Over Sixty Years of Medical Pioneering
The Sheba Medical Center is a university-affiliated tertiary referral hospital that serves as Israel’s national medical center in many fields. It is the most comprehensive medical center in the Middle East, renowned for its compassionate care and leading-edge medicine. It is also a major medical-scientific research powerhouse that collaborates internationally with the bio-tech and pharmaceutical industries to develop new drugs, treatments and technologies, and a foremost global center for medical education.

Born in 1948 along with the fledgling State of Israel to treat the wounded of Israel’s War of Independence. Tasked personally by Prime Minister David Ben-Gurion, Dr. Chaim Sheba opened a small military hospital at Tel Litwinsky (later renamed Tel Hashomer, meaning ‘Hill of Guardians’) to heal the brave men and women injured in the pivotal battle for Jerusalem.

Tel Hashomer Hospital became the Sheba Medical Center as it grew to encompass four specialized hospitals and hundreds of medical clinics and scientific laboratories...

Over the past 60 plus years, Sheba Medical Center has revolutionized medical care in Israel pioneering Israel’s first open-heart, artificial heart, congenital heart defect surgeries, founding its foremost rehabilitation facility, and introducing the most advanced medical technologies to Israel and the world...
Sheba is the Leading Hospital in the Middle East

- 64 medical departments
- 75 laboratories
- 110 outpatient clinics
- 1,200 doctors
- 1,500 paramedic professionals
- 1,700 technicians and support staff
- 1,700 beds
- 2,300 nurses
- 6,700 healthcare professionals and scientists on campus
- 31,000 operations conducted annually
- 1.5 million patient visits annually

Sheba Combines Six Major Facilities

- Medical Research Complex
- Medical Education Academic Campus
- Acute Care Hospital
- Children’s Hospital
- Women’s Hospital
- Rehabilitation Hospital

Sheba Leads Medical Treatment in:

- Cancer, including hemato-oncology
- Cardiovascular diseases
- Genetics
- Obstetrics and Gynecology
- Orthopedics
- Pediatrics
- Psychiatry
- Rehabilitation
- Surgery

Sheba is Home to Israel’s National Health Institutions

- Main Rehabilitation Hospital for Terror Victims and IDF Wounded
- Israel National Blood Bank
- Israel National Center for Autoimmune Diseases
- Israel National Center for Cystic Fibrosis
- Israel National Center for Glaucoma
- Israel National Center for Health Policy and Epidemiology
- Israel National Center for Hemophilia
- Israel National Center for Medical Simulation
- Israel National Center for Multiple Sclerosis
- Israel National Center for Newborn Screening
- Israel National Center for Spinal Cord Injuries
- Israel National Center for Tay Sachs
- Israel National Virology Laboratory
At Sheba, clinical treatment and medical research are closely intertwined, in proximity to the patient, for the direct benefit of the patient.

More than 25 percent of all Israeli medical research is conducted at Sheba. The hospital serves as the main venue for human clinical trials conducted by the Weizmann Institute of Science, and Tel Aviv and Bar-Ilan universities.

Sheba is one of only two medical centers in Israel with US Department of Health Federal Wide Assurance (FWA) designation – a classification that makes Sheba eligible for U.S. federal research grants involving human clinical trials.

Israeli and international bio-tech and medical industries work in close synergy with Sheba scientists and clinicians to develop new medical technologies and drugs, often using Sheba as their main testing site.

**HOME TO BASIC AND APPLIED MAJOR RESEARCH CENTERS IN:**
- Autoimmune diseases
- Cancer genetics and treatment
- Cardiovascular diseases
- Diabetes and metabolic diseases
- Genetics, onco-genetics and fertility
- Gynecological and surgical oncology
- Hemato and pediatric oncology
- Lipids and artherosclerosis
- Neurosciences
- Stem cell and regenerative medicine
Prof. Zeev Rotstein, Director and CEO of the Sheba Medical Center since 2004, is the man behind the hospital’s patient-centered, compassionate approach to healthcare; its drive for technological advancement; and its ever-growing ties to global healthcare institutions and philanthropists.

Prof. Zeev Rotstein M.D., M.H.A., has served the Sheba Medical Center for thirty years, first as a cardiologist, then as a senior administrator. He is an Associate Clinical Professor at the School of Medicine and the Faculty of Management in the Graduate School of Business Administration at Tel Aviv University, where he teaches health policy and economic issues, health systems management, risk management and quality assurance in medicine.

the hospital director

Sheba: A Symbol of Israel’s Survival, Strength and Success

Prof. Zeev Rotstein

Israel Needs the Pioneering Medical Leadership and Compassionate Spirit of the Sheba Medical Center

As the Sheba Medical Center embarks on its seventh decade, we look back with immense pride at the hospital’s many achievements. Thanks to my predecessors, Professors Chaim Sheba, Mordechai Shani and Bolek Goldman, and to the tens of thousands of devoted Sheba medical personnel over the decades, Sheba today can claim the mantle of medical leadership in Israel. In some fields, Sheba can be found at the very forefront of global medical invention and treatment.

At every important juncture in Israel’s turbulent history, the Sheba Medical Center has played a pivotal role. We have invested hundreds of millions of dollars to give Israel’s soldiers the best acute and rehabilitative care; to treat victims of terror attacks; to cure children – Jewish and Arab – suffering from malignant diseases and congenital heart defects; to provide the finest obstetrical and gynecological care for this country’s mothers; and to heal those afflicted by rare genetic diseases.

Our 6,700 healthcare professionals are committed to the highest standards in medical diagnostics and personal medical service, treating the “whole person” with compassion and sensibility. Although we are a large medical center, the “Sheba spirit” provides each of our patients and their families with a human touch.

Sheba cannot stand still if it is to remain at the leading edge of medical and technological innovation. To this end, we are investing tens of millions of dollars annually – contributed by discerning philanthropists and medical foundations around the world – in medical education, medical research and clinical trials. We are constantly expanding our horizons through high-level collegial contacts with world leaders in medicine and science, and are developing concentrated research and treatment efforts in cardiology, cancer, neurosciences, stem cell and regenerative medicine, and more.

We welcome the partnership of visionary philanthropists and investors in advancing our pioneering drive for excellence. Join us in providing the fellowships, equipping the operating rooms, labs and wards, and endowing the research funds necessary to guarantee our success! Together, we can make the medical breakthroughs needed to ensure Israel’s health and strength and make a significant contribution to healthcare worldwide.

Sincerely,

Zeev Rotstein
At the Bert W. Strassburger Center for Lipid Treatment and Research, Prof. Dror Harats leads a sophisticated patient care program with advanced scientific research into lipid metabolism disorders and cardiovascular diseases.

Prof. Dror Harats is a fighter. His lipids clinic and laboratories are the leading Israeli center in the battle against disease caused by fats in the blood, and he is a five star general in the struggle against academic and scientific boycotts of Israel.

Prof. Dror Harats moves rapidly between his many battlefronts. He heads the Sheba Medical Center’s scientific review board that approves human clinical trials and experiments, directs a leading research laboratory, and minister to thousands of patients who depend on his unique expertise in combating lipid disorders and cardiovascular diseases.

Founded in 1993 and today recognized as the leading center in Israel, Prof. Harats’ center is engaged both in primary and secondary preventive programs for cardiovascular diseases; in the diagnosis and treatment of complicated cases of lipid disorders; and in sophisticated biochemical and genetic testing. His labs are accredited by the American Center for Disease Control (CDC) in Atlanta, and they provide comprehensive lipid and genetic risk profiling and metabolic workout services to all medical centers in Israel.

