cancer research today at Tel Aviv University.



Dr. Neta Erez with PhD student Yoray Sharon

Despite the "War on Cancer" declared almost 45 years ago – and the tremendous advances in the field to date – cancer recently edged out heart disease as the number one cause of death worldwide. According to **Prof. Nadir Arber**, Head of Tel Aviv University's Cancer Biology Research Center, Djerassi-Elias Institute of Oncology, cancer remains an elusive killer because it simply cannot be approached as a single disease.

"The term 'cancer' refers to 150 different conditions, classified by the organ where the cancers originate, the

types of cells in which they develop, and various biological processes involved in their growth," explains Arber, a professor of gastroenterology and practicing MD.

"That's why the most promising new developments in cancer today incorporate many fields – the biological sciences, engineering, physics, psychology, bioinformatics and epidemiology," Arber says.

TAU Vice President for Research and Development, Prof. Yoav Henis, himself a cancer researcher at the Department of Neurobiology, George S. Wise Faculty of Life Sciences, stresses, "The cross-disciplinary approach is where Tel Aviv University shines. We have 60 world-class lab groups and some 250 clinicians working together on research that brings lab discoveries to the hospital and vice versa."

Staring down metastasis

During her post-doctoral research, **Dr. Neta Erez** of the Department of Pathology was known as "Bruce Willis" by her lab team due to her die-hard resoluteness. As head of her own lab at the Sackler Faculty of Medicine, Erez devotes herself to elucidating what

happens when cancer metastasizes, or spreads, and becomes far more deadly. Bringing science one step closer to an eventual strategy for metastasis prevention, Erez has identified a process by which some cells "go rogue" and support the metastatic process.

"When cancer is diagnosed before the primary tumor has had a chance to spread to another part of the body, patients' prognosis is usually good," Erez says. "However, once metastasis occurs, cancer is mostly incurable. In our lab, we've demonstrated that inflammation – an immune system response that can be associated with cancer – is part of the springboard that allows early-stage metastatic cells to leap onward."



Prof. Nadir Arber



ling Can

Erez studies inflammatory factors that help breast cancer spread to the lungs. "Comparing normal and cancer-associated connective tissue cells known as fibroblasts, we've characterized an early-stage activation that occurs before metastasis proceeds," she says. "Once we identify the molecular signals causing this activation, it may be possible to target them with drugs that would block metastasis," she says.

In another area of her research, for which Erez just received a major European Research Council grant, she is looking at how skin cancer metastasizes to the brain. "We've shown how brain cells in the surrounding tissues are hijacked and corrupted so that, instead of their original function related to maintenance and repair of injured tissue, they help secondary tumors become established in the brain. Our next challenge will be to find molecules that can be drug targets for disrupting this process."

Prof. Shamgar Ben-Eliyahu is also working on a drug for preventing metastasis. In his case, however, the drugs under investigation are well-established, safe and readily





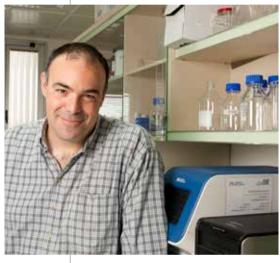
available. They just need to be given at the right dosage, at the right time. Interestingly, this project was inspired not only by Ben-Eliyahu's academic training in mathematics, computer science and biomedicine, but also by his PhD and post-doctoral research in the area of psycho-biology and people's response to emotional stress.

"Micro metastases – the very first stage of cancer's spread – often exist even before the surgical removal of a primary tumor," says Ben-Eliyahu, a member of TAU's Sagol School of Neuroscience and of the School of Psychological Sciences. "Then, the surgery itself may release cancerous cells into the bloodstream and lymphatic

system. Some eventually create secondary tumors in other tissues."

Ben-Eliyahu explains that surgery has both chemical and psychological side-effects. "Surgery is associated with the release of stress hormones that affect the level of pain experienced by a patient, suppress the body's immune response, and actually make tumor cells

NANO-SCALE DRUG CARRIERS BRING DELIVERANCE



Tiny "cancer missiles" that zoom drugs directly to a patient's diseased cells, developed by scientists affiliated with TAU's Marian Gertner Institute for Medical Nanosystems, are taking cancer treatment to new levels of effectiveness and personalization while also reducing harmful side-effects.

"Researchers all over the world are working on the development of personalized therapies that will fit the right cancer medication to the right patient," says **Prof. Dan Peer** of the Department of Cell Research and Immunology, George S. Wise Faculty of Life Sciences. "In our lab we have designed a nano-scale drug delivery system that not only targets diseased sites more accurately, but its payload of drugs is tailored to a particular patient's condition, responsiveness and genetic makeup."

The system developed by Peer and his team uses natural, lipid-based materials that are found in the body as drug carriers. Injected into the patient's bloodstream, the carriers home in on the cancer cells only – leaving the surrounding healthy cells and tissue damage-free.



Prof. Dan Peer "Initial lab results have been very encouraging," says Peer, who is Head of the Laboratory for Nanomedicine, TAU Center for Nanoscience and Nanotechnology, as well as Director of the Leona M. and Harry B. Helmsley Nanotechnology Research Fund. "In ovarian cancer, we achieved a 25-fold increase of on-target medication delivery, decreased the cancer cells' drug resistance, and boosted the destruction of the tumor; the cancer cells began to die off within 24-48 hours." Soon Peer, together with biomedical startup Quiet Therapeutics, will begin clinical trials for the technology.

In other pioneering work, a team led by **Prof. Ronit Satchi-Fainaro**, Chair of the Department of Physiology and Pharmacology and Head of the Vascular Biology and Nanomedicine Lab at the Sackler Faculty of Medicine, has chemically synthesized a polymer nanocarrier that attacks and dismantles cancerous cells and their supportive micro-environment selectively.

"The advantage of our polymer is that it can get a combination of chemotherapies and biological substances to the tumor site at the same time, while evading the body's immune response much like a stealth bomber," says Satchi-Fainaro. "The immune system does not recognize the polymer as a threat, and does not attack it, because it's made up of a chemical that the body manufactures anyway."

In recently published laboratory findings, treatment with Satchi-Fainaro's technique improved overall cancer survival rates five-fold in comparison to a control group.

"The applications are endless," she adds. "Along with different chemotherapies, the polymer can ferry additional types of drugs to the cancer microenvironment, such as blood vessels inhibitors and anti-inflammatories. We can also analyze the patient's tumor cells to tailor the right drug combination for him or her using specially tailor-made 3D tumor models.

"Our aim is to expand our arsenal of anti-cancer weapons while decreasing the toxicity of the chemotherapy drugs used," says Satchi-Fainaro who, along with serving as advisor to several Israeli and international biotech companies, is Visiting Professor at Harvard Medical School and Children's Hospital Boston and recipient of the prestigious 2014 European Research Council Consolidator Award.

more aggressive," he says. "In my lab, we've demonstrated how anti-inflammatory drugs – administered just before and after surgery – can counteract this surgical stress response. The result is a dramatically lower rate of metastasis and better long-term survival."

This strategy, proven in the laboratory, has begun to be examined in human clinical trials. But as Ben-Eliyahu points out, the very simplicity of the approach may prove a disadvantage.

"The drugs we use are commonly used, don't cost much, and, used correctly, have the potential to prevent disease recurrence in just a few critical days of treatment," he says. "Since pharmaceutical companies tend to invest in drugs that can be patented and yield large profits over many years, it may be a challenge to gather the funding needed for full-scale clinical trials. Still, we are optimistic, and expect good results in both breast and colorectal cancer patients."

The endocrinology connection

Breast cancer is the career focus of Dr. Ido Wolf, a member of the Sackler Faculty of Medicine and Head of the Department of Medical Oncology at the TAU-affiliated Tel Aviv Sourasky Medical Center. In 2008, Wolf identified how klotho - a natural hormone emitted by the brain and kidneys - prevents breast cancer cells from multiplying. Later, he demonstrated that women who carry a mutated form of klotho have a much higher risk of developing breast cancer. His more recent work - also related to breast cancer - was recognized with the 2014 Kline Prize for Excellence from the Israel Science Foundation.

"I'm interested in cancer endocrinology, which is a study of the hormones, like estrogen, that tumor cells need to grow," Wolf says. "Drugs can block estrogen production, or limit its ability to reach cancer, but some patients are

resistant. In our lab, we demonstrated how a specific genetic mutation, which is not seen in the primary tumor but only appears when the cancer metastasizes to the liver, results in a structural change that makes these cancer cells resistant to hormone therapy medication. Now that we know about this mutation, we can look for ways to prevent it, so that hormone therapy can do its job."

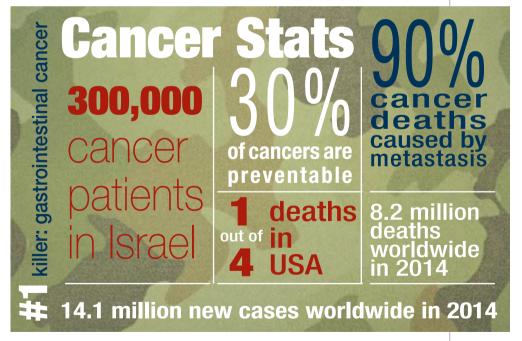
In another project, Wolf has shown that klotho is also implicated in cancer of the pancreas. Specifically, he noticed that while healthy pancreatic cells contain klotho, cancerous cells do not. And that, he says, is good news.

"When we injected cancerous tissue with klotho in the lab, not only did it prevent the cancer from spreading, but the tumors actually became smaller," Wolf reports. "This points toward a

Body, heal thyself

A prominent direction for TAU cancer research combines traditional treatments – surgery, chemotherapy and radiation – with "immunotherapy" that boosts the body's innate talent for targeting and destroying cancer cells. For this partnership to work, however, the first order of business is to make sure that the immune system doesn't work against itself.

"Some immune system white blood cells, called T-cells, recognize and destroy cancer, while others put a limit on this destruction," says **Prof. Jacob Schachter**, head of the Ella Institute for Treatment and Research of Melanoma at the TAU-affiliated Chaim Sheba Medical Center. Schachter explains that, in his approach, he does not try to treat the tumor but rather to calibrate immune activity.



possible therapy for this particularly aggressive form of cancer. In addition, testing for the presence of klotho – or more specifically, for the lack of it – might provide earlier diagnosis, allowing physicians to treat pancreatic cancer more effectively."

His team begins with surgical removal of metastatic cancer tissue from which they isolate the "good," cancerdestroying T-cells. Next, chemotherapy is used to destroy all the T-cells that remain in the patient's body. "Once this is accomplished," explains Schachter,



DECLARING A "CYBER-WAR" ON CANCER

One aspect of defeating an enemy depends on understanding who - or what - you're fighting. "For years we've viewed cancer as 'dumb' cells that randomly mutate and run amok," says Prof. Eshel Ben-Jacob, a member of TAU's Raymond and Beverly Sackler School of Physics and Astronomy and Sagol School of Neuroscience, and incumbent of the Alex Maguy-Glass Chair in Physics of Complex Systems. "But that model does not explain why cancer

> outwits doctors at every turn or why - after decades medical science is only marginally closer to beating it."

Drawing upon his decades-long research of bacterial social intelligence, Ben-Jacob proposes a new picture of cancer as a networked society of smart cells that communicate with each other to survive. "There is growing evidence that cancer cells, much like bacteria, rely on advanced communication, social networking and cooperation to grow, spread within the body, colonize new organs, and develop drug resistance, "he says.

"What we have to do now is declare a cyber war on

cancer. We need to develop a new class of drugs and treatments that will disrupt cancer's intricate modes of cell-to-cell communication and decisionmakina.'

This rethink of cancer's self-organization has unleashed numerous experimental studies, including two recently co-authored by Ben-Jacob together with colleagues at Rice University's Center for Theoretical Biological Physics and the University of Texas MD Anderson Cancer Center, and partially supported by the Tauber Family Funds.



Bacteria model of

metastasis

"the isolated 'good' cells - expanded from millions to billions in our lab – are delivered back into the bloodstream, where they are free to attack the tumor because there are no 'bad' T-cells to inhibit their activity." This strategy, called TIL, or tumor-infiltrating lymphocytes technology, was devised at the NIH, where Schachter helped advance the method's clinical development.

Schachter says that the TIL method - the use of which is rare worldwide, and in Israel available only at Sheba shrinks 50% of metastatic melanoma tumors, and in 10 to 20 percent of patients results in a total cure. "One of our advanced cancer patients who we treated four years ago is now competing in marathons," he enthuses.

Schachter's lab has also recently developed an entirely new therapeutic compound.

"Our compound targets specific T-cells that allow tumors to thrive because they 'shield' cancer from the body's immune response," Schachter explains. "This new drug was developed in-house, from A to Z. It is our hope that this will soon translate into more effective anti-cancer therapy."

Cancer immunology is also the focus of Prof. Shai Izraeli, incumbent of the Gregorio and Dora Shapiro Chair for the Research of Malignancies, a world-recognized expert on childhood leukemia who recently became the first Israeli to be elected a member of the Board of the European Hematology Association. A part of the Israeli Centers of Research Excellence (I-CORE), Izraeli is a member of the Department of Human Molecular Genetics and Biochemistry at the Sackler Faculty of Medicine and the Cancer Research

Center at the TAU-affiliated Sheba Medical Center.

He was attracted to the study of blood cancers because of the way that laboratory findings can quickly be translated into improved medical care – a practical medical mission he endeavors to pass on to his students through his role as director of TAU's MD-PhD program.

