

KEEPING AN EYE ON INNOVATION



MEETING POST-TRAUMA HEAD-ON

FIVE DAYS IN RAMBAM'S SHOCK TRAUMA ROOM

> IN THE SPIRIT OF THINGS

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FROM THE DIRECTOR Prof. Michael Halberthal talks about Rambam's future plans



GUT INSTINCTS Racing towards a cure for fibromyalgia



MEETING POST-TRAUMA HEAD-ON Treating IDF veterans and civilians with PTSD



FIVE DAYS IN RAMBAM'S RABBI YECHIEL ECKSTEIN Z"L SHOCK TRAUMA ROOM



KEEPING AN EYE ON INNOVATION Four innovative medical solutions



THE NURSES STATION Connecting to the Heart During Isolation



BEHIND THE SCENES Operating to Scale



SEND IN THE CLOWNS Easing the treatment process for sick children



IN THE SPIRIT OF THINGS Providing spiritual care during difficult times



GLOBAL MEDICINE



TREASURING OUR FRIENDS Words from Dr. Esty Golan



A CONVERSATION WITH PROFESSOR RAFI BEYAR In the Midst of a Great Medical Revolution



UNDER INVESTIGATION Two physician/scientists share their research



RAMBAM INTERNATIONAL RELATIONS Snapshots



SPECIAL EVENTS

RAMBAM Health Care Campus

Director General: PROF. MICHAEL HALBERTHAL

STATE OF ISRAEL MINISTRY OF HEALTH

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Rambam on call · DECEMBER 2021

FROM THE DIRECTOR PROFESSOR MICHAEL HALBERTHAL

DEAR FRIENDS,

How often does a team of individuals have the opportunity to play an influential role in defining the future? I am proud to share that we are in the process of doing just that – creating a new master plan for Rambam that will identify and meet the hospital's needs for the next 25 years. This is a major event! It is the greatest, most meaningful milestone in my tenure as Director General. It is humbling to play such a part in creating Rambam's future, not knowing what the world will look like, and knowing that it will not be realized until after my term is over.

Today, Rambam's 1,000 beds account for approximately eight percent of all general hospital beds in Israel; it is one of the two most crowded hospital campuses in the country. Under our present development plan, options for expansion are limited. Yet, when we look at Israel's healthcare through 2050, we see that Rambam will continue to be the sole tertiary care medical center in the north. As Israel's population continues to grow and age, the consequences of this situation will require us to increase the number of beds to at least 1,700 in order to meet this burgeoning need.



The new plan—made possible in part as a result of Rambam's successful campaign to receive land from an adjacent, scheduled-to-be-closed naval base—will provide us with an additional 60,000-80,000 square meters of building space. This translates into eight new buildings!

This massive change is on a completely different scale from anything we have done in the past. It requires us to think outside the box to create a comprehensive new outlook for Rambam, and to do so when we cannot truly predict the future. For example, how can we be sure of what healthcare will look like in 25 years? How can we know what parking solutions to incorporate? Will we be using automated, self-driving cars, which are already in existence today and which are growing in popularity? It is a guessing game of sorts.

As Rambam continues to maintain its status, we must also expand our vision regarding the role we will undoubtedly play in the community. We must address the questions of how we can reach beyond the walls of the hospital and how to harness Rambam's exceptional knowledge, experience, and skills, to make it more accessible throughout the city and into the surrounding areas.

We envision transitioning from being a medical center into becoming a medical hub, providing services in satellite locations outside of the hospital in facilities like Maale Hacarmel Mental Health Center, which is being integrated into Rambam. In becoming a hub, we will go from treating illness to promoting health and proper healthcare for all.

However, our focus on the future of Rambam is not only about the buildings. Just as important—if not more so—is what we are doing inside of them – saving lives, researching, innovating, and so much more! In this edition of Rambam On Call, we write about several of our pioneering breakthroughs and discuss innovation with Professor Rafi Beyar, Rambam's former Director General and current President of our Friends Associations. You will discover Rambam's Pain Medicine Institute, which is racing towards a cure for fibromyalgia. We also tell you about Rambam's array of PTSD treatments, which are now more crucial than ever. And of course, we share so much more.

With everything that we do here, our most important mandate is to provide medical services. By the same token, we need to keep researching and innovating, because all of these components influence one another. I have no doubt that with all of the amazing things we do, many of our achievements will help to ensure Rambam's financial future. However, I am grateful to friends like you who believe in and support our vision, for we still remain very dependent on philanthropy. During the coming years, we will not be able to keep pushing the envelope without it.

I am thrilled to have you as partners as we build the future of Rambam together, and look forward to what promises to be a very exciting journey.

Best regards,

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Michael Halberthal, MD Professor (Clin. Edu.), General Director, Rambam Health Care Campus

Rambam on call • DECEMBER 202

ibromyalgia – an illness characterized by chronic pain throughout the body, fatigue, and sleep disturbance—is very common, affecting two to eight percent of the population. It is frustrating for patients and their families, as well as for the doctors who treat them. The team in Rambam's Pain Medicine Institute is trying to change that, and they may have found a solution in the most unlikely of places – microbiome, which consists of the various microorganisms found in the body.

FINDING A CONNECTION

Researchers around the world have discovered that microbiome is connected to a multitude of illnesses and conditions, and that the microbiome in people suffering from these conditions is different from the microbiome of healthy people. In these situations, not only are the different microbiome present – they actually play an active role.

RAMBAM

Health Care Campus

In light of these discoveries, Rambam's pain doctors and researchers began to wonder if microbiome might also have an impact on chronic pain, Dr. Amir Minerbi, the Pain Medicine Institute's Deputy Director, set the wheels in motion during his fellowship at Montreal's McGill University, in collaboration with Dr. Yoram Shir, Director of the university's Alan Edwards Pain Management Unit and Dr. Arkady Khoutorsky, whose laboratory plays an instrumental role in the research.

Minerbi and his colleagues recruited a group of women who were verified sufferers of fibromyalgia and a second group comprised of healthy women in order to study the microbiome of the participants in both groups, examining every possible element that could impact the composition, including what they ate, whether they were physically active, and others. "What we saw was that at the macro level, the microbiome was quite similar between the two groups. However, when we examined it at a deeper level, we discovered several species of microbiome that were different in the fibromyalgia sufferers," explains Minerbi.

OF MICE AND FIBROMYALGIA

The initial research results were significant, offering conclusive proof that fibromyalgia is an actual physical illness, as well as a connection between the composition of the microbiome and the illness, though there was no indication as to whether the microbiome had caused the fibromyalgia or the fibromyalgia had altered the microbiome.

In the second phase, in order to determine the causation, the researchers implanted microbiome samples from three women suffering from fibromyalgia and from three healthy women in a large group of germfree mice, in order to assess whether the microbiome actually caused the illness.

Within two weeks of microbiome implantation from the fibromyalgia sufferers,

the mice began to suffer from pain. They also became less active, and started to experience sleep disturbances. The mice implanted with the microbiome from the healthy women remained healthy.

"We managed to demonstrate that not only was the microbiome different – it also caused the pain," notes Minerbi.

The most fascinating aspect of the phase was that they managed to completely reverse the process in all three mice by implanting microbiome from healthy people.