Atherosclerosis is the leading cause of death in the Western world. More than 10,000 Israelis die each year from the disease and its many complications. Prof. Harats is responsible for some of the major medical breakthroughs in the field. He diagnosed the first cases of Congenital Deficiency of Lipoprotein Lipase (a critical enzyme in lipid metabolism) – a diagnosis which has allowed for live-saving treatment of ill newborns; the ApoCll and ApoB48 genetic mutations; and of severe pregnancy-related Hyperlipidemia (type V dyslipidemia) that causes recurrent miscarriages in women.

He also was one of the pioneers who discovered the role of the immune system in atherosclerosis and invented a new genetic tool for the treatment of angiogenesis, a process that plays a major role in cancer and cardiovascular disorders.

Today, his Lipid Center laboratories are engaged in research of lipoproteins metabolism and cholesterol homeostasis, hypolipidemic drugs, targeting therapeutic genes to the vascular wall, and the development and progression of the atherosclerotic lesion.

Prof. Harats is a professor of medicine in the departments of internal medicine and biochemistry at the Sackler Faculty of Medicine at Tel Aviv University. He has published more than 100 papers and chapters in books, and been awarded numerous prizes and grants in the field of atherosclerosis and cancer.

Prof. Harats did post-graduate work at the University of California in San Francisco and has founded several bio-tech companies with global partners. This exposed him to the global battle that the State of Israel often has to fight against its detractors, who in recent years have taken their fight into the academic and scientific realms. Together with the Academic Friends for Israel – an advocacy group that seeks to strengthen world university ties with Israel – Prof. Harats has organized several international conferences in Israel, to promote scientific collaboration and to combat the academic and scientific boycotts of Israel.
Towards a Future Without Cancer

Prof. Gidi Rechavi, chairman of the Sheba Cancer Research Center, uses DNA micro-array chips and other cutting-edge technologies to conduct advanced molecular, genetic, immunologic and cell biology studies, and is considered one of the world’s leading researchers of hematological malignancies.

As he lay wounded in a Sheba Medical Center bed following the Yom Kippur War, Gidi Rechavi made the decision to study medicine. Since then, Prof. Gidi Rechavi has conquered one medical plateau after another, turning himself into one of the top cancer clinicians and researchers in the world.

Destined for greatness, Prof. Gidi Rechavi won the prestigious Kennedy Prize for best graduate student at the Weizmann Institute of Science, and became a specialist in pediatrics, general hematology and pediatric hemato-oncology. He went on to establish the Department of Pediatric Hematology-Oncology and Bone Marrow Transplantation at Sheba’s Edmond and Lily Safra Children’s Hospital. Under his leadership, the hospital became the major Israel center for treatment of childhood cancer and life-threatening hematological and immunological diseases. He also pioneered the concept of comprehensive palliative care by establishing the Marion and Eli Wiesel Pavilion at Sheba – Israel’s only pediatric hospice.

Eight years ago, Prof. Rechavi established the Sheba Cancer Research Center (SCRC), a unique center where basic research of the highest level is conducted, aimed at the speedy transferal of practical findings that emerge in the lab directly to the patient’s treatment protocol. The Cancer Research Center conducts advanced molecular, genetic, immunologic and cell biology studies using cutting edge technologies such as DNA micro-arrays, high-throughput sequencing, laser capture micro-dissection, flow cytometry and cell sorting.

He also has conducted leading studies into the genomics of tumorous stem cells, the existence of which were discovered only a few years ago. More than 100 scientific papers a year are published by SCRC researchers in the top scientific journals and Rechavi himself has published more than 300 scientific articles. Graduate students and young scientists flock to Rechavi’s side, and his devotion to the development of these young physician-scientists is legendary.

The SCRC building was donated by Roman ben Aharon HaKohen, in honor and in loving memory of his parents Aharon ben Nachman HaKohen and Irina bat Avraham of blessed memory.

When Sharon Harari’s son, Amitai, was diagnosed with Fanconi’s Anemia, a rare and usually fatal genetic disease, the consensus was that Gidi Rechavi was the best doctor, anywhere, to help.

When no suitable bone-marrow donor was found, Prof. Rechavi refused to give up. In consultation with Prof. Rechavi, Sharon became pregnant through in-vitro fertilization. Using sophisticated science and ultra-modern tools available to only a select few global scientists, her embryos were checked by Rechavi for compatibility when developed to just eight cells. One embryo showed no signs of the genetic disease and was carried to full-term birth. When little Alma came into the world, stem cells were taken from her umbilical cord blood and transplanted into Amitai. They gave her big brother the gift of life. This was the first time in Israel and only the second time in the world that bone marrow transplantation was performed using cord blood stem cells taken from a sibling conceived after pre-gestational genetic diagnosis to ensure a perfect donor match and no genetic disease.

Amitai and Alma: Prof. Rechavi’s Miracle

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Prof. Raphael Catane, director of the Cancer Treatment Center (pictured here in the patient service “Recreation Center”), has drafted the best oncologists in the country and built Israel’s leading cancer center with an emphasis on the newest targeted therapies and cutting-edge drugs.

“Cancer is a terrible disease,” says Sheba oncology division director Prof. Raphael Catane. “It is not an ‘external’ illness, but stems from the fact that the body’s own cells go wild. Its prognosis is often ominous and the treatment occasionally terrible. But we are working to change that. With today’s new targeted therapies, tailored individually to each patient’s unique genetic typing, we can in many cases significantly prolong their life or cure the disease.”

Catane has attracted an outstanding cadre of first-rate oncology scientist-clinicians, who treat more than 2,500 new patients a year, and handle more than 30,000 patient visits per year. Catane supervises comprehensive clinical treatment clusters in breast, lung, and gastrointestinal cancers, melanoma, uro-oncology, neuro-oncology, sarcoma, fertility and other cancers.

Dozens of the world’s top pharmaceutical companies cooperate with Sheba, as well, allowing Sheba patients to benefit from their latest, experimental drugs. In fact, the Sheba Cancer Center is the only center in Israel where Phase I, II and III clinical pharmaceutical trials are conducted — under FDA and other recognized international scientific protocols.

By cooperating closely with cancer researchers and the bio-medical industry, Prof. Raphael Catane is harnessing the latest advances in cell biology, diagnostic technologies, and pharmaceuticals to revolutionize the treatment of cancer:

"We rapidly move medical advances from the lab bench to patient bedside,” he says. This allows us to treat even the cancers most difficult to cure, or at least to alleviate their symptoms and prolong life for most of our 30,000 patients," he says.

The center also boasts the most advanced radiotherapy equipment in the Middle East, and a comprehensive program of complementary patient services — from yoga to acupuncture to hair salon (wig) services. “We seek to treat the whole patient — and his or her family,” Catane says.

Prof. Catane was born in France and arrived in Israel in 1949. Before coming to Sheba in 2001, he was head of oncology at Hadassah University Hospital and at the Shaare Zedek Medical Center in Jerusalem, and director of clinical cancer and pharmaceutical research at Bristol-Myers Squibb in the US. He was also an associate at the US National Cancer Institute (NIH) in Bethesda. He has published over 150 academic articles in the field.