"Physicians who are also trained scientists are uniquely capable of recognizing important questions and identifying the research strategies that will eventually lead to better clinical treatment," he says. "This is especially gratifying when those benefiting from the work are little kids."

Izraeli recalls how, in 2001, he was treating a child who had both leukemia and Down's syndrome, two conditions that often occur together. This inspired him to go back to the lab and search out the molecular basis of this linkage.

The search began with the examination of a known but unexplained phenomenon: The genetic calling card of Down's – an extra copy of chromosome 21 – appears in about half of childhood leukemias, but only in a patient's abnormal, leukemic cells. Izraeli hypothesized that a study of leukemia as it appears in Down's children would reveal important insights about childhood leukemia in general.

He was right. His investigation revealed a molecular abnormality triggering the over-production of immature immune cells. This abnormality, while not unique to Down's syndrome, is a key characteristic of some very hardto-treat forms of childhood leukemia.



Prof. Shai Izraeli, grantee of the Varda and Boaz Dotan Research Center in Hemato-Oncology



Now integrated into cancer diagnostic protocols all over the world, Izraeli's findings also point toward new therapeutic strategies. "An over-production of immune cells is typical of autoimmune conditions – like MS and allergies – for which drugs are available. It may be possible to use some of these medications

to target high-risk variants of childhood leukemia, and allow more patients to grow up cancer-free."

Izraeli's work is being bolstered by a grant from

the Varda and Boaz Dotan Research Center in Hemato-Oncology, which was recently established at TAU as the first in a series of disease-specific research hubs. The center, headed by Prof. Nadir Arber, is providing targeted support to blood cancer researchers at both the University's Sackler Faculty of Medicine and its George S. Wise Faculty of Life Sciences.

One-stop-shop for prevention

A targeted approach is also key to a unique clinic, the Integrated Cancer Prevention Center, where Arber serves as medical director. Located at the Sourasky Medical Center, the clinic offers patients thorough screening for the 11 most common cancers in a single

"We are all on the same team because we are motivated by the same goal – to save lives."

2-3 hour session.

"By identifying patients' susceptibility to certain cancer types, and by detecting cancers in their earliest stages, we make it possible to bypass the long and painful protocols of full-blown cancer treatment. This helps people fight cancer more effectively, or avoid it altogether," says Arber, who has developed a method for detecting early-stage colon

cancer through a simple blood test.

An avid follower of Israeli soccer team HaPoel Tel Aviv, Arber believes that teamwork also has a place in the advancement of science. To this end, he recently hosted a major cancer prevention conference on the TAU campus, which attracted experts from Japan, Hong Kong, Italy, Poland, Germany, France, Spain, Denmark, Canada and the Czech Republic, as well as from Israel.

In summing up TAU's contributions to the cancer field, Prof. Arber notes that TAU scientists collaborate regularly with the very best institutions abroad, such as America's Mayo Clinic, DKFZ – the German Cancer Research Center – and institutes in Japan and China. "We are all on the same team because we are motivated by the same goal – to save lives," Arber concludes.

Additional reporting for this item came from Louise Shalev, Tallie Lieberman and American Friends of Tel Aviv University.

SEEING THE POSITIVE, EVEN IN CHILDHOOD CANCER

The diagnosis of cancer is a major crisis in the lives of sick youngsters and their families and requires considerable emotional coping skills. Most literature on the subject discusses the negative emotions and painful factors of living with the disease. Now, **Irit Schwartz-Attias**, a TAU doctoral student in nursing with 14 years' experience working with children with cancer, has set out to prove that families can feel positive emotions and maintain well-being – in spite of the difficult situation. She is searching for the link between parents' feelings and those of their sick child's, and vice versa.

"In my clinical work I have seen time and again that when the parent remains positive and hopeful, the child will feel hope and develop better coping skills," Schwartz-Attias says. "Conversely, parents who reveal their depression and hopelessness, even when the child has a good prognosis, negatively affect the child's subjective well-being." Drawing on techniques from positive psychology, Schwartz-Attias is developing a pilot project for helping children and parents find

TAU PhD student Irit Schwartz-Attias

the positive experience in cancer situations. Such an approach, She believes, could have long-term implications for these families. The research is being conducted under the supervision of Prof. Tamar Krulik of the Department of Nursing, Stanley Steyer School of Health Professions, and Prof. Tammie Ronen, Dean of the Gershon H. Gordon Faculty of Social Sciences and Head of the Renata Adler Memorial Research Center for Child Welfare and Protection.



Participants on a group tour to the Knesset and the Supreme Court

Legal Immersion, Israeli-Style

TAU's Parasol Foundation International LLM Program is opening up new vistas in the law to international graduate students

For Tammy Pustilnick, 27, a lawyer from Chile, Israel was the best place to hone her knowledge of international and humanitarian law – especially during the 2014 Gaza conflict. "Studying in Israel during that time was like being in a learning laboratory," says the graduate of the first class of TAU's Parasol Foundation International LLM Program. The program is centered at TAU's Buchmann Faculty of Law, ranked first in Israel and among the top law schools in the world, and offered through TAU International.

The Program offers three study tracks for lawyers wishing to gain an academic grounding in their areas of specialization: Law, Global Governance and Human Rights; Law, State and Religion; and Law and Technology. More than 50 courses taught in English are on offer, allowing students to explore contemporary challenges to law stemming from processes of globalization, the complexities of the Middle East Region, the Israeli legal and social systems, and the technological dynamism

of the "start-up nation."

Eran Brauer, Senior Advisor to the Parasol Foundation Trust in Israel, says, "The Trust is supporting various cross-border projects that enable foreign students to benefit from an excellent academic level and entrepreneurial environment in Israel. The LLM Program is a great example of fruitful cooperation

between us and the University. Eventually, the program's graduates will return to their home countries and become goodwill ambassadors for Israel."

The Parasol Foundation Trust awards substantial fellowships aimed at promoting diversity and rewarding academic excellence. The Trust is also supporting Indian students at the TAU Business School as well as at other universities.

Global learning center

Academic Director of the Program, Prof. Eyal Benvenisti, says, "The LLM Program connects the University with the world and is part of our effort to establish ourselves as a global learning center. The mingling between the international and Israeli students enriches the learning experience for both and

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"The Program's graduates will return to their countries and become goodwill ambassadors for Israel."

results in a cross-fertilization of ideas that raise the level of discussion in the classes," he says.

For Tammy, who completed her law degree in Chile where she worked in the antitrust sector, the TAU law experience was a real eye opener. "On this program

I gained so much knowledge about what international law actually says about conflict situations. It is important to be informed and understand the legality of everything since the issues are very complicated."

Tammy is happy. Not only has she recently completed a world-class graduate law degree at TAU, but she's enjoying living in Tel Aviv with her husband, whom she met on a Birthright trip to Israel, and their first child – "an Israeli baby." She is now extending her time at TAU to write a thesis in her field and hopes to eventually work at an NGO in human rights law.

Microscope on Israeli legal system

New this year is Aleksandra Hristova, 29, from Skopje, Republic of Macedonia. For Aleksandra, who is taking the Law, State and Religion track in the program, Israel – with its complex societal makeup – is the very best place to focus on her interest – how democratic societies deal with the human rights of ethnic and religious minorities.

Aleksandra studied law at the South East European University in Tetovo, a unique university that was established to promote togetherness and equality ual to express his/her beliefs should be free but not collide with the values and freedoms of other groups within society and create tensions," she says. "I hope that this program as well as my living experience in Israel will not only help me comprehend but also find ways and guidelines for how to deal with these issues."

Meanwhile, Aleksandra is extremely impressed by the level of teaching at TAU. "The teachers fulfill all my criteria for being good professors. They're openminded, remarkably knowledgeable and always try to encourage dialogue and debates. Our brainstorming sessions



ceremony





Career entry point

Julienne Yueh, 34, from California, selected TAU because of its strong reputation, but also because she believed the degree would set her on her desired career path. A graduate in economics from UC Davis and in law from Santa Clara University, Yueh has worked as an economics analyst for the State of California, and as a litigator in both civil tort law and immigration and deportation proceedings.

At TAU, Yueh decided to switch from litigation to intellectual property law, in which she hopes to specialize in California. She gained a broader perspective from her TAU experience, including great networking opportunities with other students and faculty.

between minorities in Macedonia. After her studies, she worked as a local expert in legal issues in an EU project focusing on the legal aspects of Macedonia's candidacy for the European Union and then in the area of contract law in a corporate telecommunications company. Even though her working experience is not related to her master's studies, she is convinced that the Law, State and Religion track will greatly contribute to her future endeavors in the area of her interest.

"Nowadays in the Balkans, in Europe as well as in other countries around the world, there is a significant relationship between minority religions and communities and the democratic liberal state. The rights of the individare very useful for understanding the Israeli example and experience as well as learning about classmates' societies and their views on certain issues in the law."

As for what she can bring to TAU, Aleksandra says, "since Israel is a perfect example of a country where democratic and religious principles work hand in hand in its legal system, it will be my pleasure to share my positive Israeli experience with those less familiar with the country and promote Israeli values and the Jewish culture."

The Parasol Foundation Trust is a Gibraltar-based philanthropic trust dedicated to supporting charitable projects in the areas of health and medical research, education, community services, culture and heritage, female entrepreneurship and disaster relief. Ruth Parasol is the principal benefactor and a founding member of the International Advisory Board of the Trust.

Looking to Nature for Design Ideas

Yael Helfman-Cohen, a doctoral student at the Porter School of Environmental Studies, is promoting the field of biomimicry in Israel in a bid to inspire smart, sustainable engineering designs When Japanese engineers designed a superfast train line linking Osaka with Tokyo, they never imagined a backlash. But the trains created sonic booms when they exited mountain tunnels, rattling windows and nerves up to 80 kilometers away. Of the engineers who puzzled over a solution, one, fatefully, was a birdwatcher. One day, as he observed a kingfisher soundlessly enter the water to bear down on his prey, he had an idea.

Today the bullet trains of Japan sport "beaks," with head cars redesigned according to the complex angles of kingfisher beaks. Not only does the new design eliminate noise pollution, it increases energy efficiency. This is nature's knowledge in action. This is biomimicry.

Biomimicry as a springboard

Rather than rely on serendipity, Porter School of Environmental Studies doctoral candidate Yael Helfman-Cohen seeks to make the vast knowledge base of nature readily available to engineers. "There are many examples of connections between engineering problems and sustainable biological solutions," says Helfman-Cohen, "but there is still no systematic method for transferring knowledge between disciplines."

Helfman, an engineering and management graduate, is answering this need with her doctoral thesis, "Biomimetic design method for innovation and sustainability," under the guidance of Prof. Yoram Reich of TAU's School of

Mechanical Engineering. She has created a database of repetitive structures found in biological systems, linking them to engineering functions. One example is the "lotus effect." The lotus leaf is characterized by its repetitive structure of protrusions, which Helfman-Cohen associates with the engineering functions of attaching or detaching. The protrusions cause water droplets to bounce off the leaf and collect particles of dirt along the way. The lotus effect mechanism has inspired self-cleaning products such as outdoor paints, glass and dirt-repellent clothing.

Championing biomimicry

A cofounder of the Israel Biomimicry Organization, Helfman-Cohen's vision is to establish Israel's first biomimicry institute. "We possess everything needed to lead in this field – strong engineering, an innovative spirit and extensive knowledge in biological science, which



accounts for more than 50% of all Israeli doctorates. With the right investment Israel can be the biomimicry start-up nation," she says.

BIOMIMICRY EXAMPLES FROM NATURE

Natural Structure	Function	Application
Burrs' tiny hooks	Attaching	Velcro
Lotus leaf texture	Detaching dirt	Self-cleaning surfaces
Sharkskin bristles	Deterring bacteria	Operating room surfaces
Termite nest tunnels	Air circulation	Ventilation systems
Eagle wingtips	Energy efficient movement	Airplane winglets



TAU's new Photography Studies Program shows the growing importance of the medium in the history of art, culture and society

With the increasing popularity of photo sharing apps and sites, photography is becoming the most dominant visual medium in contemporary means of communication. Nevertheless, the history of photography is an understudied discipline in Israeli academia. Recognizing this, the Department of Art History, Yolanda and David Katz Faculty of the Arts, established an exciting new Photography Studies Program that is exposing students to contemporary trends in the field.

The program aims to familiarize students with the history and theory of photography as it relates not just to art history, but also to general history, sociology, anthropology and philosophy, says Dr. Vered Maimon, the driving force behind the program. "Unlike fine art, photography is not just an art form; it has uses and applications as a form of documentation and evidence," says

Maimon. "We wanted to create an interdisciplinary platform that would open up a dialogue among students coming from different fields of study," she says.

This year's course offerings include a class on Palestinian and Israeli photography, Japanese photography, photography and memory, and photography collections in museums, among others. "Introducing photography into the curriculum has opened up the art history department to innovative critical and cultural perspectives," says Maimon. "It's an exciting time."

Maimon, a TAU graduate, was recruited from Columbia University to initiate and head the program. She received her BA from TAU's Department of Film and Television, and her MA in cultural studies from TAU's Porter Institute for Poetics and Semiotics, Lester and Sally Entin Faculty of Humanities. "During my film stud-

ies, I became interested in photography as an art form and later did my PhD at Columbia on photographic pioneer William Henry Fox Talbot."

