RAMBAM Health Care Campus

Rambam on call

ISSUE No.8 | December 2011

Reborn Baby

BMT cures infant's rare immune disease

Uterine Fibroids?

Wave them goodbye!

24 HOURS

in Internal Medicine C

DREAM DOCTORS

Clowns make hospitalization a magical experience

Dear Friends,

Since its launch in December 2007, we have envisioned *Rambam On Call* as a niche publication for our supporters abroad. With the December 2011 issue, we are pleased to introduce a new format expanded to magazine dimensions. The new *ROC* aims to deepen our dialogue with you.

In these pages, you can read about Rambam's physicians and nurses at work – and in our cover story, about Rambam's medical clowns ("Dream Doctors," p6). You will also find stories about Rambam's patients, whose lives and quality of life are our cherished central concern ("Escaping the Bubble," p.14), and about the advanced medicine that Rambam makes available to the people of Northern Israel ("Making a FUS Over Fibroids," p.10; "Valve Watch," p.18) and to the world ("International Outreach," p.30). We also invite you to read about yourselves ("Friends Help Build a Hospital," p.33).

It is not self-evident that people thousands of miles distant from Israel's tiny geographical "niche" at the eastern edge of the Mediterranean should find the time and energy to care so very deeply about the people and State of Israel. But you do!

My colleagues and I have been welcomed into your homes and synagogues in London, Toronto, New York and elsewhere, and furthermore, you have traveled to us here in Haifa individually, as mission participants, and as delegates to the annual Rambam Summit. Time and again, we have been moved by the deep respect and affection that you have shown us personally and as representatives of Rambam Health Care Campus, Israeli medical science, and the State of Israel at its humanitarian best. Thank you.

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Contents

Issue No. 8 | December 2011

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Team Work

>> Erela Tarlev Ben-Shahar

Departmental Rounds | **Pediatric Nephrology**

Mahdi Tarabia, 40, married and father of two, is Head Nurse in the Division of Pediatric Nephrology.

1 Of what does your work consist? I am responsible for the nursing work in pediatric nephrological dialysis, which includes working with the physicians, coordinating and implementing dialysis treatment, keeping in touch with the children's families, coordinating kidney transplants, and maintaining contact with the children who have received transplants.

2 Why precisely did you choose this department? I came here after I had worked for nine years in intensive care. My decision to work in the pediatric departments was not accidental. I love children, and from the moment that I chose to be a nurse, I decided that I would work with kids. Furthermore, I especially enjoy working with the team of physicians here.

3 Of what are you especially proud? Of our consideration for the children. We provide dialysis with consideration for school hours, homework, and the examination calendar so that the kids can continue to lead a normal life. We begin working every day at 6 a.m. so that the children can finish with dialysis early and go to school.

4 Do you feel a bond with the children in the department? I keep in continuous touch with them and their families. I make sure to call them with holiday greetings, and to assist them with things that are not connected to the hospital. For example, when I discovered that in the department there are families with financial difficulties, I busied myself with collecting donations and money for them.

5 Are there breaking points? How can there not be? Sometimes I lack the strength for all the suffering and hardship that I see. But during these moments, I tell myself: If I leave, I will betray my professional responsibility and my responsibility to the children and their families. The idea that my work is important and that I am doing everything in my power to help them cope helps me to continue.

6 What are the most difficult moments? When a child dies. However, the death of a child is a rare occurrence with us here.

7 What are the most emotional moments? The moment when I hear that there is a kidney for donation. Every transplantation is like a rebirth. At this moment, side by side with excitement, I enter a maelstrom of activity because I have a limited number of minutes to arrange and coordinate everything with the physicians. My greatest satisfaction is to see the child emerge from the transplantation.

8 How does your family cope with your work? I have their full support. My wife knew beforehand the life we could expect, and the children have also accepted it well. I also wish to stress the full support that I receive from the Division of Pediatric Nephrology staff, from the nursing staff, and from Anat Dubovi, Director of Nursing, Children's Hospital.

My Day

04:00 I awaken.

05:00-05:30 My workday starts. I test the water system and the dialysis machines and make all preparations for connecting the children to the machines.

05:30-07:00 I connect the youngsters to the dialysis machines.

07:00-07:30 The nursing staff meets for a departmental shift change and reports are made of the patients' conditions during dialysis treatment over the previous 24 hours.

09:00-09:30 I disconnect the children from the dialysis machines.

09:30-10:00 Medical staff departmental shift change meeting including the physician on call and nursing staff.

10:00-13:00 In our department, I continue to help connect children to the machines. In addition, I perform dialysis in the Pediatric Intensive Care Unit (PICU) and also direct our unit: overseeing logistics, and examining children who have arrived for follow-up after transplantation.

13:30-14:30 I help connect a third group of kids that has arrived for dialysis after school.

14:30-17:30 Together with physicians and a dietician and social worker, I visit the children who have undergone dialysis. I then transfer responsibility for the unit to the physician and nurse in charge of the evening shift.

17:30-18:30 At the end of my workday, I disconnect every child from the dialysis machines.

18:30 Arrival home.

19:30-20:30 I walk or jog for an hour.

20:30-23:00 I help my kids with their homework.

24/7 Department of Internal Medicine C under the direction of Dr. Amir Karban

07:45 The departmental physicians arrive and begin to take blood samples for lab testing from 45 hospitalized patients. At 08:15, the visits begin, and patients that were admitted for hospitalization during the past 24 hours are presented. After acquaintance with the patient is made, a discussion takes place during which the staff, headed by Dr. **Amir Karban** and Head Nurse **Yaffa Zelig**, work toward a diagnosis and build a follow-up treatment plan.

09:30 Dr. **Karban**, Dr. **Erez Hasnis**, and Nurse **Evgenia Plaskovich** are called to the room of a 62-year-old woman to wean her from a ventilator. This is another sign of recuperation for the woman, who arrived at Rambam after having been given an intravenous saline infusion that resulted in brain edema and loss of consciousness.

14:30 A 60 year old is admitted to the department for repeated vomiting that has already continued for two months and resulted in a weight loss of 12 kg. The tentative diagnosis until now has been an eating disorder. An in-depth examination by Dr. **Naomi Finkelstein** raises the possibility that the patient suffers from whooping cough. Nurse **Evgenia Plaskovich** treats the patient with antibiotics, and the frequency of vomiting lessens.

16:00 A patient whose medical condition has improved speaks with Social Worker **Reut Sade** and Nurse **Eti Green** and receives social solutions for after hospital release.

18:00 A patient with cirrhosis of the liver comes to the department complaining of severe shortness of breath. Dr. **Korin Morris** diagnoses an accumulation of stomach fluid (ascites) and performs fluid drainage. The patient experiences huge relief and says that he "has air to breathe." Dr. Morris is assisted by Nurse **Sonia Filmore** and Nursing Assistant **Hannah Peretz**.

02:20 Dr. **Tzviya Coler Botzer**, the on-duty physician, rushes to perform resuscitation on one of the patients who is having difficulty breathing. At the same time, the nurses report that another patient is in respiratory failure and requires ventilation. Meanwhile, a third patient is complaining of chest pains, and it is necessary to perform an EKG and take a blood sample in order to rule out the need for urgent catheterization. Departmental on-call physician Dr. **Ronen Zalts** arrives at the hospital and performs one of the resuscitations. Nurse **Wa'il Higazi** and Head Nurse **Yaffa Zelig** assist him.

Dream Doctors

How do you amuse a child ill with cancer and lessen his anxiety before surgery? Medical clowns Zoya Hayat and Javiar Eisenberg tell how they do it and how they live with it after work.

