



אוניברסיטת חיפה
University of Haifa
جامعة حيفا

BOARD OF GOVERNORS EDITION

HEIGHTS

UNIVERSITY
OF HAIFA MAGAZINE
SUMMER 2019

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Artificial Intelligence
Nutrition

Artificial Intelligence 14
Archaeology
Biblical Studies

MULTIVERSITY

forging new
frontiers of
knowledge

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Zoology

Neurobiology
Genetics
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+
THANK YOU
CHAIRMAN TAUBER

12



חבר הנאמנים
Board of Governors
مجلس المحافظين

HEIGHTS SPECIAL BOARD OF GOVERNORS EDITION



(l-r:) Rafael Beyar, Dalia Dorner, Gila Almagor, Jeremy Isaacs, Oliviero Stock, Lorry I. Lokey, and Sylvia Earle

RULE MAKERS & BREAKERS

Meet our 7 inspiring honorary doctorates,
trailblazers in their respective fields

p10

Welcome Governors and guests to the 47th Board
of Governors Meeting celebrating academic excellence
and social responsibility.

We look forward to seeing you at the Honorary Doctorate
Conferment Ceremony that will take place at
The Haifa Municipal Theatre.



HEIGHTS MAGAZINE

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Meeting the Challenges of Tomorrow

THE MULTIVERSITY VISION



Professor Ron Robin, University of Haifa President

OUR MISSION:

The University of Haifa “in and of” the City and the northern region

- ❖ fostering synergies across academic units and with local communities and partners
- ❖ identifying and meeting future human needs and global challenges
- ❖ facilitating an inspirational setting for teaching, learning and discovery
- ❖ supporting an extended physical presence in multiple strategic sites

Home to over 18,000 students from a wide range of ethnic and socio-economic backgrounds, the University of Haifa is the largest comprehensive research university in northern Israel, and the most pluralistic institution of higher education in Israel. Here, Jews, Arabs, Druze, Haredi and secular students, new immigrants, and military and security personnel come together to study, teach and learn.

Since its establishment 47 years ago, the University has developed into a world-class academic institution with an international reputation in a variety of fields, including marine sciences, public health, law, security studies, holocaust research, cancer research, neurosciences, bioinformatics, and education. In the rapidly changing landscape of higher education, which calls for the expansion of knowledge in the life sciences and engineering, it is critical that we extend and develop our offerings in these fields, while embracing digital technology changes that will define tomorrow’s professional, social, and economic world.

As part of our strategic plan for establishing the ‘Multiversity’, we are laying the physical and

virtual groundwork required to create a university with an extended physical presence across multiple sites in the City of Haifa and the Galilee.

The ‘Multiversity’

The Multiversity is a diverse network, for discovery, economic expansion and social mobility. It is designed to improve interaction between disciplines, broaden access to higher education, and foster collaboration between academia and diverse partners. Through its framework, we can define ourselves by who and what we include, and not by who and what we exclude.

Anchored in multiple “portal campuses”, strategically situated near sites of cutting-edge economic activity, the Multiversity allows faculty and students to enrich their research and learning via a presence in key places of change without compromising connectivity to the rest of the University.



A rendering of the future cable car campus stop, linking the University to the Technion - Israel Institute of Technology and the Lev Hamifratz Transportation Terminal.



We are well on our way...

By 2025, the Multiversity of Haifa will leverage its location by creating a network of inter-related specialized portals: the Mt. Carmel Campus (the main campus and administrative and academic headquarters); the Lorry I. Lokey City Campus (School of Data Sciences); the Marine Sciences Campus (centralizing all oceanographic research and teaching); the Medical Science Campus (at the Helmsley Health Discovery Tower, a joint venture with Rambam); the Engineering Campus in Karmiel; and the Joint Technological Institute at East China Normal University (ECNU) in Shanghai.

We are confident that this network will upgrade and increase student recruitment, transform our academic footprint and interface with the social and economic ecosystems through mutually beneficial partnerships. This is our strategy for creating synergies and significantly enhancing our local, national and international impact.

Today, in the “Glocal” era, we create a new “sense of place” and gain new notions of identity and belonging. In offering these multidisciplinary and multi-spatial solutions for the future, we seek to seize the moment with both humility and daring.

That said, we are well aware that such profound changes carry a great deal of responsibility, as well as multiple challenges. In order to implement the vision of the Multiversity, major steps have and will be taken in the near future. This can, and will only, be done with the approval and full support of the University’s governing bodies, whose input and advice are critical for the success of the forthcoming transformation.

This year, we expect to reach an all-time fundraising record. We see this accomplishment as an indication of trust and faith on behalf of our donors and partners that we are indeed on our way to a better tomorrow. We are working hard to ensure that this is an ongoing positive development. Please join us on this exciting journey.

Sincerely,

Prof. Ron Robin
President

U OF H

NEW & NOTEWORTHY



Inaugurating a New Building for the Faculty of Social Welfare and Health Sciences

A new building for the **Faculty of Social Welfare and Health Sciences** is being inaugurated at the 47th Board of Governor's Meeting. The Faculty's new home, located at the Mount Carmel campus, will be outfitted with state-of-the-art research and teaching facilities. The construction was made possible by generous gifts provided by the University's long-standing supporters **Mr. Maurice Kanbar** and **Mrs. Irma and Mr. Aaron Spencer**, who serves as Chairman of the Advisory Board of The Cheryl Spencer Institute for Nursing. The Faculty, which is one of the University's fastest growing entities, comprises three Schools, eight Departments, and the Inter-disciplinary Clinical Center.

Cornerstone-Laying Ceremony of the Wild Cereal Gene Bank Complex

The University of Haifa is celebrating the dedication of the new **Wild Cereal Gene Bank Complex**, supporting innovative wild cereal research in the Institute of Evolution and the Department of Evolutionary and Environmental Biology. The complex is being generously supported by **Lady Barbara and Sir Mick Davis**, longstanding friends of the University, **Prof. Alfred Tauber**, Chairman of the Board of Governors, and the Israel Science Foundation (ISF). The new complex will be equipped with state-of-the-art facilities, including a greenhouse, cold storage rooms and a research laboratory.



Rendering of the Wild Cereal Gene Bank Complex.

The Leon Charney Forum on New Diplomacy

The Charney Forum on New Diplomacy recently held its international launch event in New York City, hosted by Mrs. Tzili Charney, Founder and President, Chair of the Leon H. Charney Foundation, Vice Chair of the University's Board of Governors and honorary doctorate recipient (2018). The event marked the opening reception for the "The Rise of New Diplomacy" Forum, an assembly of entrepreneurs, professors, and international relations experts.

The newly established Charney Forum on New Diplomacy at the University of Haifa is chaired by Ido Aharoni, a 25-year veteran of Israel's Foreign Service and a public diplomacy specialist. The Forum was established to provide training and practical tools in the emerging practice of New Diplomacy.



Ido Aharoni and Mrs. Tzili Charney at the Charney Forum on New Diplomacy international launch event in New York, April 11, 2019.