MOVING FORWARD

Following the success of the first two phases, Minerbi and his colleagues will attempt to replicate these same processes in humans. In the next few months, they will begin clinical trials to start treating fibromyalgia sufferers using microbiome implants – something that has never been done anywhere in the world.

"We are quite optimistic. As a result of the research on mice, we have an understanding of the mechanisms that cause fibromyalgia, and we are hopeful that we might be able to treat humans in the same way. If we succeed, it will be huge."

RAMBAM'S PAIN MEDICINE INSTITUTE

Director

Dr. Simon Vulfsons

Staff

40 employees, including doctors, nurses, physical therapists, psychologists, administration

Patient Visits Per Year **Approximately 18,000**

New Patients Per Year Approximately 800

Rambam is one of several hospitals worldwide to have its own microbiome bank.

MEETING **POST-TRAUMA** HEAD-ON

המרכז לטיפול בנזקי טראומה נפשית המרכז לטיפול בנזקי טראומה נפשית RAMBAM HOSPITAL PTSD TREATMENT CENTER

Celebrating the opening of the Center for the Treatment of Emotional and Psychological Trauma

ost-traumatic stress disorder is a mental health condition that affects 6-8% of the population in Israel – a percentage similar to that of other countries. Symptoms usually begin immediately following a traumatic event, and fully emerge within three months. They can, however, emerge later. To meet the PTSD criteria, symptoms must last longer than one month, and be severe enough to interfere with daily life. For men in Israel, PTSD usually occurs following combat trauma, while for women, PTSD is usually the result of sexual trauma.

As Northern Israel's only Level 1 trauma center, Rambam

is at the forefront of PTSD treatment in the region, treating acute and chronic PTSD as well as acute stress disorders, with unique programs targeting both military veterans and civilians.

Dr. Eyal Fruchter

TREATING ISRAEL'S DEFENDERS

Rambam's PTSD Unit, led by Dr. Yael Caspi and run in conjunction with the Ministry of Defense, has been operational since the First Lebanon War, caring for more than 750 military veterans recognized as handicapped by the Ministry. The unit's activities include a research study that is training patients to self-regulate amygdala activity and process the prefrontal area, as evidence suggests that this may alleviate PTSD symptoms. If successful, Rambam would be the first site worldwide to offer this type of treatment.

Another project run by the unit is an outdoor group that promotes empowerment and social integration through outdoor sports, targeting soldiers who have remained highly symptomatic for years. The group is run by the Challenge Association in cooperation with the clinic, and its members meet weekly, starting and ending every session with meditation and mindfulness. During the activities, participants talk and process their feelings. Emphasis is placed on how they cope and manage despite their fears. "We're not curing their PTSD. We're trying to teach them how to function better," reveals Dr. Eyal Fruchter, Director of Rambam's Division of Mental Health.

HEALING THE HOMEFRONT

Wanting to provide mental health solutions for civilians, Fruchter and his team decided to open the Center for Treatment for Emotional Trauma, which is directed by Dr. Talma Cohen and treats approximately 350 patients each year who suffer from acute stress disorders and acute PTSD. The center is the only program of its kind in Israel, and focuses on providing targeted short-term treatment. "We wanted to start treating patients before they deteriorate – to intervene before the condition becomes chronic," explains Fruchter.

The staff has been trained to perform early intervention at traumatic events such as terror attacks and other mass casualty incidents, treating both victims and first responders. "They immediately travel to the site in order to treat people suffering from mental health issues without having to bring them to the hospital," he notes.

A TRIP TO THE SUPERMARKET

To help further PTSD treatment, Rambam has partnered with Alumot Or, which is providing equipment for a mental gym for PTSD sufferers. One of the gym's activities is a virtual supermarket, which addresses the pre-frontal part of the brain. Explains Fruchter, "We know these patients have trouble making decisions because the prefrontal area doesn't react well when the amygdala is overworked. They get aggravated and avoid people."

Fruchter is confident that his staff can teach people to manage their prefrontal activity via the virtual supermarket. Patients receive a shopping list, and they need to move through the virtual aisles and make choices. The program counts their steps, and records their hesitation and the total amount of time the task takes. "The virtual supermarket enables them to practice how to make quicker, better decisions."

WORKING MIRACLES

Rambam's PTSD initiatives are changing lives, and Fruchter shares the following story. "At an event I was attending, I was approached the head of ZAKA, who asked if I was from Rambam. When I said yes, he said, 'I looked for you here. I wanted to tell you that after the Mt. Meron disaster, your clinic took care of three ZAKA people who couldn't function for two weeks. We sent them to you and they needed only four sessions. These individuals are now fine. You worked miracles."



One of the Center's treatment rooms



Participants in the Outdoor Program

FIVE DAYS

IN RAMBAM'S SHOCK TRAUMA ROOM

Se

9:3

3:3

5:25

ambam Health Care Campus is the only Level 1 trauma center in the north, serving as a referral hospital for 10 district hospitals in the region. As such, Rambam has the busiest trauma center in the country, treating over 40,000 patients annually in the Green-Wagner Department of Emergency Medicine. More than 1,000 of these patients are severely injured, and are treated in the hospital's Rabbi Yechiel Eckstein z"I Shock Trauma Room.

Each time a patient is on their way to the shock trauma room, whether via ambulance or IDF transport, a message is sent to a designated group at Rambam, whose members are in charge of the treatment. The group includes Dr. Hany Bahouth, Director of the Trauma and Emergency Center; Dr. Aziz Darawsha, Director of the Green-Wagner Department of Emergency Medicine; Gila Hyams, Director of Nursing; Hen Ben Lulu, Trauma Coordinator; Rabia Salama, Head nurse in the ER; as well as on-call surgeons, internal medicine physicians, nurses, and others. Once the team has been alerted, they come to the hospital whenever needed, day or night.

The messages displayed here were received via this group over a period of five days. (Due to patient confidentiality, much of the information has been left out):



otember 25				
I1 AM	Car accident			
) AM	40-year-old, fall from height			
24 AM	40-year-old, unconscious unknown reason			
) PM	65-year-old, shortness of breath			
5 PM	50-year-old, car accident			
€ PM	77-year-old, difficulty breathing			
5 PM	Initial message: Magen David Adom helicopter en route to Achziv car accident. Patient to be brought to Rambam.			
7PM	2 patients, car accident, brought via helicopter			
2 PM	20-year-old, car accident			
I PM	64-year-old, head injury			
1	101			

Entrance to the Green-Wagner Department of Emergency Medicine







Trauma Coordinator Hen Ben Lulu



September 26

S

40 AM	IDF helicopter en route, two severely injured soldiers. Injured on duty. (see the box on the following page)			
17 AM	Helicopter with injured patients will land in 10 minutes			
10 AM	30-year-old, stabbing			
29 AM	48-year-old, fall from height			
1-2111				
eptember 27				

5:18 AM	27-year-old, car accident
9:25 AM	40-year-old, car accident
9:51 AM	76-year-old, fall from height
0:24 AM	80-year-old, car accident
2:20 PM	78-year-old, car accident

10

Two members of Duvdevan, an elite IDF counter-terrorism unit, were seriously wounded in a firefight near the northern West Bank city of Jenin, on September 26th. Both soldiers sustained life-threatening injuries and were treated in the Rabbi Yechiel Eckstein z"I Shock Trauma Room by a multidisciplinary team. They were later transferred to the operating room, and then hospitalized in the ICU. IDF Chief of Staff, Lieutenant General Aviv Kochavi, and Israel's Minister of Defense, Benny Gantz visited the soldiers while they were hospitalized.