Yael Tal >> photos: Edward Kaprov

Eight-year-old Yotam (not his real name) was not ready for the dramatic change in his life. An intense attack of stomach pain sent him urgently to the hospital, and the active and sociable child found himself lying helplessly in bed. Although the diagnosis (appendicitis) slightly alleviated his parents' anxiety, both they and Yotam were worried about the surgery scheduled for the next day. Is anesthesia dangerous? When would he awaken? How much time would pass until he recuperated completely?

The tense silence that prevailed in the room dissipated abruptly when a clown appeared. "I am Bramboola," she introduced herself, "and you must be Yotam!"

Yotam looked at her suspiciously and considered whether or not to cooperate. "Why do only *you* have those pajamas," she pointed at him. "I also want some!"

Play is a means for continued growth under every condition. Zoya Hayat and Javiar Eisenberg.

Yotam smiled. Encouraged, she asked him if he would like to go out with her for a walk and, on the way, to find pajamas to fit her, too. Yotam looked at his parents, whose eyes indicated their okay. And in this way, when he was seated in a wheelchair with Bramboola behind him, they set out. Bramboola withdrew soap bubbles, balls, and fans from her satchel and did tricks, and Yotam rejoiced and forgot his troubles.

Dream Machine

The next day, about an hour before Yotam's surgery, Bramboola cheerfully entered his room and again succeeded in coaxing a little smile from his sad face. This time, too, she announced that they were going on a trip – to the Operating Room. On the way, she made him laugh, and when the anesthesiologist approached him, she said, "Let's count to seven and enter the dream machine."

By the time they reached the number five, he had fallen asleep, smiling. "When Yotam awakened and looked for me, I knew that I had succeeded," relates Zoya Hayat (32), who plays Bramboola. "This child will remember a positive hospital stay."

Zoya, a professional actress, has worked for 3.5 years as a medical clown in the Department of Pediatric Surgery at Rambam. During this time, she has learned that real life surpasses every scenario.

"When I heard that this profession, medical clowning, exists, I immediately wanted to work in it," she relates. "Perhaps because when I was a child, I suffered from kidney stones and was hospitalized for an extended period. I remember that as a complicated experience."

How do you know what will amuse a child?

"I read them immediately from the very first meeting, listen to and observe them. There are children who immediately jump on the clown from happiness, and there are children who need time to adapt."

PROJECT

What Gladdens the Clown?

Six clowns work at Rambam Health Care Campus and constitute part of the project called Dream Doctors, which incorporates 70 medical clowns throughout the country. The project is financed and implemented solely from contributions collected under the auspices of the Philnor Foundation, a registered non-profit association. In Israel, the Foundation represents the philanthropic activity of the Norman Family of Switzerland.

Care to help?

It costs $18,000 per year to sponsor one medical clown.

ContactUs@rambam.health.gov.il

Fear and the Eagle

Sometimes the clown becomes a mediator between the child and his fear. Zoya well remembers three-year-old Assaf, hospitalized with a head tumor, who from a child expressing wariness toward her became a small admirer.

"One day, I entered his room and saw a book on his bed that his grandmother had written for him called *Assaf is Sick*. In the book, she described how his illness had been discovered, (and) the treatments (for it).

"I asked him if he would like Bramboola to read him the story, and he ignored me. I asked if he would like to read to me. He took the book and started to tell me an entirely different story because, after all, he didn't know how to read. He told about Assaf, who went on a trip and encountered a big eagle that he banished with the words 'Go away, go away!'

"I suggested that he turn the story into a play in which I was the eagle and invited him to mold me according to his wishes. In the beginning, I was a big eagle that was banished from the room; gradually, I became an adorable eaglet. At a later stage, Assaf himself played the eagle and 'flew' around the department. At that stage, I understood that he was not afraid anymore."

Magic in the ER

Actor Javiar Eisenberg (46) has been working as a medical clown at Rambam Health Care Campus for about eight years. In this framework, as Marchelino, he visits half a dozen pediatric departments and units.

Do you remember an experience that was especially difficult for you?

"Every time that I have worked with a child who at the end has died is difficult for me, but I especially remember a 13-year-old boy in whom cancer was discovered. When I entered his room for the first time, he threw me out. He was, after all, a big kid and wasn't excited by a clown. Gradually, however, a good rapport developed between us, and within my large repertoire, he was especially enthusiastic about magic. He asked me to teach him tricks; afterwards, he did them by himself for the children and medical staff in the department. He was released from hospital, but then, to my deep regret, his condition worsened and he was readmitted, (this time) to isolation. I entered his room dressed appropriately (ed. note: in sterile garb) and did new tricks for him and asked for his opinion. One day when I entered the department, they told me that he had died."

How do you cope with such experiences?

"If I were destroyed by every such experience, I couldn't continue. I'm sad when a child has died, but then I recall the good moments with him, his smile, because even if he barely had a life, I hang onto the life that he had and not to his death."

Making a FUS Over Fibroids

Every third woman above the age of 40 has uterine fibroids, which sometimes cause great suffering. An innovative treatment by means of focused ultrasound makes it possible to avoid hysterectomy or myomectomy and to improve the woman's quality of life.

>> **Eti Dor**

By means of MRI-guided focused ultrasound, the patient's fibroid shrinks and her quality of life significantly improves.

A patient prior to FUS therapy. Right to left: Dr. Michael Friedman, Dr. Sobhi Abadi, and Nurse Nurit Ariel.

At age 45, Rivka (not her real name) began to suffer from a lot of vaginal bleeding and severe stomach pain and became very anxious. A gynecological exam performed in the Uterine Fibroid Clinic at Rambam Health Care Campus determined a uterine fibroid to be the probable cause. In contrast to many women who are compelled to undergo a hysterectomy, Rivka was told by the medical staff that she had been found suitable for an innovative treatment for fibroids by means of MRI-guided focused ultrasound, called FUS.

Because of Estrogen

Uterine fibroids are a common phenomenon affecting women in their reproductive years. Every third woman above the age of 40 develops fibroids.

"We are speaking of a benign (non-cancerous) growth that develops in the muscular tissue of the uterus," explains Dr. Michael Friedman, a senior physician in the Division of Obstetrics & Gynecology, who is responsible for the new treatment. "A very large fibroid may cause the uterus to grow to the dimensions of pregnancy." The connection between the fibroid's size and the symptoms depends on its location. It is possible to find a uterus that has a large fibroid but lacks symptoms and, in contrast, a uterus with much smaller fibroids in a location that causes heavy bleeding.

What causes fibroids?

"Most fibroids are influenced by the estrogen secreted by the ovaries. Furthermore, significant overweight increases the risk of developing fibroids. At menopause, with the decrease in estrogen production, fibroids are inclined to stop growing and are even likely to shrink."

What are the outstanding symptoms of fibroids?

"If the fibroid develops from the uterus outward, it will cause the uterus to grow and to exert pressure on the bladder, which results in a frequent need to urinate, incontinence, or an inability to empty the bladder. In addition, sometimes there is a sensation of pressure on the bowel, constipation, a bloated belly, pain in the back of the legs and in the pelvis, and pain during sexual intercourse. In contrast, if the

fibroid develops inside the uterine cavity, it will significantly increase the cavity's volume and prevent the normal uterine contraction essential to the cessation of menstrual bleeding. This may cause anemia due to blood loss. In such cases, we recommend treating the fibroid."

How are fibroids diagnosed?

During a routine gynecological exam, which all women are recommended to undergo twice a year, the physician is able to feel an enlarged uterus. Ultrasound and MRI testing are then used to confirm the initial diagnosis and to determine a fibroid's location and size, and additional tests may be called for.

Focused Ultrasound

Until a decade ago, there were three widely accepted approaches to treating fibroids: a conservative approach that included medical observation coordinated with drug therapy intended to reduce the fibroid by suppressing secretion of the estrogen hormone; surgery to remove the fibroid only or the whole uterus; blockage of the blood vessels nourishing the fibroid, an invasive procedure performed under guided X-ray imaging.