New Asia Pacific Desk



Tsameret Zohar



As part of its development efforts to expand the University's presence in East Asia and Australia, the Division of External Relations and Resource Development re-

cently opened a new Asia Pacific Desk. Headed by Ms. Tsameret Zohar, former Managing Director of the International School, the Asia Pacific Desk is establishing a local presence in China, Hong Kong, and Taiwan, and will expand its activities to other countries including Singapore and Australia.

Major Accolades Awarded to Members of the University's Academic Community

Awards to Faculty

Prof. Ofira Ayalon

Department of Natural Resources and Environmental Management
Michael Landau Prize

Prof. Deborah Bernstein

Department of Sociology
Israel Prize Award

Prof. Yehudit Henshke

Department of Hebrew Language
Prime Minister's Prize

Dr. Rachel Perry

Weiss-Livnat MA Program in Holocaust Studies
The Ina and Michael Rogatchi Foundation's Humanist Award

Prof. Sharon Poliakine

Department of Fine Arts
Jacob Pins Award

Dr. Noga Ron-Zewi

Department of Computer Science
Krill Prize

Prof. Emeritus Nili Shupak

Department of Biblical Studies
Bialik Prize

Awards to Students

Dr. Valentina Klymiuk

Department of Evolutionary and Environmental Biology
Jeanie Borlaug Laube Women in Triticum (WIT) Early Career Award

Lamma Mansour

Department of Psychology
Rhodes Scholarship

Nahi Mashool-Shauli

Faculty of Education
Presidential Scholarships for Excellence and Innovations

Hila Wiedel

Faculty of Social Welfare and Health Sciences
Presidential Award for Excellence and Innovations



Women agricultural collective, 1924.



Understanding our 'Israeliness'

Prof. Deborah Bernstein honored with Israel Prize for her deep and insightful work on the evolution of Israeli society

Prof. Deborah Bernstein of the Department of Sociology has won this year's Israel Prize in the field of Sociology and Anthropology.

Prof. Bernstein, who has taught at the University for over three decades, devoted her career to studying inequality and relations of dominance in Israeli society in its formative periods, during the pre-state period and early statehood. She focused on gender inequality in the labor market, as well as the social history of women workers and marginalized women during the British Mandate. Bernstein contributed to the development of new trends in the sociology of Israeli society, and to the emergence of 'critical sociology' in the late 1970s and early 1980s. She studied the evolving ethnic relations (Ashkenazim-Mizrahim) and the formation of the Israeli system of stratification. Bernstein's research is innovative in combining sociological and historical perspectives, which she employed in her study of relations between Jews and Arabs in Haifa during the mandate period. She has published widely, both in Hebrew and in English.

The award committee remarked that "her trail-blazing research has led to important insights into understanding women and gender, social marginalization, labor relations, law and contemporary Israeli society from the time of the [British] mandate until today."

In a congratulatory letter sent to Bernstein, President Ron Robin and Rector Gustavo Mesch wrote: "Your original research exploring Israeli society has contributed to a deep and unique understanding of 'Israeliness' as we know it today. Your achievements are an inspiration to the university community, especially since your work was written at the University of Haifa, which aims to be a gateway to social mobility for anyone who so aspires. Together, through research and action, we hope to affect positive change in Israeli society."

Prof. Bernstein received the prestigious award at the annual state ceremony on Independence Day in Jerusalem.

Oxford Bound

Interview with Lamma Mansour,
BSc Psychology 2019, Rhodes Scholar

Lamma Mansour is the second UofH graduate to be awarded a prestigious Rhodes Scholarship in the past two years. At Oxford she intends to pursue her master's in evidence-based social intervention and policy evaluation. She is following in her grandfather's footsteps who studied economics there as a young adult.

What brought you to the University of Haifa?

I came here when I was 18 years old from my hometown, Nazareth. The University provided me with campus accommodations and a spot in the Ofakim Program. Although I chose psychology as my major, I was able to take “a bit of everything” including anthropology, political science, communications, education, and gender studies – a mosaic like my lecture notes, which were in three languages, Arabic, Hebrew and English.

What are some of your most memorable experiences at the University?

In my second year, I had the privilege of serving as an instructor as part of the *Access for All* initiative, a program that opens the doors of higher education to adult learners from disadvantaged backgrounds. I taught a psychology class to 20 adults, many of them nearly twice my age. The classroom discussions often touched on difficult topics such as mental illness and addictions. My students have been a great source of inspiration

for me, and all of them managed to complete the one-year course. Two of my students, who are recovering addicts, became certified to work with at-risk youths. I am grateful to the *Access for All* Program for their faith in me and I hope to one day be able to contribute to the advancement of this incredible initiative.

What are your plans for the future?

I hope to connect the diverse fields of study that I learned at the University of Haifa to further investigate the best way to implement effective community-led interventions such as the prevention of gender based violence and mental illness stigmas in the Arab community.

My research showcases the interdisciplinary approach I am interested in. Under the guidance of Prof. Zohar Eviatar of the Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, I investigated how the multilingual brain responds to spoken Arabic as opposed to literary Arabic and the role of emotions in that process. I was able to bring my personal experiences and background to the academic arena and I hope to be able to continue to do this in the future.



Lamma Mansour (right) at the *Access for All* graduation ceremony with her student Samiha from Isfiya.




Lamma (second from left) with her students.

ALUMNUS SPOTLIGHT

Reconnecting with Amir Faintuch

Amir Faintuch has held senior management positions in leading American semiconductor companies over the course of his career, serving most recently as Senior VP and Director of Strategic Investments at Intel Capital. He recently joined Pitango Venture Capital as an independent venture partner.

Faintuch, who earned a joint MBA degree from Northwestern and Tel Aviv Universities, received his BSc in Economics and Business Administration from the University of Haifa. An avid skier, hiker and scuba diver, he now lives in Los Altos, CA, with his wife Vered and his three daughters.

A photograph of two men, Amir Faintuch and another individual, sitting on a boat. They are both wearing dark blue wetsuits with orange and white accents. The man on the left is bald and smiling, while the man on the right has short grey hair and is also smiling. They are positioned in front of a body of water with a long pier and a small boat visible in the background under a clear sky.

“It’s an exciting future ahead, and it will challenge our ability to adapt, collaborate and respond to change.”



Mr. Amir Faintuch
CLASS '93

During a recent visit to Haifa, he reconnected with the University, meeting with members of the administration and networking with members of the University of Haifa Business Leaders Forum. He also joined a scientific working dive led by Professor Dan Tchernov, Founder and Scientific Director of the Morris Kahn Marine Research Station and Vice-President of Development and External Relations.

Why did you choose to study at University of Haifa?

The University's economics and business administration program was considered among the best in Israel. I was afforded an opportunity to study with some of the nation's most respected academic economists. What also attracted me was the program's balanced approach between quantitative and qualitative economics theories. The broad knowledge base I gained here has been of practical value throughout my professional career.

Any words of advice for students choosing this area of study?

I well remember the challenging classes and rigorous course load. My advice would be to believe in yourself and stick it out, even when it starts getting tough. Looking back, I think it would have been useful to have studied more than one spe-

cialization. Having to do it over again, I would have paired my major with computer science. Given the 'fanatical' pace of change in the world, I believe that being an expert in more than one subject is essential today.