Minister of Defense Benny Gantz visits one of the injured soldiers accompanied by Deputy Director Dr. Avi Weissman



About a month after the injury, Rambam maxillofacial surgeons reconstructed the shattered jaw of one of the soldiers in a complex surgery using a model printed on a 3D printer. Rambam's trauma coordinators continue to be in close contact with the soldiers and their families, and are helping them during the difficult rehabilitation stage.

IDF Chief of Staff Lieutenent Aviv Kochavi with Deputy Director Dr. Michal Mekel during his visit



Surgeons operate on one of the wounded soldiers



A model of the shattered jaw



September 28			
2:16 AM	27-year-old, shooting		
6:10 AM	30-year-old stabbing		
7:29 AM	48-year-old, fall from height		
12:38 AM	Initial message: 7-8 trapped people, wall collapse		
2:54 PM	Two people with crush injuries en route		
5:26 PM	47-year-old, car accident		
4:22 PM	20-year-old, back injury		

One of the injured patients from the accident who is hospitalized at Rambam is a young father who lost his wife and three children in the accident. With approval from Rambam physicians, he attended the funerals and returned to the hospital for treatment. Rambam received the most severely injured patients from the accident; other patients with less severe injuries were treated in hospitals in Northern Israel.



Dr. Hany Bahouth and Gila Hyams treating a trauma patient

40 PM	Update: 40 injured in accident	
09 PM	Two severely injured children ages 11 and 13, en route to Rambam via helicopter	
28 PM	11-year-old, car accident	
44 PM	40-year-old, car accident	

40-year-old, car

Initial message: 30 injured in car-versus-

bus accident in the

accident

north

September 29

3:13 PM

5:26 PM

6

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KEEPING AN EYE ON INNOVATION

AN INTEGRAL COMPONENT OF RAMBAM'S DNA IS THE ABILITY OF ITS TEAMS TO INNOVATE, DEVELOP, AND ADOPT THE LATEST TECHNOLOGIES, ENSURING THAT PATIENTS BENEFIT FROM GROUNDBREAKING ADVANCES AND THE BEST CARE.

TRANSPLANTING TWO CORNEAS INTO FOUR DIFFERENT DONORS

sing state-of-the-art equipment developed by Moria Ophthalmic Instruments, doctors in the Department of Ophthalmology recently split a donor's donation of two corneas, enabling them to save the vision of four people.

Until recently, cornea replacements had to be performed manually. The success of these procedures resulted from the skill and experience of an attending physician. Dr. Sergiu Socea, a senior physician in Rambam's Department of Ophthalmology, shared the complexities behind corneal transplantations. "In the past, the cornea was split to implant its layers. If we wanted to implant the anterior layer, we had to forgo the inner layer due to procedures involved in the preparation and cutting. If we wanted to implant

the inside, the front was not thick enough to use."

However, with the introduction of more advanced and accurate instruments, splitting only the diseased corneal tissue and replacing it with corresponding tissue from a corneal donation has become a viable option, allowing the replacement to be precisely performed. As a bonus, the complication rate is lower and the recovery is shorter.

Socea explains, "Thanks to the accuracy provided by the new equipment, we can now split a cornea that is 500 microns thick, where the front part is thick enough for implantation—a thickness ranging from 400 to 450 microns and the back part is 100 microns thick. This capability greatly enhances the results."

Dr. Shmuel Grafi, another senior



Dr. Sergiu Socea

department physician adds, "Now, when there is a donation of two corneas from one donor, we can potentially save the vision of four people. We have already successfully done this."



n a global first, Rambam physicians used cryotherapy to treat superficial bladder cancer. The minimally invasive procedure represented a collaboration between the Department of Urology, led by Professor Gilad Amiel, the department's director, and Dr. Isaac Hoffman, and Vessi Medical, the first company in the world to develop a cryotherapeutic technology to treat superficial bladder cancer.

In the old procedure, cancerous cells are scraped off the bladder wall while the patient is under general anesthesia. This can result in the scarring of healthy tissue, leading to edema, infections, and bleeding. The surgery is lengthy, can involve prolonged hospitalization, and fails to prevent disease recurrence. Repeated surgery is often required to remove subsequent tumors, increasing the risk for complications and negatively impacting quality of life.

Cryotherapy involves freezing and removal of cancer cells without damaging the surrounding healthy tissue, and thanks to Vessi Medical, the procedure is now used to treat superficial bladder cancer. It is performed on an ambulatory basis using mild sedation, saving time in the operating room, reducing complications, shortening treatment, and decreasing overall stress and risk.

Eyal Kochavi, Vessi Medical's founder, came up with the idea to treat superficial bladder cancer via cryotherapy. A urethral catheter is inserted into the patient's bladder. The catheter's tip is equipped with an advanced optical system that enables the medical team to target the tumor's location. The tumor is then frozen and removed.

Professor Amiel notes, "It is up to us to demonstrate that freezing is an advantageous oncological treatment, with fewer complications and side effects and far better results."



The team during a cryotherapy procedure

ERADICATING PREVIOUSLY INOPERABLE MALIGNANT TUMORS

octors and researchers in Rambam's Radiation Unit in Joseph Fishman Oncology Center have developed an innovative radiation method that has successfully eradicated sarcoma tumors, which are considered aggressive and resistant to treatment. They are deemed inoperable when attached to vital organs, nerves, or blood vessels.

The method-called GRID due to its grid-like appearanceuses complex radiation intensity calculations and artificial



INFORMATION FOUND IN FEMALE BODILY FLUIDS MAY FACILITATE EARLY DETECTION OF SEVERE DISEASE



r. Shlomit Yehudai-Reshef, Deputy Director of the Clinical Research Institute at Rambam, and Dr. Inbal Zafir-Lavie have created a revolutionary product that may facilitate the early detection of many diseases affecting women, from endometriosis to ovarian and other cancers.

"Vaginal discharges contain vast amounts of clinical and biological information about what is going on in our bodies, but they have not been the subject of significant research," says Yehudai-Reshef, intelligence to determine the route of radiation, and has been successfully performed three times. "We were amazed by the results," savs Dr. Salem Billan, Director of Radiation Oncology and the Director of the Head and Neck Unit in Joseph Fishman Oncology Center. "In the first three patients, success was recorded and the tumors were completely removed," adding, "this methodology makes it possible to perform radiation along a specified path using a carefully calculated dose, while preserving the vital organs."

The standard treatment for sarcoma tumors includes 25

radiation treatments, and each treatment lasts between three and five minutes. "With the new method, we add a unique treatment that is given once, prior to other treatments. It is not painful, and is similar to undergoing a CT," says Dr. Myroslav Lutsyk, a senior physician in the Radiation Unit.

The chairman of the Israeli Sarcoma Association, Dr. Alona Zer, says that this is real news. "Soft tissue sarcomas can appear anywhere; they are usually very aggressive and prove to be a therapeutic challenge. This new methodology may improve prognoses and quality of life.".

who explains that these fluids contain thousands of biomarkers (proteins) at levels that change in response to physiological conditions ranging from cancerous ovarian and cervical tumors, to ovulation problems, and endometriosis. "Every pathology has a characteristic biomarker profile."

