

UNIVERSITY OF HAIFA MAGAZINE WINTER 2018

WELCOME TO THE LORRY I. LOKEY CITY CAMPUS P10

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MAY 28-30, 2019

HEIGHTS MAGAZINE

Produced by the University of Haifa Division for External Relations & Resource Development Vice-president@univ.haifa.ac.il

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HEIGHTS UFH IN THE CITY

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President Ron Robin and Rector Gustavo Mesch roll up their sleeves to advance the Multiversity vision.

THE 'MULTIVERSITY' GAINS MOMENTUM

opened the 2018/19 academic year with many wonderful reasons to celebrate. As our 'Multiversity' vision takes shape, the University is experiencing unprecedented growth in key areas: physical development, research and student enrollment.

In October, we marked the University's expansion into Haifa's downtown with the dedication of the Dylan Tauber Educational Complex at 16 Palmer Street. The Dylan Tauber facility, along with three additional buildings in the area, will comprise the first phase of the new Lorry I. Lokey City Campus and will serve as the home for Israel's first School of Data Sciences, set to open in 2019. The School will include the Departments of Computer Science, Information Systems, Statistics and soon to be approved degree program in Data Sciences. With its distinct metropolitan vibe, the Lorry I. Lokey City Campus promises to serve as a hub for innovative academic programs, collaborative research initiatives and social and cultural activities. We are also pleased to report that, just down the road, construction has begun on The Helmsley Health Discovery Tower - our exciting joint venture with Rambam Health Care Campus that will produce scientific breakthroughs and improve access to healthcare in the region.

Recently, we celebrated the opening of the University of Haifa and East China Normal University (ECNU) Campus in Shanghai. The Joint Technology Institute (JTI) will serve as an interdisciplinary base for translational research in biomedicine, brain and behavioral research, and environmental studies.



University of Haifa's Top ARWU Rankings

Faculty of Education	101-150
Department of Communication	51-75
Department of Psychology	101-150
Department of Public Administration	76-100
Department of Sociology & Anthropology	76-100

Under the academic agreement, the Shanghai campus will host Israeli and Chinese scientists from both universities and advanced degrees will be awarded to students of both institutions.

Here on the Mount Carmel campus, our two major construction projects – The Herta and Paul Amir Faculty of Social Sciences Complex and the new building for the Faculty of Social Welfare and Health Sciences – are moving forward as planned. And, just a few weeks ago, we had the pleasure of inaugurating a second facility at the Morris Kahn Marine Research Station at Kibbutz Sdot Yam, dedicated to blue technology research.

We take tremendous pride in our exceptional academic accomplishments. The University was awarded the Ministry of Defense Military Colleges Tender to lead the prestigious Military Academic Complex. The Complex will bring the IDF's three military colleges – the National Security College, the Command and Staff College and the Tactical Command College – under one umbrella for the first time. A special team was formed to design the curriculum and we plan to construct a dedicated academic complex on the Mt. Carmel Campus that meets the unique needs of this national security studies initiative.

In another national tender, The International School was awarded a major development grant of \$2.52 million for a period of two years from Israel's Council of Higher Education, with a commitment to extend it for an additional two years bringing the total to over \$5 million. This unprecedented achievement will enable us to expand our international programs, attract talented students and strengthen our international reputation.

This year we continued to recruit and invest in 26 new faculty members from around the world. Thanks to an intensive marketing campaign, undergraduate student enrollment increased by 10% across all faculties. Our research excellence continues to be recognized by The Council of Higher Education, and this year the University's governmental funding rose to 7.5 % – the equivalent of NIS 221.3 million.

We wish to thank the entire University of Haifa community and the unwavering support from our friends and donors in Israel and around the world for helping us achieve these accomplishments. As we continue to grow, our goal is to create optimal conditions for inspiring the next generation of change agents in Haifa, the north, and the entire country.

Sincerely,

Prof. Ron Robin *President*

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Prof. Gustavo Mesch *Rector*

UH GROWTH 个 & NEW BEGINNINGS

The Dylan Tauber Educational Complex

Inauguration of the Dylan Tauber Educational Complex

he Dylan Tauber Educational Complex on Palmer Street was dedicated at a festive ceremony, with distinguished guest Prof. Alfred Tauber, Chairman of the University's Board of Governors. This ultra-modern building is named in honor of Prof. Tauber's son Dylan.

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As the new academic home of the Department of Computer Science, the Dylan Tauber Educational Complex will house computer classrooms and laboratories that focus on the study of big data, faculty offices, and a state-of-the-art digital research center. The Dylan Tauber building is the first of several facilities dedicated to expanding the University's STEM (Science, Technology, Engineering and Mathematics) offerings in the new Lorry I. Lokey City Campus, located in Haifa's central hightech district. As the University's Big Data hub, the City Campus will house the Departments of Computer Science, Information Systems, Statistics and a School of Data Sciences, opening in 2019. President Ron Robin thanked Prof. Tauber for his longstanding support and visionary leadership. "Fred, you have been a passionate advocate for moving strategic academic units of the University closer to the heart of the city where it will have an impact on the economy and social fabric of the region. With the establishment of the Lorry I. Lokey City Campus and the dedication of this, its first building, this vision is becoming a reality."

In a heartfelt keynote address, Prof. Tauber shared how meaningful and symbolic this dedication is for his son Dylan and their entire family.

Mr. Yona Yahav, outgoing Haifa Mayor, thanked Prof. Tauber for his generosity and his unwavering support of Haifa's urban renewal plans and the expansion of the University in the area.

> Morris Kahn Marine Research Station Opens Second Facility

UFH IN THE CITY

October 24

Prof. Tauber recited the blessing and affixed the mezuzah with University Rabbi Dr. Yossi Stemler, Mr. Mooly Eden, Chairman of the Executive Board (left), Mr. Yona Yahav, and President Ron Robin.