The Photography Program was inaugurated at a three-day international conference held on campus entitled "Photographic Imagination" in cooperation with Yale University, Haifa University and the Shpilman Institute for Photography. "We discussed how people relate to photography on a subjective level and how they project their fantasies, desires, expectations and imagination onto the photograph," she says. "The agenda went beyond viewing photographs as an objective form of truth."

Attending were anthropologists, philosophers, historians and art historians from Israel, Germany, UK, US, and Canada, among them co-organizer Prof. Margaret Olin of Yale University.

The Arab Spring may be over, but the Middle East is still experiencing a revolution in the democratizing dialogue made possible by Web-based social networks. For Israel, these networks have emerged as an effective platform for pillorying Israeli policies. At the same time, they give citizens from all over the region and the world powerful tools for reaching out, and giving peace a chance.

A conference initiated by TAU's Orange Institute for Internet Studies focused on social networks and the 2014 Gaza war. The Orange Institute was founded in 2003 by former TAU Director-General and Vice President Prof. Niv Ahituv, former Communication Department Chair Prof. Dafna Lemish and journalist Eli HaCohen. It brings together academic researchers, public servants, activists and industrial leaders to discuss the Internet of today – and imagine the online world of tomorrow.

"The extent to which the Web has changed our lives is astounding," says HaCohen, who alongside current Academic Director Prof. Dov Te'eni, serves as the Center's Professional Director. "For example, at one of our events, experts discussed the Egyptian revolution from an online perspective, while getting minute-to-minute updates directly from the street protests. This immediacy creates a challenge – to make sense of it all."

Gaza – A virtual perspective

At the conference, Internet experts described how social networks provided commentary on the Gaza-Israel conflict.

"About a million Palestinians – some 30% of Gaza's population – are active on social networks," says Orit Perlov, a research fellow at the Institute for National Security Studies. "Whether they express themselves on Facebook, Twitter, YouTube or in a blog, they're participating in dialogue that is open and pluralistic, while living in a society



that is definitely not. As an analyst, my job is to correlate these online discussions with other factors, to create a 'snapshot' of Palestinian public opinion."

Perlov found that, while most Gazans don't believe in peace, they also reject violence, and only refuse to rise up against Hamas out of fear for their own lives. "The war affected attitudes toward Israel; because the IDF did not destroy Hamas, most Gazans believe Israel will never do so – an attitude with strategic implications for the future."

The Internet "inside"

Operation Protective Edge also starred on social networks on the Israeli side of the border. Surprisingly, despite their argumentative reputation, many Israelis backed away from challenging conversations during the conflict.

"During the Gaza war, there was a spike of political postings on Facebook," says Dr. Shira Gvirsman, a member of the Department of Communication, Gershon H. Gordon Faculty of Social Sciences who was recently recruited to TAU after completing post-doctoral research at the University of Michigan. "Examining the online activity of Jewish Israelis, we found a high rate of 'unfriending' – cutting people off so their posts would no longer be displayed."

Gvirsman explains that "unfriending" is not overtly antagonistic, because in most cases people are unaware that the connection to them has been severed. "Unfriending is a protective act," she says. "By 'cleansing' their feeds from posts that deviated from their own preexisting opinions, many Israelis demonstrated a desire to be shielded from thoughts that might make them uncomfortable."

Gvirsman's data provides anecdotal counter-point to "cyber-optimists"



who believe that Internet use breaks down social barriers. And, she adds, the Israeli experience may be just the tip of the iceberg.

"Google already engineers search results, providing customized information flow based on our personal preferences," she says. "As a result, the Internet has become a poorer marketplace of ideas, and an engine for polarization. In this sense, social networks, while bringing individuals together, also keep society apart."

From social networks to social movements

According to Dr. Elad Segev, member of both the Orange Institute and the TAU Department of Communication, "Negative messages diffuse faster than positive ones, making social network services excellent disseminators of hate," Segev says. "With almost no accountability, negative messaging and ma-

nipulation in media have become an acceptable form of 'warfare' – certainly more acceptable than physical violence."

However, the power of social networks is sometimes exaggerated. "Together with my colleagues, I examined the so-called 'Twitter Revolution' in the Arab world, showing that realworld activity triggered activity on social network services, not the other way around," Segev explains. "In other words, social networks are only technological means used by people. They cannot light the fire – they can only provide the 'wind' that allows a fire to spread."

Building bridges

So what can be done by those wishing to use social networks to dampen the flames in the Middle East? According to Orange Institute guest lecturer Shimrit Meir, editor of Al-Masdar, an Arabiclanguage website, the first order of business is for Israel to become a player.

"Some people don't trust any Arab-Israeli dialogue, and when the media unquestioningly reports Hamas propa-

66

"Social networks, while bringing individuals together, also help keep society apart."

ganda as fact, it reinforces this attitude," Meir says. "However, the Arabiclanguage IDF blog – which covered the Gaza war differently from what was seen in the Arabic media – has 100,000 followers. The lesson is clear: if we want to communicate our point of view, we have to come to the party, even if we're not invited."

Meir says that Israel's messaging must be tailored for Arab consumption. "Our website promotes moderation by opening a non-ideological window on the State of Israel," she says. Sensitivity is needed, though, to ensure that this

window isn't slammed shut. "When reporting on a terrorist attack, we call it an 'operation' without passing judgment," she says. "The point is to keep the conversation going."

Digital diplomacy – A work in progress

One member of the Israeli government who took to social networks during Operation Protective Edge demonstrated just how tricky Web-based diplomacy can be.

"Ambassador to the US Ron Dermer hosted a question-and-answer session on Twitter that was quickly dominated by online activists attacking Israel," says Ilan Manor, a TAU student who recently completed his master's degree in mass media. "Still, it was remarkable that a diplomat was willing to engage with audiences and answer tough questions, midway through a violent international crisis."

Manor says that Israel's leaders can no longer afford to hide in the trenches. "In times of calm, we brand ourselves as a western democracy and a high-tech

hub, yet in a crisis, this national 'selfie' changes dramatically and we present ourselves as victims," he says. "The good news is that the

government's online presence is among the most active in the world. Getting others to accept Israel's message may be an uphill battle, but we're not abandoning the fight."

The Orange Institute for Internet Studies is a multidisciplinary framework dedicated to analyzing the impact of the Internet on education, health, privacy, government, the Jewish world, racism and anti-Semitism, information security, and the digital gap. The Institute offers courses, holds workshops and conferences, and acts in an advisory capacity for governmental agencies and other organizations.

Zionism as a Verb

TAU graduate Gidi Grinstein is a marathon runner, both literally and figuratively. As founder of the Reut ("Vision") Institute, a Tel Aviv-based non-profit research, strategy and leadership group focused on Zionism in the 21st country, Grinstein stands at the forefront of current debate about the future of Judaism and Israel. His 2013 book, Flexigidity: The Secret of Jewish Adaptability & Challenge and Opportunity Facing Israel, explores the source of Jewish survival and resilience. Formerly Grinstein served as Secretary and Coordinator of the Israeli Delegation for Negotiations with the PLO under Prime Minister Ehud Barak, including at the 2000 Camp David Summit. Grinstein holds degrees from Tel Aviv University in law and economics and was a Wexner Israel Fellow at the Kennedy School of Government at Harvard University. He is married with five children.

In a recent article, you said, "Zionism is a verb, not a noun." What does that mean?

I mean that Zionism – the most successful and dynamic national movement of the 20th century — permanently evolves in its ability to seize opportunities and deal with threats. A century ago, Zionists sat on stools and milked cows in Eretz Israel. Nowadays, modern machinery milks cows and the Zionist enterprise is to create high-tech industry and jobs in the Negev, as well as to make a distinctly Jewish and Israeli contribution to humanity.

What does the Reut Institute stand for?

Reut stands for taking action to help Israel and the Jewish people be secure, prosper and serve their mission of *Tikkun Olam*. We also stand for inclusiveness in society, so that all people – including the weak, disabled

and elderly – get a fair chance to shape their communities, to participate in generating economic growth, and to benefit from it.

What does Reut do?

Thomas Friedman of the *New York Times* has called us Israel's "foremost strategy group." We not only support decision-makers on issues relating to national security and socioeconomic development, but also take on major leadership initiatives.

One large project involves countering the delegitimization of Israel. In 2009 we formulated the first comprehensive response to the BDS movement, adopted by the Government of Israel and many Jewish and pro-Israel organizations, and have recently run an Israel Legitimacy Hackathon called Firewall to create better tools to fight BDS using big data and cyber security methods.

In the area of economics, Reut is

now piloting in Safed and the Western Galilee a unique approach for turning around struggling communities and regions. We've been working together with leaders such as Mayor Ilan Shochat of Safed and Raya Strauss of Nahariya to drive inclusive growth primarily through small businesses and local entrepreneurship. At Reut we believe that Israel must reorganize itself as a network of resilient and prosperous communities in order to achieve sustainable economic prosperity.

Your book is called "Flexigidity." What does that mean?

The secret of Jewish survival across millennia stems from the manner in which Judaism blends new and old, innovation and tradition, flexibilities and rigidities – hence "flexigidity." This hybrid approach remains key for Judaism and Israel's future.





Gidi Grinstein

Does this apply to the religious leadership?

Definitely. The view in "official" Israel that Orthodoxy is the only legitimate voice of Judaism is divorced from Jewish history. Some of today's progressive voices will be future Orthodox voices - in the same way that today's Orthodox Judaism was born out of big reforms of centuries ago. The progressives and the Orthodox of Judaism are interconnected and interdependent, as we are one people, one tribe, one family with a shared history and destiny that transcends faith, ideology and personal background.

How do you view Diaspora-Israel

Historically, the existence and success of Zionism has been a joint project of those who live in Zion and the Diaspora. The resources and capacities of the Diaspora, as well as its global

spread, remain of crucial significance to Israel's national security, economic development and international standing.

Today, though, I see a deepening divide in culture and values between the State of Israel and Diaspora communities. In the Diaspora, Jews are a minority whose personal and economic security depends on the tolerance of and welcoming by the non-Jewish majority.

In Israel, Jews are the majority, but are perceived to be compromising the rights of Israel's non-Jewish citizens and the Palestinians. Consequently,

many Diaspora Jews feel tension between their support for Israel and their liberal values, and a growing number of Jewish communities are distancing themselves from Israel. We must reverse this trend if Israel is to remain the nation state of the Jewish People.

Is Zionism under threat?

Zionism has always been under threat, and will continue to face permanent adversity and exceptional volatility as far as we can see into the future. Beyond external enemies, a major concern is Israel's continued control over the West Bank, which continues to cut into Zionism's democratic character that stems from a reality of a sovereign Jewish majority.

Since I believe in the flexigidity of Zionism and in its capacity to evolve, I am confident that Israel will eventually find a way to respect minority rights and acknowledge Palestinian self-determination without compromising its own core logic of being the nation-state of the Jewish people.

How did your studies at TAU influence your personal development and intellectual life?

Since childhood I've been fascinated by big picture history and strategy, which remains a passion of mine. So I had a particular interest in academic spheres that offer deeper insight into the evolution of complex systems such as economics, political science, sociology and law. It was at TAU that I grew to understand how these fields are intrinsically interrelated, and this



tension between their support for Israel and their liberal values"

> is also when I became interested in the workings of society. It was there that I embarked on a path that eventually led me to found Reut and lately to write my book, Flexigidity.

"Scholarships Changing Lives"



Steyer Scholars Redefine True Grit

The first two Helen Sarah Steyer and Thomas Mark Steyer Scholarship recipients are bright and ambitious students who are determined to overcome their personal struggles

At a young age, Steyer Scholar Galia Angel learned to face challenges with grace and resolve. After her big sister was diagnosed with cancer, Galia had to look after the household while her parents were at the hospital, and simultaneously make sure her homework was turned in on time. "It was a difficult period in my life but, ultimately, my sister beat the disease. That's all that's important now."

Galia and another TAU student, Mika Yerushalmi (pictured above), were selected in 2013 as recipients of the first two Helen Sarah Steyer and Thomas Mark Steyer Scholarships, established by the Steyer siblings as a means of making a top-notch education available to gifted young undergraduates in financial need. The scholarship fund provides for seven students per year.

Annie Lewy, Head of the Celia, Henry and Gerald Burger Unit for Student Aid at TAU's Ruth and Allen Ziegler Student Services Division, stresses that "the Steyer Scholarships allow students to dedicate themselves entirely to their studies without having to worry about tuition fees, housing and daily expenses." Criteria for student selection include academic success, curiosity, open-mindedness, goal-setting and leadership qualities – all despite financial difficulties.

In Galia's case, she overcame a child-hood with many economic setbacks to complete high school with honors. She was accepted into the Intelligence Corps of the IDF and continued working for the military in order to earn money for her university studies.

Last year Galia began her BA studies in TAU's highly selective Outstanding Students Program for the Humanities and Arts. She says of her Steyer Scholarship, "This is the first time in my life that I have been offered financial support, and it has inspired me to work even harder. In the future, I want to be part of something global and meaningful."

Holding things together

Steyer Scholar Mika Yerushalmi, a second-year student of biomedicine, says the army was the shaping force in her life. Drafted as a shooting instructor in the Israeli Air Force, she was immediately thrown into a harsh and demanding environment and struggled to complete her tasks. Finding herself at a crossroads, she considered her options: "I could either be a meaningless little cog inside the gigantic military system, or the important cog that holds the machine together. I understood that the key to my advancement and progress lay with me seeing a bigger picture and not letting obstacles stop me."