The Cancer Treatment Center was donated by Roman ben Aharon HaKohen, in honor and in loving memory of his parents Aharon ben Nachman HaKohen and Irina bat Avraham of blessed memory.
Prof. Arnon Nagler is director of the Sheba Hematology Division, Bone Marrow Transplantation, and its Cord Blood Bank (the largest cord blood bank in Israel), and an international expert in stem cell transplantation.

Prof. Arnon Nagler is Israel’s top scientist in hemato-oncology and bone marrow transplantation. He has been a senior hemato-oncologist at the Stanford Medical Center, DNAX Research Institute in Palo Alto, Cedars Sinai Medical Center, and Hadassah Medical Center in Jerusalem. He maintains close clinical and research partnerships with his colleagues at Stanford and Harvard universities.

His major research interests are cord blood biology, adoptive cell mediated immunotherapy, NK and CTL activity, transplantation in hemato-oncologic malignancies, fibrotic disorders, and the role of Collagen Type I.

His bone marrow transplantation and hematology divisions work in concert on the most advanced procedures, including stem cell aphaeresis, bone marrow harvesting, immunotherapy, and tumor vaccination. The department performs a “mini-transplant,” a novel approach to transplantation, which substantially reduces the organ toxicity of the transplantation procedure and enables transplantation without injury of the lung, liver, or kidney.

Prof. Nagler is also a leading stem cell researcher, working together with Dr. Avi Treves on separation, isolation and storage of stem cells from umbilical cord blood; isolation and characterization of adult stem cells from normal adult tissues as a potential platform technology for adult stem cell banking; and the development of additional stem cell based bio-products.
Sophisticated Cardiology with a Heart

Prof. Michael Eldar, an expert in electrophysiology and coronary artery disease, is understandably proud of his comprehensive, world-class cardiac treatment and research center.

Housed in an ultra-modern, striking architectural gem sheathed in glass, the three-building Leviev Heart Center integrates all Sheba’s diagnostic, therapeutic and preventive cardiovascular units. These include units for intensive and intermediate cardiac care, catheterization, heart failure, electrophysiology and cardiac pacing, noninvasive cardiology, nuclear cardiology, cardiac imaging, cardiothoracic surgery, and cardiac rehabilitation; along with outpatient clinics, conference facilities, and the Neufeld and Taman cardiac research institutes.

Prof. Eldar’s 300-person staff conduct a range of state-of-the-art procedures, including primary balloon treatment for heart attacks, transcutaneous aortic valve implantation and closure of intracardiac abnormal communications, radiofrequency ablation and implantation of sophisticated devices for rhythm disorders, as well as complicated open heart surgeries – including reconstructive valve surgery and aortic repair.

The Center treats over 35,000 patients a year.

Cardio-Genetics to the Rescue of the Bedouin

Nine children died unexpectedly within an eight-year period in the northern Israeli Bedouin village of Salama, leaving the village perplexed as to the cause. The deaths included the loss of two of Zeidan Suwa’ed’s eight children, and a nephew. When Zeidan’s daughter fell ill to the now familiar symptoms, he took her to Prof. Eldar at Sheba. She was diagnosed with polymorphic ventricular tachycardia (PVT), a rare irregular heartbeat. Prof. Eldar found 13 other children in the village with PVT.

Over two years of research in which he involved colleagues in the genetics labs at Sheba and Harvard University, Eldar discovered a novel genetic problem. He found a mutation in the gene calsequestrin 2 (CASQ2), which plays a key role in the contraction and relaxation of heart muscles. The Salama children were then successfully treated with beta-blockers, and all families in the village were offered prenatal testing to help them with future births.

Sheba’s state-of-the-art Olga and Lev Leviev Heart Treatment and Research Center, directed by Prof. Michael Eldar, is the first facility of its type in the Middle East.
Dr. Ehud Raanani is director of the department of cardiac surgery at Sheba.

Dr. Ehud Raanani, one of the country’s most skilled, busy and famous heart surgeons, leads a world-class team specializing in valve reconstruction and aorta repairs. They do over 1,200 surgeries a year.

Two years as an Israel Defense Forces commander in the elite Golani infantry unit, which he served in Lebanon, convinced Ehud Raanani to devote his life to medicine. After specializing in cardiac surgery, he spent two years in Canada as an apprentice to Prof. Tirone David, one of the most celebrated heart surgeons in the world. Raanani became one of his star pupils.

Raanani’s department is one of the more versatile heart surgery services in Israel. Apart from its main workload of adult heart surgery, especially valve disease and coronary bypass surgery, it operates a busy pediatric surgery unit, a heart transplantation unit, a National Homograft Bank, an organ perfusion and ECMO (artificial lung) unit, and a dedicated post-open-heart intensive care unit.

The department specializes in reconstructive heart valve surgery, repairing or replacing diseased valves and other heart tissue, including aortic valve repairs. It is the leading center in Israel in thorascopic-assisted open-heart surgery, the “Heartport” system and similarly less invasive open heart systems – which enable doctors to perform a proper open heart operation through a small incision below the right breast.

These procedures result in a nearly invisible incision, which is more appealing esthetically and is a safer surgical technique for extremely sick patients. They also apply this approach to children and young adults for correction of congenital cardiac malformation. These complicated, super-advanced surgeries can last anywhere from four to eight hours.

Raanani and colleagues collaborate closely with leading cardiac surgery centers abroad, including Prof. David’s center at Toronto General Hospital, the Mayo Clinic in the US, and European centers such as Homburg, Germany and U.Z Brussels, Belgium.

“Every time I walk into the operating theatre to repair someone’s heart, I feel a tremendous burden of responsibility,” say Raanani. “It is very emotional for me. We can repair the heart muscle, but nature has to repair the overall human body – and this takes time and patience.”
The mix of fertility and oncology treated in Sheba’s world-class obstetrics and gynecology departments makes for dramatic medicine; a unique and powerful combination of joy and pain.

The Joseph Buchman Gynecology and Maternity Center at Sheba has been Israel’s leading Ob/Gyn center of excellence for four decades. Led by Prof. Eyal Schiff, the center integrates outstanding reproductive science research with high quality and compassionate clinical care to advance women’s reproductive health. The center is a leader in developing new reproductive technologies in perinatology, onco-gynecology, genetics and infertility.

Prof. Schiff is an internationally-recognized gynecological surgeon specializing in high-risk obstetrics who became a full professor at age 41 and has published more than 100 scientific publications in his field. “My colleagues and I do ‘dramatic’ medicine,” he says. “We take weighty decisions and do risky procedures that, in a matter of mere minutes, determine life and death for babies and their mothers. It can be exhilarating and very satisfying, or very sad. The mix of oncology and fertility that we deal with is very complicated.”

The 85 doctors and 200 nurses at the Buchman Center run full-scale departments for obstetrics, high-risk pregnancies, gynecology and onco-gynecology, IVF and infertility, urogynecology, and ultrasound, along with around-the-clock operating theaters and a delivery ward where close to 11,000 babies are born every year.

It operates an open-minded birthing center and a post-birth maternity hotel. It also operates the ultra-modern Merav Comprehensive Women’s Health Center, which combines under one roof all health screening, including urology, breast, gynecology and fertility services – including a specialized MRI dedicated to breast screening.

Among the department’s subspecialties: reproductive tract malignancy screening, genetic screening and prenatal diagnosis, fetal medicine and invasive 3-D ultrasound, and minimally-invasive endoscopies for the uterus and ovaries.