November 12

(l-r) Vice-President and Director General Baruch Marzan, Rector Gustavo Mesch, Prof. Dan Tchernov, President Ron Robin, Mr. Morris Kahn, and Prof. Ilana Berman-Frank, Director of the Leon H. Charney School of Marine Sciences. new building at Kibbutz Sdot Yam was inaugurated in the presence of longstanding supporter and friend, Mr. Morris Kahn, founder of billing giant Amdocs, and one of Israel's greatest advocates and supporters of marine and coastal conservation.

Scientists at the station are working to strengthen the connection between science and industry in areas ranging from genetics and pathogens of commercial fish to marine herbicides and natural sunscreen compounds. he University of Haifa and East China Normal University (ECNU) marked the opening of its Shanghai campus – the Joint Technological Institute (JTI). The new Institute will foster cross-cultural exchanges and serve as an interdisciplinary base for translational research in biomedicine, neuroscience, behavioral research and environmental sciences.

The new campus will focus on facilitating academic collaborations and preparing students to become leaders in a globally connected world. "Another stage of our Multiversity vision became a reality today, as we inaugurated our joint campus with ECNU, where Israeli and Chinese scientists will expand the boundaries of science," noted President Ron Robin. "I am very intrigued to see what will happen at a campus where the nation that was home to Confucius meets the nation that produced Einstein."

JTI, located at the Zizhu International Education Park, will contain over 40,000 square feet (roughly 4,500 square meters) of research and office space, including cutting-edge laboratories, computerized classrooms, seminar rooms and workspaces for graduate students. Under the academic agreement, the campus will host lecturers from both universities, University of Haifa scientists will be eligible to receive research grants from ECNU sources, and advanced degrees will be awarded to students of both institutions.

In an interview with the Israeli press, Education Minister Naftali Bennett said, "This is a remarkable moment of combining forces between the great Chinese nation and the State of Israel – the startup nation." Joint University of Haifa and ECNU Campus Opens its Doors in Shanghai



November 20

The official ribbon-cutting ceremony was attended by representatives from the Shanghai municipality, members of ECNU's senior administration, and representatives from the University including Rector Gustavo Mesch, Vice Provost and Head of the International School Prof. Gad Barzilai, Prof. Edi Barkai, Dean of the Faculty of Natural Sciences, Elka Nir, CEO of Carmel-Haifa, and Prof. David Faraggi, former Rector of the University who helped shepherd this agreement. The event is a significant milestone in the University's strategic plan that aims to expand scientific collaborations and cultural exchanges between China and Israel.



Guided lab tour at the new coastal facility in Sdot Yam.

"The newly established coastal facility will promote exciting growth opportunities in areas of blue technology," explained Prof. Dan Tchernov at the event. Tchernov is the Founder and Scientific Director of the Morris Kahn Marine Research Station and the Vice-President of Development and External Relations. "Our goal is to develop sustainable marine-based industries and services while protecting our unique marine ecosystems."

The Morris Kahn Marine Research Station, a satellite of the Leon H. Charney School of Marine Sciences,

serves as the academic base for marine biodiversity research and monitoring programs operated by the Department of Marine Biology. The Station also houses a scientific diving center.

President Ron Robin thanked Mr. Kahn for his generosity and vision, and reiterated the University's commitment to leading marine sciences research in Israel.

UH first

BELITE NILITARY COLLEGES

srael's Ministry of Defense has recently chosen the University of Haifa to lead the prestigious Military Academic Complex in a move that brings Israel's three military colleges – the National Security College (MABAL), the Command and Staff College (PUM), and the Tactical Command College – under one roof for the first time. The three colleges form the backbone of the IDF's elite training programs.

In bringing together the IDF's most prestigious academic training programs under one academic institution, the new Military Academic Complex will ensure greater long-term consistency in officer training and improve the quality of the academic education acquired in tandem with military courses," explains Prof. Yossi Ben Artzi, former Rector of the University and head of the program. "As Israel's leading academic think tank in the field of security studies, the University enrolls the largest number of Israeli military and security personnel and provides the widest range of security and diplomacy related research and academic programs."

The construction of the state-of-the-art Complex is being planned at the Mount Carmel campus. Advanced facilities will include high-tech con-

The IDF National Security College

(MABAL) enrolls high-ranking officers of the IDF and the intelligence community pursuing graduate degrees in Political Science and homeland security. MABAL alumni include the current IDF Commander-in-Chief, commanders of the Northern, Central and Southern Fronts, and the Head of National Security Agency. ference and seminar rooms. The University is also the academic home of the IDF's elite cadet programs for the navy and military intelligence. Each year, we also welcome international students who come to Israel to attend the MABAL program, which regularly enrolls officers from the United States, Singapore, Canada, Germany

and Italy. This program is partially supported by donations from the Canadian Friends of Haifa University.

The studies under the new arrangement have already commenced.

"We are proud to open our doors to IDF forces and provide an academic home for members of the security services," announced President Ron Robin upon being notified of the award of the national tender. "These fine people work day and night to ensure the security of the State of Israel, and we will provide them with an unparalleled academic experience."



Prof. Ben Artzi addresses students and lecturers.



The University is seeking partners in support of this building project. For more information please contact the Vice-President for External Relations and Resource Development.

The Command and Staff College

(PUM) is the IDF's instructional institution that prepares senior officers in the three military arms (navy, ground and air forces). Students receive an MA in Political Science with a specialization in Military and Defense Studies.

The Tactical Command College

provides training to officers who serve as company commanders. They receive a BA in Multidisciplinary Studies with a major in Economics, Political Science, and Computer Science.