Fondest memories from your years at University of Haifa?

I met my wife at University of Haifa, she studied here at the same time.

What vision or motto has guided you throughout your career?

I believe in being bold – aiming high and setting ambitious goals– and at the same time staying humble so that you can truly appreciate other people's talents.

What predictions can you make about the future of our wired world?

We must plan for a future where artificial intelligence and new computer models of human intelligence affect all facets of human life. This will require the right technological and ethical, social frameworks to co-exist together. It's an exciting future ahead, and it will challenge our ability to adapt, collaborate and respond to change."

Amir Faintuch joined Professor Dan Tchernov on a scientific dive at Kibbutz Sdot Yam. The two also recently presented a fireside chat, The Mediterranean Sea—An Untapped Platform, at the Oshman Family JCC in Palo Alto, CA.

HIGHEST HONORS

Meet the University's 2019 Honorary Doctorate Conferees
Individuals whose life's work have led to exceptional
contributions to science, justice, medicine, artificial intelligence,
education, culture and the State of Israel.

Mrs. Gila Almagor – Israel



Gila Almagor is one of Israel's most famous and beloved actresses. She has appeared in over 60 Israeli and foreign film productions, has written several books, and is a role model for students and faculty at the School of the Arts. Exceptionally active in the public arena, she served as a Tel Aviv Municipality council member (1998–2004) and as chair of several associations including the Israel Cancer Association and the Israel branch of the International Association of Theatre for Children and Young People. She established the *Gila Almagor Wish Fund*, a charity for sick children and children at risk. For her work, she has received countless accolades including the Israel Prize, and holds honorary doctorates from several Israeli universities.

Justice Dalia Dorner – Israel



Retired Judge Dalia Dorner is among Israel's top legal minds, recognized for her rulings upholding human and social rights, and for her advocacy of freedom of speech and ethical journalism. She served as Justice of the Supreme Court of Israel between 1993–2004, and is President of the Israel Press Council. She has headed several state and public commissions including the treatment of holocaust survivors, the special education system and the punishment and treatment of offenders, studied by generations of students and researchers at the Faculty of Law. She is an honorary member of the American Law Institute, has been honored by several Israeli universities, and holds honorary doctorates from the Weizmann Institute and Ben-Gurion University.

Prof. Rafael Beyar – Israel



Prof. Rafael Beyar, immediate past General Director and CEO of Rambam Health Care Campus, is a renowned cardiologist, professor of medicine, and biomedical entrepreneur. His cutting-edge research led to innovative technologies in the area of cardiovascular system imaging and analysis, and invasive and interventional cardiology, including novel designs for metal stents and the first robotic catheterization system in the world. He has held several public roles including Chair of the Public Committee for the Expansion of the Medical Health Basket Services, and Chair of the Public Committee for the National Transplant Center. He recently partnered with the University of Haifa in a joint vision to establish the Helmsley Health Discovery Tower for innovation and translational research that will advance patient-centered medicine.

Dr. Sylvia Alice Earle – USA



Dr. Sylvia Earle is among the most recognized figures in marine sciences and conservation in the world. For six decades, she has been an advocate, scientist, educator, author, policy maker, inventor, businesswoman, and passionate ambassador for the sea. She was the first female scientific director of National Oceanographic Atmospheric Association, initiator of the Google Earth 'Ocean' function, and head of the National Geographic Sustainable Seas Expeditions, working to expand marine protected areas worldwide. For her work, she has received over 100 scientific and public accolades including the Woman of the Year, and 22 honorary doctorates. For several years, she has collaborated with scientists from the Leon H. Charney School of Marine Sciences on interdisciplinary studies in the Mediterranean Sea.



**Mr. Jeremy M. Isaacs,
CBE – UK**

Jeremy Isaacs is a founding partner of JRJ Group, a leading international private equity investment firm. He is a very active philanthropist and public figure, serving in a range of positions including Non Executive Director of Marex Spectron, Food Freshness Technology, Nomad Foods Limited and Landscape Acquisition Holdings Limited, Trustee of The J. Isaacs Charitable Trust, Chair of Trustees of the Noah's Ark Children's Hospice, and Honorary Fellow of the London Business School. He was appointed Commander of the Order of the British Empire (CBE) for being Non Executive Director of Imperial College Healthcare NHS Trust from 2003–2016. Mr. Isaacs established a Scholarship Fund for graduate studies at the Leon H. Charney School of Marine Sciences.



Prof. Oliviero Stock – Italy

Prof. Oliviero Stock is a renowned expert in the field of artificial intelligence, natural language processing, and cognitive technologies. His groundbreaking research focuses on technologies that interpret human needs. Prof. Stock served as Chair of the European Association of Artificial Intelligence, President of the Italian AI Association, President of the Association for Computational Linguistics, is the former Director of FBK Center for Scientific and Technological Research, and is an advisory committee member on several international scientific societies. He is a longstanding and active member of the University's Board of Governors, and has collaborated on international research projects with the Caesarea Rothschild Institute for Interdisciplinary Applications of Computer Science and the Reuben and Edith Hecht Museum.



Mr. Lorry I. Lokey – USA

Lorry I. Lokey is Founder and CEO/Chairman Emeritus of Business Wire, lover of science, staunch friend of the State of Israel, and a prominent philanthropist. He built a thriving media relations empire and served on several business and educational boards in the US and Israel. Mr. Lokey is widely recognized for his achievements in the field of journalism, and his civic and philanthropic endeavors, giving close to a billion dollars to educational programs in schools and colleges in the US and Israel. He has received many accolades, including nine honorary doctorates. He has partnered with the University to advance our 'Multiversity' vision by establishing the Lorry I. Lokey City Campus in downtown Haifa.



CARMEL AWARD OF MERIT

Haifa Municipal Theatre

The University of Haifa and Rambam Health Care Campus are jointly awarding the Carmel Award of Merit to the Haifa Municipal Theatre, in recognition of its role in enriching culture in Haifa, and for standing as a symbol of multiculturalism and tolerance. The University enjoys a long and fruitful partnership with the Theatre, collaborating with the School of the Arts, and recently with the Younes and Soraya Nazarian Library on the Digital Theatre Archives project. This year, Rambam joined forces with the Theatre in its newly launched production of *Whose Life is it Anyway*, a remake of the popular 1970's play by Brian Clark. Following the performance, a panel of Rambam experts joined a panel discussion on ethical issues.

2019 HONORARY FELLOWSHIP CONFEREES



Sheikh Zeidan Atashi – Israel

Sheikh Zeidan Atashi of the Druze village of Isfiya is a former diplomat and politician. He served as Israel's Consul General in New York, member of Knesset, and as founding member and chairman of the Druze Follow-Up Committee. A University of Haifa alumnus, he has been an ardent supporter of higher education in the Arab-Druze sector, as well as a devoted and longstanding member of the University's Board of Governors.