Research indicates that

90%

of patients experience an improvement in symptoms for six months after treatment, and a marked improvement in quality of life.

In the past decade, a new therapeutic treatment by means of focused ultrasound has become usual in the world and in Israel. Although not included in the national health services basket, the approach has become standard at Rambam and makes it possible to reduce the fibroid's size, free the patient from its symptoms, avoid surgery, and retain the uterus.

For this purpose, Rambam has gathered specialist physicians from various departments, nurses, and MRI technicians into a single treatment staff that cooperates in caring for every woman in an individualized manner. As a result of this method's success, the Uterine Fibroid Clinic has received applications for treatment from women throughout Israel and also from other countries.

How does this technology work?

Radiologist physician Dr. Sobhi Abadi of the MRI Institute: "Under guided MRI, the ultrasound device broadcasts focused sound waves to an isolated point of 10–20 mm in diameter on the surface of the fibroid and heats it to a temperature of 60–85 degrees Celsius. At this heat, fibroid tissue is destroyed. This action is repeated a large number of times while the treated area is expanded until most of the fibroid shrivels. Then, the MRI exam is repeated in order to check how much of the fibroid's volume has been successfully treated. During the weeks and months afterwards, the body absorbs the tissue and the destroyed cells. The procedure is performed under partial anesthesia and lasts for approximately four hours; the duration depends on the size of the fibroid. Recuperation time is short, and there are almost no complications."

Can every woman undergo the treatment?

"No. The treatment is not right for everyone, and only after examination by a physician, and ultrasound and MRI tests, is it possible to determine if the treatment is appropriate. The suitability is also dependent on the structure of the uterus, and on the location and number of fibroids."

Medical consultants:

Dr. Sobhi Abadi, Radiologist Physician, MRI Institute, Rambam Health Care Campus

Dr. Michael Friedman, Senior Physician, Division of Obstetrics & Gynecology, Rambam Health Care Campus

Nurit Ariel, Head Nurse, Women's Health Outpatient Clinic

Escaping *the* Bubble

Osher Gal was only six weeks old when she was admitted to the Children's Hospital at Rambam Health Care Campus. After any number of painful tests, it became obvious that she was ill with severe combined immunodeficiency, an illness that in the past had earned its patients the nickname "bubble children," and only a bone marrow donation could save her life. At six months, she successfully underwent BMT, and today she is a regular little girl in every way.

A small story about great love and hope.

Eti Dor >> photos: Edward Kaprov

In the dorm, they call her Ninja. Perhaps because she is active and energetic. It is easy to be conquered by her high spirits and her smile, easy to believe that she has always been like this, a healthy and entirely normal infant. In her short life, however, two-year-old Osher Gal has known extended periods of suffering and pain.

"My pregnancy was normal," recalls Tamar, her mother, "and when she was born, she looked entirely healthy. We held a party in her honor, and it never occurred to us that our whole life would turn upside down." Over the course of several weeks, the first signs appeared: dehydration, skin irritation, severe diarrhea.

The mother: "At first, the pediatrician suspected whooping cough, but the tests ruled out this diagnosis. Afterwards, they suspected bronchiolitis, and she received inhalation at home. But her condition worsened. Her fever rose, she was coughing nonstop, and swollen veins broke out on her face. I felt that if nothing dramatic were done for her, we would lose her."

Baby in Panic

At the age of six weeks, Osher was admitted to the Children's Hospital on the Rambam campus and underwent a series of tests during which she was punctured tens of times.

Osher Gal and her mother Tamar.

"She was a frightened baby, in true panic," her mother relates. "For the first two days, she was hospitalized in a room with other children; afterwards, she was transferred to isolation. Aside from the medical staff, only my husband, my mother and I were allowed to be in the room with her. There, the air is sterile - it is forbidden to open a window. Before we approached her, we had to wash our hands well with disinfectant and to wear a clean gown. Osher was nourished by means of a feeding tube, and sometimes, when she suffered from hunger pangs, they fed her intravenously, which I complemented with bottle feeding."

The blood test wasn't good, and necessitated a series of aggressive tests in order to locate the problem. The young family understood that the story was far from over. David, the father, took a leave of absence from his work as director of a management team in the Central Region, and the firstborn son, one-year-old Eli, was placed in the care of Tamar's parents.

The narrative is picked up by Dr. Irina Zaidman, Director of the Pediatric Hematology & Oncology Department's BMT Unit. "The Rambam Hospital team diagnosed in Osher two unusual infections and an additional, rare bacteria that manifested itself as pneumonia," she explains. "These circumstances raised the suspicion that Osher was ill with congenital severe combined immunodeficiency (SCID), a diagnosis that we confirmed after conducting additional tests. It was clear that every infection could cause her death, and that she must undergo BMT."

The discipline is not new for the Pediatric Hematology & Oncology Department at Rambam. Since 1999, 234 bone marrow transplantations have been performed there. Each year, 25-30 BMT procedures are performed among the pediatric patient population.

Bubble Children

SCID is usually discovered in the first months of life when the patient is exposed to infection. Because he lacks an immune system to protect him, his body responds harshly. The nickname "bubble children" arose from the case of David Vetter, who managed to survive with SCID until age 12 in a sterile plastic bubble ventilated by filtered air. This is to say that since the tragic case of Vetter (b. 1971 - d. 1984), medical progress has been made.

Today, it is possible to cure the illness by means of standard BMT, which creates a functioning

and healthy immune system. In Osher's case, unfortunately, the tissue test performed on her brother, Eli, was found not to be a match for her. Pediatric BMT Nurse Coordinator Iris Porat started to search for an appropriate donor through the worldwide umbilical cord blood registry network. When Osher was 3.5 months old, the fateful telephone call came: a 100% matching donor had been found in Germany. The Transplantation Committee heard that Osher was free of any active illness and clean of any infections and therefore could undergo chemotherapy. There is no way back from this act, which obliterates all the child's bone marrow cells and, in effect, leaves her entirely exposed.

The mother: "All this time, we neutralized our anxieties, and despite the fact that they told us that there was a chance that she might not come out of this, we prayed and told ourselves that everything would be okay."

Out of Isolation

A week after the destruction of her bone marrow, Osher underwent transplantation. The new bone marrow entered her body via her central heart vein.

"The medical follow-up on her was performed in two stages," relates Dr. Abdallah Khalil, a specialist in pediatric hemato-oncological diseases at Rambam. "We followed up on her development in terms of weight, motoric development, and physical development, and simultaneously, we followed up on the transplant. We confirmed that the systems in her body were uninjured and that the transplant had been accepted and was functioning well."

At the age of one-half year, Osher was released from isolation and permitted to go home. "I felt as if I had given birth to my daughter anew," recalls Tamar. "It was close to my birthday, and when I was asked what I wanted as a gift, I said that the happiest gift that I had received was that my daughter had come home."

Going out into the world caused shock to the infant who had grown up in isolation. She was afraid of people and unfamiliar objects. Even the air and the wind frightened her, and she cried a lot. Gradually, her parents began to expose her to the environment. After three months, her mother took her to the playground for the first time in order for her to see children. The little one examined her surroundings with excitement and with a lot of curiosity.

Simultaneously, the medical treatment continued. For a year, she received drugs to suppress her body's rejection of the transplant. The drugs caused a delay in teething, but after they were discontinued, the teeth grew in. Today, Osher comes for follow-up tests in the framework of the day hospitalization clinic.

GLOSSARY

Severe Combined Immunodeficiency

SCID is a name that includes a number of rare illnesses arising from various genetic disturbances. The illness involves severe damage to the development and functioning of type B and T lymphocytes (white blood cells), and in certain instances, also damages type NK lymphocytes. The illness causes an extreme vulnerability to severe infections, and in the absence of rapid diagnosis and suitable treatment, it is likely to be fatal. SCID breaks out at the beginning of the infant's life, when he is in contact with various infections. The prevalence of the illness has not been established, but it is known to be high in certain ethnic groups in which consanguineous marriage is customary. Each year at the Children's Hospital on the Rambam campus, one or two instances are diagnosed.