THE UNIVERSITY OF HAIFA SALUTES EXCEPTIONAL LEADERSHIP AT THREE SPECIAL CEREMONIES



October 4

Chancellor Angela Merkel (center) with Ms. Dana Azrieli, Chair of the Azrieli Foundation (far left), Rector Gustavo Mesch, President Ron Robin and Prof. Manfred Lahnstein (far right). **Chancellor Angela Merkel** was awarded an Honorary Doctorate during an official visit to Israel at a stately event in Jerusalem, attended by political leaders, dignitaries and members of the University's Board of Governors, administrators, faculty and students. Chancellor Merkel was recognized for her outstanding leadership grounded in principles of equality and human rights, for serving as a role model to women around the world, for her staunch stand against racism and anti-Semitism, and in appreciation of her efforts to strengthen German-Israeli relations.

"It is a great privilege to honor a leader who has taken upon herself the mission of defending the liberal order in both words and actions, a determination shared by the University of Haifa." - President Ron Robin

The University of Haifa expresses its deepest appreciation to Prof. Manfred Lahnstein, former German Federal Minister of Finance and Economics and former Chairman of the University of Haifa's Board of Governors, and Dr. Sonja Lahnstein–Kandel, President of the German Friends of the University of Haifa and former Vice Chair of the Board of Governors, for facilitating this momentous occasion. Prof. Manfred and Sonja Lahnstein are recipients of honorary doctorates from the University.



November 4

Dr. Michael Baker (center) with Dr. Arnie Aberman (left), and President Ron Robin **Dr. Michael Allen Baker** a leading Canadian physician, was conferred with an Honorary Doctorate degree at a festive ceremony during our Canadian Friends annual Mount Carmel Dinner held in Toronto, Canada. Dr. Baker was recognized for his lifelong accomplishments and contributions to Canadian medicine, and for his support of the State of Israel.

The event, attended by more than 600 guests, included President Ron Robin, Vice-President Prof. Dan Tchernov, Dr. Arnie Aberman, President of the Canadian Friends of Haifa University and members of the Board of Governors, prominent members of Canada's medical community, and Prof. Rafael Beyar, General Director and CEO of Rambam Health Care Campus. Many thanks to Dr. Aberman and Canadian Friends Executive Director, Hetty Shapiro, for spearheading a successful campaign in support of translational medical research at the new Helmsley Health Discovery Tower.

"University of Haifa's collaboration and alliance with Rambam and Technion is inspiring. Together they are creating powerful synergies, and sharing pioneering research at the new medical tower." - Dr. Michael Baker



August 17

Prof. Nel Noddings with Prof. Hanan Alexander

Prof. Nel Noddings a leading American philosopher, feminist, educationalist and ethicist, was awarded an Honorary Doctorate in a special ceremony held at the 16th International Network of Philosophers of Education Conference, hosted by the Faculty of Education. Prof. Noddings was recognized for her pioneering work on the ethics of care that greatly impacted educational research, policy and practice, social work, health science, nursing, family therapy and parenting. "Prof. Noddings' ground-breaking work in the 'ethics of care' transformed twentieth-century moral thought, significantly contributing to strengthening the values of gender equality – both in theory and in practice." – Prof. Hanan Alexander, Dean of the Faculty of Education

JOINT RESEARCH OPPORTUNITIES AT

"I can ease your Pain"

Researchers may have unlocked the connection between empathy and pain in our brains.

study, led by Prof. Simone Shamay-Tsoory of the Department of Psychology, suggests that people in a romantic relationship may be able to relieve physical pain through touch and empathy.

This research is making a unique contribution to our understanding of the neurological processes of empathy and the physiological mechanisms of brainwave synchrony and pain perception.

"Twenty romantically involved couples in a longterm relationship (over one year) participated in the study," explains Shamay-Tsoory. "We wanted to gain a better understanding of how empathy works in our brain in real-life interactions." As part of the experiment, the female partners experienced pain while their male partners sat beside them, at times touching their hand.

Working with pain expert, Prof. Irit Weissman-Fogel of the Department of Physical Therapy and researchers at the University of Colorado in Boulder, the research team was able to map two distinct neural networks that mediate emotional aspects of empathy behaviors in the brain, using functional magnetic resonance imaging (fMRI), electroencephalography (EEG) recordings, and other tracking devices. According to Shamay-Tsoory, "This study empirically supports the idea that touch can transfer a partner's empathy, thereby decreasing pain. The basis of our findings can be significant to future research exploring other types of relationships, such as empathy in the context of parents and children."

The research was identified by *Globes*, an Israeli business newspaper, as one of the seven most important Israeli university discoveries of 2018, and published in the prestigious *PNAS* (Proceedings of the National Academy of Sciences) journal.

Over 40 faculty members and some 150 students from a diverse range of fields are involved in applied and basic research that relies on utilizing fMRI technology. "We eagerly look forward to the establishment of a dedicated **Center for Brain Imaging Research** at the new Helmsley Health Discovery Tower that will provide scientists from the University and Rambam clinicians unlimited access to advanced fMRI equipment," says President Ron Robin. "The Center will also serve as a training ground for MA and PhD students and as part of its activities will host conferences attracting members of the scientific community from Israel and abroad."

Prof. Shamay–Tsoory and members of the SANS Laboratory have published novel research in collaboration with colleagues from Rambam. The studies explored neural signs of anxiety exhibited by people with autism spectrum disorder (ASD) to social touch, and on how oxytocin – known as "the love hormone" – may enhance compassion of people suffering from symptoms of post–traumatic stress dis– order (PTSD).