Dr. Tzafira Ben-Barak – Israel

Dr. Tzafira Ben-Barak of the Faculty of Humanities is an expert in Ancient Near Eastern history and biblical research. She is being recognized for her many educational and cultural pursuits in the city of Haifa, and as an outstanding lecturer at the Department of Jewish History. Among her most notable works is "Inheritance by Daughters in Israel and the Ancient Near East: A Social, Legal and Ideological Revolution".

10 YEARS

Laszlo N. Tauber Family Foundation

A DECADE OF GIVING



Alfred I. Tauber is a Professor Emeritus of Medicine and Professor Emeritus of Philosophy, specializing in hematology, biochemistry and immunology. He has served on the faculties of Harvard University and Boston University, and as Chairman of the Board of Governors at the University of Haifa since 2013.

For over a decade, Prof. Alfred I. Tauber has been an indispensable force of change at the University of Haifa. In his role as Chairman of the Board of Governors, he played a pivotal role in advancing the University's physical and academic growth, as well as its community-based initiatives. He has also been a staunch supporter of the Multiversity plan introduced by President Ron Robin and Rector Gustavo Mesch, to transform the University into a hub for cross-disciplinary teaching and research, and catalyst for economic development and social mobility in Israel and the North.

In addition to being a distinguished immunologist, Prof. Tauber has taught and written extensively on ethics, the philosophy of science, and the history of ideas. For his critical studies of immunology, he received the Science Medal from the Institute of Advanced Studies (ISA) of the University of Bologna (2008), and an honorary doctorate from the University of Haifa (2011). He was also recognized for his philanthropic activities promoting social welfare, education and research at the University and in Israel through the Laszlo

N. Tauber Family Foundation, which he established with his sister Ingrid nearly two decades ago, in memory of their late father.

"Throughout his accomplished medical and academic career and his philanthropic work, Fred pursued non-conventional bridges in pursuit of creating a more equal, inclusive and just society," notes President Robin. "His forward-thinking leadership and support helped us strengthen our academic foothold in the city of Haifa, forge cross-sector ventures with academic and business partners, advance community-based initiatives, educate a new cadre of mental health practitioners, and assume a leading role in the fields of mental health research and bioinformatics."

Prof. Alfred Tauber is the University of Haifa's largest donor with a history of contributing generously to a diverse range of initiatives including student scholarships, innovative study programs, technology transfer innovation, campus-wide initiatives, building projects, and pioneering research studies.



- » Psychiatric Rehabilitation Fieldwork
- » Mental Health Case Management Services Study



- » Carmel Fire Emergency Fund
- » Sequencing Spalax Genome Cancer Research
- » National Outcome Rehabilitation Monitoring Implementation and Research Project

- » American Society of the University of Haifa
- » Pine Biotech Bioinformatics Company (Carmel-Haifa)

2008

• 2009

• 2010

• 2011

• 2012

• 2013



- » PhD Scholarships in Psychiatric Rehabilitation

- » Tauber Bioinformatics Research Center

- » Dolphin Research by Dylan Tauber

MAJOR PROJECTS

Tauber Bioinformatics Research Center

developing user-friendly bioinformatics platforms (T-BioInfo) for fast and easy analysis and visualization of multi-omics data.

Center for Community Mental Health Research Major Projects and Training

Mental Health Case Management Services Study; National Outcome Rehabilitation Monitoring Implementation and Research Project; and Psychiatric Rehabilitation Fieldwork Graduate Program.

Research Initiatives

in the fields of neuroscience, biofuels, and evolutionary sciences (cancer treatment and protection; wild wheat genome).

American Society of the University of Haifa

activities and initiatives.

Dylan Tauber Educational Complex

new academic home of the Department of Computer Science in the Lorry I. Lokey City Campus.

Carmel-Haifa Activities and Carmel Innovations Fund I and II

bringing early-stage research out of the laboratory and into the marketplace.

Haifa Research Center for Maritime Policy & Strategy

national maritime think-tank on regional security and foreign policy, law, energy and the environment.

Scholarship Programs

for PhD students in the field of Psychiatric Rehabilitation; Avaloch Fellowship for Outstanding Music Ensembles; Student Reservists in Operation Tzuk Eitan

Donor Garden

in honor of the generosity of our dedicated friends and supporters.

- » Carmel-Haifa Portfolio Companies
- » Co-Existence Initiatives on Campus by Dr. Ingrid D. Tauber
- » Haifa Research Center for Maritime Policy & Strategy
- » Operation of the Recording Studio at the Department of Music



- » Carmel Innovations Fund I
- » Donor Garden



- » The Interdisciplinary Clinical Center
- » Carmel Innovations Fund II

• 2014

• 2015

2016

• 2017

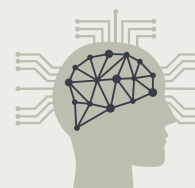
• 2018

• 2019

- » Avaloch Fellowship for Outstanding Music Ensembles
- » Tzuk Eitan Scholarship Fund
- » Posttraumatic Stress Disorder Research



- » Dylan Tauber Educational Complex
- » Research Projects in Translational Neuroscience
- » Wild Cereal Gene Bank



- » NAVIGATE Mental Health Initiative
- » Jewish-Arab Center Employment Initiatives



To meet the complex challenges and opportunities that the future holds, the University is committed to building data fluency and empowering its faculty and students to work across disciplinary boundaries.

- Prof. Ido Izhaki,
Vice President and
Dean of Research

USING AI TO PICK UP THE PIECES

A novel AI algorithm developed by a team from the University of Haifa and the Technion is able to piece together archaeological fragments “perfectly” using computer vision.

For Prof. Ilan Shimshoni of the Department of Information Systems, putting AI to practical uses has turned into a lifelong passion. His recent collaboration with Prof. Ayellet Tal and Niv Derech from the Technion, has produced a sophisticated digital tool that can assist archaeologists and curators reassemble ancient artifacts efficiently and reliably.

“Using computer vision, the system takes a picture of each fragment and extrapolates what the area around the fragment might look like based on color and structure,” explains Shimshoni, “even in pieces where edges and colors have been eroded. It then points the user to fragments that match that prediction.”

The project, funded by the EU-supported Gravitare project, has received extensive media attention over the last several months. Articles on the work have been published in the *Times of London* and *la Repubblica* to name a few.



ment matches based on patterns and breaks in the loose fibers along the edges of the papyrus parchment. Both of these projects are examples of applied research in digital humanities – at the intersection of computational tools and humanities disciplines.

“There are countless applications for this technology in biology, medicine and even drug development,” adds Shimshoni. “I am also working on another exciting project whose goal is to create a digital health screening tool to prevent falls in older adults. The system under development uses 3-D imaging to assess risk of falling based on skeleton images that can be taken from the safety of the patient’s home.” The Ministry of Health has identified senior fall prevention as a top priority. This is an interdisciplinary project being undertaken together with Prof. Hagit Hel-Or of the Department of Computer Science. It involves a team of physiotherapists from the Western Galilee Hospital in Nahariya and The Israel Innovation Authority.