In 2015, Yehudai-Reshef and Zafir-Lavie formed biotech company Gina Life for the purpose of identifying precise pathology biomarker profiles, using vaginal fluids. The Gina Life System uses a "smart pad" attached to underwear, where the fluids are absorbed through tiny channels onto adhesive strips. The strips are photographed using a smartphone and the photos uploaded to an application that provides results within minutes. Once available, the system may save women from unnecessary invasive testing, surgeries, and elusive diagnoses.

Rambam's BioBank is playing a vital role in the process. Since 2019, the BioBank has collected hundreds of vaginal discharge samples from healthy women and women suffering from various diseases. "To the best of my knowledge, this is the first BioBank of its kind in the world," says Yehudai-Reshef. "Together with Dr. Yuri Paz, Director of the Gynecological Endoscopy Unit, and Dr. Ido Mik, a senior physician in the Division of Gynecology and Obstetrics, we are identifying the pathology biomarkers." The team is trying to determine which cell proteins are the first to indicate the presence of disease. Based on their clinical trials, and using artificial intelligence, they want to determine the five proteins that will serve as biomarkers with the strongest correlation with each disease.

In 2020, Gina Life's proposal was accepted by the prestigious digital health incubator MindUP, a joint venture of Rambam, medical technology manufacturer Medtronic, IBM, and venture capital firm Pitango. The company is internationally recognized as a promising start up and has raised significant investments, including from female investors interested in technology that focuses on women's health.

Rambam on call · DEC

··· THE NURSES' STATION



CONNECTING TO THE HEART DURING ISOLATION

uring the early days of the pandemic, in most COVID-19 departments around the country, patients were hospitalized in strict isolation and no family visits

THE ISOLATION AND SOCIAL DISTANCING REQUIRED DURING HOSPITALIZATION IN THE COVID-19 DEPARTMENTS CAN NEGATIVELY IMPACT THE WELLBEING OF BOTH PATIENTS AND THEIR FAMILIES, AS WELL AS THAT OF THE TREATMENT TEAM. A GROUP OF NURSES IS WORKING HARD TO ALLEVIATE THE SITUATION.

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were allowed. However, as Rambam became more adept at understanding and treating the disease, the hospital changed its policy to allow visits from loved ones wearing protective gear, accompanied by medical staff.

Asthe COVID-19 morbidity rates increased, so too did the number of requests from families seeking to visit their loved ones. To effectively meet that growing need, a group of senior nurses

who had volunteered to visit isolated patients when no family visits were allowed, expanded their activities through the establishment of "Connected to the Heart". The purpose was twofold – to guide families during their visits as well to visit the patients themselves in order to connect with them on a more personal level. The group's activities took place via a project entitled "Isolated but Not Alone", which focused its efforts on ensuring that patients' emotional needs were being met. The project was even more active when the fourth wave of the coronavirus resulted in the opening of additional COVID-19 departments at Rambam.

This unique group included 30 nurses who volunteered to take part in the project. In describing the empowering human experiences they encountered, they spoke of initial meetings with family members and the difficulties that the families faced during their visits, as well as their own anxiety during the visits. They also talked about having to suit up in PPE when entering the departments, the limited time that families were given to say their final goodbyes to loved ones, and undergoing a debriefing exercise after the visits.

In their free time, the nurses received instructions regarding the processes of putting on PPE, questioning families prior to entering the departments, and writing an emotional assessment in the patient's medical record after the visit.

The pandemic's challenges led to an important initiative that benefitted patients and their families, and aligns with Rambam's vision of nursing – professionalism, compassion, and excellence alongside contribution and dedication.

OPERATING TO SCALE

ccording to David "Dudu" Levi, the Operations Director for Operating Rooms at Rambam for the past 26 years, Rambam has always been a pioneer in operating room management. Levi explains that operating rooms are a precious commodity, and at Rambam, there is a shortage. "Rambam has only 19 active operating rooms, which, relative to its size, is considerably fewer than other Israeli hospitals," he laments.

As such, Levi began researching operating room utilization in order to ensure optimal usage. He and his team conducted studies using data from hundreds of patients, collecting details regarding the causes for delay and cancellation. Through these studies, Levi realized that if he wanted to optimize operating room use, responsibility needed to be placed on both the surgical departments and the operating rooms.

> This meant that surgical department directors suddenly had to explain their operating room usage. "We measured them in terms of how often they used this resource relative to the amount of time they were allotted, what was done during

> > David "Dudu" Levi

allotted times, and whether the time was used well or not at all. Then I rated them according to a measurement scale, allocating operating room resources in accordance with the departments' usage ratings."

The new system led to a new culture, where surgical department directors are more proactive regarding operating room usage as well as tasks like preparing patients properly and in a timely manner and notifying through the proper

channels if they no longer need an operating room. There is also an incentive aspect. If a department cancels an operating room three days in advance, it will not negatively impact their utilization rating, ensuring that allotments are changed in an orderly, more efficient manner

THERE ARE APPROXIMATELY 30,000 SURGICAL PATIENTS EACH YEAR AT RAMBAM, WHICH TRANSLATES INTO APPROXIMATELY 50,000 PROCEDURES.

that leads to increased optimization.

The process of changing Rambam's operating room usage via measurement scale ratings was lengthy. It took years for Levi to reach the level of specialization he needed to build the scale, and several more years to execute it. The scale has now been in place for 15 years, leading to significantly improved resource utilization in the operating rooms and across the board. "When I first started this practice, it was not in use anywhere," recalls Levi. Today, Levy's scale is used in all Israeli hospitals that must file reports regarding operating room utilization.

SEND IN THE CLOWNS

ith a twinkle in his eye and a bright red nose on his mask, Emanuel Hannoun, one of Rambam's four medical clowns, stands in the corner of the elevator in Ruth Rappaport Children's Hospital, calmly strumming his ukulele as though making music in such an environment is not unusual. While a few of the passengers stare straight ahead or down at their feet, others look bemused and delighted, happy for this unexpected musical respite.

Rambam's medical clowns came to the hospital via the Dream Doctors Project, a non-profit organization whose goal is to integrate medical clowns into the Israeli healthcare system. "We love our clowns – they have invested in understanding the philosophy regarding interpersonal connections and psychology, and have received unique training," notes Tamar Shochat, the Children's Hospital's Administrative Manager.

The medical clowns spend time in various departments, including the Joan & Sanford Weill Division of Pediatric Hematology-Oncology and Bone Marrow Transplantation, the Pediatric Nephrology Institute, surgical departments, the Cheryl Spencer Pediatric Emergency Department, and others. They work hard to placate any fears that the children are feeling, doing what they can to relieve pressure and create a friendly environment that makes the medical process easier.

Hannoun and the other clowns

see their work as being therapeutic, but what they love the most is the chance to be close to the children. "I don't come to be funny – I come to make the connection and see how it develops," he explains.

Shochat explains her philosophy regarding the project: "We want our children to be healthy – both physically, through the care given by our medical teams, as well as mentally. This is where the medical clown really shines. Just as we invest tremendous resources to ensure the best physical care, we also invest in the emotional side. The bottom line is that these medical clowns address the emotional aspects. It's vital that people understand the importance of the role the medical clown plays here."