She began learning as much as she could about her position and, as a result, won the Best Instructor Award. She was later promoted to acting office commander. Mika explains, "In the military, I became a better version of myself – Mika 2.0 if you'd like."

Today, she applies her strong work ethic to her studies. She chose to major in medicine and biology, because she wants to understand "what makes us tick." She hopes the importance of her future research will extend beyond Israel and make a real impact on the medical community.

Helen Sarah Steyer and Thomas Mark Steyer, both TAU honorary doctors and governors, have created a number of philanthropic projects at Tel Aviv University, including the Stanley Steyer School of Health Professions in memory of their late father.



Schulich Program Prepares TAU Students for Leadership

18 TAU Schulich Leaders are part of a sweeping Canadian-Israeli scholarship initiative to nurture next generation scientific and technological innovators, the brainchild of Seymour Schulich of Canada

TAU electrical engineering student Itzik Avital (pictured above), 26, was identified as a potential star student upon entering his studies at TAU. Based on his outstanding matriculation and university entrance grades, Itzik was accepted to TAU's Schulich Leaders program, which supports outstanding undergraduate students throughout their studies. Itzik is one of 18 TAU Schulich Leaders to date.

The Schulich Leader Scholarship Program is a wide-ranging initiative extending from Canadian to Israeli universities and comprising a \$100 million endowment for three years. The scholarships are bestowed on students demonstrating outstanding potential in the STEM fields: science, technology, engineering and mathematics.

The program is the vision of Canadian mining magnate and philanthropist Seymour Schulich, one of Canada's best-known Jewish business leaders. Mr. Schulich believes strongly that science and technology are the driving forces behind the economies of

both Canada and Israel. "My hope is that after a successful pilot, this initiative will help ensure that Canada and Israel are at the forefront of excellence in science and research for generations to come.

Itzik served in the Israel Defense Forces (IDF) in the elite commando unit, Duvdevan. Now in his third year of the challenging four-year TAU electrical engineering degree program, he acknowledges that neither he nor his family could have afforded his studies without the grant. "The Schulich Scholarship enables me to develop my full potential and to fulfil my dreams of becoming a high-tech entrepreneur," he says.

Like all students in the program, Itzik volunteers to tutor needy pupils in a south Tel Aviv school. "We teach them math and some engineering," he says. "I hope this early start will help them gain the same opportunities I got through this scholarship."

Like Itzik, Hila Israelov, 25, a BSc student in neuroscience and psychol-

ogy, says that the Schulich Leaders Scholarship has given her a chance to devote herself exclusively to her studies. A former Division Commander in the Nahal Brigade of the IDF, where she served for five years, Israelov says she has been interested in the workings of the brain since childhood. "I always loved biology, but I have a scientific and a humanistic side, and this expresses itself in my studies in both neuroscience and psychology," she says.

Hila mentors a youngster in her own disadvantaged neighborhood in South Tel Aviv, providing one-to-one tutoring. "I'm helping to open up his horizons and show him that university studies are a real possibility. I believe this is a type of social leadership."

At TAU, the program is coordinated by the Celia, Henry & Gerald Burger Unit for Student Aid at TAU's Ruth and Allen Ziegler Student Services Division, working in close cooperation with the Schulich Foundation operating nationwide in both Canada and Israel.

Head of Student Aid, Annie Lewy, says, "We are more than happy to have TAU students participating in this very exclusive program. The Schulich Leaders Program enables our outstanding students to dedicate themselves more intensively to their studies and develop themselves as the future leaders of the community. The generous scholarship granted to each student - 10,000 Canadian dollars per year for three or four years, depending on the subject studied - is today one of the highest granted to undergraduate students. It allows students to complete their studies and start their careers without more delay."

Seymour Schulich is among Canada's most generous philanthropists, having donated in excess of \$350 million to various causes. Named "Mining Man of the Year" in 1997, he is an Officer of the Order of Canada and holds honorary doctorates from five universities.



Solidarity with Our Men and Women

TAU's Scholarship Fund for Reserve Combat Soldiers is providing assistance for students who served in active duty during Operation Protective Edge

For TAU student Efrat Blatt, 26, a regular July day at the University suddenly took a dramatic turn. "One moment I was cramming for my exams in the library; the next moment I was called up to my army division in the South. Within hours I found myself in a war zone," says Efrat, a master's student in counseling and special education.

Efrat is one of 900 TAU students who served in reserve combat units during Operation Protective Edge. For the students, this meant dropping their studies, jobs, families and vacation plans and reporting to the front for active duty. TAU responded immediately by launching an emergency campaign

to provide them with scholarships for when they returned.

The scholarship campaign has, to date, raised over \$500,000 from generous supporters around the world. The fund is providing vital financial and academic assistance to TAU students who served seven days or more during the Gaza Operation, ensuring that their studies will not be harmed as a result of their military service. Well-known Israeli businessman Zeev Feldman, Chairman of the Board of Peamey Tekva Ltd. Charitable Foundation and a TAU graduate, initiated the scholarship campaign with a generous lead gift.

TAU President Joseph Klafter says, "We all owe a debt of gratitude to our talented and courageous students who put their lives on the line to protect and defend the State of Israel. We thank our supporters on their behalf."

For Efrat, a staff sergeant who provides weapons training to infantry soldiers, this was her third Israeli operation. This time, however, she was the only female out of 450 male soldiers in her division. "I gave up my summer to serve on the front, but it was worth

it to help prepare our soldiers for the battlefield," she says.

"From now on you're an officer"

IDF reserve captain Hadar A., a student of engineering and management, was also preparing for summer exams when rockets began raining down on Tel Aviv. Called up immediately, he remembers the train ride heading south toward the Gaza Strip. "From now on you're an officer," he steeled himself, "there's a war on and that's it."

On his return from the front, where he witnessed the death of a close friend, Hadar found getting back to normal difficult. "Time has proved to be the only thing that helps. And slowly I've been getting back on track, coping with this school year. But it's still not easy. Thoughts about my experiences remain with me, for better or worse.

"I'm happy that I don't have to deal with everything alone – that the University is helping me, both academically and financially," says Hadar.

Efrat sums up her military experience: "I come from a very Zionist family and it was important for me to make a meaningful contribution." Efrat tells of the amazing rallying of support from the public during this period. "This scholarship shows that the University and its supporters are behind us all the way," she says.

Efrat Blatt





A recently announced \$10 million donation from philanthropist and Academy Award-winning film producer Steve Tisch will transform the University's world-recognized Department of Film and Television into a full-fledged School. The donation comes amidst a boom in the Israeli film and television industry driven by creative visionaries, including a large number of TAU alumni, and will help fuel its continued growth across the globe.

The major investment will help attract and expand top level talent, boost the capacity to offer scholarships, provide new state-of-the-art equipment and building renovations, enhance curriculums, and bring international collaborations. Tisch's donation and name will also bring Hollywood know-

how and increased visibility to the department, which is currently ranked among the top 15 film schools outside the USA.

"The ability to tell stories is critical to increasing dialogue and understanding, something the world is certainly in need of," said Steve Tisch. "Tel Aviv University is at the forefront of nurturing and growing creative, talented and diverse voices from across Israel and the region. I'm very pleased to support their efforts and honored by their recognition."

As Israel's leading institution of film and television studies, the Department of Film and Television has educated and raised several generations of filmmakers and film scholars who are renowned for their impact on the Israeli cultural arena and the country's film and television industry, including Oscar-nominated directors Ari Folman (*Waltz with Bashir*), Yaron Shani (*Ajami*) and Dror

Moreh (*The Gatekeepers*). Israel's recent successes include works by graduates of the Department, such as Hagai Levi's new Golden Globe-winning drama *The Affair* – which followed his Emmy and Golden Globe-winning series *In Treatment*, Gideon Raff's award-winning *Homeland*, and student Oscar-winner Hadas Ayalon's *Paris on the Water*.

"Steve Tisch's commitment to the film school is a tremendous vote of confidence in the talent of our students and faculty members," said TAU President Joseph Klafter. "The new Steve Tisch School of Film and Television will not only enhance academic training and knowledge in the

discipline, but will also strengthen Israel's influence on the cinematic arts globally," he said.

Steve Tisch: Filmmaker, philanthropist and leader

Tisch is a partner at Escape Artists Productions and is Co-Owner, Chairman and Executive Vice President of the New York Football Giants. He received his Academy Award as a producer of *Forrest Gump*, which won the Oscar for Best Picture in 1994. Other notable films include *Risky Business, The Pursuit of Happyness* and *American History X.*

Tisch has long been a leader in the philanthropic sector and generously contributes his time and resources to a variety of organizations. Last year President Barack Obama

THE STEVE TISCH SCHOOL OF FILM AND TELEVISION

Steve Tisch Makes Transformative \$10m Gift



announced Steve's gift to the department of neurosurgery at the David Geffen School of Medicine for the UCLA Steve Tisch BrainSPORT Program. Steve is also on the Board of Trustees of The Geffen Theater in Los Angeles, The Sundance Institute, The Los Angeles County Museum of Art and The Preston Robert Tisch Brain Cancer Center at Duke University. He is the naming benefactor of the sports and fitness center at his alma mater, Tufts University.

In 2014, Tisch served as the first honorary chair of the Tel Aviv International Student Film Festival at TAU, long ranked among the top three student film festivals in the world.

On a visit to the School: Steve Tisch (center) with Yaron Bloch (right), Head of the Steve Tisch Film School, and Joseph Pitchhadze, senior academic faculty member



TAU

Honorary Doctor Len Blavatnik

BLAVATNIK INITIATIVE

Blavatnik Donates \$20 million to TAU

The Blavatnik Family Foundation has made a \$20 million gift to Tel Aviv University to launch the Blavatnik Initiative, a multi-year program committed to the advancement of interdisciplinary scientific research, discovery

and development at TAU. The Initiative will also provide support to film students and fund a new recruitment program focused on attracting world-class researchers and faculty to the University.

"We are honored and extremely grateful for this most generous gift, which will contribute substantially to the development and international standing of Tel Aviv University,"

said TAU President Joseph Klafter. "Len Blavatnik has been a strong partner to the University for years and has demonstrated a passionate commitment to promoting excellence in higher education and research in the State of Israel."

"TAU has a distinguished tradition of excellence and achievement, and I am delighted to help support the next generation of scientific researchers and innovators in Israel," said Len Blavatnik, industrialist, philanthropist and TAU Honorary Doctor and Governor.

The Blavatnik Initiative will allocate funding to launch five new programs at TAU:

Blavatnik Center for Drug **Discovery**: To be the first of its kind at an Israeli university, the center will equip, staff and operate a state-of-the-art core laboratory that will serve

dozens of drug research groups across the TAU campus, as well as from other Israeli research institutions, at a critical stage in their research. The center is anticipated to deepen biomedical scientific knowledge, enhance Israeli industrial and economic progress, and lead to the development of novel drugs that will alleviate suffering and save lives.

Blavatnik Interdisciplinary Cyber Research Center: Drawing on TAU's rich pool of cyber scholars and experts to support research and produce position papers, the center will prepare a new generation of innovators and professionals through the awarding of 16-20 scholarships to Blavatnik Scholars at the undergraduate, graduate and post-doctoral levels.



Pictured: Prime Minister Benjamin Netanyahu. TAU President Joseph Klafter and Blavatnik Cyber Center Head Prof. Isaac Ben-Israel

THE "GO-TO PLACE" FOR CYBER

The Blavatnik Interdisciplinary Cyber Security Research Center was inaugurated during the Fourth Annual International Cyber Security Conference at TAU in the presence of Prime Minister Benyamin Netanyahu. The event marked the first formal project launch of the Blavatnik Initiative.

The Center will position TAU as the "go-to place" for cyber innovation and knowledge in Israel and the world and provide solutions to the growing threat in the cyber sphere. TAU President Joseph Klafter said, "Now, more than ever before, we need to nurture our best scientific talent, set up the most advanced labs, and strengthen the links between academia, government and business toward a unified front guard against cyber threats."

Mr. Blavatnik's representative, Mr. Avi Fischer, Chairman and CEO of Clal Industries, and a TAU law graduate, former faculty member and Governor, accepted a certificate of recognition on Mr. Blavatnik's behalf.

The Center works with the US Air Force, NATO, top Israeli intelligence and defense agencies, Tata Industries, Broadcom and others. On the policy front, the University's Yuval Ne'eman Workshop for Science, Technology and Security, which organized the event, has been providing incisive reports to the prime minister, defense minister, IDF, chief of staff and many more decision makers and agencies for the past 12 years.

Blavatnik Computer Science Research Fund: The fund will support and promote cutting-edge research at the Blavatnik School of Computer Science, awarding competitive grants to TAU faculty members in advanced computational sciences and related fields.

Blavatnik Student Film Production Fund: The fund will provide vital financial support to upcoming Israeli filmmakers as they create high quality, thought-provoking productions. Undergraduate and graduate students will be awarded grants of between \$2,000 to \$5,000 per film, enabling them to transform their ideas from story board to cinematic work. The fund will help reinforce Israel's unique standing in the global film community.

Blavatnik President's Faculty Recruitment Discretionary Fund: This fund will bolster the University's

competitiveness in attracting and hiring star faculty members. The fund will lay emphasis on recruiting talented young researchers in priority areas, including nanoscience, environmental studies, neuroscience and cyber, and in emerging fields, including computational linguistics, information security and optical imaging.