Prof. Ilan Shimshoni received a BSc. in mathematics from the Hebrew University and an MSc. in computer science from the Weizmann Institute of Science. After receiving his Ph.D. in computer science from the University of Illinois at Urbana Champaign (UIUC), he completed a post-doctorate at the Technion. He joined the Department of Information Systems at the University Haifa in October 2005.

Shimshoni is putting this technology to further use to decode the last few undeciphered Dead Sea scrolls. Working with Prof. Jonathan Ben-Dov from the Department of Biblical Studies and doctoral student Roy Abitbol, Shimshoni is using the system to identify frag-



food & exercise

LIFESTYLE CHOICES CAN REVERSE NON-ALCOHOLIC FATTY LIVER DISEASE NATURALLY

Non-alcoholic fatty liver disease (NAFLD) has quietly reached epidemic levels, afflicting roughly 25% of the worldwide population. Commonly affecting overweight children, adolescents as well as young and older adults, NAFLD is characterized by excessive accumulation of fat in the liver. If left unchecked, advanced forms of the disease can lead to liver damage and related adverse health effects such as diabetes and cardiovascular disease.

A pioneering study led by Prof. Shira Zelber-Sagi of the School of Public Health with researchers at Tel Aviv Medical Center found that NAFLD is a preventable disease. “According to our findings, a healthy lifestyle can reverse the disease,” explains Zelber-Sagi. “Even a 5% weight reduction has shown positive liver fat reduction as measured in ultrasound examinations and liver biopsies. Our recommended health guidelines for the management of NAFLD recently published by ATID – The Israeli Dietitians Association for the Advancement of Healthy Nutrition – suggest lifestyle changes that include regular physical activity of up to two and a half hours a week, and a Mediterranean-style diet.” The Mediterranean diet emphasizes vegetables, fruits, legumes, nuts, whole grains, fish, mono-unsaturated fats found in olive oil, and only small amounts of red meat.

NAFLD is also a growing public health concern in Israel. “There are usually no symptoms, so most people don’t even know that they have the disease,” notes Zelber-Sagi. Physical inactivity and a diet rich in saturated fats and added sugars are the primary causes of NAFLD.

Although Prof. Zelber-Sagi maintains that government policies play an important role in nutrition and health promotion, she fears it will not be enough to ensure the health of the next generation without education and support services. To this end, she is spearheading a multidisciplinary digital platform that will combine expertise in nutrition, behavioral economics and artificial intelligence. Working with Prof. Mor Peleg from the Department of Information Systems and Prof. Doron Kliger of the Economics Department, the mobile application is designed to both educate and motivate young people to make smart food choices and take responsibility of their general health.

“We need to start thinking differently about nutrition and fitness,” adds Zelber-Sagi. “Instead of counting calories, we should focus on the ingredients going into the foods we eat. Cutting back on heavily processed foods and sweetened beverages, as well as staying active are key to a healthy liver.”



Prof. Shira Zelber-Sagi is the Head of the Program of Nutrition, Health and Behavior at the School of Public Health and a member of the Liver Unit at the Department of Gastroenterology in Tel Aviv Medical Center. She is also a member of the National Committee of Gastroenterology, Hepatology and Nutrition at the Ministry of Health, and several European public health committees.

Health Management Made Easy

Following successful pilot testing in Spain and Italy, University of Haifa researchers continue to lead the way in mobile patient support systems and are now developing increasingly sophisticated knowledge-based and data-driven decision-support tools for physicians.



Prof. Mor Peleg is Chair of the new Data Science Program, a member of The Caesarea Edmond Benjamin de Rothschild Foundation Institute for Interdisciplinary Applications of Computer Science, and recipient of the 2019 Outstanding Researcher Rector's Award. After earning her PhD at the Technion, she completed her postdoc in biomedical informatics at Stanford University.

The MobiGuide system, which provides patients and health care professionals with real-time clinical information and suggestions, has recently completed two successful pilot trials. The results indicating patient compliance –the degree to which patients adhere accurately to medical advice– surpassed the expectations of researchers and clinicians. “We were delighted to discover that in a clinical study of pregnant women with gestational diabetes in Spain, all of the users persistently followed their monitoring and treatment recommendations as prescribed by their physicians,” explains Prof. Mor Peleg, scientific coordinator of the MobiGuide project and former head of the Department of Information Systems. “The high rate of adherence, nearly 99%, resulted in stabilized blood sugar, significantly lower blood pressure, and a trend for fewer C-sections. Likewise, findings from a pilot conducted with atrial fibrillation (irregular heartbeat) patients in Italy indicated a 75–82% compliance rate as well as an increase in patient satisfaction, due to increased safety.”

The high success rates are anything but trivial, given that 20–30% of prescription medication in the US alone are never filled, and that 50% of medications for chronic disease are not taken as prescribed. Since 99% of disease



KNOWLEDGE-BASED AND DATA DRIVEN
DECISION SUPPORT FOR PHYSICIANS



PERSONALIZED PATIENT
DECISION AND SUPPORT SYSTEM

management is in the hands of patients and caregivers, there is a critical need for tools that will make it easier on patients to stick to their medication plan.

“There are a number of reasons why patients do not always follow their medications,” explains Peleg. “Multiple prescriptions can be confusing, symptoms may be intermittent, or patients alter their prescriptions because they don’t like the side effects. Digital technology can personalize therapy by monitoring patient status and enabling real time interaction with doctors. MobiGuide was designed with this in mind – to improve patients’ quality of life, help facilitate patient trust, reduce medical errors and hospitalization admissions, and lower doctors’ work loads.”

“Building on the success of MobiGuide, we are now working with colleagues at Stanford University and Rambam Health Care Campus on extending the automated intelligence system to handle patients with chronic multimorbidity conditions, ranging from diabetes, cardiovascular disease, osteoporosis, schizophrenia, and more, considering patient preferences in treatment decisions. In the new system, patient clinical goals are shown as trees, with ‘green trees’ representing goals that are satisfied by the current treatment. The algorithm checks for ‘non-green trees’ (unmet goals) and alerts both patients and physicians about critical changes in health status.”

A STEP CLOSER TO ENDING WORLD HUNGER:

UofH researchers discover wheat protein that promises to improve food security

Scientists are warning that global wheat production is facing a serious threat from fungal diseases. Yellow rust attacks wheat leaves and spikes, stopping their photosynthesis and shriveling the grains, consequently threatening global food supplies and contributing to billions in economic losses. Currently, farmers are spraying infected fields with fungicides to limit the damage.



A pioneering study led by Prof. Tzion Fahima and researchers at the Institute of Evolution (IOE) recently identified the structure of a new resistance gene called Yr15 in wild emmer wheat that protects plants against the yellow rust epidemic. “Wheat accounts for 20% of calories and proteins consumed by humans. The identification of the natural disease resistance gene in wild emmer wheat will reduce the use of harmful pesticides and pave the way towards ensuring global food security,” explains Fahima.