Prof. Simone Shamay-Tsoory Head of the Social and Affective Neuroscience (SANS) Laboratory Department of Psychology

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The real impact of shift-work on your body's internal clock



Prof. Tamar Shochat The Cheryl Spencer Department of Nursing



For more information about supporting new research facilities like these in the Helmsley Health Discovery Tower, please contact the Office of the Vice-President for External Relations and Resource Development. he importance of sleep has been increasingly recognized as critical for good health, development, memory and everyday functioning. Researchers at the University of Haifa are seeking to better understand the toll lack of sleep takes on our health.

What happens to your body when your sleep/ wake cycle – regulated by your circadian clock – gets thrown off its normal rhythm? "Getting a good night's sleep is not always easy, yet we now know that consistent sleep patterns are key to wellbeing, health and productivity," explains Prof. Tamar Shochat of the Cheryl Spencer Department of Nursing. Prof. Shochat and her team are dedicated to promoting good sleep hygiene and good health.

Her current research, being conducted in collaboration with Prof. Yona Nadir, Head of the Thrombosis and Hemostasis Unit at Rambam, points to a direct link between irregular sleep schedules of nurses working shifts and increased levels of some coagulation factors in blood vessels. A new study, tracking changes in vascular functions among nurses at the beginning and end of their night shifts, aims to shed light on the underlying biological processes. "We are exploring a range of topics that are associated with shift work, circadian misalignment, and disrupted sleep patterns," notes Prof. Shochat, "including links between sleep, cardiovascular health, metabolism, and mobility performance in middle aged and older adults, as well as the effects of evening light exposure on sleep patterns in college students. We hope that our efforts will contribute to promoting sleep awareness in the general public and relevant populations, such as shift workers, young people with a delayed sleep phase, older adults with insomnia, and public health policymakers."

Prof. Shochat plans to expand her research activities in the field of sleep at the **Interdisciplinary Laboratory for Sleep and Chronobiology**, which is slated to be built in the new Helmsley Health Discovery Tower. Benefiting from its close proximity to research populations, including patients in the inpatient departments and medical and nursing teams, the Laboratory will serve as a hub for the advancement of sleep and circadian research in Israel, health promotion and patient care. "Being close to our research subjects is key to studying the flow of behavior in its natural setting," explains Prof. Shochat.

Prof. Shochat has published extensively on sleep in aging populations, sleep, fatigue and cognitive functioning of shift workers, from nurses to airline crews, as well as sleep patterns in adolescents and their connections with electronic media exposure, depression, and lifestyle.



Actigraphs enable scientists to monitor and track human rest/activity cycles in a noninvasive manner.

THE **BIG** STORY IN THE **CITY**

Consumer Decision-Making Behavior Understanding Human Emotion Advanced Environmental Monitoring Managing Information Security

ig Data is transforming the way we live, study and tackle problems - and in Haifa it is becoming a catalyst of urban change and academic innovation.

The massive volume of information being generated daily from sources such as Twitter feeds, video recorders, mobile apps and data collected by sensors is presenting complex challenges for social science researchers.

"Big data is turning the scientific method on its head," notes Prof. Eran Vigoda-Gadot, Dean of The Herta and Paul Amir Faculty of Social Sciences. "If traditionally scientists came up with questions to answer through investigative research, today's researchers are more inclined to shaping investigative questions out of massive quantities of available data – effectively transforming scientific inquiry from top-bottom to bottom-up."

The "big data" approach to scientific discovery is producing a paradigm shift in the field. "More information leads to more integrative answers that can produce new approaches and solutions. Our challenge is to familiarize ourselves with the data, its sources, and the tools used in its collection and analysis, so that we, as social scientists, can derive scientific and social value from it," explains Vigoda-Gadot. "Such a goal requires us to teach graduate and undergraduate students state-of-the-art methods for data acquisition and analysis. To that end, we are introducing a rigorous data science component, involving close interdisciplinary cooperation, across departments within and outside the Faculty. This approach will position us at the forefront of addressing significant global challenges affecting society."

The University's administration has decided to relocate the Departments of Computer Science, Information Systems and Statistics to Haifa's central high-tech and biomedical district downtown, with the opening of the Lorry I. Lokey City Campus. In fact, the University is also establishing a School of Data Sciences, the first of its kind in Israel.

"Researchers at the Lorry I. Lokey City Campus will have immediate access to Haifa's budding high-tech industry, which will accelerate the translation of massive data volumes and inspire breakthroughs in technology, science and medicine, and smart decision-making," notes Rector Mesch, who previously served as the Dean of The Herta and Paul Amir Faculty of Social Sciences.

The new campus, consisting of four buildings, is part of the University of Haifa's Multiversity vision of providing enhanced research and educational experiences for faculty and students and further economic growth and social mobility for the region. Its central location at the Haifa port provides convenient access to railway stations and major roadways in and out of the city.



Prof. Eran Vigoda-Gadot Dean of the Herta and Paul Amir Faculty of Social Sciences



Rector Gustavo Mesch



LOCATION - LOCATION - LOCATION...



his gift is an affirmation of the University's mission to improve access to education and bring more jobs, stability, and security to northern Israel by establishing a downtown campus. I invite others to join me in transforming what is becoming one of Israel's most important universities."

– **Lorry Lokey** Founder and CEO/Chairman Emeritus Business Wire Mr. Lorry Lokey is the Founder and CEO/Chairman Emeritus of Business Wire, lover of science, staunch friend of the State of Israel, and a very generous man. He has built a thriving media relations empire, and served on several business and educational boards including: The Stanford Daily; Temple Beth El, San Mateo; the Peninsula Jewish Community Center, Belmont, and as trustee for the Leo Baeck School in Haifa. Mr. Lokey is widely recognized for his achievements in the field of journalism, as well as his civic and philanthropic endeavors, giving nearly \$800 million to educational programs in schools and colleges in the United States and Israel. His generous gift of over \$10 million to the University of Haifa will support the construction of a new city campus centered in the city's downtown area.