With the Blavatnik Initiative, Tel Aviv University joins the roster of elite universities such as Harvard, MIT and Oxford that have won major funding from the Blavatnik Family Foundation. The Foundation, which supports educational, scientific, cultural, and charitable institutions throughout the world, also established the Blavatnik Awards for Young Scientists awarded through the New York Academy of Sciences

RAYA STRAUSS CENTER FOR FAMILY BUSINESS RESEARCH

First Family Business Center in Israel

With family-owned businesses dominating the Israeli economy, the establishment of the Raya Strauss Center for Family Business Research at TAU's Faculty of Management is timely and essential. The Center, established through a \$5 million gift from Raya Strauss, is the first of its kind for research and teaching in the field of family business in Israel.

To succeed in today's marketplace, a family-owned company must address special challenges, such as nurturing effective family and shareholder working relationships, passing on the business from one generation to the next, and maintaining ownership control. The new center will focus on in-depth academic research of these and other issues common to family businesses around the world. The center's mission is to serve as a focal point for research and studies on an international scale. In addition, the center will work to increase networking and partnerships among family businesses.

The center will join similar ones at leading institutions such as Kellogg, Harvard, Wharton and INSEAD. "The field of family business, which includes a wide range of companies – from small businesses to global conglomerates – contributes greatly to the growth of the Israeli economy,"



said Dean of Management Moshe Zviran. "The new center will help strengthen the family business sector and encourage entrepreneurship and innovation, thus contributing to professionalism and excellence."

Creating academic-business dialogue

At the agreement signing for the center, TAU President Joseph Klafter thanked Raya Strauss for her work and extensive contribution to the family business field, which is of great importance economically and to the core business values of Israeli society. According to Prof. Klafter, "TAU's goal is to create an active dialogue between the academic and business worlds."

Also participating in the signing ceremony were Prof. Zviran and the joint heads of the new center – Dr. Dan Weiss, a scholar of family business at the Faculty of Management, and Mrs. Nava Michael-Tsabari, who recently submitted the first doctorate in the field in Israel.



TAU
President
Joseph
Klafter and
Raya Strauss
at the signing
ceremony

Dr. Michael Shaoul and Dr. Nirit Weiss Shaoul NIRIT AND MICHAEL SHAOUL FUND
FOR VISITING SCHOLARS AND FELLOWS

Countering Israel's Cultural Marginalization



New York philanthropists Dr. Nirit Weiss Shaoul and Dr. Michael Shaoul have established a fund that extends TAU's network of international exchange and collaboration. The fund will serve as significant resource to help counteract the threat of isolation of Israeli academia from the Boycott, Divestment and Sanctions movement (BDS).

The Nirit and Michael Shaoul Fund for Visiting Scholars and Fellows is a multi-year commitment to encourage global faculty exchange and joint scientific and cultural collaborations across academic disciplines. Funding will supplement university resources for expenses and honoraria related to speaking engagements and visiting professorships across the campus. Recipients will be designated Nirit and Michael Shaoul Fellows.

"Nirit and I are alarmed by the increasing cultural isolation of Israel," Shaoul says. "We view this as the second

most serious threat to the country, after security, with the universities on the front lines. That's why we created this seed fund – to which we hope others will contribute – to help stem the effects of marginalization."

"We also believe that those academics who visit Israel are much more likely to develop an informed and balanced view of the situation, which can then be represented within their faculties upon their return," says Dr. Shaoul.

TAU President Joseph Klafter says, "Through the Nirit and Michael Shaoul Fund for Visiting Scholars and Fellows, TAU will be able to continue forging new academic research relationships, and to reinforce its hundreds of existing relationships – the lifeblood of all world-class institutions."

Dr. Michael Shaoul is a TAU Governor and Treasurer of American Friends of TAU. Dr. Nirit Weiss is a neurosurgeon at Mount Sinai Hospital in Manhattan.



MORTON H. LEVITT AND CYNTHIA LEVITT ENDOWED SCHOLARSHIP FOR MEDICAL EDUCATION

Philanthropists Expand Family Support for TAU

A Florida couple has established the Morton H. Levitt and Cynthia Levitt Endowed Scholarship for Medical Education. The Levitt Scholarship continues a family legacy of support for TAU's Sackler Faculty of Medicine that includes

Dr. Levitt's parents, extended family and great-uncle, Harry C. Bernard. "I am very proud to be a member of the Levitt family – a family that taught me from an early age that charity, philanthropy and service was the true measure of a person's success," he says.

Morton H. Levitt, MD, professor of clinical biomedical science, former chair of the Integrated Science Department and former Senior Associate Dean for Faculty Affairs at Florida Atlantic University's Charles E. Schmidt College of Medicine, is a board-certified pathologist. He is recognized nationally for his expertise in medical and pathology education, advocacy, and medical policy and governance. His professional career includes service in the National Cancer Institute's Carcinogenesis Bioassay Testing Program, service as a hospital executive and chief medical officer, and more than 20 years in the United States Air Force.

Dr. Morton H. Levitt and Cynthia Levitt For the past half century, TAU's Sackler School of Medicine has played a major role in shaping Israeli medicine, research and health. With its top quality faculty members and over 4,000 successful graduates, the School has much to be proud of. This sense of achievement was shared by some 1,500 alumni and students at a special event celebrating the School's Jubilee held on the TAU campus.

The Sackler School is the only medical school in the world to offer three teaching tracks simultaneously: the full six-year medical track, a four-year MD track for graduates

SACKLER SCHOOL OF MEDICINE

Celebrating 50 Years of Impact



From left: Then Dean of Medicine Yoseph Mekori; Deputy CEO of the Ministry of Health, Dr. Boaz Lev; former Director of the Rabin Medical Center, Prof. Danny Oppenheim, and former Minister of Health, Dr. Ephraim Sneh

in life sciences, and the New York State/American Program for training North American doctors.

The Jubilee event included class reunions, a formal ceremony and artistic performances. Among the attendees were alumni who hold senior positions in the Israeli medical world, including past and present directors of major medical centers throughout the country. The event was moderated by then Dean of Medicine Yoseph Mekori, who remarked that the School "has become a leading medical school locally and internationally, both in research and in the implementation of innovative teaching and educational approaches."

In a message conveyed by Prof. Mekori, TAU benefactor Dr. Raymond Sackler, who founded the school together with his late brothers Arthur and Mortimer, praised the School's achievements, the number and quality of its graduates, its distinguished faculty and the tens of thousands of patients who have benefited from the care and treatment provided by its graduates and affiliated hospitals.

Dr. Sackler, who just turned 95, also noted the success of the School's New York State-American Program, which he established 40 years ago to expand the School's international

reach and extend its benefits to those outside Israel. "The Program has achieved success beyond our dreams and is ranked on par with the finest North American medical schools," he said, adding that his family's continuing support for the program and the School arose out of "our deep affection and unwavering support for the State of Israel, its citizens and their consistent and generous humanitarian efforts for the benefit of all mankind."

Greetings were also given by Chairman of the Alumni Association Dr. Chaim Perluk, Head of Mediton Holdings.

SACKLER PRIZE IN BIOPHYSICS AWARDED

The Raymond and Beverly Sackler International Prize in Biophysics for 2014 was awarded in the field of "Physical Principals of Biological Systems" to Prof. Howard C. Berg of Harvard University for his pioneering contributions to understanding the physical mechanisms of bacterial motion and chemotaxis; and to Prof. George Oster of UC Berkeley for his discovery of the physical principles behind intracellular force generation in cell motility, morphogenesis and biological pattern formation. The prize was established by TAU Honorary Chairman Dr. Raymond R. Sackler, and his wife, Beverly, major benefactors of science at the University.



From left: Prof. Yoav Henis, TAU Vice President for Research and Development; Prof. Howard C. Berg; and Prize coordinators Professors David Andelman, Michael Urbakh and Michael Kozlov

Imagine an incubator for generating paradigm-changing ideas – an academic framework where scholars are completely free to follow their curiosity, and to ask questions that challenge conventional thinking on issues affecting human-kind. There are few such centers in the world, but TAU's Cohn Institute for the Study of the History and Philosophy of Science and Ideas has the distinction of being among the top five – considered on par with similar centers at Cambridge, Harvard, and the Max Planck Institute for the History of Science in Berlin, with which it has close connections.

The Cohn Institute was endowed in 1989 by TAU Governors Bertram J. (Bert) and Barbara Cohn of New York, members of American Friends of Tel Aviv University since 1982. Ardent supporters of environmental causes, the Cohns were inspired by the institute's multidisciplinary breadth and innovative approach to problem solving, which sought – even

then – to break down the barriers between the arts and the sciences and to find connections between them.

At the dedication ceremony of the institute in 1990, Barbara Cohn said, "Bert and I believe that saving our environment and humanity and bridging the disciplines of the social and natural sciences and the humanities is one single intellectual and educational act. We're confident that the scholarly climate of this institute will support this belief, and we're very excited about what that can mean for the betterment of mankind," she said.

Bert Cohn, 89, served in the US Army, graduated from Harvard College *cum laude* in economics and earned an MBA from NYU. He held prominent positions in a number of businesses and manufacturing companies, including at First Manhattan Co. in New York. Bert was awarded a TAU Honorary Doctorate in 1989 in recognition of his support for Jewish organizations and higher education. His wife, Barbara, was Director of Sarah Lawrence College Art Gallery. At TAU, the Cohns have contributed to the Program for Excellence, the Institute for National Security Studies and doctoral scholarships, and endowed the Bertram J. and Barbara Cohn Chair in the History and Philosophy of Science.





PROFILE: BERTRAM J. COHN

In the Pursuit of Knowledge and Truth

TAU's Cohn Institute for the History and Philosophy of Science and Ideas is fulfilling the intellectual quest envisioned by its benefactors, Bertram J. and Barbara Cohn

In centuries past, students attended university purely for the pursuit of knowledge and truth. The Cohn Institute has proudly preserved that tradition, providing an intellectual home base across the disciplines for some of Israel's most creative scholars. Centered at the Lester and Sally Entin Faculty of Humanities, the institute provides an interdisciplinary framework for 20 faculty members, 140 master's students and 50 PhD candidates in the exact sciences, life sciences and humanities.

In 2008, following a competition among major centers for higher education, the Cohn Institute was selected to establish the new Minerva Center for Humanities, joining TAU's five other existing Minerva Centers. The Minerva Center awards doctoral and post-doctoral scholarships and sponsors ambitious research programs. Heading the Center is Prof. Rivka Feldhay, a former Cohn Institute director, who is directing a research group on the migration of knowledge. A second team is led by Prof. Adi Ophir of the Cohn Institute, who is studying key concepts in political thought. The third group, led by Dr. Raef Zreik of the Buchmann Faculty of Law, is leading comparative research on forms of political communities inspired by Muslim and Jewish traditions, as well as contemporary critical philosophy.

Cohn Institute director Prof. Yossef Schwartz says, "No aspect of human intellectual activity is off limits. Our students and faculty are driven by pure passion to expand the intellectual horizon. As a result, the Cohn Institute continues to shape academic discourse around the globe." *Science in Context*, the Institute's journal, is rated one of the top three in its field in the world, he notes.

Promoting Arab-Jewish discourse

Former Cohn Institute director and Head of TAU's Zvi Yavetz School of Historical Studies, Prof. Leo Corry, says, "Bert Cohn feels a very strong affinity to the Cohn Institute due to its Israel connection. Mr. Cohn's vision is for Israeli universities and academicians to work collaboratively with their Arab counterparts to find long-term, humanistic, non-political solutions for strengthening Arab-Jewish relations."

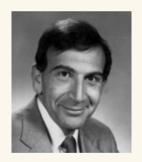
To this end, the Cohns recently contributed additional funding for a new project entitled the "Cohn Minerva Project – Globalization in the Middle East from the Perspective of the Humanities." Directed by Prof. Schwartz and Dr. Zreik, the project brings together Arab and Jewish students to engage in monthly discussions about Israeli society from both a Palestinian and a Jewish perspective. The project awards grants to three Arab doctoral and two Arab post-doctoral students.

Prof. Corry notes that the Cohns have been intimately involved with the activities of the institute for 25 years. "The Cohns always leave their door open for anyone connected to the institute." He recalls attending Mr. Cohn's 80th birthday celebrations. "There were two organizations represented there – the Wilderness Society and the Cohn Institute," he says. "We are very proud of this connection."

MOSHE LAHAV MD PRIZE FOR EXCELLENCE IN OPHTHALMOLOGY

An Eye on Vision

A prize established at TAU 15 years ago continues both to promote important advances in eye research and to honor the outstanding contribution to the field of the late Dr. Moshe Lahav, a noted ophthalmologist in the United States and Israel



The late Dr.
Moshe Lahav

The Moshe Lahav MD Prize for Excellence in Ophthalmology, established in 2000, rewards top researchers at TAU's Maurice and Gabriela Goldschleger Eye Institute at the TAU-affiliated Sheba Medical Center and is administered by the Sackler Faculty of Medicine. The prize committee comprises top experts in the field and several of Dr. Lahav's family members.

TAU ophthalmologist Prof. Michael Belkin says of Dr. Lahav, "He was that rare individual who combined excellence as a researcher, surgeon and clinician with humanism and a love of people. He was loved by his students, who still talk about him today."

Dr. Lahav was a graduate of the Hebrew University Hadassah Medical School. During his career, he held numerous clinical and academic positions, including as Chief Resident at the Yale Medical School in 1972 where he was also an assistant professor; Chief of Ophthalmology at the Veterans Administration Medical Center in Boston; Professor of Ophthalmology at Tufts University School of Medicine; and lecturer at Harvard Medical School. In Israel he was a senior lecturer at the Hadassah Medical School and an Associate Professor at the Goldschleger Eye Institute. The Lahav Prize at TAU was inspired by the Tabori Prize that Dr. Lahav won as a medical student.