IN THE SPIRIT OF THINGS

Members of the spiritual care team can be found throughout Rambam, including in Joseph Fishman Oncology Center, the Hematology and Bone Marrow Transplantation Institute, the Departments of Internal Medicine, and the surgical and intensive care units. They also work in Ruth Rappaport Children's Hospital, providing spiritual comfort for young patients and their families in the Pediatric Nephrology Institute, the Wagner-Green Pediatric Intensive Care Unit, and the Neonatology and Neonatal Intensive Care Unit, as well as those who face the unfathomable reality of palliative care.

A GUIDING HAND

The responsibilities of Rambam's spiritual caregivers are varied as they accompany patients and families through a myriad of difficult situations from a spiritual

> vantage point, helping them to understand and cope with illness, grief, and loss, and guiding them through making ethical, moral, and end-of-life decisions, encouraging them to draw on their own religious or values-based beliefs when relevant. The caregivers share in their struggles, join them where they are, and accept them unconditionally, listening specifically for spiritual distress and working together to address it. For patients who find comfort in religious traditions, the caregivers introduce relatable texts and sources, while with others, guided imagery, poetry, and meditation may be used. Schultz and his team assist patients as they navigate

> encounters with suffering and death and search for answers



Spiritual caregiver Inbal Liber



Rabbi Mike Schultz

acing medical challenges often involves suffering, fear, uncertainty, and sometimes even loss, and trying to make this overwhelming journey as bearable as possible is the exceptional, dedicated staff in Rambam's Spiritual Care Service, led by Rabbi Mike Schultz. The service is designed to meet the diverse spiritual, emotional, and religious needs of patients, their families, and staff. Its six spiritual caregivers—who come from different religions—are fully integrated members of the departments in which they work, helping patients to explore their spirituality in whatever form it takes. Notes Rabbi Schultz, "We meet with patients and family members who are overwhelmed by stress and anxiety. Our spiritual caregivers are there to help them tap into their inner resources to find a sense of meaning and a greater peace of mind." to questions raised by their experiences. "We ask what a patient is hoping or praying for, and will either offer them our own blessing or bring traditional prayers for those who want them," explains Rabbi Schultz, who began working as a spiritual caregiver at Rambam in 2009.

The outcome of these efforts is clear. Patients and families are calmer, and they feel more connected to themselves and to others. Communication and understanding are improved with family and medical staff, which leads to better partnership for care. They are more empowered to use their own spiritual resources and to find the way forward, to live meaningfully in a challenging time.

Rambam on call · DECEMBER 2021



RAMBAM GOES GLOBAL WITH KIDNEYS, COURSES, AND COVID-19

ccording to Israel's National Transplant Center, when altruistic donors register directly and join the organ exchange database, a chain of matches is created, enabling donors to essentially save many lives. In some instances, donors and recipients live in different countries, requiring complex coordination to ensure that all aspects of the process are successful. Recently, Rambam has played key roles in two such operations.

EXCHANGING ORGANS WITH THE UAE

In the first exchange of its kind between Israel and an Arab state, Rambam was involved in a unique kidney transplant arrangement involving donors and recipients in Israel and the United Arab Emirates. Doctors at a Tel Aviv-area hospital removed a kidney from 39-year-old Shani Markowitz, and from there, the organ was transported to Ben Gurion Airport in a special cooler and flown to Abu Dhabi. Meanwhile, the kidney of a woman in Abu Dhabi was removed and flown to Israel, designated for a 34-year-old female patient at Rambam. The Rambam recipient's husband donated his kidney to Markowitz's mother, and Markowitz's kidney was flown to the mother of the Abu Dhabi donor.

This arrangement involved three families, in which one person in need of a kidney received a suitable organ, while their relative donated their kidney to a stranger. Such a system is needed because none of the patients had relatives with a suitable kidney match.

····· GLOBAL MEDICINE ·····

"This is very exciting. It's the first time we have conducted such a process between Israel and an Arab state, and it demonstrates that medicine truly has no borders," said Professor Rafi Beyar, former Director General of Rambam, and the Chairman of the Israel Center for Organ Transplantation. He added that, "We had two families in Israel and one in Abu Dhabi involved in this process. Given the geographic proximity of the UAE, this arrangement can be used regularly to save lives."

FLYING KIDNEYS TO THE CZECH REPUBLIC

In a complicated, meticulously timed campaign that included exchanging coolers containing kidneys at the airport in the Czech Republic, as well as a 21-hour marathon of surgeries at Rambam, two residents of Northern Israel were given a second chance at life thanks to the National Transplant Center's international organ exchange program. The chain of events included flying the kidneys from Israel to the Czech Republic and receiving kidneys from the Czech Republic, kidney harvesting at Rambam and Sheba Medical Center, and one altruistic donor - a man in his 40s unrelated to either the donor families or the recipients who simply decided to donate a kidney to strangers.

Professor Beyar says, "The method of exchanging kidneys with foreign countries is already becoming routine. The results are proving themselves through the success of the transplants."

Dr. Tony Karram, Director of Rambam's Department

Rambam receives a kidney from the United Arab Emirates

of Vascular Surgery and Transplantation, explains, "The process began at 3:00 in the morning. The first kidney was taken by ambulance to Ben Gurion Airport and flown with another kidney from Sheba to Prague."

Dr. Karram added that the campaign ended at midnight, with a chain of six donations and six transplants. "This operation involved a tremendous joint effort by surgeons, vascular surgeons, anesthetists, nephrologists, nurses, transplant coordinators, and many other professionals who collaborated to make the process a success."

ISRAFLI MEDICAL DELEGATION VISITS **ROMANIA TO HELP WITH COVID-19**

An Israeli delegation of physicians headed by Dr. Rami Sagi, Deputy Head of the Hospital Division of the Israeli Ministry of Health, traveled to Bucharest, Romania, at the invitation of Israel's Ambassador to Romania, David Saranga. Dr. Eyal Fuchs, a senior physician in Rambam's Pulmonary Institute and Director of COVID-19 Department A, was a member of the delegation.

The group toured regular hospitals as well as several field hospitals. Romanians have great regard for the Israeli healthcare community's handling of the COVID-19 pandemic, and the visit received widespread local media attention.

According to Dr. Fuchs, "Romanians are at the peak of morbidity in the fourth wave - they have over 5,000 confirmed cases every day, and between 500-600 deaths per day. The burden on hospitals is evident. While they use modern medicines, advanced

RAMBAN

Preparing a kidney for transport to the Czech Republic

······ GLOBAL MEDICINE ·····



Israeli delegation and local staff in the Romanian Ministry of Internal Security

Delegation members meet with Rambam representatives in Ruth Rappaport Children's Hospital

equipment, and widely used treatment protocols, these measures are insufficient."

Dr. Fuchs explained that although emergency departments have been converted into COVID-19 treatment centers, recovered patients often remain hospitalized because there is no welldeveloped system of community medicine. Community doctors are not obligated to continue treatment in accordance with the guidelines followed by hospital doctors. As a result, there is tremendous hospital overcrowding and a lack of organization, which affects the quality of care and results in higher mortality rates.

Dr. Fuchs added, "Our goal is to help the healthcare teams defeat the current wave of COVID-19. I hope that we have been able to contribute to the Romanian people's handling of this vicious disease, and to strengthen the deep relationship between our two countries."