Research focuses on oocyte biology and aging, implantation and placentation, parturition, basic reproductive endocrinology and molecular oncogenesis, hypertension and infections in pregnancy, and more.

Shaba’s In Vitro Fertilization Fertility Clinic delivered Israel’s first test tube baby. Since then, the IVF Unit has been at the forefront of its field. The unit is recognized internationally for its innovative medical treatments including micromanipulation, ICSI, laser AHA, blastocyst growth, ultrasound-aided embryo placement, and cryopreservation of embryos.

In 2005, Prof. Jehoshua Dor, Dr. Dror Meirow and Dr. Jacob Levron of the Sheba IVF clinic successfully conducted the world’s first ovarian tissue transplant leading to a healthy live birth. Sagit Hechler, a 29-year old Israeli woman had become infertile from cancer treatment, received a transplant of ovarian tissue that had been taken from her body prior to chemotherapy treatment and preserved by freezing. This first ever birth from frozen ovarian tissue was reported as a global breakthrough in The New England Journal of Medicine and in the media around the world.
Leading the World in Researching and Treating Debilitating Autoimmune Diseases

Prof. Yehuda Shoenfeld, a leading clinical immunologist and an expert in rheumatology and allergy, heads Sheba’s Shlomo and Pola Zabludowicz Center for Autoimmune Diseases and its internal medicine department.

A prolific researcher and author, Shoenfeld has published more than 1,500 papers in scientific journals such as Blood, Cancer, Circulation, Immunology, Lancet, Nature, New England Journal of Medicine, Proceedings of the National Academy of Sciences and more. He also has authored and edited 25 books, some of which are considered cornerstones of science and clinical practice, such as The Mosaic of Autoimmunity and the textbook Autoantibodies. He is also the founder and editor of the Israel Medical Association Journal and the internationally known journals Autoimmunity Reviews and J Autoimmunity.

Autoimmune diseases afflict an estimated 20 percent of the population. These diseases result from a dysfunctional immune system in which the body attacks its own organs, tissues and cells. Autoimmune diseases include rheumatoid arthritis, multiple sclerosis, type 1 diabetes, Crohn’s disease, lupus, and about 80 other syndromes. Poor quality of life, high health care costs, and substantial loss of productivity are some of the social and financial burdens imposed by these debilitating diseases, which quite often are fatal.

Shoenfeld explains that there can be viral, bacterial, parasitic, fungal or other type of infections that trigger an autoimmune disease, along with genetic factors. There are also various environmental factors such as the sun (which can trigger lupus attacks), paints (scleroderma), and even living near an airport. Women are much more susceptible than men to autoimmune diseases, Shoenfeld notes, because their sex hormones strengthen their immune systems.

“Two decades of advanced research now allow us to identify genetic, environmental, and infectious causes of certain autoimmune diseases and to develop novel approaches for treatment and prevention,” says Prof. Shoenfeld. “Our center centralizes under one roof all aspects of autoimmune research and treatment, and brings together physicians and researchers from multidisciplinary fields such as internal medicine, clinical immunology, autoimmunity, rheumatology, ophthalmology, neurology, obstetrics and gynecology. There is a revolution in biological drugs for autoimmune diseases, and these discoveries are also developing in Israel and at Sheba.”
At the Sigi and Marilyn Ziering National Center for Newborn Screening, founded by and housed at Sheba, the blood of every baby born in Israel – more than 150,000 a year – is screened during the first days of the child’s life for a dozen debilitating and deadly metabolic and endocrinological diseases. If treated properly during the first months of life, doctors can prevent mental retardation, blindness and death caused by these diseases.

Dr. Shlomo Almashanu, director of the Center, says that his cutting-edge laboratory saves the lives of a newborn baby every other day. “In the past year we identified and saved the lives of newborn children with congenital hypothyroidism, congenital adrenal hyperplasia, PKU, MSUD, glutaric aciduria, propionic acidemia, methylmalonic acidemia, tyrosinemia, homocystinuria, citrullinemia, MCAD and VLCAD. For each and every disorder screened, we have identified and saved lives, and we hope to expand our screening abilities to include additional diseases.”

Dr. Almashanu is a clinical biochemical and molecular geneticist, board certified by the American Board of Medical Genetics. He trained at the Technion, and the University of Maryland and Johns Hopkins Medical Schools.

Prof. Elon Pras directs Sheba’s Gertner Institute of Human Genetics. Geneticist Prof. Elon Pras and his colleagues provide superior, cutting-edge medical care through pre-marital, pre-natal, and post-natal genetic screening and counseling.

Prof. Pras is one of the country’s top experts on FMF, the most common genetic disease in Israel (especially among North African and Iraqi Jews), which can lead to kidney disease and death. He spent four years studying genetic mapping and isolation of the disease gene at the US National Institutes of Health. He also has led research into cystinuria, familial baldness diseases, inherited eye diseases, inherited mental retardation, familial sudden death syndrome and other inherited disorders.

Prof. Pras says that Israeli women have a “very high awareness of,” and are creating a growing demand for genetic screening before and during maternity. “They understand that modern medicine allows us to significantly lower the incidence of genetic diseases, and Israeli society is very tolerant and liberal in this regards,” he says. “We successfully reduce the load of babies being born with Tay-Sachs, fragile-X, cystic fibrosis, Down syndrome and more – and this has practical and humane benefits for both the parents and the entire medical system.”

Navigating the Moral and Biological Challenges of Genetic Medicine

Led by Prof. Elon Pras, the Danek Gertner Institute of Human Genetics at Sheba has pioneered numerous studies on genetic diseases, especially those ailments predominant in ethnic Jewish populations, such as familial Mediterranean fever (FMF), fragile X, Tay Sachs, and Gaucher disease.

Established in the early 1970s by Prof. Baruch Padeh, one of the founders of the Sheba Medical Center, the Institute provides superior, cutting-edge medical care through pre-marital and pre-natal genetic counseling and world-class laboratory services.

The array of genetic tests available include cytogenetic testing, chromosome analysis, maternal serum biochemical markers, and a broad spectrum of biochemical and molecular tests for metabolic diseases such as Tay-Sachs, fragile-X Syndrome, Bloom Syndrome, Fanconi Anemia, Canavan Disease, cystic fibrosis, familial disautonomia, familial deafness, ML4, Niemann-Pick, Gaucher and ataxia telangiectasia.

The Institute is also a global leader in pre-implantation genetic diagnosis (PGD), allowing for identification and selection of embryos with a normal compliment of chromosomes before IVF implantation.

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Saving Lives Every Day Through Newborn Screening
He is double board certified in physical rehabilitation medicine and orthopedic surgery. He conducts the most difficult amputations and fits the most sophisticated, computerized artificial limbs. He personally oversees the rehabilitation of almost all the most severely injured Israeli war heroes and victims of terror.

Prof. Itzhak Siev-Ner, chief of orthopedic rehabilitation at Sheba, specializes in prosthetics and orthotics, and chronic wound healing. His devotion to his patients is legendary, and his department is a leader in developing and applying advanced technologies for rehabilitation, such as Virtual Reality Muscle Training and Computerized Gait Analysis. Still, Siev-Ner finds time to assist new immigrant doctors in their absorption, and to participate in Israel’s global media battles for legitimacy and understanding. He was the founding director of the Israel Performing Arts Medicine Center, and he directs Sheba’s Complementary Medicine Clinic. He also chairs the Israel Medical World Fellowship and the Israel State Employee Physician’s Organization, and is deputy president of the Israel Medical Association.