Among his achievements in the professional field were techniques for improving retinal surgery and insights into neovascular disease of the retina and choroid.

Dr. Lahav's daughter, Alexandra, a professor of law at the University of Connecticut and a former visiting lecturer at TAU, says, "The Lahav family is proud to fund this prize as a tribute to Dr. Lahav's commitment to research and teaching, and to carry forward his memory by nurturing promising young Israeli ophthalmologists."

2015 DISCOVER MISSION

Global Leadership Group

A new generation of friends, governors and supporters of TAU from seven countries experienced an immersive, behind-the-scenes look at Israel's most influential university through the inaugural "Discover Tel Aviv University Mission" hosted by the University. The tour gave participants – all business and community leaders – a chance to hear about the preeminent medical, technological and security research that has positioned TAU on the cutting edge of Israeli innovation, as well as to share their own intellectual passions.

Highlights included talks by Iron Dome inventor Brig. Gen. (Res.) Dr. Danny Gold and Waze co-founder Uri Levine – both TAU alumni. Off campus meetings included a private briefing by IDF Spokesman Lt. Col. Peter Lerner and exclusive access to Israel Aerospace Industries led by the Chairman of the Israel Space Agency and TAU professor Maj. Gen. (res.) Isaac Ben-Israel.



Mission members hear from skin cancer researcher Dr. Carmit Levy at the Sackler Faculty of Medicine – one of several lab visits and expert talks in fields ranging from biotechnology and nanoscience to national security, cyber issues and public policy.

"In just a couple of days we got a small sample of everything the university has to offer," said mission participant and TAU Governor Ariel David, a journalist based in Rome and Tel Aviv and a board member of the Dan David Foundation. "This brief but fascinating tasting left us all hungry for more."

TAU Governor Selina Goren Komeran with Iron Dome inventor Dr. Danny Gold. The Komerans hosted a welcome dinner for participants attended by TAU Board of Governors Chairman Prof. Jacob A. Frenkel, Executive Council Chairman Dr. Giora Yaron, and President Prof. Joseph Klafter



Ariel David (left) with Prof. Israel Hershkovitz at the Dan David Laboratory for the Search and Study of Modern Humans

UK LEGACY MISSION

Fourth Legacy Visit

Group photo at the Legacy

Twenty-two participants in TAU's UK Legacy Mission enjoyed an action-packed week of activities, including access to exclusive sites and an exciting day at TAU meeting star researchers. The Mission, which is led by TAU Governor Geoffrey Simmonds, has become a staple of UK-Israel philanthropy and has expanded TAU's circle of friends and supporters in the UK, as well as strengthened the bonds between Israel and British Jewry.

The week's highlights included a guided tour of the Hula Lake Park, a visit to the Haifa naval base with Admiral Abraham Ben Shoshan, and an audience with Deputy British Ambassador Rob Dixon. Other events included an opera evening with TAU's Buchmann-Mehta School of Music and a festive dinner in the company of TAU students.

At a special ceremony, each recipient movingly spoke about the loved ones they were memorializing through their bequest and their dedication to Israel, and received a certificate of recognition from the University. The ceremony was followed by the unveiling of the 2014 Legacy Honor Wall, where participants' names are displayed in perpetuity at a location in the heart of the campus.

UPCOMING MISSIONS

3rd Annual Discover TAU Campus and Beyond
Mission of the American Friends – March 22-27, 2015
Amazing China: Experiencing China through a TAU
lens – Nov 8-17, 2015

Top Global Friends Events

Melbourne: **Musical Evening**

President of the Australian Friends in Victoria, Dr. Victor Wayne, and his wife, Karen, hosted a piano performance by international concert pianist Sarah Grunstein.



From left: Dr. Karen Wayne, Sarah Grunstein, Dr. Victor Wayne and TAU Governor Dr. Harry Perelberg

Montreal: Chair Affair

Canadian Foreign Affairs Minister John Baird was guest of honor at an elegant reception hosted by Merle and Bernard Stotland in support of the Stephen J. Harper Chair. Among the 80 dignitaries, community leaders and Canadian Friends were Consul General Ziv Nevo Kulman; Ronnie and Senator Leo Kolber; The Honourable Irwin Cotler; Eva and TAU Governor





The Honourable Herbert Marx; Margaret and TAU Governor Sylvan Adams; Monica and Mike Yuval; Emmelle and Alvin Segal; Dr. Karen Buzaglo; Alexandre Abecassis; Dr. Irith Lebovich; and David Senbal. Canadian Friends National President, Barbara Seal, CM. chaired the evening.

From left: TAU Governors Donald and Barbara Seal, Merle and Bernard Stotland

Toronto: TAU-Munk Collaboration

University of Toronto Chancellor Michael Wilson and President Meric Gertler hosted a private reception for Tel Aviv University Board of Governors Chairman Jacob A. Frenkel, President Joseph Klafter, and Canadian supporters of TAU to celebrate a joint research initiative between TAU and the Munk School of Global Affairs at U of T.

From left: CFTAU Board Member Jonathan Hausman, The Honorable Michael Wilson, Prof. Meric Gertler, Prof. Joseph Klafter, Prof. Jacob A. Frenkel, Canadian Friends Toronto, Ontario and Western Region Executive Director Stephen Adler and TAU Vice President for Resource Development Amos Elad



Mexico: Meet the President

Jaime Murow Troice (pictured) is the President of the Mexican Friends of Tel Aviv University. A Mexico City native, Jaime is President and CEO of Devox Group General Paint. Jaime is an active member of local Jewish community organizations, and currently serves as Chairman of the Board of the Beth Israel Community Center in Mexico City.





Mexico City: Meet and Greet

New Dean of the Iby and Aladar Fleischman Faculty of Engineering Prof. Yossi Rosenwaks was warmly welcomed by the Mexican Friends, who organized a series of speaking engagements for him at leading Mexican universities. From left: Mexican Friends President Jaime Murow Troice, KKL Mexico Director Carol Broussi, Prof. Yossi Rosenwaks and Mexican Friends Board member Fernando Lasky



Hong Kong: Entrepreneurship the TAU Way

From left: Jonathan

Penkin, Sharon Ser. Prof. Moshe Zviran

and Michal Mor

The Hong Kong Friends, currently being established under the leadership of Sharon Ser, hosted the Dean of the TAU Faculty of Management, Prof. Moshe Zviran. He spoke before members of the Hong Kong business and banking community at an informative lunch generously sponsored by Jonathan Penkin, Managing Director at Goldman Sachs (Asia) L.L.C.

From left: TAU's Prof. Leonardo Leiderman. Dr. Gustavo Cañonero, Enrique Szewach, Argentinean Friends President Polly Mizrahi de Deutsch, Dr. José Siana Serrate and Dr. Ernesto Talvi

Buenos Aires: Global Markets Analysis The Argentinean Friends of TAU held their

renowned International Economic Symposium for the 19th year running. This year's event was a resounding success, with 1,300 diplomats, business and community leaders hearing engaging talks delivered by the distinguished panelists.

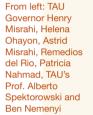


Top Global Friends Events

Marbella: New Branch of Spanish Friends

The Spanish Friends held a festive three days of events at the luxurious seaside town of Marbella to welcome TAU to the Andalusia region. Organized by the TAU representative for the Andalusia Region Patricia Nahmad, the events were attended by top TAU officials President Joseph Klafter, Vice President for Resource Development Amos Elad, Senior Resource Executive for Latin America and Spain Herman Richter, and President of the Spanish Friends and TAU Governor, Isaac Querub.

In a separate event, the Friends held an intimate dinner to raise funds for scholarships benefiting students who participated in Israel's Operation Protective Edge in Summer 2014. The exclusive event, organized by Patricia Nahmad together with new TAU supporters Helena Ohayon, Remedios del Rio, and Ben Nemenyi, was generously hosted by Philippe and Olivia Valere.



London: Drinks and Dreidels

The TAU Trust in London held their annual Hanukkah party in collaboration with The Israeli Salon at The Elgin in West London. The evening brought together the young Israeli community in London, including TAU alumni.



Guests celebrating Hanukkah in London.



representative Carlos de Las Heras; Herman Richter; Isaac Querub; University of Málaga representative Maria Jesus Morales; Hon. Consul of Israel in Andalusia Rafael Cohen; Prof. Joseph Klafter; Patricia Nahmad; Amos Elad and Fleurette Klafter



Moscow: New Friends Association

The inaugural event of Tel Aviv University's new Friends Association in Russia was held at the Skolkovo Institute of Science and Technology in Moscow, in the presence of the President of the Skolkovo Foundation and founding President of the Russian Friends, businessman and philanthropist Mr. Viktor Vekselberg; Ambassador of Israel in Russia, Ms. Dorit Golender; TAU President Joseph Klafter and 200 leading members of Muscovite business and academic circles.



From left: Mr. Viktor Vekselberg, Ambassador Dorit Golender and Prof. Joseph Klafter

Paris: Play Preview

Some 400 TAU friends and benefactors enjoyed a sneak peek at the theater production *Un Dîner d'adieu* (A Farewell Dinner), directed by long-time TAU supporter Bernard Murat. The performance was organized by the French Friends of TAU at the generous initiative of Mr. Murat and his wife, Andrée Zana Murat.





Berlin: Movie Night

Guests of the German Friends enjoyed a screening at the famed Filmkunst 66 cinema of seven films produced by students of TAU's Department of Film and Television. The moviegoers were impressed by the high quality of the films and requested additional screenings.





Still from the student film Eva Is Leaving





Tel Aviv: Political Views



Throughout the year the Israeli Friends' Business Academic Club hosted Israel's leading politicians, including former Finance Minister Yair Lapid (pictured right) and Foreign Minister Avigdor Liberman (pictured left).



From left: Dr. Murray Zucker, Carolyn Steinberg and Dr. Nik Wolfson

San Francisco: From SF to a War Zone



Dr. Nikolaj Wolfson spoke to a rapt audience of his experiences when he volunteered to return to Israel to serve as an orthopedic surgeon during Operation Protective Edge. Among those attending the reception at the art-filled home of Nancy Goldberg were TAU Governor Murray and Roberta Zucker, Luba Troyanovsky, Aaron Tartakovsky, and Rita and Irwin Blitt.



From left: Dr. Sidney Boublil, TAU Governor Dr. André Amiach, outgoing Dental School Head Prof. Ilana Eli, Dr. Marie Helene Azoulay, incoming Dental School Head Prof. Ervin Weiss, Dr. Charles Levy and Dr. Serge Cattan



Tel Aviv: French-Supported Dental Upgrade

After a successful fundraising campaign, the French Friends and international dental fraternity Alpha Omega (AO) inaugurated six rooms at the Maurice and Gabriela Goldschleger School of Dental Medicine in the presence of senior University and AO officials, as well as French Friends and Governors.



From left: Dr. Luis Alberto Lacalle Pou, Adolfo Smolarz, Aida Smolarz, Dr. Luis Alberto Lacalle de Herrera, Ana Ringler, Miriam Smolarz and Maria Julia Pou Lacalle



From left: Carl Yonker, Howard and Sonya Waldow, Prof. Uzi Rabi, and AFTAU President and CEO Gail Reiss

Los Angeles: Security Briefing

Seventy TAU alumni,



friends and AFTAU supporters gathered at the home of Sonya and Howard Waldow to hear an insider briefing on Middle East security issues from TAU's Prof. Uzi Rabi, Head of the Moshe Dayan Center for Middle Eastern and African Studies at TAU.



Punta del Este: Annual Luncheon

Vice Chairman of the TAU Board of Governors Adolfo Smolarz and TAU Governor Miriam Smolarz hosted the yearly festive luncheon, attended by former President of Uruguay Dr. Luis Alberto Lacalle de Herrera and his son, Uruguayan senator Dr. Luis Alberto Lacalle Pou; TAU Professor Martin Kupiec; and TAU governors and supporters of the various Latin American Friends Associations. TAU President Joseph Klafter and Argentinean Friends President Polly Mizrahi de Deutsch sent video greetings.



New York: Generosity for Dental School



At a gala event, 175 guests celebrated the culmination of the Alpha Omega Foundation and American Friends of Tel Aviv University (AFTAU) joint campaign to fund the Rothstein-Williamowsky Post-Graduate Clinics. The Campaign Chairs paid tribute to the clinics' inspiring leaders, TAU Governor Dr. Ben Williamowsky and TAU's Prof. Ilana Eli, and toasted the evening's honorees.

From left: Dr. Ben Williamowsky, Campaign Co-Chair Steven William Kess, AFTAU President and CEO Gail Reiss, Campaign Co-Chair and TAU Governor Dr. Marc Rothman, Dr. Allen Finkelstein, and AFTAU National Chairman Jon Gurkoff

Seventh Annual India-Israel Forum

A 40-strong delegation of TAU officials, entrepreneurs, academics and journalists recently traveled to India to attend the 7th India-Israel Forum in New Delhi. TAU President Joseph Klafter, who led the Israeli delegation, lauded the conference as being "highly successful in creating friendships, partnerships and networks" between the two countries.