The symptoms: viral and bacterial infections, chronic coughing, oral-cavity and skin infections, and especially infections in the diaper area. If there is pulmonary infection, the physical exam will reveal a malnourished infant in respiratory distress.

The treatment: after confirmation of the diagnosis, the patient requires aggressive isolation in order to prevent infection. In the next stage, a suitable donor must be found for BMT.

Additional treatment: giving the enzyme ADA to infants who have contracted the illness due to lack of this enzyme.

The success of the treatment: several factors dictate success, and among them: the patient's age, early identification (while the patient is still in generally good condition), the kind of genetic problem, the transplant's compatibility, the patient's nutritional and clinical condition prior to transplantation, the manner in which the patient is prepared for transplantation, and the emergence of resistance to transplantation (or lack of same).

The highest chance of survival is when use is made of a nearly identical donor.

Medical consultant: Dr. Irina Zaidman directs the Pediatric Hematology & Oncology Department's BMT Unit at Meyer Children's Hospital, Rambam Health Care Campus.

VALVE WATCH

While other countries are still accustomed to replacing a patient's damaged heart valve with a mechanical valve, Rambam has succeeded in repairing the existing valve thanks to technological advances and a seasoned medical staff.

Eti Dor >> photos: Edward Kaprov

Dr. Gil Bolotin and his staff in the OR.

Care to help?

The Department of Cardiac Surgery seeks $75,000 in value-added funding for purchase of lifesaving equipment.

ContactUs@rambam.health.gov.il

Dr. Gil Bolotin, Dr. Victor Kertsman, Dr. Yaron Barak, and Nurse Gita Yosef during surgery.

Heart-lung machine technical staff Ditza Bornstein and Evgeny Shapiro.

Dr. Nikolay, a family physician in his forties from Russia, suffered for long months with life-threatening damage to one of his heart valves. Various physicians who examined him in his country claimed that there was no way to avoid surgically replacing the valve, a process that would entail his taking blood thinners for the rest of his life. Dr. Nikolay refused to accept their verdict. In his search for a better therapeutic solution, he came to the Department of Cardiac Surgery at Rambam, where experts perform complex valve repairs. He successfully underwent such a procedure, and a week later returned to his country.

ONE DIRECTIONAL FLOW

Dr. Nikolay suffered from an illness called mitral valve failure. In order to understand what this means, it is necessary to become familiar with cardiac structure.

The heart has four valves and two pumps that, despite being separate from one another, are adjacent. The pump that pushes oxygen-poor blood into the lungs via the pulmonary artery is on the right side. The pump that pushes oxygen-saturated blood to all parts of the body via the aorta is on the left side.

The heart valves are tasked with permitting blood to enter the heart chambers in only one direction and with preventing backward blood flow, explains Dr. Gil Bolotin, who directs the Department of Cardiac Surgery. "Two of the valves are located between the atria and the ventricles, and two between the chambers leading to the big arteries (the pulmonary artery and the aorta).

"The mitral and aortal valves are located on the heart's left side. The aortal valve, located between the left ventricle and the aorta, is composed of three leaflets that open and close whereas the mitral valve, located between the left atrium and the left ventricle, is composed of two leaflets and of tendons that link the valve to the heart muscle."

Two diseases are characteristic of the valves. One - valve stenosis, which is caused among other factors by joint inflammation or another rheumatic disease. In this case, the valve does not open all the way, and the blood flows via a smaller than normal opening. The disease is likely to cause

anatomical changes, sometimes severe, of the whole valve mechanism and of the heart muscle. Two – valve failure. When this happens to the mitral valve, as occurred in Dr. Nikolay's case, the blood returns backwards in the direction of the lungs, particularly during exertion, which results in shortness of breath.

COMPLEX REPAIRS

In the past, valve repairs were considered to be among the most complicated of surgeries. The vast majority of damaged valves were replaced by mechanical valves, a fact that obligated patients, a substantial number of whom were aged 30-50, to be dependent on blood thinners all the days of their lives.

In recent years, a lot of experience in repairing damaged heart valves has been accumulated in Israel and in the world. One of the important developments is the replacement of mitral tendons with artificial tendons. What distinguishes Rambam in this field is the medical staff's cooperation and professionalism. Every patient undergoes a state-of-the-art cardiac echo test that provides a 3D image of the mitral valve. A joint team composed of a staff of cardiologists specializing in the echo test, under the direction of Dr. Yoram Agmon, and of heart surgeons, directed by Dr. Gil Bolotin, decides on the appropriate treatment.

If a complex repair is called for, the team prepares a detailed plan prior to surgery. They conduct additional echo tests at the beginning of the operation, at the end of the operation in order to check results, and before release from the hospital in order to guarantee quality control and an excellent outcome.

Moreover, in the past, all mitral valve repairs and replacements were conducted by means of surgical operations that also involved opening the breastbone. Today, in some simpler cases, it is possible to replace or repair the mitral valve via a small incision made on the right side of the chest cavity. The advantages are many: less bleeding, less risk of breastbone problems, shorter duration of both hospitalization and recuperation, and much better aesthetic results.

Of the

200

valve repair or replacement procedures performed at Rambam annually, tens are achieved without opening the chest cavity.

Instead of Open Heart Surgery

In part of the population, aortal valve stenosis develops with the years, and there are also innovations in this discipline. If in the past all the patients suffering from valve stenosis were required to undergo open heart surgery in order to replace the valve, today, due to the development of prosthetic implant valves that can be folded and inserted into a catheter, it is possible to replace a valve via catheterization. The procedure is done without need for a heart-lung machine and without opening the breastbone.

"This procedure is meant for patients whose surgical risk is very high, usually elderly patients," says Dr. Bolotin. "The operation is carried out in the cath lab under short-duration general anesthetic. We insert the catheter into the femoral artery or the chest and maneuver the prosthetic valve into its natural place in the heart. The valve is put in place using echo heart imaging and X-ray screening in real time."

What are the advantages for the patient?

"Significant reduction of the pain and trauma that accompany the opening of the chest cavity. The method is likely to shorten hospitalization and recuperation time, and in this procedure, in comparison with the scar left after conventional open heart surgery, a minor scar is left."

Medical consultant: Dr. Gil Bolotin, Director, Department of Cardiac Surgery, Rambam Health Care Campus

>> Erela Tarlev Ben-Shahar

x400

Meet the virtual microscope, the device able to simultaneously display the isolated cell and its surrounding tissue to pathologists around the world.

Identity Card

Name: dotSlide - Digital Virtual Microscopy System
Manufacturer: OLYMPUS, Tokyo, Japan
Place and Date of Birth: The technology patent was issued in 2005 by Olympus (Tokyo). The device was manufactured for the first time in 2007.
Price: €80-100,000
Where to find it: Only at medical and advanced research centers in the USA, Japan, Europe and South Africa, and (as stated) at Rambam.

What is it? A computer system able to scan tissue and present it in its entirety on the screen and simultaneously to magnify each tissue cell x 400. After scanning, it is possible to navigate the tissue's expanse and to enlarge and reduce its every part with accuracy.

What's innovative about it?

Fundamental to the pathologist's work of distinguishing between normal and abnormal tissue is the need to see not only the isolated aberrant cell but also the pattern created by the cells within the tissue. Until now, it has been impossible to find a microscope that could simultaneously display the enlarged cell in high resolution and the entire tissue.

What are its benefits?