Overall, the 700-bed Sheba Rehabilitation Hospital is one of the largest and most comprehensive rehabilitation hospitals in the world. It offers respiratory, neurological, orthopedic, psychiatric, geriatric, multiple sclerosis, and head and brain rehabilitation, and operates Israel’s only eating disorders clinic for adults. It also serves as the national center for treatment of post traumatic stress disorder victims and spinal cord injuries.

The rehabilitation hospital seamlessly integrates its care with doctors in the Sheba acute care hospital, uniquely providing patients with expert rehabilitation care in the earliest stages of their treatment, ensuring the speediest-possible return to healthy home life. Patients are not sent home until they learn all the daily living motor skills necessary for successful reintegration to life at home and the workplace.

Over 120 soldiers injured during the 2006 war with Hezbollah in Lebanon, and more than 60 soldiers injured during the 2009 conflict with Hamas in Gaza, were treated in the hospital. At the same time Palestinians, both civilians as well as policemen, were also treated in the center.
Prof. Anat Achiron established and directs the comprehensive Dolly Steindling Multiple Sclerosis Center at Sheba, a unique clinic within the Sheba Rehabilitation Hospital. The multi-disciplinary treatment facility – the only one of its kind in Israel – offers MS patients from across Israel comprehensive treatment, from the earliest stages of diagnosis through preventative and rehabilitative care.

This includes neurological and clinical testing, cognitive assessment, imaging, pharmaceutical counseling and prescription, physiotherapy, occupational therapy, communication therapy, and psychological counseling. The specially-trained staff includes nurses, social workers, neurologists, psychiatrists, neuro-ophthalmologists, urologists, orthopedic surgeons and rehabilitation specialists.

The Center operates its own computerized MRI processing and analysis unit that reviews and tracks patient scans and lesion loads. A unique computer program developed by Prof. Achiron allows for quantitative volumetric measurement of the MS lesions and for comparative assessment of disease activity and treatment effects.

The center employs the newest techniques in exercise, art and drama therapy in order to enhance the MS patients’ physical and psychological wellbeing. The Center also runs seminars and support groups for the spouses and families of MS patients.

The Center’s Neuro-Immunology and Neuro-Genomics Laboratory evaluates patient cytokines (individually matching the appropriate immunomodulatory drug to each patient), conducts testing of patient antibodies against beta-inferon compounds; and conducts basic and applied research related to MS.

Currently, Prof. Achiron is researching the gene expression of specific biological pathways mainly associated with inflammation and cell death, and neuro-protective pathways associated with different disease stages. This work has the potential to discover the mechanistic processes associated with the pathogenic process involved in MS and hopefully will lead to new treatments for MS.

Prof. Achiron’s multidisciplinary center offers MS patients comprehensive treatment, from the earliest stages of diagnosis through preventative and rehabilitative care.
He learned how to eject from an airplane and pilot calmly as smoke threatens to engulf the cockpit. After hundreds of simulated and real flights under every possible condition, Amitai Ziv got his wings. However, the combat pilot emerged from his Israel Air Force training with something else too: an idea that would eventually change medical training worldwide.

Amitai Ziv went into pediatrics following his service in the air force. It struck him as unacceptable that medical students and health professionals train – and make their mistakes – on live patients, unlike aviation. So he set out to adapt flight simulation training to the field of medical education in a comprehensive fashion.

Dr. Ziv established the Israel Center for Medical Simulation (known by its Hebrew acronym “MSR”) – the world’s first all-embracing “virtual” hospital, where health professionals learn from their mistakes in a safe environment while training against role-playing actors and real-life computerized mannequins. MSR conducts simulation training in a wide variety of clinical domains such as cardiology, anesthesia, obstetrics and gynecology, surgery, trauma, and chemical and biological warfare management.

Walk into MSR and you may encounter a smoke-filled room with sirens blaring and gunfire staccato, lifelike mannequins strewn on the floor, and a distressed person pleading for help. In the next room there might be a staggering drunk giving a doctor a hard time, while down the hall a doctor attempts to extricate a baby mannequin stuck in the womb of a “mother” mannequin while monitors beep loudly. MSR can simulate virtually every medical setting: from emergency room to delivery room, from pharmacy to battlefield.

MSR also trains health professionals in communication skills: pharmacists face clients with prescriptions for drugs that interact adversely, and surgeons practice relaying bad news. “Most of all, this is a place to make mistakes in order to learn from them, and thus to save lives,” says Dr. Ziv.

MSR is the only national medical simulation center worldwide, and is unique in its multidisciplinary training of a wide spectrum of health professionals. Many IDF medical teams train at MSR too, including the units that went to battle during the 2006 (Lebanon) and 2009 (Gaza) wars. A growing number of medical associations require their professionals to undergo periodic refresher courses at MSR. In addition, most Israeli medical schools require candidates to undergo simulation-based assessment of personal and interpersonal attributes at MSR. Hundreds of American doctors have trained in emergency preparedness at MSR, as well.

MSR has truly set a new global standard in medical training. Top institutions across the globe – including the Mayo Clinic, Cleveland Clinic, Case Western Reserve, McGill University in Montreal, and Albert Einstein Medical Center in Brazil – are building simulation centers with MSR as their model and Amitai Ziv as their chief consultant. “Amitai Ziv has established the pre-eminent center in medical education, and has had an incalculable worldwide impact,” says Prof. William F. Dunn, Director of Mayo Clinic’s Simulation Center.

The son of Canadian-born parents who immigrated to Israel in 1949, the 50-year-old Ziv is also deputy director of Sheba, responsible for risk management and quality assurance. In addition to his passion for medical education and safety, he is deeply committed to Jewish identity and for years has been an active participant in the “Kolot” pluralistic beit midrash. MSR and Kolot run a program for health professionals called “Ailing and Healing,” in which participants explore their roles as caregivers through Jewish text study and simulated real life scenarios.

In 2007, Dr. Ziv was awarded the Charles Bronfman Humanitarian Award in recognition of his “values, commitment, creativity and energy” and his “innovative work in reshaping medical education and medical care throughout the world.”
The Edmond and Lily Safra Children’s Hospital is a calm, loving place, largely due to the special spirit inculcated by Prof. Zvi Spirer. The experienced immunologist is the medical father figure to every doctor and nurse in the building, and has been the director-mentor of many leading Sheba physicians.

"While we have become super-sophisticated in diagnosis and surgical technique using the most advanced laboratories and equipment, modern medicine has also become too technocratic," says Prof. Spirer. "I teach my colleagues to bring back personal touch and individual intuition; to look at the child, not just the computer screen and the blood test results."

Spirer’s prize students – each of them today stars in their own right – can be found all over the world: Prof. Gidi Rechavi at Sheba, Dr. Gavriel Hauser at Georgetown, Dr. David Chitayat at Toronto’s Hospital for Sick Children, and more.

Spirer himself has published over 175 scientific papers on pediatric infectious diseases and immune deficiencies, and was the longtime director of Tel Aviv’s Dana Children’s Hospital.

Spirer humbly walks the hallways of the Safra Hospital, which was directed for years by his friend, the late Prof. Justin Paswell; and is today ably led by Prof. Gidi Peretz.