PARTICIPANTS FROM 12 COUNTRIES TAKE PART IN RAMBAM'S FIRST INTERNATIONAL COURSE SINCE PANDEMIC BEGAN

Rambam hosted the first course of its kind during the COVID-19 pandemic, on the subject of "Managing Health Services During a Crisis". The course was put together by MASHAV -Israel's Agency for International Development Cooperation, the Ministry of Foreign Affairs, the Golda Meir Mashav-Carmel International Training Center, and Rambam. All international courses were discontinued due to the pandemic, but are now possible as a result of the achievements of the Israeli healthcare system and the country's green pass restrictions. 23 representatives from 12 countries came to Rambam to learn from senior officials about collaboration, work, and how to manage a variety of scenarios. Participants included representatives from Albania, Bosnia-Herzegovina, Cameroon, the Dominican Republic, Guatemala, Kazakhstan, Kosovo, Northern Macedonia, Montenegro, Rwanda, Senegal, and Tanzania, including the Minister of Health of Guatemala, hospital directors, heads of nursing, and more.

The delegation received an overview from Professor Michael Halberthal, Rambam's Director General and Chairman of Rambam's Teaching Center for Trauma, Emergency and MCS, who spoke about the hospital, the scope of its activities, its strategic location, and the challenges it faces. Lecturers included Dr. Hany Bahouth, Director of Acute Care Surgery, Director of the Trauma and Emergency Center, and Medical Director of the Teaching Center for Trauma, Emergency and MCS; Ms. Gila Hyams, Director of Nursing and Director of the Teaching Center for Trauma, Emergency and MCS; Rambam Deputy Director Dr. Avi Weissman; and Professor Lior Gepstein, Director of the Division of Research and Director of the Department of Cardiology. The delegation also toured the Yechiel Eckstein z"l Shock Trauma Room and the Sammy Ofer Fortified Underground Emergency Hospital.

DEAR FRIENDS,

It has been a busy year at Rambam Health Care Campus, as we carry out our daily activities against the backdrop of the pandemic while optimistically looking towards the future. In recent months, we have begun to receive a small trickle of international visitors on our campus again, and hope that this trend will be able to continue. We were excited to receive two visits from Herta Amir during the past few months and had the privilege to hold a ceremony in the presence of family and friends from the US and Israel, honoring her most recent donation. We hosted Margot Gibis, President of the Leir Foundation and presented her, on behalf of the Foundation, with the Rambam Award. If the situation permits, we hope to see more of you in the months to come!

As always, we are grateful for you, our supporters, who choose to partner with Rambam on a broad variety of projects. We cherish our donors – many of whom, have been with us for a long time. Your impact is evident across the campus. We do not take for granted the generosity of these individuals and foundations who share and believe in our vision, including The Leona M. and Harry B. Helmsley Charitable Trust, which completed its significant pledge towards the establishment of Helmsley Health Discovery Tower.

We are happy to tell you that progress has continued on our big construction projects—Helmsley Health Discovery Tower and Eyal Ofer Heart Hospital—as well as on many smaller projects, despite the challenges of the pandemic. We plan to open the Heart Hospital during the first quarter of 2022. In addition, thanks to a significant donation from Herta Amir, we are in the planning stages for renovating the newly named Herta and Paul Amir Internal Medicine Building, which includes the building's infrastructure as well as refurbishment of the Herta and Paul Amir Department of Internal Medicine A.

Our Friends Associations around the world continue to work diligently, holding intimate in-person events as well as online programming. They are expanding their circles of supporters, and raising awareness of activities occurring at Rambam. During the summer, in cooperation with AFORAM, Professor Halberthal and Professor Beyar traveled to the US to meet with friends and potential donors.

Lastly, I believe that if the pandemic has taught us anything, it is the importance of treasuring our friends and loved ones and seizing opportunities to strengthen our connections with others. We are cautiously looking forward to holding the 2022 Rambam Summit from May 31st through June 2nd – our first Summit since 2019, and it is with great pleasure and anticipation that I invite you to join us. This will be a long overdue chance for us all to celebrate our special friendships and Rambam.

With warmest regards,

Dr. Esty Golan Managing Director of International Relations and Chief of Strategic Development

TREASURING OUR FRIENDS WORDS FROM DR. ESTY GOLAN

bam on call 🔸

A CONVERSATION WITH PROFESSOR RAFI BEYAR

IN THE MIDST OF A GREAT MEDICAL REVOLUTION

or Professor Rafi Beyar, President of International Friends Associations of Rambam and the hospital's former Director General, medicine and innovation go hand-in-hand, drawing on the link between the challenges that doctors face every day and the technology, research, and engineering that results in the creation of solutions for those unmet needs. "This is how medicine moves forward," he says.

And Professor Beyar should know. As an interventional cardiologist and a biomedical engineer by profession, innovating is in his DNA. He is no less passionate about Rambam, and is a strong, vocal supporter of the hospital's comprehensive innovation infrastructure. "Rambam is in a very unique position. In addition to its role as the leading hospital in Northern Israel, it is also one of the only hospitals in the world that is strongly affiliated with a technological university – the Technion. In the surrounding areas, there are more elements that further strengthen Rambam's standing – the proximity to and collaboration with the University of Haifa and the large hi-tech presence in the area.

This unique ecosystem complements the spirit of entrepreneurship and research found in many of the hospital's staff members, who come to Rambam precisely because of this atmosphere," explains Professor Beyar.

KNOCKING DOWN WALLS

Professor Beyar believes that a significant factor contributing to Rambam's successful innovation is its involvement in programs that harness technology and research. One such initiative is Rambam MedTech – Rambam's technology transfer company. "Rambam MedTech provides a support system for staff members, guiding them through the design process and encouraging them to come up with marketable solutions. It plays an essential role."

Rambam's collaboration with Stanford University to launch Biodesign Israel last year has also made an impact. "As a result of Biodesign, companies have been founded and cooperation with local academic institutions and industry has been strengthened. We are knocking down walls between the different institutions, leading to more innovation in the area."

Professor Beyar also mentions Rambam's role in helping to establish Haifa's digital health incubator, MindUP. "This was a critical milestone, creating a model for partnership between industry and a governmental hospital," he recalls, adding that MindUP has facilitated the establishment of more than 12 startups across the country.

FIRST-IN-HUMAN STUDIES

Until recently, most medtech companies in Israel were conducting their initial clinical trials abroad. However, shifts in the local environment combined with international travel difficulties resulting from the COVID-19 pandemic have led to an increase in first-inhuman studies being conducted at Rambam. Many companies have approached the hospital out of a desire to perform their initial research using its patients. To that end, Rambam has established an entity for first-in-human clinical trials in oncology, where these trials are carried out safely and effectively; this unit is growing. By the same token, patients seek out hospitals that are the most involved in research, because they know they will receive better care. This is especially true with regard to oncology research studies.

With this in mind, he shares that the concept behind Helmsley Health Discovery Tower is a focus on patient-oriented innovation by uniting medicine and research. Chairman of the Steering Committee for Helmsley Health Discovery Tower, Professor Beyar explains that the facility will incorporate research laboratories from the nearby academic institutions and from local industry. "The idea is to bring everyone together and connect these elements in order to create solutions that no one came up with previously," he states. "We have a vested interest in this success because it benefits our patients."

FAST-PACED INNOVATION

"The activity here is incredible. The challenges that arose during the pandemic were met with increased cooperation with industry leaders who helped us find solutions. This, as well as the growing prevalence of digital health and other factors, has led to an increase in research.