1 **Breaking through geographical barriers:** Until now, in order to hear the expert opinion of a pathologist located elsewhere, it has been necessary to send the tissue in question to him. Only pathologists working side-by-side could simultaneously look at the same tissue. The virtual microscope allows pathologists around the world to simultaneously view the same tissue.

2 **Accurate diagnosis:** The device makes it possible to convey an expert opinion regarding a rare or specific illness.

3 **Improved quality of medical instruction:** Students of pathology may look at the same tissue that their instructor is viewing. It is thus easier to clarify for them on what authority the instructor is basing his opinion. The microscope also facilitates documenting and archiving results and cataloging them for purposes of teaching and comparison.

4 **Creation of a shared and uniform language among all pathologists:** Because it has been impossible to simultaneously see the enlarged images of every tissue cell at once, a pathologist who wishes to compare among cells has been compelled to rely on memory. The new microscope displays all the cells in one image and enables rapid and simple transmission of every cell's enlarged image.

What's next? It sounds as if in future, the virtual microscope will replace the human pathologist. However, this probably will not happen. No digital device in existence today can diagnose an image of abnormal tissue as can a pathologist. There are still things that are impossible to teach a computer, such as distinguishing between a single large cell and two proximate cells. Despite this, if the microscope contributes to creating a common language and defining measures for decision-making in pathology, this will represent the first step toward developing a futuristic device that will instigate a real revolution in the discipline of computerized pathology.

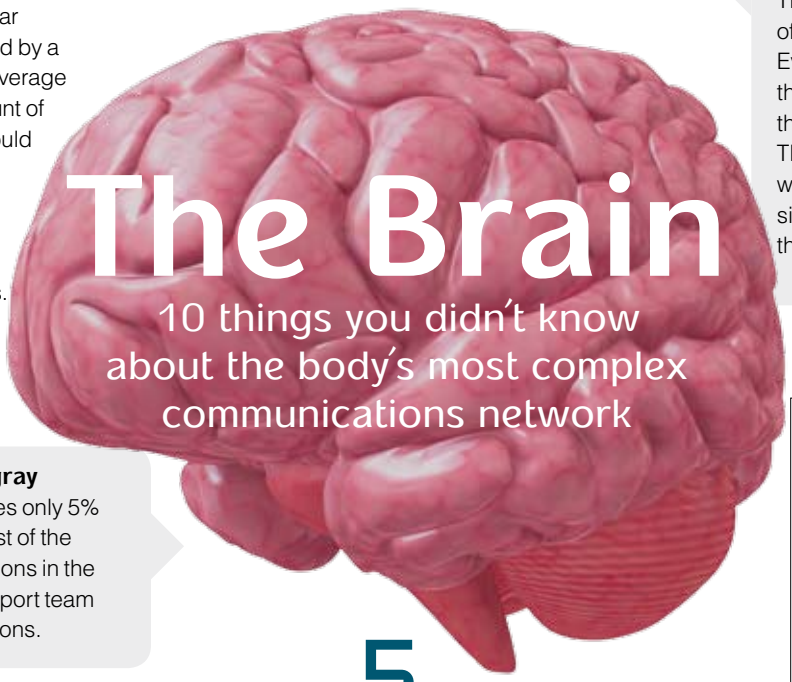
Medical consultant: Dr. Edmond Sabo is a senior lecturer at the Technion's Rappaport Faculty of Medicine and directs the Hemato-Pathology Unit and the Gastrointestinal Pathology Service at Rambam Health Care Campus.

Able to navigate an expanse of tissue and to enlarge and reduce every part of it accurately. The virtual microscope.

>> Erela Tarlev Ben-Shahar

The Brain

10 things you didn't know about the body's most complex communications network



1 A complex communications network
The brain has 100,000,000,000 neurons, each of which is linked with 25,000 other cells.

2 A sophisticated switchboard
The amount of intercellular communication managed by a person's brain on daily average is equivalent to the amount of communication there would be if each and every person on earth were simultaneously conducting 200,000 telephone conversations.

3 Not everything is gray
Gray matter constitutes only 5% of our brain. All the rest of the cells and their extensions in the brain constitute a support team that services the neurons.

4 About weight
The human brain weighs 1.4 kg on average. The adult male brain is a bit heavier and larger than the adult female brain. However, size doesn't matter. The brain of Albert Einstein, for example, weighed a little less than the brain of an average woman (1.230 kg). Seventy-five percent (75%) of the brain is water.

5 Distribution of Authority
The brain's right lobe is tasked with various responsibilities different from those of the left lobe. For the majority of the population, the right lobe is responsible for musical talent, imagination, dreams, fantasy, and drawing. The left lobe, in contrast, is responsible for mathematical talent, logical problem-solving, language functions, and remembering names, dates and facts.

6 The infant brain
Most neurons have already been created at the start of pregnancy, but they increase at a rate of 250,000 per minute. A newborn's brain weighs 350-400 grams, but nearly all of the brain cells already exist. The brain is the organ that grows least from birth until adulthood.

7 The adult brain
Brain mass begins to shrink by a quarter of a percent each year after age 30. But note: there are adults for whom brain function is not influenced by this shrinkage. In fact, on cognitive tests, 30% of 80 year olds perform at the same level as do young people.

8 Illuminating!
If the electrical power generated by the brain could be harnessed, it would be possible with its help to permanently illuminate a 10 watt light bulb.

9 Lots of oxygen
The brain requires 20% of the body's oxygen. Every minute, 750 ml of the blood pumped from the heart reach the brain. The brain can survive without oxygen for four to six minutes, after which the neurons begin to die.

10 Patient, Heal Thyself The brain does not have pain receptors. Sometimes, neurosurgeons exploit this and keep the patient conscious during brain surgery so that they can communicate with him while operating and make sure not to injure important hubs, such as the language center or the motoric center.

Medical consultant: Dr. Gregory Telman is a senior physician in the Department of Neurology at Rambam Health Care Campus.

SAVE THE DATE

פסגת רמב"ם 2012
RAMBAM SUMMIT & MISSION 2012

Where Medicine, Technology and Humanity Intertwine

Emergency Medicine | Mass Trauma | Surgical Sciences

WHEN EVERY SECOND COUNTS

Once a year, we convene at the Rambam Health Care Campus for a summit on vital issues facing modern medicine.

This year's Summit will address the latest advances in surgical and trauma medicine together with the related challenges.

The foremost experts in surgical and trauma medicine will be featured at the Summit, together with informed clinicians, scientists, decision-makers, and representatives of key institutions from Rambam, Israel, and abroad. Attendees will have the opportunity to learn from lectures, workshops, and panel discussions.

Our guests will also have the opportunity to explore the emerging Rambam Health Care Campus, with the world's largest emergency underground hospital, and view the progress of our landmark strategic plan. The prestigious 2012 Rambam Award will be presented at a gala dinner the first evening of the Summit.

Northern Israel's premier medical center will be the inspirational backdrop for five exciting days, beginning with the Rambam Summit, followed by the Rambam Mission.

Please save the date for this important event.