This colorful 150-bed facility serves 8,000 in-patient admissions and 60,000 emergency room visits a year. It is also a “pain-free” hospital; all treatments are done with specialized anesthesia so that the child experiences no pain and no fear.

Israel’s leading pediatric services in hematology and hemato-oncology, bone marrow transplantation, rheumatology, psychiatry, rehabilitation and surgery are offered in the hospital; Israel’s only hospice for children, the Marion and Elie Wiesel Children’s Pavilion, is adjacent to the main facility. The Israel National Center for Cystic Fibrosis is located within the hospital.

The Edmond and Lily Safra Children’s Hospital

Prof. Zvi Spirer is the ultimate doctor’s doctor. A wise mentor and outstanding teacher with a phenomenal memory and an incredible love for children. Someone who can diagnose the most difficult cases just by talking to his young patients.
Department of Psychiatry

Prof. Michael Davidson is a global expert on the biology of schizophrenia, as well as its cognitive and social manifestations, and on pharmacological issues related to dementia— in particular Alzheimer’s disease. For many years, he directed Sheba’s multi-faceted and broad-ranging mental health services. He is the author of over 200 scientific publications and editor of one of the most prestigious medical journals, European Neuropsychopharmacology. He teaches both the Sackler School of Medicine and the Mount Sinai School of Medicine in New York.

Sheba offers a unique child and adolescent psychiatry unit, specialty clinics in anxiety, affective disorders, veteran affairs, post-traumatic stress disorder, biofeedback, geriatric psychiatry and early psychosis, services for the ultra-religious population, and a range of psychological services in the Rehabilitation Hospital.

Sadly, more than 100 disabled soldiers who suffer from Post Traumatic Stress Disorder (PTSD) are in treatment at Sheba— some of whom were injured as far back as the 1973 Yom Kippur war. They suffer from various symptoms of shellshock and continued dysfunction. Sheba offers them a supportive and comprehensive framework, including workshops in English and computers, arts and crafts, physical education courses, carpentry, animal husbandry, and woodworking; along with dynamic psychotherapy, art therapy, and psychodrama. In addition, the Sheba department also conducts studies with the Israel Defense Forces on the mental health of its regular soldiers.

Unique to Sheba is its Adult Eating Disorders Department. It treats patients over 18 years old who suffer from Anorexia and Bulimia, Morbid Obesity, and related ailments. The department offers full hospitalization, daycare, and an outpatient clinic.

Sagol Neuroscience Research Center

Prof. Anat Biegon is director of Sheba’s Joseph Sagol Neuroscience Research Center. The center’s unique synthesis of neurology, neurosurgery and psychiatry has led to many research breakthroughs. This includes novel and important insights into the genetic and environmental risks, and the diagnosis and treatment of presently incurable brain disorders, such as Alzheimer’s disease, anorexia, developmental disorders, epilepsy, multiple sclerosis, Parkinson’s disease, schizophrenia, stroke, cancer, normal and abnormal fetal brain development, and traumatic brain injury.

There are more than 100 physicians and scientists working on brain and spinal cord related issues at the center, with hundreds of publications in the scientific and clinical literature. Center physicians and scientists collaborate with experts in the Sheba radiology, nuclear medicine, endocrinology, oncology and rehabilitation departments, as well as with scientists and students in academic institutions in Israel and abroad.

Brain cancer related research projects pursued by the center include studies of neuro-inflammation (in collaboration with scientists at the Hebrew University) and RNA editing (in collaboration with the Sheba Cancer Research Center).

Prof. Biegon divides her time between Sheba and the US, where she is a senior scientist at the Brookhaven National Laboratory and an adjunct professor in psychology at SUNY Stony Brook. She also has been a visiting neuroscientist at Hoffmann-La Roche Inc., the US Dept. of Energy’s Lawrence Berkeley Laboratory, and the Rudolf Magnus Institute of Pharmacology in Utrecht. She has published in biological psychiatry, neuro- and psycho- pharmacology, and neuro-endocrinology.
To Boldly Go Where No Doctor Has Gone Before

Plastic surgeon Prof. Arie Orenstein is a scientific research and development entrepreneur.

Prof. Arie Orenstein is a plastic surgeon specializing in light and laser applications. In addition, he is a scientific research and development entrepreneur who has spearheaded the advancement of numerous new diagnostic and therapeutic technologies.

Prof. Orenstein directs the ultra-modern Maurice and Gabriela Goldschleger Center for Advanced Medical Technologies at Sheba, which brings clinicians, scientists, academics and the medical technology industry together under one roof. The collaborative and creative environment speeds up the development process and ensures better delivery of patient care, more secure sources of services, and continued emphasis on innovation.

The center pioneered diffusion-weighted magnetic resonance spectroscopy, intra-operative theatre portable MRI, a dynamic contrast MRI for assessment of blood brain barrier functioning and its applications, the focus ultrasound device, spectral imaging real-time mapping of brain functionality, the Amniometer prenatal diagnosis and labor monitoring system, a method and system for monitoring ablation of tissues, and a chemical compound that allows for early detection of colon and lung cancers. The center offers numerous licensing opportunities for investors.

Prof. Orenstein graduated medical school in 1971 and began collaborating with a series of hi-tech companies. He later became a plastic surgeon specializing in reconstructive surgery and burns, and an internationally-recognized expert in the clinical application of photodynamic therapy, utilizing light in the cure of skin cancers. He was a fellow at the Beckman Laser Institute at the University of California at Irvine, and later became head of plastic and reconstructive surgery at Sheba.

He continues to lead research projects in skin tissue engineering and immunity, scar formation and control. For 12 years, Prof. Orenstein served as co-chairman of the Israel Medical Association and the Israeli representative on the World Medical Association board, and as chairman of the government-employed physician’s union in Israel.

The Sheba Regional Burns Center, which Orenstein heads along with Dr. Josef Haik, was founded in 1973 during the Yom Kippur War to treat the numerous soldiers who were badly burned. Today, the center serves all of central Israel, and leads the country in burn prevention education and national burn trauma emergency preparedness. It is the only burn unit in Israel with in-house surgical, respiratory, intensive care and rehabilitation facilities especially devoted to burn treatment.

Kinneret’s Inspiration

It was 9:30 Saturday night and business at ‘My Coffee House’ was still slow. Only two tables were occupied. Kinneret Boosani, a 23 year-old reflexology student, was working the late shift as a waitress, earning money for her studies.

Kinneret served coffee to the customer at the bar. Then came the blast. The man at the bar was no customer, but a suicide bomber. Kinneret was critically wounded. One customer died. Kinneret lost one eye, suffered a collapsed lung, and 60 percent of her body suffered third degree burns. She was transferred to Sheba’s burn center, known for expert treatment. Kinneret had dozens of skin grafts. After three months she was transferred to Sheba’s Rehabilitation Hospital. Three of her fingers couldn’t be saved and had to be amputated. A protective full-body pressure suit was designed for her. For over six years, Kinneret was an ambulatory patient, coming to the rehab center four times a week for treatment and undergoing numerous surgeries.

Kinneret’s story, along with her determination to live a productive life, inspired many people. She even traveled abroad to meet Sheba friends and donors. She now studies film editing and graphics. “I only watch happy movies, no news,” she says.
Prof. Sarah Ferber is an internationally recognized leader in the area of regenerative medicine for treating diabetes. She was the first to demonstrate the possibility of using the liver for generating functional insulin-producing cells.