These things speed up innovation. I believe that these tools will bring us many products. In the coming years, medicine will undergo a huge leap forward. We are in the midst of a great revolution in medicine," declares the Professor.



DR. HADAR ZIGDON GILADI, DMD, PHD

Department of Periodontology and the Laboratory for Bone Repair

Revealing the Crosstalk between Osteosarcoma and Endothelial Progenitor Cells

> steosarcoma (OS) is a malignant bone cancer most prevalent in young people. Tumors need a consistent supply of nutrients

and a pathway throughout the body provided by blood vessels formed by angiogenesis. Endothelial Progenitor Cells (EPCs) contribute to angiogenesis and aid in the migration and invasion of tumor cells in many cancer types through secretion of specific mediators.

Patients with metastatic high-grade OS exhibit a poor prognosis. We hypothesize that OS stimulates and recruits EPCs that increase OS cell invasion, migration, and metastasis associated with increased blood vessel density. By revealing the crosstalk between OS and EPCs, new treatment strategies like targeted therapies aimed to block the interaction between the OS and the EPCs may be developed.

EPCs secretome enhanced OS cell invasion and migration and increased secretion of matrix metalloproteinase 9 (MMP9, an enzyme that degrades extracellular matrix and promotes cell trafficking). Proteomic analysis of EPCs secretome revealed an angiogenic profile. The addition of VEGF-A to the OS medium enhanced invasion and MMP9, indicating that EPCs promote OS aggressiveness in a paracrine manner in part by VEGF-A. VEGF-A autocrine effect was investigated by pharmacological blockage and VEGF-A silencing in OS cells and showed decreased osteosarcoma migration, invasion and AKT phosphorylation. Last, osteosarcoma human lung samples were highly stained for CD31 (endothelial marker), VEGF-A, and MMP9. In conclusion, our most interesting finding is that EPCs promote osteosarcoma development not only by incorporating into vessels, but also by paracrine secretion of cytokines that led to enhanced migration, invasion and MMP9 expression. Our findings could propel the development of novel metastatic-osteosarcoma therapies.



DR. EREZ HASNIS, MD, PHD

Attending Physician, Department of Internal Medicine "D" and GI Malignancy Prevention Unit, Institute of Gastroenterology

Pancreatic cancer is a deadly disease, characterized by universal resistance to therapeutic regimens and aggressive biology with early metastatic seeding. Dr. Hasnis' research addresses pancreatic cancer aggressiveness by identifying the tool set used by the disease to spread to the liver.

he researchers in the Hasnis laboratory use a unique mouse model, in which early pancreatic cancer is removed to allow the later development of liver metastasis. Highthroughput analyses are used to compare cells from the primary tumor and cells from the liver metastasis in order to identify traits that support metastatic fitness. This approach has identified several novel genes that are critical for the development of metastatic disease in pancreatic cancer.

The research carried out in Dr. Hasnis' laboratory aims to evaluate the function of those genes in the local and distant spread of this horrific disease. Pancreatic cancer is also notorious for its resistance to immune therapy. Related studies in the laboratory examine mechanisms underlying the escape of pancreatic tumor cells from immune surveillance. Factors that support evasion from the immune system are expected to serve as novel targets to increase efficacy of immune therapy in pancreatic cancer, thus reducing tumor aggression and prolonging patient survival.

RAMBAM INTERNATIONAL RELATIONS

ambam was awarded the Lebanon War Medal for Civilian Organizations by Israel's Minister of Defense Lt. Col. (Res.) Benny Gantz and Director General of the Ministry of Defense, Mai, Gen, (Res.) Amir Eshel. The medal, received by Prof. Halberthal. honors Rambam for its activities while Israeli forces served in Israel's Southern Lebanon security zone.

> L-R Minister of Defense Lt. Col. (Res.) Benny Gantz and Prof. Michael Halberthal

epresentatives from the new Haifa Bay Port visited Rambam for an introductory meeting and to examine avenues for cooperation. Guests included Yoav Zuckerman, Tal Goldstein, and the port's construction manager, who represents port owner SIPG. At Rambam, they met with Director General Prof. Michael Halberthal, Deputy Director Dr. Avi Weissman, Managing Director of International Relations Dr. Esty Golan, and Dr. Ronit Segal Hirshberg, former CEO, Rambam Health Corporation and Director, Division of Marketing & Business Development.



Representatives from the new Haifa port with members of Rambam's administration



L-R Tamir Pardo, Yossi Bornstein, Prof. Michael Halberthal, Prof. Rafi Beyar, and Dr. Roee Atlas.

rof. Halberthal and Tamir Pardo, Chairman of Shizim Biomed Group, signed an agreement to promote digital health and medical technology projects. In attendance were Prof. Rafi Beyar, President, International Friends Associations; Dr. Roee Atlas, Director, Rambam MedTech, Ltd.– Rambam's technology transfer company–who led the signing of the agreement; and Shizim founder and CEO Yossi Bornstein.

· · · SNAPSHOTS



lorida-based friends Mitch Rubenstein and Laurie Silvers visited Rambam, where Dr. Golan provided an overview. They met Dr. Daniella Magen, Chair of Pediatrics & Director, Pediatric Nephrology Institute, in Ruth Rappaport Children's Hospital and Professor Irit Ben-Aharon, Director, Joseph Fishman Oncology Center; and visited Sammy Ofer Fortified Underground Emergency Hospital.



L-R Galit Alon, Prof. Michael Halberthal, Daniel Arison Dorsman, Danielle Gal, Yifat Shmuelevitz and Dr. Esty Golan

aniel Arison Dorsman; Danielle Gal; and Yifat Shmuelevitz, VP Social Investments for The Ted Arison Family Foundation; visited Rambam, meeting with Prof.Halberthal, Dr. Golan, Galit Alon, Executive Manager, Friends of Rambam; Dr. Daniella Magen; Professor Mony Benifla, Director, Pediatric Neurosurgery; and Dr. Gennady Gaisman, Director, Unit for Physical Medicine and Pediatric Rehabilitation. They toured Sammy Ofer Fortified Underground Emergency Hospital and Ruth Rappaport Children's Hospital.



L-R Laurie Silvers, Mitch Rubenstein, Dr. Esty Golan and Ellen Pomerantz

SNAPSHOTS



with an initial stop in Los Angeles. They met with close supporters Herta Amir, Dr. Bita and Cameron Yadidi, Roya and Avi Arshadnia, Sandy Gooch and Harry Lederman, Dr. Raphael and Jackie Nach, and Dalia and Robert Melamed. Sari Arshadnia, AFORAM's Director, Western Region, accompanied Prof. Halberthal and Prof. Beyar during their stay.

From the West Coast, Prof. Halberthal and Prof. Beyar traveled to the East Coast, visiting supporters Margot Gibis, President, and board members of the Leir Foundation in Connecticut; Shahram Yaqoubzadeh from the Iranian American Jewish Federation of New York; AFORAM Executive Board Members Adam Emmerich and David Sterling; Abby Joseph Cohen and David Cohen; Dr. Joseph and Karen Levine at their beautiful home; President of AFORAM Meri Barer and Sol Barer: and Aaron and Mark Spencer in Massachusetts. Prof. Halberthal and Prof. Beyar were accompanied by Ellen Pomerantz, AFORAM's Director, Northeast Region.