Yarkoni

Sunday-Friday, June 3 - 8, 2012

Rambam Health Care Campus, Haifa, Israel

State of Israel Ministry of Health

RAMBAM Health Care Campus

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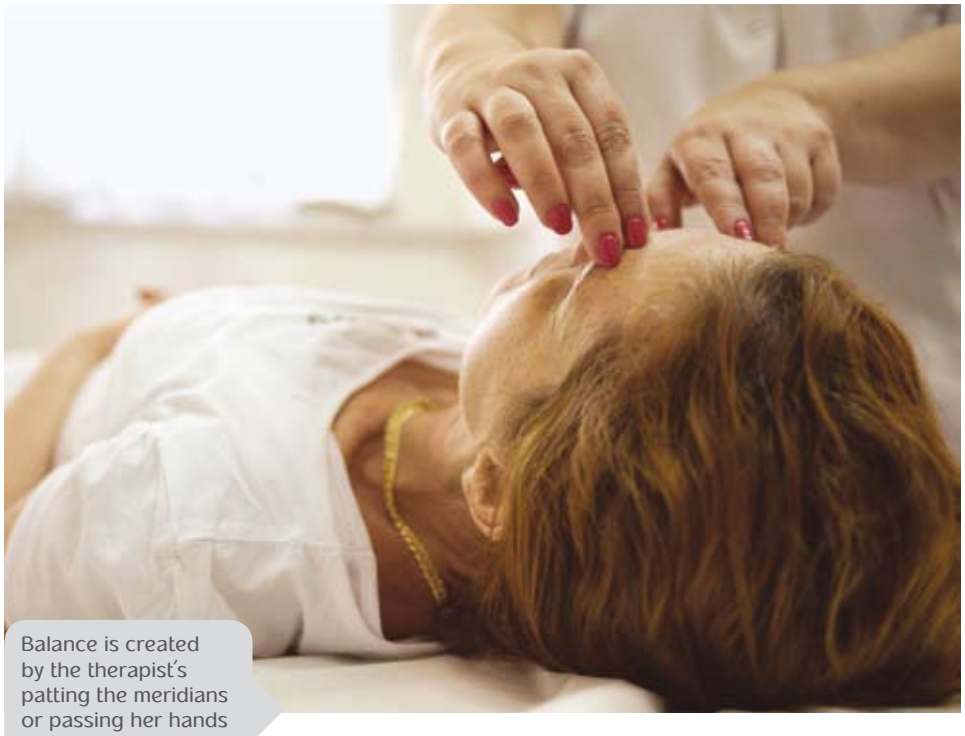
The Muscle **Whisperer**



Balance is created by the therapist's patting the meridians or passing her hands over them. Merav Mamorsky in action.

My Tips

1 **Do not rush into drug therapy.** Listen to your body. Do you truly have a headache or are you stressed, tired, or insufficiently hydrated instead?

2 **Learn to relax.** Put one hand on your navel and the other on your chest, lightly tap your chest, and experience a wonder – you have relaxed.

3 **Strengthen your immune system.** Gently pat the length of your sternum several times daily.

4 **Concentrate.** Close your eyes and imagine an **X** shape or put your right hand on your left knee and the opposite - your left hand on your right knee - a number of times, and your focus will return.

Merav Mamorsky, an academically degreed Registered Nurse in the Allergy, Immunology & AIDS Institute at Rambam, is an expert regarding allergies and how to treat them by means of kinesiology and the IPEC Therapy® - Integrated Physical Emotional Clearing system.

What is kinesiology?

"The term's origin is the Greek word *kinesis*, whose meaning is *movement*. In complementary medicine, kinesiology is an approach that includes balancing the body's system of movement and the reciprocal relations among the body's various energy systems. The technique is based on the fact that the body does not lie and remembers everything that has happened to it from the moment of conception. The diagnostic method is a *muscle test*. Muscle tone is linked to the body's energy condition, its degree of stress, and the quality of communication among the energy systems. A strong muscle is a muscle whose energy flows properly. A weak muscle has an energy block."

How is this expressed in your work?

"For diagnosis, I use the same kind of allergy test vials as are used in conventional medicine. The patient places a specific vial on his navel, and I touch his arm muscle and ask his body if the vial has weakened it. Usually, the results accord with conventional test results. Patients who come to me are suffering from multiple allergies and want me to treat the one that most bothers them."

How is the treatment performed?

"The treatment is called balancing therapy because an allergy indicates an allergen-caused energy imbalance. I help restore balance by patting the meridians or passing my hands over them, as in healing. I also use Reiki and the IPEC system of energy therapy."

How do you know that you have arrived at the balance point?

"I am always in contact with the body's muscles and ask the body when it is balanced and how long the balance will last. Usually, 10 treatments on average are enough, but the number may vary depending on the patient's condition. The treatment gives an answer to food-allergy sufferers. Usually after treatment, people can eat without hesitation the food that has been troublesome for them. The first exposure to the food in question is done in the clinic under my supervision and that of an allergist."

Medical consultant: Merav Mamorsky is a nurse in the Allergy, Immunology & AIDS Institute at Rambam Health Care Campus.

I Can't Get No Satiation

What the Rambam Said:

A person should never eat unless he is hungry. . . . A person should never eat until his stomach is full. Rather, he should stop once he has satisfied three quarters of his hunger.

(*Mishneh Torah*, The Book of Knowledge, Laws of Behavior, 4:1,2)

And in simple translation:

Don't overeat. Experience the natural sensations of hunger and satiety and act accordingly.

How to Reprogram the Mechanism of Hunger and Satiety

1 **Eat organized meals, and at regular hours.** Keeping strictly to a fixed daily routine will prevent binge eating.

2 **Eat slowly and chew the food.** Dedicate the time necessary for experiencing the sensation of gradually increasing satiety.

3 **Eat while sitting, not while standing or walking.** Wolfing down food, especially at fast food stalls, always lends itself to gluttony. In addition, for the most part, this kind of food is calorie-laden and unhealthy.

4 **Eat square meals, but not meals that are large and loaded with calories.** Only in this way can you newly whet the sensation of hunger and respond to it.

5 **Strictly observe breakfast.** This is the most essential meal of the day, especially for schoolchildren.

6 **Eat at least one meal a day with the whole family.** Aside from "quality time," you will be rewarded by a thoughtfully prepared meal and by sitting together around the table.

7 **Educate your children to listen to their feelings.** Don't pressure them to finish all the food on their plate.

8 **Turn every meal into an experience.** Pleasure all your senses. Food must be aesthetic and varied, and in this way, you will become accustomed to the fact that quality and not quantity rules.

What do medical experts say today?

Today, it is clear that the combination of too little exercise and gluttonous eating has caused many people in the Western world to become significantly overweight. In fact, the problem's increase in scope has become most worrisome in the population of children and teenagers. According to the World Health Organization (WHO), by the year 2015, 2.5 billion people will suffer from overweight and approximately 700,000,000 from obesity. Aside from the recognized and immediate consequences of overeating (bloating, pressure on the diaphragm, heartburn, and difficulty digesting), overeating eventually results in overweight, and this results in significant morbidity, including arteriosclerosis and heart disease. In the recent past, the complex physiological mechanisms of hunger and satiety have been clarified. Diverse therapies, drugs, devices, and even surgeries have been tried for treating overweight by various means, and among the others, by calling forth the feeling of satiety in order to achieve controlled weight reduction.

Medical consultant: Dr. Yitzhack Schwartz is a senior physician in the Department of Pediatric Cardiology & Adults with Congenital Heart Disease at Rambam Health Care Campus.

>> Dvora Kreda

West Side Story

A cool draft sluices through the 20,000 sq m wide, 14 m deep construction crater at the heart of Rambam's new West Campus. Soon, the summer day will have turned muggy; another few hours, and the site of the Sammy Ofer Northern Regional Underground Emergency Hospital will be broiling.

The crater is dense with several hundred tons of building equipment and material. Five tower cranes, each capable of moving loads of up to 2.5 tons, are kept busy transporting wheelbarrows and Bobcats, cement and nails, steel rods and rebar grids, elements for scaffolding and for constructing doors and windows.

To reach the sky, the crane operator must climb the tower mast's internal ladder. Each operator is paired with a rigger, down below, whose bright yellow vest distinguishes him from the other animated LEGO figures in glinting white, yellow, and orange hardhats. The operator communicates with the rigger by walkie-talkie and hand signals (or since this is Israel, by leaning far out his cab window, and shouting).

The operator-rigger pairs are responsible for the graceful aerial choreography of the jibs, the cranes' long, latticed working arms, which crisscross horizontally above and under each other at heights of about 500 meters. Each long arm is balanced by a shorter jib whose cement-block counterweights only seem to hover perilously above hospital pedestrians.