"Universities and cities benefit from a symbiotic relationship. In merging academia, biomedical research and high technology, the Lorry I. Lokey City Campus will attract thousands of new students, who will become an integral part of the unique climate of downtown Haifa. We thank Lorry Lokey for his generosity and support that will enable us to open up greater opportunities to our faculty, students and graduates, and contribute to the economic growth of northern Israel."

- President Ron Robin

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"The opening of a Data Science campus in Haifa's business center is a major milestone for the city of Haifa. The presence of a large student population will breathe vibrant life and color to the area. I applaud the tremendous resources and efforts invested by the University of Haifa to combine the right formula of quality academia, social integration, and contribution to the regional development and the State of Israel."

- **MK Naftali Bennett** Minister of Education "We look forward to partnering with the University of Haifa in bringing together academia, high-tech knowledge and entrepreneurial initiatives in Haifa's port area, which is evolving into the city's central business center."

- Dr. Erel Margalit

Founder and Chairman of Jerusalem Venture Partnership (JVP), and initiator of the Israel Initiative ii2020 and of the new Digital Health Complex in Haifa



BREAKING DOWN BARRIERS IN THE **NEUROSCIENCES**

" " " "

There is no glass ceiling for a girl's dream.

- Prof. Mouna Maroun, Sagol Department of Neurobiology

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Prof. Mouna Maroun of the Sagol Department of Neurobiology can stake a claim to a lot of 'firsts' – she is a first generation university graduate, the first woman from her hometown of Isfiya to earn a PhD, and is the first Arab woman in Israel to hold a senior faculty position in neuroscience as a University Department Head. She was recently featured in *TheMarker*, an Israeli business newspaper, as one of the top 20 female scientists in the country changing the face of medicine.

"As an Arab woman, my belief is that the revolution towards gender and ethnic equality starts topdown at academic institutions," shares Prof. Maroun. "Recruiting outstanding women as faculty members– Jewish, Arab, Ethiopian and Haredi – especially in sciences and STEM (Science, Technology, Engineering and Mathematics) subjects is one of the first steps to ensure the representation of women in higher education and to convey a clear message to the younger generation that there is no glass ceiling for girls."

Prof. Maroun's pioneering research that explores stress and fear responses in lab animals has led to a breakthrough in the way mental health professionals treat trauma patients. Her findings, illuminating the special needs of child trauma victims, have spearheaded the development of new treatments that focus exclusively on children and adolescents.

"When I was younger, I dreamed of becoming a medical doctor and making a difference in people's lives," recalls Maroun. "Looking back, I believe that my experiences as a minority – coming from a religious Maronite Christian family – coupled with being a young female faculty member helped shape my outlook and my career. Having to over– come social and cultural barriers inspired me to pursue unconventional research paths. My research is dedicated to exploring how our behavior is affected by brain activities and the underlying neural mechanisms influencing phobias, such as post–traumatic stress."

Prof. Maroun is the former Head of the Sagol Department of Neurobiology, and serves as a member of the Planning and Budgeting Committee (PBC)



Prof. Maroun, Head of the Neurobiology of Emotions Laboratory, with members of her research team. The lab focuses on identifying developmental differences in the mechanisms of fear and extinction in animal models.



For more information about supporting University of Haifa scholars, please contact the Office of the Vice-President for External Relations and Resource Development. of Israel's Council for Higher Education and as Chair of the Steering Committee for Accessing the Arab Population to Higher Education. She is also a member of the Al-Maram Association promoting science education in Arab schools, led by distinguished Arab-Israeli scholars, including Technion Prof. Hossam Haick, a University of Haifa Honorary Doctorate recipient (2017), for his pioneering work on nanotechnology and disease diagnosis.

"The University of Haifa is my academic home," states Maroun. "It is here that I received my undergraduate and graduate degrees and here that I landed my first academic position. I am so grateful for the support I received along the way, especially from Prof. Gal Richter-Levin, founder and head of the Haifa Forum for Brain and Behavior, and The Integrated Brain and Behavior Research Laboratory, who was my academic advisor, and is an esteemed colleague and dear friend. The University opened many doors for me. Here I was given an equal opportunity to reach my potential, and even surpassed my dreams." Maroun, who is seen as a role model by young women across the country and especially by Arab students of both genders, works hard to expand professional opportunities of neuroscience scholars from underrepresented minority groups. At the University of Haifa, she played a pivotal role in the establishment of the new Rothschild-Caesarea Doctoral Fellowship of Excellence Program for PhD Students in Neurobiology, offering nine merit-based scholarships to deserving students. One of her students, Aseel Yaseen, was awarded the Dean's Prize for Outstanding PhD Dissertation for her novel research on the negative effects of a high fat diet on cognitive, emotional and memory functioning of a juvenile brain. The paper was published in the multidisciplinary journal Cerebral Cortex.

"The University is a wonderful example of true co-existence. As an Arab in Israel I believe that science can bridge people together through the passion for knowledge. Science gives equal opportunities regardless of politi-

cal opinions and conflicts."





The Sagol Department of Neurobiology was established with the generosity of longstanding friends of the University Tova and Dr. Sami Sagol (left), who are great patrons of

science and academic development at Israel's leading universities and institutes. Dr. Sagol is a recipient of an Honorary Doctorate (2011) from the University of Haifa for his great contribution to furthering Israeli industry and to the study of neuroscience at the University. The Sagols also supported the establishment of The Emili Sagol Creative Arts Therapies Research Center (CATRC) and the Sagol Research & Therapy Laboratory for Children at Risk.