The breakthrough discovery is the culmination of a 25-year research project. Researchers utilized the genetic assembly of the bread wheat genome, recently published by the International Wheat Genome Sequencing Consortium (IWGSC), to complete the study. “Due to its enormous size – five times larger than the human genome – it took a consortium of more than 200 scientists from around the globe over a decade to crack the code,” adds Fahima who is among the representatives of Israel in the coordination committee of IWGSC. “Once unlocked, we were able to develop perfect markers that can distinguish between the functional Yr15 gene, and about 20 other non-functional copies of this gene scattered across the wheat genome. This is a powerful tool

that can be used by seed companies and wheat breeders around the globe.”

The cloning of the Yr15 gene led to an even more important discovery – the presence of the members of Tandem Kinase-Pseudokinases (TPK), a protein family found in many plant species. “We suggest that TPK regulates the ‘cell death’ mechanism in the immune system that stops the invasion of a pathogen,” explains Dr. Valentina Klymiuk, a co-author of the study who completed her PhD at the Laboratory for Plant Genomics and Disease Resistance under the supervision of Prof. Tzion Fahima and Prof. Abraham Korol. “This finding sheds light on the molecular evolution of immune defense responses in plants, animals and humans,” notes Fahima, “thereby opening up a whole new field of scientific inquiry.”



Prof. Tzion Fahima has taught and mentored an entire generation of Israeli and international wheat researchers. He serves as the Director of the Institute of Evolution, Head of the Laboratory for Plant Genomics and Disease Resistance, and is a corresponding member on the IWGSC Coordination Committee, Scientific Board of the Israeli Gene Bank, and several local and international advisory boards.

Dr. Valentina Klymiuk received the 2019 Jeanie Borlaug Laube Women in Triticum (WIT) Early Career Award from the Borlaug Global Rust Initiative (BGRI) for her contributions to the Yr15 gene study and the discovery of the TPK protein family.

Human Involvement in Ancient Food Webs May Shed Light on Resolving 21st Century Environmental Challenges

Scientists from the University of Haifa are leading a cutting-edge study – merging archaeology and biology – to investigate human-environment interaction in antiquity, and its effects on ancient food-webs and the fragile Judean Desert ecosystem.

Photo: Dr. Yael Rotem

The unique topography and arid climate at the ancient village of Ein Gedi situated 400 meters below sea level, presents the perfect backdrop for reconstructing the ecological footprint of prehistoric peoples. “Clues from the past coupled with genetic advances and new genomic technologies can help us develop predictive models that could be extremely beneficial for the design and implementation of conservation strategies,” explains Dr. Nimrod Marom who is heading the DeadSea-Eco project. “We are applying bioarchaeological methods to uniquely preserved remains found in the area, which date as far back as the Holocene Epoch 10,000 years ago.”

“Our goal is to decipher how human meddling in food webs in antiquity might have caused the degradation of local pastoral resources, which led to the reliance of human communities on external supplies of livestock animals and wood.”

The DeadSea-Eco project is being funded by the European Research Council through a major grant of 1.5 million euros. The study involves the expertise of a multidisciplinary team, comprised of archaeologists, paleontologist, paleogeneticists and archaeozoologists from the University of Haifa, University of Kiel, the Israel Antiquities Authority, Hebrew University of Jerusalem, Tel Aviv University, and the Weizmann Institute of Science.

Dr. Nimrod Marom is an archaeozoologist and member of the Leon Rikanati Institute of Maritime Civilizations and the Leon H. Charney School of Marine Sciences. He received his BSc at the Hebrew University and did his graduate studies at the University of Haifa under Prof. Guy Bar-Oz of the Zinman Institute of Archaeology, a prominent Israeli archaeologist specializing in archaeozoology. Marom completed his postdoc at the University of Chicago.

Scientists are studying the remains of predators and their prey indigenous to the region – namely leopard, ibex, hyrax, hyena and fox. “Prehistoric leopard traps and walled enclosures point to an intensity of human involvement in the desert landscape in different periods,” adds Marom.

“The DeadSea-Eco project is setting the infrastructure for the advancement of archaeozoology at the University of Haifa.”

Photo: Dr. Ignacio A. Lazagabaster

Behind the science of *creative art therapies*



Approximately one-third of women coping with breast cancer experience symptoms of depression, anxiety, pain and fatigue, and are not responsive to conventional talk therapies. A new study at the School of Creative Arts Therapies is shedding light on the healing power of art therapy in the promotion of wellness in cancer patients.

“We aim to study the biological and psycho-social mechanisms underlying emotional processing to better understand the mind-body connection in

The research also aims to study how women of different ethnic and religious backgrounds respond to the art therapy process. “Expressing emotion is inconsistent with social norms in some ethnic minorities. As art therapy makes expression and communication possible within a safe and supportive relationship, it is likely to elicit a more favorable response among more traditional and collectivist ethno cultures,” explains Czamanski-Cohen. “We are working closely with Prof. Faisal Azaiza, Dean of the Faculty of Social Welfare and Health Sciences, and Prof. Miri Cohen, Head of the School of Social Work, whose pioneering research explored perceptions and coping mechanisms of Arab women living with breast cancer in Israel and the West Bank.”

The research is being conducted by a multidisciplinary team with expertise in art therapy, psycho-neuro-immunology, psycho-physiology, health psychology and social work from the University of Arizona, Monash University, as well as Rabin and Ziv Medical Centers. Their findings from the pilot study was recently published in the *Journal of Psychosocial Oncology*.



The drawing, made by a breast cancer patient, depicts a desire for overcoming the emotional pain and barriers still remaining after treatment.

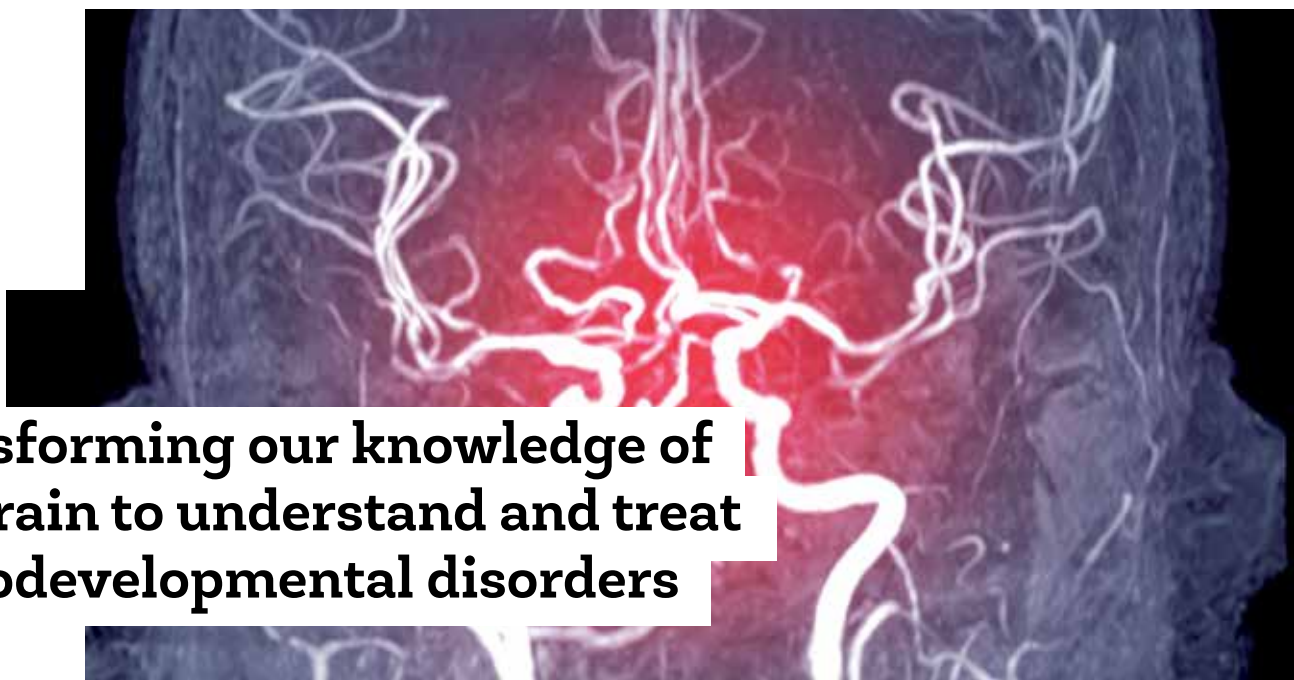
the healing process,” explains Dr. Johanna Czamanski-Cohen of the School of Creative Arts Therapies, who is conducting the study with Dr. Karen Weihs from the University of Arizona.