Mr. Kobi Bossel, West Campus Project Manager for the Engineering Department at Rambam, strides onto the recently poured and dried ambulance dock for the new Children's Hospital. Piles support steel-and-wooden scaffoldings that will be dismantled once a reinforced concrete roof has been built. Sparrows flit among the piles, chirping; sunlight illuminates their wingtips and fanned tails.

"We have divided the project into five areas so that construction of its five facilities can be advanced simultaneously," he explains. "As you can see, the Underground Emergency Hospital is well on its way, and we have commenced ground-level construction of the Children's Hospital. We have also started building the skeleton for the Oncology Center and the Cardiovascular Hospital and have planted the Biomedical Discovery Tower's footprint."

Mr. Bossel leads the way downstairs into dank underground passageways at Level -3 and plays his flashlight across raw surfaces: ceilings with exposed sprinklers; walls with holes prepared for oxygen, medical-gas, suction, and electrical-power outlets; open floor trenches. The space is redolent of moist cement and the scorched scent of welding.

The Projects:

Underground Emergency Hospital

Children's Hospital

Oncology Center

Cardiovascular Hospital

Biomedical Discovery Tower

He unlocks a door and turns on lights to reveal a 300 sq m model hospital room equipped with medical beds and bed head units. He flips a switch to inflate overhead air socks of pristine white fabric, points out the specially coated glossy floor (which will be scrubbed of auto oil grease monthly), and gestures toward an enormous circular column that appears to help support the ceiling but is in fact one of 86 sea and ground water pumps that will eventually be cut away, and whose wells will be closed with cement, in order to fully seal the facility.

"It's a privilege to build this hospital," he concludes, smiling. "I'm a Haifaite. I'm building my city."

Care to help?

A wide range of naming opportunities is available for Friends who wish to help build Rambam's new West Campus.

ContactUs@rambam.health.gov.il

The dual-purpose facility, rapidly convertible from an approximately 1,450-vehicle parking garage into a 2,000-bed acute emergency hospital fortified against conventional and non-conventional warfare, represents a crucial component of the State of Israel's emergency preparedness in answer to Hezbollah's strategic threat to Haifa and the North.

Royalty. . .

KINGDOM OF THAILAND

Prof. Dr. Her Royal Highness Princess Chulabhorn Mahidol, a biochemist and the youngest daughter of King Bhumibol Adulyadej and Queen Sirikit, pays an official visit to our medical center to sign a memorandum of understanding calling for bilateral educational programs and research projects between the Chulabhorn Hospital Cancer Centre (Bangkok) and Rambam Health Care Campus. On the same occasion in May, she is guest speaker at a seminar also addressed by RHCC Director & CEO Prof. Rafi Beyar, 2004 Nobel Laureate in Chemistry Prof. Aaron Ciechanover, and other members of Rambam's medical and scientific leadership.

KINGDOM OF SWEDEN

In October, Dist. Prof. Dan Shechtman of the Technion's Department of Materials Engineering wins the 2011 Nobel Prize in Chemistry. The honor comes seven years after Dist. Prof. Aaron Ciechanover and Dist. Prof. Avram Hershko of the Technion's Rappaport Faculty of Medicine win the prize. Comments RHCC Director and CEO Prof. Rafi Beyar: "Dan Shechtman is a consummate researcher at the Technion, a world-class institution with which Rambam is proud to enjoy a close affiliation. Many of Rambam Medical Center's outstanding achievements have been facilitated by the integrity and dedication of our scientific colleagues at the Technion, with whom our medical center's clinician-scientists collaborate. We congratulate Prof. Shechtman for the recognition that he has brought to his work, to the Technion, and to the State of Israel."

NEWS IN BRIEF *Spring – Fall 2011*

AUSTRALIA – Prof. Shimon Pollack, Director of the Allergy, Immunology & AIDS Institute, and colleague Dr. Eynat Kedem, a maternal and pediatric HIV specialist, hop over to Sydney to help launch the Strategic Timing of Antiretroviral Treatment (START) Phase IV clinical trial comprising 4,000 HIV-infected men and women from 30 countries. The project, sponsored by the International Network for Strategic Initiatives in Global HIV Trials (INSIGHT), a program of the U.S. National Institutes of Health (NIH), is additionally funded by Australia, France, Germany and the United Kingdom. Prof. Pollack is an INSIGHT Steering Committee Member and the group's Principal Investigator (PI) for Israel.

NIGERIA – Pediatric endocrinologist Dr. Elizabeth Oyenusi of Lagos University Teaching Hospital (LUTH), and her husband, orthopedist Dr. Adedoyin Oyenusi, travel with their three children to Haifa. At Rambam, the couple spend three months receiving advanced specialist training in their respective medical fields.

FINLAND – Rambam heart surgeon Dr. Ziv Beckerman spends two weeks operating on patients at Vaasa Central Hospital. The visit takes place in the context of an international exchange program established by Dr. Kari Teittinen, Director of the Department of Cardiac Surgery at Vaasa, and Rambam counterpart Dr. Gil Bolotin. The program aims to enable Finnish and Israeli residents and specialists in cardiology to perform surgery in one another's departments and thus learn from each other's working methods.

International Outreach

INTERNATIONAL MAYORAL DELEGATION

Fifty mayors from twenty-six countries around the globe visit us on their way to the International Mayors Conference in Jerusalem. Their hosts at Rambam include Dr. Yaron Bar-El, Deputy Director of Rambam Health Care Campus; Dr. Michael Halberthal, Medical Administration and Hospital Management; Prof. Michael Aviram, Director of the Clinical Research Institute at Rambam (CRIR); Dr. Shlomi Israelit, Director of the Department of Emergency & Urgent Care Medicine; and Mr. Yehuda Horezki, Project Engineer, Division of Construction & Engineering. Mayor Traore Doussou Lancine of Conakry, Guinea: "There is obviously a very high level of medicine here, and I have never seen anything like the new parking lot that can be changed into an emergency hospital."

USA – Dentist, surgeon, artist and sculptor Prof. Stephen Schendel of the Stanford University School of Medicine comes to Rambam to demonstrate the advantages of combining orthodontic treatment with maxillofacial and plastic surgery. He performs complicated single-procedure operations on two patients, a 7-year-old boy with cleft palate and deformities of the jaw, eyes and eyelids, and an 18-year-old woman with jaw and nose deformities. The visit is organized and hosted by Rambam's Dr. Dror Aizenbud, Director of the Unit of Orthodontics and Craniofacial Anomalies in the Department of Oral and Dental Medicine at Rambam.

USA – A Quality Improvement team from Boston's Beth Israel Deaconess Medical Center (BIDMC), a teaching hospital of Harvard Medical School with a thriving QI program aimed at providing safe, effective, efficient, equitable and timely patient-centered care, visits Rambam to share its expertise. The BIDMC delegation includes pulmonary and critical care specialist Dr. Praveen Akuthota; Prof. Mark Aronson, Vice-Chair for Quality in the Department of Medicine and Associate Chief of the Division of General Medicine and Primary Care; Dr. Christopher Fischer, Assistant Director of Emergency Department Operations; gastroenterologist Dr. Daniel Leffler; and nephrologist Prof. Mark Zeidel, Chief of the Department of Medicine.

PALESTINIAN AUTHORITY – Nine Palestinian physicians from the West Bank and East Jerusalem join thirty-five Israeli and two Nigerian colleagues for a two-day workshop, led by orthopedic surgeon Prof. Jose Morcuende of the University of Iowa Carver College of Medicine, in the non-invasive Ponseti method of manipulation and plaster cast applications for correcting clubfoot in newborns. Dr. Mark Eidelman, Director of the Pediatric Orthopedics Unit at Rambam, is event organizer and host.

Lords & Ladies. . .