FROM SURVING

Tens of thousands of asylum seekers, forcibly displaced from their homelands in E. Africa (Eritrea, Sudan), have sought refuge in Israel. Many of them have endured the unimaginable – torture, human trafficking, and violence before and during their migration – and their mental state is often further troubled with post-migration stressors such as legal status and discrimination. Prof. Amit Bernstein of the Department of Psychology and his Observing Minds Lab group have documented that a very high proportion of this population suffers from post-traumatic stress disorder (PTSD) and mental health problems tied to trauma and chronic stress.



vital mental health services for refugees. This exciting interdisciplinary humanitarian project is being championed by Tzili Charney, Honorary Doctorate recipient (2017) and long-time friend of the University of Haifa, under the auspices of

the Leon Charney Resolution Center. In line with her long-standing commitment to social justice and peace, this project is a unique holistic approach to care for the complex needs of asylum seekers in Israel.

Research findings are already demonstrating strong links between mindfulness, resilience and recovery among refugees in Israel. Bernstein's group is now planning the effective dissemination of this intervention nationally in Israel, and internationally. "The team has initiated a new collaboration with Humanity Crew to begin the testing and implementation of the Mindful Trauma Recovery intervention program in Athens, Greece," adds Bernstein. "In the

next phase we aim to partner with mental health care pioneers in additional countries across Europe and Africa." With the help of social innovators and philanthropic leaders, they hope to reach millions of forcibly displaced persons through a novel web-based platform capable of delivering the intervention without the confines of borders, bricks or mortars.

"I am very excited about this program and confident that the dedicated members of this initiative – with respect to the clinical team and the legal experts – will make their mark in creating better lives for refugees around the world and hope for a better future." – **Tzili Charney**, *Chair of the Leon H. Charney Foundation, Vice Chair of the University of Haifa's Board of Governors.*



The mindfulness program has given me tools to help me gain control of my feelings. The meditations have made me more focused and less angry at home.

- M. is a refugee from Eritrea who recently completed the 9-week Mindful Trauma Recovery Program In response to this growing public mental health crisis, Bernstein's team has spearheaded an applied research initiative in collaboration with NGOs and leaders from the refugee community. "We are currently testing an innovative mindfulness-based intervention program for men and women from Eritrea in south Tel Aviv," explains Bernstein. "The Mindful Trauma Recovery for Refugees is a specialized low-cost mental health intervention with far-reaching implications for addressing the exploding mental health needs of millions of forcibly displaced refugees across Europe and Africa."

To build on this work, Bernstein's team has joined forces with the University's Clinics for Law and Social Change, under the direction of Dr. Tamar Harel Ben Shahar, to deliver legal guidance and



Sujoud Saqer is passionate about spreading a message of inclusion on campus. The inspiring undergraduate student and recipient of a Saman (Hebrew for 'Students Leading Accessibility') Scholarship* is heading a campaign to create a more inclusive community of students. Together with Samah Saqer, she is leading efforts to improve braille signage on campus, form a disability awareness group for fellow students, and launch a social media site to engage the University community in social inclusion issues.



"When I first moved into the dormitories three years ago and began my studies here, I was unprepared for the challenges I would face," explains Sujoud who has been blind from birth. "Aside from mastering a new physical environment, there were plenty of non-visible layers to overcome – mainly, the overwhelming emotional barriers of suddenly living on your own, and blending into a new learning environment and social experiences."

Sujoud, 19, and majoring in English Literature, was raised in Kfar Kanna, an Arab town in the Galilee. Two years ago, she picked up psychology as a second major.

"I believe strongly that promoting inclusion of individuals with disabilities will help to mitigate stereotypes. Even as a child, I insisted that I wanted to study in a regular school. When I read about the Saman Project and the important contributions the scholarship recipients are making I had an `aha!' moment – why shouldn't I be included among these courageous leaders?" "The University of Haifa is committed to helping all students pursue their education in a safe and 'barrier-free' learning environment," notes Nitza Arie, Head of the Department of Accessibility Services. Under the direction of Dean Jenny Kurman, the Office of the Dean of Students established the Department to accommodate the growing number of students with physical and learning disabilities. "We recently introduced support services, including learning strategies and adaptive technologies, student tutorials, and assistance in accessing disability-related funding. Our goal is to expand these offerings and initiate additional programs to meet the increasing and changing needs."

"I am very grateful to the Student Association for their assistance in promoting the initiative and for the guidance I received from Nitza and her professional staff at the Office of the Dean of Students," adds Sujoud. "The team always puts me at ease and makes me feel at home." Sujoud Saqer (right), and Noa Toib, an MA student in the Department of General History, at a Student Association fair promoting social causes and cultural activities on campus.



For more information about supporting accessibility programs and services on campus, please contact the Office of the Vice-President for External Relations and Resource Development.

*Saman Scholarships encourage students to raise awareness of disability inclusion issues on campuses across Israel. The Saman Project is jointly funded by JDC Israel, Ruderman Family Foundation, Ted Arison Family Foundation, Jewish Federation of Palm Beach County, and National Union of Israeli Students. Γ

CARMEL-HAIFA LAUNCHES INNOVATIONS FUND II

Carmel-Haifa – the University of Haifa's Economic Corporation– has launched **Innovations Fund II**, offering investors direct access to its newest portfolio of promising, early-stage tech start-ups.

ur main mission is to assist faculty members translate innovative research into successful commercial products and services," explains Elka Nir, CEO of Carmel-Haifa and Carmel Innovations. "We are extremely proud that our portfolio companies in Fund I secured financial backing to the tune of \$8 million from leading global healthcare corporations. One of these companies, Protekt Therapeutics (formerly MemoFit) is developing a memory-enhancing drug based on Prof. Kobi Rosenblum's research for delaying the onset of Alzheimer's disease and dementia.

"Innovations Fund II will identify new projects with commercial potential in fields ranging from marine and agricultural sciences to information systems, artificial intelligence, and digital health."