L-R Ben and Carolin Neman, Dr. Bita and Cameron Yadidi, Prof. Rafi Beyar, Sari Arshadnia, Prof. Michael Halberthal, and Nora and Jack Amin



Harry Lederman, Prof. Rafi Beyar, Sandy Gooch and Prof. Michael Halberthal



L-R Prof. Rafi Beyar, Dr. Joseph Levine, Prof. Michael Halberthal, and Karen Levine

rominent businessman and Deir el-Assad Mayor, Ahmed Dabbah, and his brother Yihye visited Rambam and met with Prof. Halberthal; Dr. Golan; Ariye Berkoviz, Deputy CEO, Construction and Development; Professor Gil Bolotin, Director, Department of Cardiac Surgery; and Inbar Shahaf, Director, Unit of Resource & Market Development and Donor Relations. The guests toured Eyal Ofer Heart Hospital.



Ahmed and Yihye Dabbah and members of Rambam's administration and staff

den Dahan, Director, Human Resources, and Dana Delgado from the Plus500 Donations Committee and the **Finance Department** visited Rambam. Following a meeting in Dr. Esty Golan's office where they received a recognition certificate, they met with Dr. Daniella Magen and Tamar Shochat, the Administrative Manager of Ruth Rappaport Children's Hospital, and toured the facility.



SNAPSHOTS .



L-R Prof. Michael Halberthal, Meri and Sol J. Barer, Prof. Rafi Beyar



Young patient playing during the ceremony

Recognition ceremony was held in Sammy Ofer Tower to honor the donation of a piano to Rambam in the presence of two of the donors – Yishai Kuperman and Steve Jackson. Other donors included Uri Inbinder and Uriel Kahn. During the ceremony, hosted by Deputy Director Dr. Michal Mekel, a young patient and two staff members played several musical pieces for those in attendance.

Professor Mary-Louise McLaws, who has been named as the new honorary president of Australian Friends of Rambam. Professor McLaws is an epidemiologist with expertise in hospital infection and infectious diseases control. Professor McLaws hopes to bring awareness of Rambam's innovative achievements to a wider community outside of Israel.



Professor Mary-Louise McLaws



L-R Dana Delgado, Eden Dahan, Inbar Shahaf and Dr. Esty Golan



ritish Friends of Rambam took part in this year's Maccabi GB Community Fun Run. Thousands of runners participated in the event, supporting 76 different community charities. The niece and grandchildren of BFORAM Director Anita Alexander-Passe, Samantha Rose, Anoushka Alexander-Rose, and Sophia Alexander-Passe, respectively, all participated in the Run.

CELEBRATING RENA SHENA Z"L

SPECIAL EVENTS

n the presence of the acting Director General of Israel's Ministry of Justice and the Administrator General, Adv. Sigal Yaakovi, Ministry representatives, and members of



Administrator General, Adv. Sigal Yaakovi, Dr. Halberthal, Dr. Golan and the Administrator General delegation

the Rambam administration and staff, an event was held to honor the memory of Rena Shena, a Poland-born, American Jewish woman who bequeathed her estate to an Israeli hospital. The Administrator General, responsible for facilitating the distribution of estates for the benefit of the State of Israel and its institutions, chose to use the funds to support Rambam.

The event held at Rambam included a ceremony and presentation of a donor recognition certificate to the Ministry representatives, who were responsible for facilitating the process. Following the ceremony, the guests were given a tour of Rambam's Radiation Therapy Wing in Joseph Fishman Oncology Center. After the tour, the guests and Rambam representatives scattered Shena's ashes in the Mediterranean Sea off the Haifa coast.

MIFAL HAPAYIS HONORED FOR DONATION DURING PANDEMIC

donor recognition ceremony was held in Rambam's Greidinger Hall in Ruth Rappaport Children's Hospital to honor Mifal Hapayis (Israel Lottery) for its significant donation to the hospital's COVID-19 efforts, which helped Rambam to purchase respirators, monitors, portable imaging equipment, endoscopes, and more. The ceremony was hosted by Dr. Golan, and included speeches from Dr. Halberthal and Avigdor Yitzhaki, Chairman of Mifal Hapayis, , and presentation of a certificate recognizing the organization's generosity.

Following the ceremony, plaques were unveiled on the hospital's COVID-19 Donor Recognition Wall and on the Maimonides Leadership Circle Donor Wall. During a tour of the Sammy Ofer Fortified Underground Emergency Hospital, an additional plaque recognizing the organization's contribution was unveiled.



Avigdor Yitzhaki and representatives from Mifal Hapis with Dr. Halberthal, Dr. Golan on stage during the ceremony

Mifal Hapayis representatives in attendance included Yitzhaki; Benjamin Dreyfus, CEO; Osnat Elroy, Company Secretary; Tzippi Shimony, Chairman's Chief of Staff; Amiram Albo, CEO's Chief of Staff; Kobi Ben Benishti, Director of Assignments and Building Control; and Avi Debby, Assignments and Building Control Division.

······ SPECIAL EVENTS ······



Herta Amir, Keenan Wolens with Dr. Golan, Prof. Halberthal and Prof. Bevar

Herta Amir and Prof. Beyar with a young patient

HONORING HERTA AMIR

ambam hosted a celebratory groundbreaking ceremony honoring Herta Amir's most recent gift, which will facilitate restoration and upgrading of Rambam's internal medicine building, often referred to as the Mendelsohn Building after the architect who designed it. The building will now be known as the Herta and Paul Amir Internal Medicine Building.

The day began with a reception attended by Herta, her daughter Orna, Orna's husband, Keenan Wolens, long-standing friends Irith Rappaport, Glen Perry, and Professor Ron Robin (President of the University of Haifa), and members of the extended Amir family living in Israel, as well as Rambam department heads and senior management, and other employees. Director General Professor Michael Halberthal, and President of Rambam's International Friends Associations Professor Rafi Beyar, spoke about the family's longstanding dedication to the hospital, their exceptional generosity. Guests were treated to exciting videos about the life of Herta and Paul, as well as a look at the fascinating history of the Internal Medicine Building and its vital role in caring for the people of Israel. The high point of the reception, however, occurred when Herta took the stage and spoke movingly about her dear husband Paul, z"l, his love of Israel, and his enduring commitment to Haifa - especially to Rambam.

Following the reception, Herta and her guests were taken on a tour of the Rambam facilities

that have benefitted from their generosity and bear the family's name, including the Herta and Paul Amir Pediatric Cardiology Institute, where Herta and her family were visibly moved while meeting with a young girl whose life had been saved by the institute's medical team, and the Herta and Paul Amir Neurosurgical Intensive Care Unit.

The ceremony concluded with the unfurling of the (temporary) plaque proudly displaying the name of the Herta and Paul Amir Internal Medicine Building.

The celebration continued into the night as Herta, members of her family, and Rambam leadership enjoyed a sumptuous, authentic Middle Eastern feast at Haifa restaurant Shtrudel.

Rambam's leadership was honored to celebrate this landmark event and to personally express thanks to Herta and the Amir family for their steadfast friendship and support.





SAVE THE DATE 2022 | RAMBAM SUMMIT May 31 - June 2, 2022

2022 Rambam Award Recipients

Mr. Alan J. and Mrs. Tatyana Forman USA

Professor Emeritus Peretz Lavie Israel Mr. Jonathan

and Mrs. Edna Sohnis USA

Professor Emeritus Yoram Palti Israel

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