Haifa, Israel and New York, New York
Renowned philanthropists Joan and Sanford I. Weill and the Weill Family Foundation have made a commitment of $10 million to Rambam to support and name the Joan and Sanford I. Weill Pediatric Hematology – Oncology Department and the Joan and Sanford I. Weill Israeli-Palestinian Friendship Center.

The Department will comprise Rambam's current Pediatric Hematology & Oncology Department and its Bone Marrow Transplant (BMT) Unit, which will be merged into a single, upgraded entity housed within the new Ruth Rappaport Children's Hospital.

For many years, Rambam has treated children from the West Bank and Gaza for whom advanced medical treatment would otherwise be unavailable. The Weill Friendship Center will enable Rambam to provide these children with seamless medical care between the hospital and their homes, to make available residential hostel facilities to patients' families, and to give advanced medical training to Palestinian residents, fellows and nursing staff.

> I was so touched by the attitudes of the Rambam staff, how they treat the children with such respect and such love. I said to my husband, 'If I lived here, I would volunteer in a heartbeat!'
>
> **Joan Weill**

A Prized Friend

LONDON - In September, Chief Rabbi Lord Jonathan Sacks, patron of British Friends, and his wife, Lady Elaine Sacks, held a reception in their home for Rambam Award 2011 recipient the Hon. Mrs. Laura Wolfson Townsley, Chairman of the Wolfson Family Charitable Trust. Prof. Rafi Beyar and Dr. Esty Golan, CEO and COO of Rambam respectively, traveled to London to present the prize to Mrs. Wolfson, who is known for her philanthropy in the fields of medical and scientific research and education.

and God of Thunder *& Rock'n'Roll*

RHCC - KISS bassist, singer-songwriter, and all-around rocker Gene Simmons, actress Shannon Tweed, and their son Nick paid a visit to Rambam, Mr. Simmons' birth hospital, in March. Born here in 1949, the future rock star was named Chaim Witz. At age eight, he immigrated to the United States with his mother, Holocaust survivor Florence Klein. In the 1960s, he changed his name in tribute to rockabilly singer-songwriter Jumpin' Gene Simmons. The family's visit to Rambam was broadcast on *Gene Simmons Family Jewels*, a popular American reality show.

Summit 2011: Children at Center Stage

HAIFA - In late May, Dr. Donna E. Shalala, President of the University of Miami, and former U.S. Secretary of Health and Human Services under President Clinton, was among six exceptional individuals presented with this year's prestigious Rambam Award. The longest serving HHS Secretary in U.S. history, Dr. Shalala pioneered health and welfare reform and raised child immunization rates to their highest levels.

Also awarded this year's prize for outstanding contributions to medicine and humanity were actress, film star, and author Ms. Gila Almagor Agmon; industrialist Mr. Nochi Dankner; the late philanthropist Mr. Joseph Fishman and his family; financier Mr. Harvey Krueger; and the Hon. Mrs. Laura Wolfson Townsley.

Among other highlights, the Summit brought delegates together with physician Dr. David Samadi, Chief of Robotics and Minimally Invasive Surgery at the Mount Sinai Medical Center School of Medicine in New York City. The meeting took place in a classroom adjacent to the OR. Dr. Samadi, in scrubs, and Director of Rambam's Department of Urology Dr. Shimon Meretyk, a burly man in green gauze cap and gown and off-white Wellington boots, came straight from surgery, bringing with them into the classroom the sheer physicality of the operating theater.

Their listeners were watching two video screens that live-streamed images of Dr. David Kakiashvili, Director of the Robotics Unit at Rambam, as he performed a prostatectomy assisted by the $2.6M da Vinci surgical robot recently acquired for the hospital by a consortium of donors. One screen displayed Dr. Kakiashvili intensely focused on moving the robot's micro-instruments; the other displayed a magnified view of the instruments at work inside the patient's abdominal and pelvic cavities.

> At the end of fairy tales, children are saved by the woodcutter. Grandparents are the caring adults in fairy stories, and we are the caring adults in the real world. The investment in the health and education of all kids is the passion of my career.

Dr. Donna E. Shalala
Rambam Award Recipient
Keynote Speaker
Scientific Conference
Rambam Summit 2011

The Answer, My Friend

Summit planners' hopes for a Gala Dinner blessed with balmy night weather were disappointed by breezes so strong that flames behind the gas patio heaters' emitter grids blew about like feathers. The violet points of light enhanced the night's beauty but provided little heat, and organizers scurried to distribute baby blankets. Nothing captures the crowd's good-natured mood better than the aplomb with which the audience of diplomats, hospital trustees, medical department heads, and Friends from Israel and abroad draped the pastel blankets over their evening clothes and huddled together.

Onstage, meanwhile, Ms. Almagor Agmon (her famous, dark eyes magnified and flashing on a video screen, her famously husky voice emotional) said of her volunteer leadership on behalf of sick kids, "It became my life - to do something for someone!"; the children of posthumous Awardee Mr. Joseph Fishman said of their father, "He received devoted care (at Rambam), and asked if it was possible to take this great staff and give them optimal conditions"; and diva Achinoam Nini performed bundled up in a long coat that fluttered, and white aviatrix scarf whose long ends dramatically rippled, in the wind.

Dr. Yes

LONDON – UK film and TV celebrity Bettine Le Beau, who co-starred in the early James Bond film *Dr. No* (1962), was guest speaker at a luncheon held at the home of Ms. Gabriella Alexander-Passe, daughter of BFRAM Director Ms. Anita Alexander-Passe. The July fundraiser was attended by 35 British Friends, who raised £1000 in research funding for the Division of Pediatric Nephrology. In related news, the indefatigable Anita has published *A Celebration of Life in Poetry* (United Press Ltd, 2011), half the proceeds of which will be used to help sick children at Rambam.

An American Shabbat

WESTHAMPTON BEACH – At the invitation of Rabbi Marc Schneier, Founding Rabbi of the Hampton Synagogue, Rambam leaders Prof. Rafi Beyar and Prof. Karl Skorecki came to Long Island in August for an American-style Shabbat among Friends.

On Friday night, Prof. Beyar shared the floor with the Hon. Dr. Suzan Johnson Cook, U.S. Ambassador-at-Large for International Religious Freedom, in the context of the synagogue's Shabbat Diplomat Dinner Series. He spoke before the assembled 150 guests of the immense capital expansion underway at Rambam. On Shabbat afternoon, Mr. Adam Emmerich, President of AFORAM, and his wife Pam opened their summer home to an intimate gathering for discussion with Professors Beyar and Skorecki. Mr. David Sterling, Secretary/Treasurer of AFORAM, was there.

Back at the synagogue for *seudah shlishit* (the third Sabbath meal), which also attracted 150 participants, Prof. Skorecki, Director of Medical and Research Development at Rambam, delivered the afternoon *shiur* (lesson). He spoke of Jewish genetics, and in the words of Ms. Michele Segelnick, Executive Director of AFORAM, "mesmerized his audience."

A new children's hospital, named for Ruth Rappaport, is being built at Rambam Health Care Campus. The 9-floor building will include 7 in-patient departments (some of which will be fortified against conventional and chemical warfare) and over 20 specialized departments.

The new hospital will be approximately 17,000 square meters (2.5 times the size of the existing children's hospital) and will include expanded public areas, a movie theater, family rooms, and classrooms, all of which will provide children and their families with a supportive, healing environment.

The best experts in pediatric medicine will work at the Ruth Rappaport Children's Hospital, employing a multi-disciplinary approach. The hospital will be affiliated with the Technion-Israel Institute of Technology's Ruth and Bruce Rappaport Faculty of Medicine. Senior physicians from the Faculty will be involved in innovative research, spearheading the advancement of pediatric medicine in Israel and the world.

To gift the Children of Rambam, please contact:
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