Inspired by the first Fund's impressive track record, the Haifa Economic Corporation, the development arm of the Haifa Municipality, has announced it will invest one million dollars in Innovations Fund II, including \$100,000 to support SEAERRA – an underwater vision start-up led by Dr. Tali Treibitz.

Carmel-Haifa is currently opening additional offices in the newly established Lorry I. Lokey City Campus, which will be home to Israel's first School of Data Sciences and the Tauber Bioinformatics Research Center. "Our new branch in the



Elka Nir CEO of Carmel-Haifa and Carmel Innovations

City Campus brings us in close proximity to major tech players and accelerators, such as the new Digital Health Complex founded by Brad Bloom and Erel Margalit."

"The launching of Fund II affirms the confidence of our investors in the unique investment vehicle and innovative projects offered by Carmel-Haifa, which enables them to advance pioneering research toward applied solutions and commercialization," adds Nir. "Investors have the option of being involved in project selection and assume board positions, and may invest directly in the established startups at a later stage."



result

Carmel Innovations Fund II

invests in **Underwater-**Vision Startup

Intelligent cameras developed at the University of Haifa are simplifying the recovery of images taken underwater or in conditions of poor visibility with far-reaching applications from deep-sea exploration to autonomous vehicles.

mages taken underwater and in foggy environments have low color and contrast due to scattered light. Dr. Tali Treibitz, Head of the Marine Imaging Lab at the Hatter Department of Marine Technologies, is leading a research team developing technologies to recover visibility in these images.

"Pictures acquired underwater are affected by the distance of the object from the camera, and the optical properties of the medium, making it difficult to restore the colors without prior knowledge about the scene and the medium," explains Dr. Treibitz. "Our physics-based methods accurately reconstruct the captured scene in real time, producing a sharp and high-resolution color image. The process is fully automatic and applies novel algorithms."



For more information about SEAERRA and other portfolio companies in Carmel Innovations please contact Elka Nir at Carmel-University of Haifa Economic Corporation.

Underwater imaging is widely used in multiple types of marine operations, from scientific research to commercial and recreational purposes, and are often obtained using cameras mounted on underwater vehicles.

"SEAERRA is providing a technology with simple hardware based on intelligent solutions that require minimal input," adds Dr. Treibitz. "Using our novel algorithms and standard photography equipment, we are now able to produce clearer images taken underwater and in foggy environments."



New International Desks Boost Presence Around the Globe



The University of Haifa is expanding its global footprint in Europe, Latin America, and Asia with the opening of four new international desks, a move initiated

by Prof. Dan Tchernov, Vice-President of Development and External Affairs. "We are pleased to announce that we have expanded our activities to Hong Kong, strengthened our presence in Western Europe, and intensified our outreach to Spanish- and Russianspeaking communities on a global scale," noted Tchernov. Our aim is to cultivate relationships and expand our fundraising base in strategic geographic areas where we have previously had minimal representation, and to serve as a point of liaison for the promotion of scientific initiatives and partnerships."

Reception for Rector Gustavo Mesch

HAIFA Dylan Tauber Educational Complex

HAIFA Business Leaders Forum for Haifa and the North

> **LONDON** Empress Farah Pahlavi

HAMBURG Jewish-Arab Leadership Program Dinner

TORONTO Mt. Carmel Dinne



HAIFA Galia Albin

Mr. Yonel Cohen. The Argentinian Friends office coordinated a lecture tour on the topic of "Community Strategies on Dealing with Poverty" led by Prof. Roni Strier, Director of the Interdisciplinary Center for Research on Poverty and Social Exclusion Studies. As the academic head of the University's Flagship Program, Prof. Strier has earned

a reputation in the field of promoting solidarity and integrating marginalized groups into Israeli society. Workshops were held with department heads of the Argentine Ministry of Social Development, as well as the American Jewish Joint Distribution Committee (JDC) staff working with impoverished Jewish families and communities in the region.

During a recent academic and fundraising tour in Latin America, Rector Gustavo Mesch was the honored guest at a festive reception hosted by Prof. Celso Lafer, an Honorary Doctorate recipient (2014) and longstanding friend and supporter. Prominent academic and community leaders of São Paulo, including members of the founding committee of the Brazilian Friends Association, attended the function.

Canadian Friends of Haifa University held its annual Mount Carmel Dinner attended by more than 650 guests. As part of the festivities, an Honorary Doctorate was bestowed on prominent Canadian physician, Dr. Michael Allen Baker. The proceeds of the dinner will support the establishment of The Helmsley Health Discovery Tower, an exciting collaboration with Rambam Health Care Campus. More on the event on page 7

The German Friends recently hosted a festive dinner celebrating 10 years of the Jewish-Arab Leadership Program, which has supported some 500 BA graduates over the years. Dignitaries and community leaders including former President of the Bundestag Dr. Norbert Lammert, Max and Dr. Nagila Warburg, and Dr. Sonja and Prof. Manfred Lahnstein attended the event. Mrs. Lian Ryan-Hume, a graduate of the Program who went on to become a Rhodes Scholar, was among the guest speakers. The annual dinner held by the German Friends raises funds for the influential Leadership Program.

Israeli Friends of the University of Haifa announced the election of the Association's new President, Ms. Galia Albin, a leading Israeli businessperson, filmmaker, philanthropist and children's rights activist. Albin replaces prominent Israeli businessman,

The Association also recently celebrated the opening of the Business Leaders Forum for Haifa and the North on the Mount Carmel campus, a newly formed body representing the region's business community leaders. The Forum will be dedicated to advancing the University's research and academic activities in downtown Haifa. The keynote speaker was Moshe Karadi, Chair of Delek Israel, the 15th General Commissioner of the Israeli Police and University of Haifa alumnus.