In 2000, she published a revolutionary research paper in Nature Medicine which launched a new field of global scientific research: she demonstrated that adult human liver cells retain substantial plasticity and can be induced to assume new fates and function, upon appropriate molecular manipulation. She showed that the liver can be a pancreatic progenitor tissue and be used for autologous cell replacement therapy for diabetic patients.

In 2005, Prof. Ferber achieved another global breakthrough in tissue engineering (published in the Proceedings of the US National Academy of Sciences) by coaxing human liver cells to produce insulin. When implanted in diabetic immune deficient mice, she was able to reduce acute diabetes. “By converting liver to endocrine pancreas tissue, a human diabetic patient could in future become the donor of his own therapeutic tissue!” says Ferber. “The ultimate plan is to take liver cells from people with diabetes, reprogram the cells and re-inject them. Because they are the patient’s own, the cells should escape rejection by the immune system, sparing the individual a lifetime of daily insulin injections and anti-rejection treatment.”

Prof. Ferber’s globally-leading research has received millions of dollars in funding over the past decade from the Juvenile Diabetes Research Foundation, the Israel Academy of Science and the DCure Foundation. She has also received the Teva, Lindner, Rubin and Wolfson awards. Her technologies are protected by issued patents in US and Europe, Canada and Australia.

Prof. Ferber, head of the Endocrine Research Unit at Sheba, completed her doctoral work in biochemistry at the Technion (where she worked under Professors Avram Hershko and Aaron Ciechanover, who received the Nobel Prize in Chemistry in 2004), and completed her post-doctoral studies at the Joslin Diabetes Lab at Harvard University. She has mentored more than 30 graduates and post-doctorate students and physicians, and is a proud mother of three children.
Prof. Jonathan Leor, director of Sheba’s Multidisciplinary Human Stem Cell Research and Regenerative Medicine Center, is a world leader in repair of damaged heart muscle with stem cells and scaffolds.

Sheba is a global leader in stem cell science: one of the great scientific frontiers for the twenty-first century – the key to treating and eventually eradicating diseases such as heart failure, renal insufficiency, diabetes, Alzheimer’s, Parkinson’s, immunological deficiencies, and hematological diseases including cancer.

Few research facilities in the world can boast experts working in almost all aspects and stages of stem cell research and treatment – with recognized scientific breakthroughs in this cutting-edge field. Sheba, however, has a unique advantage: the proximity of research labs to a leading primary care hospital, where advances in basic science immediately can be translated into clinical trials and treatment.

Prof. Jonathan Leor, who directs Sheba’s multidisciplinary regenerative medicine research center, is a cardiologist seeking stem cell and regenerative medicine solutions to repair heart muscle damaged by myocardial infarction (heart attack). He is developing molecular and cellular approaches to repair of heart muscle, through tissue engineering, bioactive materials and molecules, reprogramming by genetic manipulation of stem cells, cell engraftment and more.

He has published in Scientific American on the tissue engineering of a cardiac muscle patch, and in Cytotherapy on the use of human umbilical cord blood stem cells for myocardial repair.

Sheba stem cell center scientists truly are considered to be leaders in the field worldwide. Prof. Arnon Nagler and Dr. Avi Treves are world leaders in the separation, isolation and storage of stem cells from umbilical cord blood. Prof. Gidi Rechavi is a world leader in stem cell genomics, including cancerous stem cells. Dr. Sarah Ferber is the recognized world leader in cell replacement therapy for diabetes. Dr. Benjamin Dekel’s research into adult and embryonic kidney stem cell replacement therapy is path-breaking, as well.

Sheba recently built a $5 million facility with 1,000 square meters of laboratory space for the stem cell science research center.

Seeking Stem Cell Solutions for Major Disease

Dr. Benjamin Dekel MD, PhD has focused on finding solutions for kidney regeneration and repair that hold the promise of one-day being able to solve the severe shortage of kidneys available for transplantation. He was the first to utilize human embryonic kidney rudiments to ‘grow kidneys’ (published in Nature Medicine in 2003), was among the first to succeed in isolating adult kidney stem cells and also to show that human bone marrow stem cells can create blood vessels in the injured kidney. Recently, his team was the first to identify malignant renal stem cells that initiate pediatric renal cancer.

A pediatric nephrologist at Sheba’s Safra Children’s Hospital and head of the Pediatric Stem Cell Research Institute, Dr. Dekel received an MD degree from the Technion, completed training in pediatrics at Sheba, and completed both his PhD studies (with honors) and post-doctoral training at the Weizmann Institute. Sheba targeted him early on as a medical leader and put him on the fast track for scientific and clinical advancement through its elite Talpiot Medical Leadership Program. Since then, he is the recipient of numerous scientific awards.
Who will lead Israeli science and medicine into the future? The graduates of Sheba’s Talpiot Medical Leadership Program, which identifies, advances and prepares the brightest young physician-scientists for leadership positions in medicine and healthcare in Israel. Already, participants are affecting a revolution.

They are profiles in brilliance, at the vanguard of Israeli medicine. The 33 young medical leaders selected thus far for Sheba’s Talpiot Medical Leadership Program run the medical gamut from oncology to ophthalmology. Their advance is rapid; their achievements impressive.

The revolutionary program provides participants with lead scholarships, personal mentoring, and specially-tailored residency opportunities, along with a broad education in human relations, executive management strategies, leadership skills, and Jewish culture and philosophy. The program turns outstanding young MD/PhD physicians into “renaissance” doctors and senior medical executives who can be agents of change - both for Sheba and the entire Israeli medical system.

Dr. Yehuda Kamari

Nurtured on Excellence

Raya Leibowitz-Amit was nurtured on excellence from a young age. Her grandfather was the known philosopher and scientist, Prof. Yeshayahu Leibowitz; her other grandfather is Prof. Shimon Gitter, founder of Tel Aviv University’s Medical School; her father is astrophysicist Prof. Ilya Leibowitz; and her mother is mathematician Daniella Leibowitz. With genes like these, it is no wonder that Raya was a gifted child who skipped grades in school and racked up a range of impressive achievements.

At age 35, she holds two degrees with top honors from the Weizmann Institute of Science, a medical degree from Tel Aviv U., and a doctorate in cancer cell biology. She also is the mother of three small children. Through the Talpiot program, she is combining her clinical work in oncology at Sheba with translational research on the pathogenesis of malignant melanoma, specifically through a novel regulatory mechanism of gene expression based on the generation of micro-RNAs.

Dr. Raya Leibowitz-Amit

Dr. Yehuda Kamari

Rocketing to the Top of the Class

Dr. Yehuda Kamari is a specialist in atherosclerosis, hyperlipidemia and hypertension at Sheba’s Bert W. Strassburger Lipid Center; specializing in primary prevention of cardiovascular diseases in high risk patients. His research focuses on the role of inflammation in atherosclerosis and fatty liver and specifically the role of Interleukin-1 in these diseases. He already has won several prestigious awards for his research. He is also a senior physician in Sheba’s hypertension unit and internal medicine departments, and known as an excellent and devoted lecturer.