The first stop on the India trip was Mumbai to attend the Indo-Israel Innovation Colloquium, organized by TAU's Coller Institute of Venture in partnership with the Confederation of Indian Industry (CII), Aspen Ananta and Spencer Stuart. The Colloquium focused on academic and business cooperation between the two countries. While in Mumbai. Prof. Klafter visited the Indian Institute of Technology Bombay and the Institute of Chemical Technology to discuss collaboration opportunities. He acknowledged the Indian conglomerate Tata Industries' leading investment in the \$23.5 million Momentum Fund at Ramot, TAU's technology transfer company, noting that the fund is helping to feed innovation and collaboration.

The highlight of the visit was the India-Israel Forum held in New Delhi,

which focused on food security and cyber security. It was co-chaired by CEO and Chairman of Henry Schein, Stanley M. Bergman; Chairman of Zim Shipping, Aharon Fogel; Godrej &



From left: Indian National Skills Development Council Chairman Subramanian Ramadorai, TAU President Joseph Klafter and CEO of Ramot at Tel Aviv University Shlomo Nimrodi at the Indo-Israel Innovation Colloquium

Boyce Chairman Jamshyd N. Godrej; and former Chief Mentor of CII and forum co-founder Tarun Das. Israeli Ambassador to India Daniel Carmon was also in attendance. TAU's Blavatnik Interdisciplinary Center for Cyber Research hosted parallel cyber security sessions with the participation of the Center's director and Chairman of the Yuval

> Ne'eman Workshop for Science, Technology and Security, Major Gen. (Res.) Prof. Isaac Ben-Israel; Head of Security Services at Check Point Software Technologies Ron Davidson; and senior division head at the National Cyber Bureau Nir Peleg. TAU's Manna Center for Plant Biosciences held sessions on food security with the participation of Center Director and Dean of the George S. Wise Faculty of Life Sciences Prof. Daniel Chamovitz.

Prof. Klafter noted that Israel and India, while very different, are

both appreciative of sharing knowledge and learning from one another. "This giant power – India – appreciates the Israeli spirit of innovation and entrepreneurship," he said.



Top Rankings

The academic year opened with TAU ranked first among Israel's universities by the Times Higher Education World Rankings and the only one in Israel to make the world's top 200. Additional rankings were:

- TAU's Business School, Faculty of Management, won the "5 Palmes of Excellence" –
 given only to institutions with strong global influence from Eduniversal Rankings. The
 School was ranked 28th out of 1,000 of the best business schools in 154 countries.
- TAU made the world's top 10 universities that produce venture-capital backed entrepreneurs. In total, 169 TAU alumni founded 141 companies that received investment backing between 2009 and 2014. Successful TAU alumni include two co-founders of WAZE, sold to Google for over \$1 billion, and the founder of Trusteer, sold to IBM for over \$800 million.
- TAU is ranked 29th in the world for patent filings among universities according to the latest report issued by the World Intellectual Property Organization (WIPO), an agency of the United Nations. This makes TAU first in Israel and 14th outside the USA.
- TAU's Department of Film and Television was ranked 12th among film schools outside the USA by Hollywood Reporter Magazine.





TRIBUTE TO WALLENBERG

Marking 70 years since the disappearance of Swedish diplomat Raoul Wallenberg, who risked his life to save tens of thousands of Hungarian Jews from the Nazis, TAU dedicated its annual Wallenberg conference and prize-awarding ceremony to the topic, "International Diplomatic and Legislative Activity against Racial Discrimination." The event was organized by TAU's Kantor Center for the Study

of Contemporary European Jewry, headed by Prof. Dina Porat, and co-sponsored by TAU's Cymbalista Synagogue and Jewish Heritage Center and by the Embassy of Sweden in Israel. Speakers included Swedish Ambassador Mr. Carl Magnus Nesser; former Swedish Minister of Democracy Mr. Jens Orback; former Canadian Minister of Justice Prof. Irwin Cotler; and former President of TAU Prof. Yoram Dinstein.

Moving words on Wallenberg and his legacy were delivered by TAU Vice President Prof. Raanan Rein; Wallenberg family member Ms. Cecilia Ahlberg; and representative of the Raoul Wallenberg Foundation, Mr. Danny Rainer. The Raoul Wallenberg Prize in Human Rights and Holocaust Studies has been generously supported by the Swedish Friends of TAU for the past 28 years.

ERC Awards Grants to 13 TAU Researchers

The European Research Council, as part of the first round of its 'Horizon 2020' Program, has awarded 28 Starting Grants to Israeli universities, with TAU receiving 46% of the grants. Horizon 2020 is the largest ever research and development program initiated by the European Union, and will award €80 billion in grant money by 2020. Each of the 13 Tel Aviv University researchers will receive a grant ranging between one and two million euros. "This is a dramatic success for our researchers," said Ms. Lea Pais, Director of TAU's Research Authority. "It puts them on par with the world's leading researchers."

One for the Road

More efficient modes of transport that use oil substitutes - and that reduce pollution and congestion in urban centers - is the goal of TAU's newly established Institute for Innovation in Transportation. The Institute is jointly operated by the Porter School of Environmental Studies and the Iby and Aladar Fleischman Faculty of Engineering, in cooperation with the Fuel Choices Initiative of the Prime Minister's Office, which provides over \$5 million in funding. The Institute is open to researchers throughout Israel and will forge cooperation agreements with research centers overseas.

The Institute awards grants to promising researchers in the field and established the Smart Transportation Accelerator for young entrepreneurs, which has so far generated 50 proposals. Of these, five have been selected to receive a \$25,000 grant for product development at the University. "Transportation involves

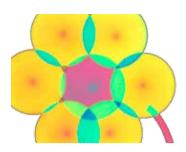
diverse fields," says Porter School Head Prof. Dan Rabinowitz. "We hope to make TAU and Israel a global hub of knowledge in the field."



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New Major Data Science Center

The ability to analyze "big data" data sets so large and complex that they cannot be processed in a traditional manner - has become crucial to business, science and industry. Recognizing this, TAU has established a new interdisciplinary Data Science Center under the leadership of Prof. Yaron Oz, Dean of the Raymond and Beverly Sackler Faculty of Exact Sciences and incumbent of the Yuval Ne'eman Chair in Physics. According to Oz, the Center's goals are to create an interdisciplinary framework for the natural sciences, social sciences and humanities, to promote study programs in the field, and to collaborate with related high-tech and biotech industries.



Satisfying Material Needs

Developing novel substances for uses ranging from artificial heart valves to airplane wings is the goal of TAU's new Materials Science and Engineering Department at the Iby and Aladar Fleischman Faculty of Engineering. "Materials Science will be a growth engine in the global economy," says department chair Prof. Noam Eliaz, "with a decisive impact on quality of life, health, security and the environment." Some 11 faculty members are affiliated with the new department from the faculties of engineering, exact sciences and life sciences. This year a new program for a combined BSc degree in materials science, engineering and chemistry, developed in close cooperation with the Raymond and Beverly Sackler School of Chemistry, has been introduced.



New Center for Language Excellence

As part of its emphasis on global research partnerships and international study programs, TAU recently launched the Center for Language Excellence at the Division of Foreign Languages. The first of its kind in Israel, the Center provides one-to-one tutoring in English and other foreign languages and serves Israeli and international students, faculty and staff. For a nominal fee, TAU community members can improve their English writing, reading and conversational skills, as well as obtain guidance on academic papers, theses, dissertations, oral presentations, CVs,

post-doctoral applications, grant and fellowship applications and more. The sessions are given by experienced TAU faculty and international graduate students. In addition to English, tutoring is available in other languages, including Arabic, French, Italian, Polish, Portuguese, Spanish, Russian and Turkish. Commenting on the service, TAU history student Claudia Stern from Chile says, "I truly believe that the Center is one of the best tools TAU can offer for young scholars in the making. The service has helped me enhance my professional profile."



Top 100 Papers of all Time

Research by TAU professor and Israel Prize laureate Yoav Benjamini and the late TAU professor Yosef Hochberg was ranked 59th out of the 100 most cited scientific articles of all time, according to *Nature*. Their path-breaking research, in which they introduced the "false discovery rate" (FDR), was originally published in the *Journal of the Royal Society of Statisticians B* in 1995. The FDR addresses problems where a large

number of statistical hypotheses are tested. It is applicable to the entire spectrum of scientific investigations



Prof. Yoav Benjamini requiring complex statistical analysis, such as gene expression studies, in which the activity of hundreds of thousands of genes are assessed, or to the study of the functioning brain, where the tens of thousands of potential locations of brain activity are screened to locate those most active while performing some cognitive task. The method is becoming increasingly important when analyzing big data, where it can limit the rate of errors. The original article has been cited more than 16.700 times in scientific literature. Prof. Benjamini is incumbent of the Nathan and Lily Silver Chair for Advanced Statistics.

O people

TAU Professor Appointed Google VP

Prof. Yossi Matias of Tel Aviv University's Blavatnik School of Computer Sciences, the Managing Director of Google's R&D Center in Israel, was appointed a Vice President at Google. Prof. Matias is a recipient of the Gödel Prize and elected Fellow of the Association for Computing Machinery.





Prof. Yossi Matias



95 Years Young: Rector Aron Shai congratulates Prof. Moshe Brawer, founder of the Department of Geography at TAU and an Israel Prize laureate, at an event marking his 95th birthday.

Lord Mayor of Frankfurt Peter Feldman visited TAU for the second time. He was accompanied by a delegation of Frankfurt City Council members and city representatives. Together with TAU President Joseph Klafter and TAU Vice President of Resource Development Amos Elad. the delegation toured the campus and visited TAU's new Porter School for Environmental Studies Building and the Buchmann Faculty of Law, where they were guided by Dean of Law Ron Harris. Prof. Klafter and Prof. Harris noted the generous support of major TAU benefactor Dr. h.c. Josef Buchmann. They also noted the numerous collaborations between the twin cities of Tel Aviv and Frankfurt and the close ties between TAU and Goethe University, including the Josef



Frankfurt Lord Mayor Visits TAU

TAU
President
Joseph
Klafter with
Lord Mayor
of Frankfurt
Peter
Feldman

(right)

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Buchmann PhD Fellowship Fund, which awards grants to outstanding doctoral students from both institutions.

community

Supporting Children in the Line of Fire

A TAU-led, school-based intervention program, "Feeling Safe," is proving effective in boosting the resilience and hardiness of Israeli children residing in areas that suffered severe rocket attacks, especially in the south of the country. The program was developed by Prof. Michelle Slone of the School of Psychological Sciences, Gershon H. Gordon Faculty of Social Sciences, who identified a number of "resiliency factors" that can be imparted to the children in a school setting and that can help them cope with the stress of conflict. These factors include self-esteem, self-efficacy and the ability to mobilize support within the family and the community. The program's rationale is based on Slone's observation that most children in conflict zones suffer from a variety of psychological problems including distress, anxiety, depression, eating and sleeping problems, poor

academic performance and even substance abuse. These difficulties may or may not appear overtly and can often escape detection.

Originally called the Sderot Project and implemented during Operation Cast Lead, the program was generously supported by TAU benefactors Woolf and the late Helene Marmot and the French Friends Association of



Children running to a bomb shelter

TAU. The program was extended to include 60 more schools in the past four years, with additional funding coming once again from the French Friends. Many children from these schools come from lower socioeconomic backgrounds and the program helps boost their coping skills.

EMET Prize



Prof. Ariel Porat of TAU's Buchmann Faculty of Law and incumbent of the Alain Poher Chair in Private Law won the 2014 EMET Prize for Science, Art and Culture. He was recognized for his path-breaking research in tort and contract law and for his contribution to the theoretical understanding of private law and development of law in Israel.

Prof. Porat served as Dean of the Faculty from 2002-2006, during which time he established two new international LLM programs as well as the special admittance program for students from Israel's pe-

riphery. He is the founder of the highly-ranked journal *Theoretical Inquiries in Law* and is a member of the Israel Academy of Sciences and Humanities. He has authored four books and published over 70 articles in leading journals.

First Olay Thon Prize



Prof. Yosef Shiloh of TAU's Sackler Faculty of Medicine and incumbent of the David and Inez Myers Chair for Cancer Genetics received one of the first international research prizes in the medical and natural sciences to be awarded by Norway's largest charitable organization, the Olav

Thon Foundation. Recognized for his pioneering research in genetics, Prof. Shiloh is a recipient of the Israel Prize and EMET Prize and the American Association of Cancer Research G.H.A. Clowes Award. He is a member of the Israel Academy for Sciences and Humanities.

Second Term for Yaron



The Tel Aviv University Executive Council reappointed **Dr. Giora Yaron** (pictured) as its Chairman. Dr. Yaron is the former chairman of TAU's Technology Transfer Arm, RAMOT, and serves on the Board of Governors of Hebrew University, the Board of Directors of Amdocs and the

advisory boards of Raphael Advanced Defense Systems and the Israel Ministry of Defense. A serial entrepreneur, Dr. Yaron has co-founded 6 international high-tech companies. He holds a PhD in Device Physics from the Hebrew University, has published over 20 scientific papers and holds 6 patents.

Ramot Appoints New Chairman



Dr. Shlomo Markel has been appointed Chairman of RAMOT, TAU's technology transfer arm. Dr. Markel has served as Vice President at Broadcom Corporation (CTO Office) since 2001, and oversees the company's operations in Israel. He is a member of the Brenner

nominee committee, which reviews all senior D&O appointments made by governmental bodies. Dr. Markel holds a PhD in Electrical Engineering from the Technion – Israel Institute of Technology.