The research initiative, being funded by the National Institute of Health (NIH), is studying a culturally-mixed group of 240 Jewish and Arab breast cancer patients who are undergoing an 8-week program of outpatient art therapy sessions. During this period, Czamanski-Cohen and her team will monitor physiological markers responsible for inflammation in the immune system using blood samples, heart rate variability using ECG, and social-psychological responses as self-reported by the participants.

Dr. Johanna Czamanski-Cohen

heads the University's art therapy wet laboratory and is a research member of the Emili Sagol Creative Arts Therapies Research Center, established with the generosity of longstanding University benefactors, Tova and Sami Sagol. She received her master's of Art Therapy from New York University and completed a PhD in Social Work and Health Sciences at Ben Gurion University. Shortly after completing her postdoc at the University of Arizona, she became a faculty member at the University of Haifa.





Transforming our knowledge of the brain to understand and treat neurodevelopmental disorders

The human brain has the astounding capacity to control all major body systems. While recent technological advances have broadened our understanding of how the brain develops and functions, many questions remain. How is information encoded in neurons? How are memories stored and retrieved? How are emotions regulated? What are the molecular, cellular, and genetic mechanisms underlying degenerative diseases, such as Alzheimer's disease?

An interdisciplinary research team of the University's leading neuroscientists, psychiatrists, neurobiologists, and psychologists will soon join forces to explore these and other pressing neuroscience questions at the new Center for Neurodevelopmental Disorders (NDD). The team will pool their scientific expertise towards a shared goal: deepening the understanding of the root causes of neurodevelopmental disorders, and ultimately advancing medical treatments for millions of individuals suffering from debilitating neurodevelopmental diseases.

The innovative Center will be the first research facility in Israel to study the full spectrum of neurodevelopmental disorders. Home to the Sagol Department of Neurobiology, the University of Haifa has gained an international reputation for research across fields of study including biochemistry, cell biology, psychology, and neuroscience.

"The new center will enable us to further investigate neurodevelopmental disorders at the mo-

lecular, cellular, and circuit levels," explains Prof. Kobi Rosenblum, Director of the NDD Center, Head of the Laboratory for Molecular and Cellular Mechanisms Underlying Learning and Memory, and the former Chair of the Sagol Department of Neurobiology.

"We know that neurodevelopmental disorders have a strong genetic basis, as well as causal environmental factors. These factors interact during various phases of brain development and trigger disease in ways that are not yet clearly understood," adds Prof. Rosenblum.

The researchers in the Center will also be using neuroimaging to study the psychological and neural mechanisms of emotions and social behaviors associated with neurodevelopmental disorders. Prof. Simone Shamay-Tsoory and a team of psychologists are using fMRIs to study brain activity during real-life social interactions, to gain insight into the emotional and social consequences of developmental disorders, including affective disorders, personality disorders, and schizophrenia.

"The new Center aims to position the University of Haifa and Israel as a leading NDD research hub in the region. It will provide scientists and outstanding young researchers with a technology-rich environment to fuel collaborative projects that will translate basic research into state-of-the-art patient care," notes Prof. Rosenblum.

The Center for Neurodevelopmental Disorders

Cellular Imaging
Electrophysiology
DCS

Clinician
Child/Psychologist/Neurologist
NDD Researcher

mRNA Translation
Regulation

Social learning
Behavior and Brain Imaging

Animal
Models

NDDs
Human
Genetics

iPSCs
Human Disease
Model

Planned to facilitate dynamic interdisciplinary work, the Center will include state-of-the-art labs, an integrated research and treatment center for patients with NDD, and collaborative spaces for hosting international researchers. In its initial phase, the Center will be staffed by 14 scientists within four cutting-edge technological sub-centers: Personalized Medicine, Single-Cell Analysis,

fMRI Imaging, and Deep Phenotyping. Each of these units will afford researchers access to modern, innovative technology and attract leading scientists worldwide. The close proximity of researchers and clinicians will enable a collaborative environment leading to a better understanding of mechanisms underlying NDDs and the development of novel therapeutic approaches.



Rendering of the Helmsley Health
Discovery Tower.



RAMBAM
Health Care Campus
Creating the future of medicine.

The Center for Neurodevelopmental Disorders will be housed at the Helmsley Health Discovery Tower, our unique joint venture with Rambam Health Care Campus, which promises to become one of the most advanced facilities in Israel in the fields of medicine and life sciences. Bringing together physicians, researchers, clinicians, and biotechnology start-ups, the Health Discovery Tower will offer optimal conditions for creating synergies that will accelerate innovations in patient-centered care.



The University of Haifa is seeking partners in support of the Center for Neurodevelopmental Disorders. For more information, please contact the Office of the Vice-President for External Relations and Resource Development.

CHAMPIONING ISRAEL'S SUSTAINABILITY BLUEPRINT

Prof. Ofira Ayalon is among Israel's foremost sustainability experts and an internationally renowned leader in waste management. Her pioneering environmental research over the past two decades has served as a basis for environmental management strategies and policy making in Israel.

In recognition for her far-reaching contributions to climate change, sustainable energy, waste and natural resources management, Prof. Ayalon was awarded the 2018 Mifal Hapais 'Michael Landau Prize' for the Sciences and Research in the field of sustainability.

On receiving the award, Ayalon confides she was both honored and surprised, "I am extremely outspoken on environmental issues and have a reputation for being a 'rebel', so I wasn't expecting this." She has written extensively on sustainability issues related to biofuel potential in Israel and energy policy, agriculture and its impact on the environment, business opportunities in environmental technologies (clean-tech), transportation-related air pollution, household waste management, and adaptation to climate change.