Dr. Kamari comes from a very different family than Dr. Leibowitz-Amit. His parents made aliyah in the 1950’s, settled in Kriyat Shmona, and brought seven children to the world. Higher education was but a dream. “Thanks to the Talpiot program, I am fulfilling such a dream: becoming both a scientist and a doctor, and advancing towards a leadership position, at one of the best medical institutions in the world,” Kamari says.
Compassionate Care Beyond Israel’s Borders

Sheba’s commitment to compassionate care extends beyond Israel’s borders. Sheba doctors have provided international relief and medical training in Argentina, Armenia, Azerbaijan, Brazil, Cambodia, China, Equatorial Guinea, ivory Coast, Kazakhstan, Kosovo, Mauritania, Peru, Russia, Rwanda, Sri Lanka, Ukraine, Uzbekistan, Vietnam and more. Sheba also maintains a special medical treatment agreement with the Republic of Cyprus.

Patients From Across the Middle East

Patients come to Sheba from across the Middle East, including from Arab countries that have no diplomatic relations with Israel and from the Palestinian Authority. Sheba supported the establishment of the Open Heart Surgery Institute in Ramallah, the Cancer Center in Bethlehem, and several other medical projects in the West Bank. Many Sheba doctors are active in the Physicians for Human Rights association, which actively seeks to improve the quality of medical care for Palestinians. These commitments stem from the hospital’s commitment for the ailing and needy; from the State of Israel’s long-time tradition of contributing to humanitarian relief efforts abroad; and out of an abiding concern for healing and compassion that is ingrained in Jewish history and tradition.

Treating Palestinian Children

The Edmond & Lily Safra Children’s Hospital at Sheba, in particular, plays a special role in treating Palestinian children, especially in the fields of pediatric oncology and cardiac surgery. Often, a third of the patients in the Children’s Hospital are Palestinians from the West Bank and Gaza, whose condition requires high-level medical intervention unavailable in these areas. The hospital’s Middle East Congenital Heart Center each year conducts dozens of complicated cardiac micro-surgeries on Palestinian children with congenital heart defects.

International Consulting in Operation of Hospitals

The Tel Hashomer International Corporation offers the multidisciplinary experience of the Sheba Medical Center to guide and mentor healthcare officials and medical professionals around the world in the development, erection, management, operation, and overseeing of hospitals and healthcare systems. For overseas hospitals, Tel Hashomer International supervises medical facility construction, recruits and trains medical personnel, operates new hospitals in their trial phases, procures medical supplies, equipment and information technologies, and conducts clinical and quality assurance supervision. For healthcare systems, Tel Hashomer International conducts system analysis, efficiency studies, and economic management.
Professor Chaim Sheba
Commanded the Israel Defense Forces medical corps. Was tasted by Prime Minister David Ben-Gurion to establish Tel Hashomer as a military hospital to treat the wounded from Israel’s War of Independence. Led the hospital until his passing in 1971, following which it was renamed in his honor.

Professor Baruch Padhi
Commanded the Israel Defense Forces medical corps. Founded Sheba’s Institute of Genetics, and was deputy director of the medical center, as well as director general of the Ministry of Health.

Professor Mordechai Shani
The key figure in Israeli healthcare for decades. He was director general of Sheba for more than 30 years; served two terms as director general of the Ministry of Health; was the architect of the 1994 reform of Israel’s health system; and was a key player in the creation of Israel’s Patient’s Bill of Rights.

Professor Boleslaw Goldman
Director of Sheba for more than 30 years. A specialist in genetics, health administration and internal medicine, he has played a leadership role in many of Israel’s most important health and educational organizations.

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Professor Boleslaw Goldman
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Professor Zeev Rotstein
Director
Trained in medicine at Tel Aviv University, and has held fellowships at the New York Department of Health, Tufts and Northwestern universities, and Johns Hopkins Medical Center School of Hygiene and Public Health. Has led the medical center since 2004.

Professor Raphael Walden
Assistant Deputy Director for Risk Management and Foreign Relations
A vascular surgeon. He has been a visiting professor at Massachusetts General Hospital in Boston and at Salpêtrière Hospital in Paris, and is professor at Tel Aviv University’s Sackler School of Medicine.

Professor Shlomo Noy
Director of the Rehabilitation Hospital; and Vice President for Research and Development, and Academic Affairs
A naval medical officer and a psychiatrist, he is also a professor at the Sackler School of Medicine.

Professor Michael Davidson
Deputy Director of the Rehabilitation Hospital
Director of the department of psychiatry at Sheba. He also is a professor of psychiatry at the Sackler School of Medicine, and at Mt. Sinai School of Medicine in NYC.

Professor Eyal Schifff
Obstetrics and Gynecology Division Director
Received his M.D. and Ph.D. degrees from Tel Aviv University, and headed Sheba’s High Risk Obstetrics and Prenatal Services departments.

Professor Asher Barzilai
Laboratories Division Director
An expert in infectious diseases, he is an associate clinical professor in pediatrics at the Sackler School of Medicine and at Mt. Sinai Hospital in NYC.

Professor Eli Konen
Imaging Division Director
An expert in cardiovascular imaging and diagnostic radiology, he has been a fellow at Toronto General Hospital, Lectures at the Sackler School of Medicine.

Professor Gidi Paret
Pediatrics Division Director
An expert in pediatric critical care medicine, he is an associate professor in pediatrics at the Sackler School of Medicine and directs Sheba’s Edmond and Lily Safra Children’s Hospital.

Professor Zeev Rotstein
Professor of Medicine.
A gynecologist and endocrinologist with a Ph.D. in pharmacology and nutrition. He has been deputy director of Rambam Medical Center in Haifa, and head of the program in public health administration at Haifa University.

Dr. Itzhak Zaidise
Associate Director
Sackler School of Medicine.
A vascular surgeon. He has been a visiting professor at Massachusetts General Hospital and Head of Emergency Services departments.

Dr. Avi Shamios
Director of the General Hospital
Trained in internal medicine and healthcare management in Israel and at Harvard University, and served as Surgeon General of the Israeli Air Force. He teaches hypertension and aerospace medicine at the Sackler School of Medicine.

Dr. Arnon Afek
Deputy Director of the General Hospital
Dr. Arnon Afek, Deputy Director of the General Hospital; and Vice President for Research and Development, and Academic Affairs
A naval medical officer and a psychiatrist, he is also a professor at the Sackler School of Medicine.

Dr. Nitza Ziv
Deputy Director for Medical Services departments.
A thirty-year veteran nurse, she received her Ph.D. in nursing administration, and was the director of the Tel Aviv University nursing school.

Dr. Amitai Ziv
Deputy Director for Medical Services departments.
A thirty-year veteran nurse, she received her Ph.D. in nursing administration, and was the director of the Tel Aviv University nursing school.

Dr. Shoshy Goldberg
Director of Nursing and Para-Medical Professions
Miss Goldberg received her diploma in nursing from the University of Haifa, and head of the program in public health administration at Haifa University.

Dr. Yaron Afak
Deputy Director of the General Hospital and Head of Emergency Services
Also is director of MSR: The Israel Center for Medical Simulation. Trained as a pediatrician at the Hebrew University and the University of Pennsylvania Children’s Hospital.

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Thousands of people around the world support the work of the Sheba Medical Center at Tel Hashomer.

The Friends of Sheba, in six countries around the world, work in partnership with local philanthropists, foundations and community organizations to direct contributions to projects at the hospital that best fit the donor’s specific interests.

All the Sheba Friends offices are able to provide tax deductible receipts.

To learn more about philanthropic opportunities at Sheba, visit the “Supporting Sheba” page at www.sheba.co.il or contact the Friends of Sheba:

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