Prof. Yossi Rosenwaks has been appointed Dean of the Iby and Aladar Fleischman Faculty of Engineering, replacing Prof. Ehud Heyman. Prof. Rosenwaks joined the faculty in 1996, and has been a professor at the School of Electrical Engineering since 2005. He has served

as the president of the Israel Vacuum Society, as director of both the TAU Wolfson Applied Materials Research Center and the Gordon Center for Energy Research, and as head of TAU's Department of Physical Electronics. He is currently Director of TAU's Center for Renewable Energy, which he founded in 2011. Prof. Rosenwaks' research focuses on nanoscale characterization of semiconductors and the development of advanced transistors and solar cells. He has edited two books and published over 140 peer-reviewed journal articles.



Prof. Ehud Grossman has been appointed Dean of the Sackler Faculty of Medicine, replacing Prof. Yoseph Mekori. Prof. Grossman is incumbent of the Hella Gertner Chair for Research in Hypertension and in recent years has acted as the Vice Dean for Academic Promotions

and Nominations at the Faculty of Medicine. He has previously served as the Scientific Council Vice-Chairman and Specialization Committee Chairman of the Israeli Medical Association, as well as Chairman of the Israeli Society of Hypertension. Prof. Grossman has headed the Department of Internal Medicine at the TAU-affiliated Chaim Sheba Medical Center since 1997, and the Hypertension Unit since 2003.



Prof. Ervin Weiss has been appointed Head of the Maurice and Gabriela Goldschleger School of Dental Medicine, replacing Prof. Ilana Eli. Prof. Weiss spent two decades as a member of the Restorative Dentistry Department at TAU, and from 1989 to 1996 headed TAU's

Dental Hygienist Program. He has served as Chairman of the Israeli Association of Oral Rehabilitation, President of the Israeli Society for Dental Research and Head of the Oral Rehabilitation Department at the Hebrew University's Faculty of Dental Medicine. Prof. Weiss has published over 130 research papers and book chapters and holds 15 patents.



Prof. Moshe Zviran has been appointed Dean of the Faculty of Management, replacing Prof. Asher Tishler. An expert in information systems as well as entrepreneurship and innovation, Prof. Zviran is incumbent of the Isaac Gilinsky Chair of Entrepreneurship, Technology,

Innovation and Management and Chair of the MBA program in Management of Technology and Innovation and Entrepreneurship (MoTIE). He heads the Adams Institute for Information Technology. A triple TAU graduate, he has served as the Vice Dean of Management for the past seven years. He has published numerous articles in leading academic journals and authored two books on information systems. He is a consultant for leading organizations in Israel and abroad, and serves as a board member of several companies.



Prof. Daniel Chamovitz, noted plant geneticist, was appointed Dean of the George S. Wise Faculty of Life Sciences, replacing Prof. Moshe Mevarech. Director of TAU's Manna Center for Plant Biosciences and founder of the Manna Program in Food Safety and Security, Prof. Chamovitz

consults for governmental agencies on food security issues and is a sought-after speaker and science commentator. His book, *What a Plant Knows: A Field Guide to the Senses*, was an Amazon Top 10 science book for 2012 and served as the basis for a recent TAU Coursera course that enrolled over 50,000 students worldwide. He has published numerous articles and is on the editorial boards of several scientific journals.



Prof. Yehuda Afek has been appointed head of the Blavatnik School of Computer Science, replacing Prof. Yossi Azar. An expert in concurrent programming, networking, communication protocols and internet security, Prof. Afek joined the School in 1988. He co-founded Riverhead

Networks Ltd., a software company providing algorithmic security technology to protect against Distributed Denial of Service attacks in enterprise and service provider networks, which was acquired by Cisco Systems in 2004. Upon the company's acquisition, Prof. Afek served as a Director of Technology at Cisco Systems for 5 years. Prof. Afek has been a member of program committees for numerous international conferences, has authored over 120 journal and conference papers and holds over ten patents.



Prof. David Mioduser has been appointed head of the Jaime and Joan Constantiner School of Education, replacing Prof. Rafi Nachmias. A faculty member for over 20 years, Prof. Mioduser has served as Head of the School's Department of Education in Math, Science & Technology,

and is head of TAU's Science and Technology Education Center. Prof. Mioduser's research examines the cognitive aspects and learning processes in the encounter between students and technology. He has been a research partner in international studies conducted under the auspices of the European Union, the OECD and the IEA on integrating technology into teaching and learning.

Appointments: Ravit Huberfeld, Management, Executive Director of the Alrov Real Estate Research Institute
• Prof. Abdussalam Azem, Life Sciences, incumbent of the Louise and Nahum Barag Chair in Molecular Genetics of Cancer Biology • Prof. Itai Benhar, Life Sciences, incumbent of the Morris and Manya Lee Chair in Biophysics and Biotechnology • Prof. Isaac Harari, Engineering, incumbent of the Diane and Arthur B. Belfer Chair in Mechanics and Biomechanics • Prof. Yitzhak Katz, Medicine, incumbent of the Leon Alcalay Chair in Pediatric Immunology • Prof. Yoseph Mekori, Medicine, incumbent of the Herczeg Memorial Chair of Argentine Friends on Allergy and Related Diseases • Prof. Lev Shemer, Engineering, incumbent of the Lazarus Brothers Chair of Fluid Mechanics • Prof. Eli Sprecher, Medicine, incumbent of the Professor Frederick Reiss Chair in Dermatology • Prof. Ina Weiner, Social Sciences, incumbent of the Stephen Harper Chair in Translational Neuroscience • Prof. Anthony Weiss, Engineering, incumbent of the Celia and Marcos Maus Chair of Digital Signal Processing

Honors: Fellow of the European Physical Society, **Prof.** Halina Abramowicz, Exact Sciences • Honorary Doctor of ETH, Zurich, Switzerland, Prof. Noga Alon, Exact Sciences • Member of the German National Academy of Science (Leopoldina), Prof. (emer.) Roni Aloni, Life Sciences • 2013 Teva Pharmaceutical Industries Founders Award, **Prof. Karen B. Avraham**, Medicine • Honorary Doctorate from the Lund University, Sweden, **Prof.** (emer.) Leslie Banks-Sills, Engineering • Morton Deutsch Conflict Resolution Award, Prof. Daniel Bar-Tal, Humanities • Rechovot Women's Festival Lifetime Achievement Award, Michal Bat-Adam, Arts • Honorary Member of the Israel Geological Society, Prof. Zvi Ben-Avraham, Exact Sciences Member of the American Philosophical Society, Prof. Eshel Ben-Jacob, Exact Sciences • Dan Zisskind Prize for Research, **Prof. Simon Benninga**, Management • Zeltner Prize for Legal Research, Prof. Leora Bilsky, Law • Member of the Academy of Europe, **Prof. Nachum** Dershowitz, Exact Sciences • Shneior Zalman Heshin Prize for Academic Excellence in Law – Young Researcher category, **Dr. Avihai Dorfman**, Law • Prix Delalande-Guérineau, Prof. Israel Finkelstein, Humanities • Shazar Prize for Research in Jewish History, Prof. (emer.) Mordechai Akiva Friedman, Humanities • Israel Bar Association Award, Prof. (emer.) Daniel Friedmann, Law • Wolf Foundation Krill Prize for Excellence in Scientific Research, Dr. Irit Gat-Viks, Life Sciences • Raphael Rozin Prize for Rehabilitation, Noa Givon, Medicine • Nefesh B'Nefesh Bonei Zion award, Prof. Jeffrey M. Hausdorff, Medicine • SEG Reginald Fessenden Award, Prof. (emer.) Dan Kosloff, Exact Sciences • 2013 Jean-Marie Dubois Award, Prof. Ron Lifshitz, Exact Sciences • IEEE Reynold B. Johnson Information Storage Systems Award, Prof. Simon Litsyn, Engineering • Untold News Award, Prof. Rimona Margalit, Life Sciences • Fellow of the American Physical

Society, **Prof.** (emer.) Roman Mints, Exact Sciences • European Prize for Basic Research in Osseointegration and Dental Implantology, Prof. Ofer Moses, Medicine • President of the Israel Physical Society, **Prof. Yaron Oz**, Exact Sciences • 2013 Israel Chemistry Society Prize for Outstanding Young Scientist, Prof. Fernando Patolsky, Exact Sciences • Member of the Israel Young Academy of Science; Untold News Award, Prof. Dan Peer, Life Sciences Amnesty International Award of the Henri Langlois Film Festival, Yael Perlov, Arts • WINEP Statesman Scholar Award, Prof. (emer.) Itamar Rabinovich, Humanities • Raphael Rozin Prize for Rehabilitation, Dr. Debbie Rand, Medicine • 2013 Teva Pharmaceutical Industries Founders Award, Prof. Ronit Satchi-Fainaro, Medicine • 2014 Zeltner Prize of the Rotary Club, Israel, Dr. Hila **Shamir**, Law • Fellow of the Association for Computing Machinery, **Prof. Nir Shavit**, Exact Sciences • 2014 Bialik Prize for Jewish Thought, Prof. Uzi Shavit, Humanities • Israel Bar Association Award for Outstanding Contribution to Legal Research and Achievements in the Public Sector, Prof. (emer.) Shlomo Giora Shoham, Law • Chairman of the Israel Society of Ecology and Environmental Sciences, **Prof. Marcelo Sternberg**, Life Sciences • Minerva Arches Award for Research Cooperation and High Excellence in Science, **Dr. Tamir Tuller**, Engineering • Wolf Foundation Krill Prize in Physics, Dr. Tomer Volansky, Exact Sciences • Global Leadership Awards, Prof. Ehud Weinstein, Engineering • European Pediatric Orthopedic Society Pro Maximis Meritis Medal, Prof. Shlomo Weintraub, Medicine • Minister of Culture and Sport Musical Performance Prize - Frank Peleg Lifetime Achievement Award, **Prof. Jonathan Zak**, Arts • Minister of Culture and Sport Musical Performance Prize – Board of Trustees Award, **Prof. Mira Zakai**, Arts





Inglorious Revolutions: State Cohesion Iddle East after

in the Middle East after the Arab Spring

Edited by Dr. Brandon Friedman and Dr. Bruce Maddy-Weitzman

The Moshe Dayan Center for Middle Eastern and African Studies (2014)

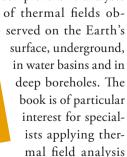
This collection of essays examines state-hood in the Middle East in the aftermath of the uprisings in December 2010. How are the individual states coping with these challenges? Are they succeeding? If not, what are the potential consequences for the cohesion of states, societies, and the region? Drs. Friedman and Maddy-Weitzman are researchers at TAU's Moshe Dayan Center for Middle Eastern Studies.

Applied Geothermics

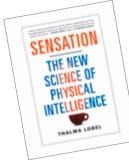
eothermics

By Prof. Lev Eppelbaum, Dr. Izzy Kutasov and Dr. Arkady Pilchin Springer (2014)

Based on publications by its authors, this book presents the most current geothermal problems and methodologies, including comprehensive analyses



in petroleum, water and ore geophysics, environment and ecological studies, archeological prospection and climate of the past. Dr. Lev Eppelbaum is an associate professor at the Department of Geosciences, Raymond and Beverly Sackler Faculty of Exact Sciences.

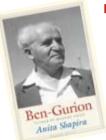


Sensation: The New Science of Physical Intelligence

By Prof. Thalma Lobel Atria Books (2014)

What if flipping a light switch could jump-start your thinking? Or if giving a friend a sugary snack could make them "sweeter" company? In *Sensation*, Prof. Lobel uses the new science of physical intelligence to describe how our physical sensations profoundly influence

our behavior, thoughts, emotions, judgments, decisions and choices. Prof. Lobel is a former Chair of TAU's School of Psychological Sciences and Director of the School's Child Development Center.



Ben-Gurion – Father of Modern Israel

By Prof. Anita Shapira Yale University Press (2014)

This new biography of David

Ben-Gurion strives to get to the core of the complex man who became the face of the new Jewish nation. Focusing on the period after 1948, during the first years of statehood, and incorporating unique archival material, the book provides new insights into Ben-Gurion's personal qualities and those that defined his political leadership. Anita Shapira is an emerita professor of Jewish history at Tel Aviv University, an Israel Prize laureate and former head of TAU's Chaim Weizmann Institute for the Study of Zionism.

Understanding Global Crises: An Emerging Paradigm

By Prof. Assaf Razin MIT Press (2014)

This work offers a comprehensive historical account of major global financial crises in the last 30 years, focusing on the currency crisis, the stock market, the banking crisis, the



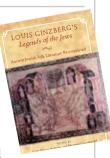
macroeconomic mismanagement that leads to crisis, and the birth and bursting of bubbles. The book describes how analytical elements of the theories of financial and monetary crises fit together in macroeconomic analysis of global crises. Prof. Razin is a member of TAU's Eitan Berglas School of Economics and Friedman Professor of International Economics at Cornell University.

Louis Ginzberg's Legend of the Jews: Ancient Jewish Folk Literature Reconsidered

Edited by Galit Hasan-Bokem and Prof. Ithamar Gruenwald Wayne State University Press (2014)

Celebrating the centennial anniversary of Louis Ginzberg's *The Legends of the Jews*, this book revisits the work of the legendary commentator on the Jerusalem Talmud, offering illuminating essays on its underlying cultural aspects, as well as staging a lively intellectual

dialogue between contemporary and past scholarship. Prof. (emer.) Gruenwald is a former Chair of the Department of Jewish Philosophy and Co-Chair of the Program of Religious Studies at the Chaim Rosenberg School of Jewish Studies.



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