"The application of research to decision-making is like turning an ocean liner," explains Ayalon. "A time lag exists between scientific assessment of environmental problems and their legal regulation and enforcement. My goal is to try to close this gap." She believes a key component to reaching a solution is through behavioral change.

"Sustainability is about education," notes Ayalon. "There are two major players that determine the



Prof. Ofira Ayalon

Department of
Natural Resources
and Environmental
Management

Former Director,
Natural Resource and
Environmental Research
Center (NRERC)

Head, Environmental
Projects at the Samuel
Neaman Institute for
National Policy Research



University of Haifa
became Israel's first
university to achieve
"Green Campus" status
over a decade ago.

development of environmental policy – the government and the public. I believe that academia must play a leading role in providing evidence and guidance for a better informed citizenry."

Ayalon is no stranger to environmental stewardship and advocacy. Her research on alternative fuels led to the Israeli government reforms in the fuel sector, such as its recent decision to offer incentive grants totaling over \$8 million to local authorities to install charging stations to electric vehicles and \$28.5 million to companies willing to integrate compressed natural gas (CNG) fueling infrastructure within public gas stations. At the University, she has been a driving force behind the administration's environmental agenda, which has developed into an integral part of its organizational culture on campus.

A great part of her research also focuses on the development of renewable technologies, for which she has received the prestigious Iraj Zandi Award from the Widener University School of Engineering for her contributions to the field of solid waste technology management. She is currently collaborating with the Innovation and Technology for Development Center at the Technical University of Madrid on transdisciplinary sustainability projects.

The Hospital as Art: “Field Hospital X” Exposes Social Ills

The University of Haifa’s School of the Arts will have a unique presence at the 58th International Art Exhibition – La Biennale di Venezia, also known as the Art Olympics. Prof. Aya Ben Ron’s project “Field Hospital X”, chosen as Israel’s art pavilion, is a powerful and bold multisensory hospital that communicates personal stories of social ills and injustices.



Currently, the ‘Care Kit’ videos are a collection of four personal stories of social injustices experienced and recounted by invited artists.

Field Hospital X (FHX) is a new project that challenges the way in which art can act and react in the face of social ills in society. “Learning from the structure and practice of hospitals, health maintenance organizations and healing resorts, FHX provides a space in which silenced voices can be heard and social injustices can be seen,” explains Prof. Ben Ron.

Like in a hospital, FHX’s visitors take a number and wait in a reception area. “Our goal is for all our visitors to receive equal treatment,” explains Ben Ron, “this is why no private or ‘skip the line’ visits are available.” While waiting, visitors watch the FHX TV Program – a video that provides information about the hospital’s ideology, its Care-Areas and Care-Kits. In it, FHX presenter Victoria Hanna repeats some of the hospital mottos: “Take care; be patient; be a patient; care needs time.”

At the reception desk, each visitor receives a hospital ‘Risk-Wristband’ that determines which of the four Care-Kits they will watch in the ‘Care-Chair Area’ before being discharged. Each Care-Kit contains a video by an invited artist, telling a personal story and revealing a social injustice. In

between, they visit the hospital’s ‘Safe-Unit Area’, where they can learn how to produce a ‘Self-Contained Shout’.

Among the project’s most enthusiastic supporters is Tzili Charney, Vice-Chair of the University’s Board of Governors, art patron and Jewish philanthropist, under the auspices of the Leon Charney Resolution Center.

Field Hospital X was created by Ben Ron with curator Avi Lubin and producer Miki Gov. Following its launch at the Venice Biennale, it will travel to other venues around the world and produce additional Care-Kits with new participating local and international artists.



Aya Ben Ron is an award-winning artist and art professor at the University of Haifa and Hadassah Academic College. Her works range from site specific projects and installations to moving-image, documentary, and film, and includes collaborations with medical institutions and hospitals.

STUDENT SPOTLIGHT

Esti Kampinski is not your typical university student. She is an ultra-Orthodox high school teacher, mother of nine and grandmother of five. She is a student in the rigorous MA program in Creative Art Therapies offered at Mivchar – the Haredi College in Bnei Brak that partners with the University of Haifa to offer a variety of academic degrees.



“I love my work and really care about my students. I chose to go back to school so that I could gain tools that could help my students cope with learning and social challenges in and outside of the classroom.” University of Haifa academic programs offered at Mivchar have been tailored to meet both the religious and academic needs of the Haredi population. Women study in the morning hours while the men study in the afternoon and evening hours.

“The combination of drama and psychodrama appealed to me because it complements my background in acting and love for the stage.” Participants in the Drama Therapy and Psychodrama track explore internal conflicts through drama-based exercises such as role-play, theater

games, group-dynamic games, mime, puppetry, face painting, mask work and storytelling.

“I make the two-hour journey from Jerusalem to Bnei Brak once a week. I am the oldest person in the class (most of the girls in the program are my daughter’s age), but it has been well worth it. My classes are stimulating and insightful, and for me the experience has been transformative – not only in my classroom, but also in my personal life.”

Esti Kampinski is the granddaughter of Rabbi Pinchas Menachem Alter Z”L, the seventh Rebbe of the Hasidic Ger dynasty. “Growing up in an intellectually stimulating environment, I developed a thirst for knowledge and inquiry-based learning.”

“I am so thankful for the constant support and encouragement I receive from my husband and children. This experience has taught me that it is never too late to further your education. In fact, I am thinking of pursuing my studies in advanced psychotherapy after completing this degree.”



Mivchar was founded with a goal of creating a framework to allow Haredi men and women to pursue careers while maintaining their religious lifestyles. Today the college offers academic degrees from leading Israeli Universities.

The University of Haifa is committed to its mission of expanding academic opportunities for all members of society, and promoting upward mobility. At the Bnei Brak campus, the University is training a new generation of Haredim to enter and succeed in the Israeli workforce, and improve their standard of living.



Thanks to the generous support over the last decade from longstanding friends Younes and Soraya Nazarian (pictured above), the Library has become an active hub of research and intellectual life on campus.

BACK TO BASICS

Join the University of Haifa community in promoting our new crowdsourcing campaign, inviting the public to support activities at the **Younes and Soraya Nazarian Library** – Israel's premiere academic library.

CAMPAIGN GOALS

- | | | |
|---------------------------------|-------------------------------------|---------------------------------|
| 1 Extended Library Hours | 2 Expand Digital Collections | 3 Assistive Technologies |
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For more information please contact the office of the Vice-President for External Affairs and Resource Development

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Promoting Technology and Social Initiatives

Building on our joint venture with Rambam Health Care Campus and new academic and business partnerships, the Multiversity strategy is cutting across sectors and disciplines.

INNORTH INNOVATION IN ISRAEL'S NORTH

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- > **Framework** for education and training with a range of course offerings in business and entrepreneurship
- > A **vehicle** cultivating entrepreneurial activities supported by professional mentoring and counselling services through **Carmel-Haifa**, as part of accelerator and incubator frameworks
- > **Venue** for ideation events, collaborative campaigns and workshops with industrial, academic and community partners
- > **Launch pad** for the next great startup
- > **Springboard** for your entrepreneurial journey

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& innovation to the next level at UoH**

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