> The University of Haifa UK hosted a memorable event with former Empress of Iran Farah Pahlavi and authors Miranda Darling and Viola Raikhel-Bolot to celebrate the book launch of "Iran Modern: The Empress of Art". The event, sponsored by the

Ezri family, was part of a campaign to raise funds for the Ezri Centre for Iran & Persian Gulf Studies, which has become a global authority on Iran and the Persian Gulf.

Haifa UK also organized an event featuring Mooly Eden, Chairman of the Executive Board and former Intel Israel President, in partnership with UK Israel Business. Some 100 businessmen and women came to hear Eden speak about the future of artificial intelligence and robotics.



American Society of the University of Haifa (ASUH) was instrumental in securing a mega gift from wellknown American philanthropist, Mr. Lorry Lokey towards the University's expansion plan in Haifa's downtown area. Mr. Lokey's generosity will establish

the Lorry I. Lokey City Campus in the heart of Haifa's business and high-tech center, as well as Israel's first School of Data Sciences. More about the Lorry I. Lokey City Campus on page 11

ASUH was pleased to announce a generous gift from the Laszlo N. Tauber Family Foundation for the establishment of the Dylan Tauber Educational Complex in the City Campus. More on the dedication ceremony on page 4

As part of its efforts to increase alumni engagement and create a more robust alumni community, ASUH recently hosted two successful alumni evenings in New York City and Los Angeles. The events attracted University of Haifa graduates from varied faculties and International Programs. As the initiative gains momentum, the American Society plans to introduce similar events in other major cities across the US.



Dr. Liat Gafni-Lachter, OTD

Fulbright Scholar Program Department of Occupational Therapy

Creator of "Better Together" Program for Advancing Family-Centered Care

> Liat Gafni-Lachter wears many professional hats: she is an occupational therapist, educator, and currently, a Fulbright scholar at the University of Haifa, where she is completing her postdoctoral research. After completing her service in the IDF Medical Corps, Dr. Gafni-Lachter earned a bachelor's degree in occupational therapy at the Hebrew University of Jerusalem, followed by a master's degree in occupational therapy at the University of Haifa. A few years later, she moved to the US to advance her clinical and research skills, first working as a pediatric occupational therapist in Chicago, then as an assistant professor at Saginaw Valley State University in Michigan. During her doctoral studies at Boston University, she developed "Better Together", a training program designed to enhance family-centered care in pediatric health services. This program is now the focus of her postdoc research.

My Academic Journey:

After working as a therapist with children with developmental delays and autism for a number of years, I was motivated to improve family-centered care practices. Upon receiving the Fulbright scholarship, I chose the University of Haifa as my academic home. I was fortunate to find two excellent advisors at the Department: Prof. Naomi Josman, an internationally recognized leader in cognitive rehabilitation who also serves as the Director of the Department's PhD Program and as Deputy Dean of the Faculty of Social Welfare and Health Sciences; and Dr. Ayelet Ben-Sasson, a renowned researcher in the field of child development and the co-creator of 'Baby Croinc', a platform which harnesses crowd wisdom to help parents monitor their child's developmental milestones.

Postdoc Activities:

With support from the University, I launched the "Better Together" training program which to date has trained about 65 occupational therapists across Israel and was able to raise awareness of ways to promote family-centered care at conferences and workshops in Israel and abroad. Since being rolled out over a year ago, practitioners have noted substantial learning gains and improvements in parent-practitioner interactions. The program was first hosted at the University's Interdisciplinary Clinical Center, which offers diverse therapeutic and diagnostic services to at-risk populations. It was also sponsored by the University's Division of Continuing Education, and the Department of Occupational Therapy. I am also honored to represent the Department in the Israeli Society for Occupational Therapy.

Future Plans:

I hope to continue training professionals and develop more effective tools and measurements for partnerships with families at the organizational level. I plan to expand my research to follow families as the children enter adulthood. I am grateful to the Fulbright United States-Israel Education Foundation, the Ministry of Absorption and the University of Haifa for their generous support and for believing in me.



The University of Haifa recently completed the installation of new gifts of art from the estate of Prof. Avraham Kampf (1920-2016) at multiple locations on the Mt. Carmel campus. The Kampf collection includes additional works of art by Yaacov Dorchin, Grisha Bruskin, Regina Heim, Ahmad Knaan, and other Jewish artists. Kampf, a distinguished art historian, scholar of modern and Jewish art, curator, author, educator, and beloved professor, founded the University's Department of Fine Arts at the Faculty of Humanities.

Art Legacy Gift Honors Prof. Avraham Kampf

(1920-2016)

נן פסלים ע" פרופ' אברהם ש. קמפ

וור אברהנ (1920-2016)

מייסד החוג לאמ כאוניברסיטת ח

The Prof. Avraham Kampf Sculpture' Garden

A Gift from the Estate of Prof. Avraham Kampf (1920-2016)

The Founder of rtment of Fine Arts University of Ha



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Decoding the art of animation is my passion. My research focuses on the development of new computational tools that enhance virtual reality, machine learning, and art and design apps.



Fraph Roboti

RETURNING SCIENTISTS PROGRAM

The 'Zippable bunny' represents a novel algorithm developed by Dr. 1 ETH used as a short-cut in the assembly of 'real' 3D graphic shapes in computer animation

developable shape

Meet Dr. Roi Poranne, Senior Lecturer in the Department of Computer Science

Roi joined the University of Hala through the Returning Scientists Program, after completing his Post oc at ETH Zurich. The Program offers

enerous start up packages to enable p cholars to set up their academic, home

I am working on a new project to enhance virtual reality applications in stroke rehabilitation therapy with colleagues from the Faculty of Social Welfare and Health Sciences. I am delighted that my earch is conti

health care outcomes

3D model





zippable bunny

contact the Office of th s and Resource Develo