Soroka University Medical Center is one of the largest hospitals in Israel.

It serves a population of over than 750,000 people from all over the Negev, 350,000 of them are children.

Soroka young patients are a microcosm of the uniquely diverse Negev population including: new immigrants from Ethiopia, the former Soviet Union and Argentina, Bedouins, Children of veteran Israelis and even children sent from the Palestinian Authority of the Gaza strip.

The present pediatric wards deal with a diversity of problems including: medical conditions indigenous to desert living, oncology patients, preterm infants and terror.

These days, a new modern Hospital for Sick Children is being built. The Saban Hospital for Sick Children in Beer Sheva will include 122 admission beds in three pediatric wards, an Intensive Care Unit with Isolation Rooms, a Hematology-Oncology Unit for young cancer patients, a Day Hospitalization Unit, an Adolescent Treatment Unit and an Imaging Center.

Saban Hospital for Sick Children is a part of the Soroka University Medical Center, and is a main part of the Health Science Faculty in Ben Gurion University of the Negev. Our staff members are active in teaching medical students of 1st, 4th and 6th year students, and students from the Faculty of International Medicine School of Columbia University, New York, USA.

The research is an important part of the Pediatric Division of Soroka University Medical Center. Our research is recognized world-wide in fields such as: Infectious Diseases, Genetics, Metabolic diseases, Neonatology, Pulmonology, Nephrology, Hemato-Oncology, Endocrinology, Intensive Care Medicine and Rheumatology.

This booklet describes the academic and research activities of our various departments.

Sincerely Yours,

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Head:
Prof. Ron Dagan, MD

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Senior Staff members:
Dagan, Ron, MD Professor
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Porat, Nurith, Ph.D. Senior Lecturer
Einhorn, Menachem, MD Lecturer
Melamed, Rimma, MD Lecturer

Department Facility:
The Pediatric Infectious Diseases Unit of the Soroka University Medical Center was established in 1988. The unit is actively and intensively involved in clinical consultation, teaching, national and international advisory and planning committees and research. The unit is composed of faculty members and of an additional 35 staff including pediatricians, study coordinators, laboratory technicians, computer programmers, computer technicians, epidemiologists and medical students. Six post-graduate students are currently completing their MSc or PhD degrees. The facility includes 2 laboratory and 18 office spaces covering 420 m².

Research Interests:
1. Pathogenesis, epidemiology and prevention of vaccine-preventable diseases (with emphasis on encapsulated bacteria, mainly Streptococcus pneumoniae). This includes: a) bench research on pneumococcal attachment mechanisms, development of potential candidates and the involvement of the cell membrane in the invasion process of S. pneumoniae; b) epidemiology including molecular epidemiology of pneumococcal invasive infections, mucosal infections and carriage and spread of antibiotic-resistant and vaccine-type S. pneumoniae; c) the effect of antibiotics on the dynamics of clinical response and carriage and spread of antibiotic-resistant S. pneumoniae in the community; d) clinical studies (Phase I, II, III) with conjugate pneumococcal vaccines, and their effect on S. pneumoniae ecology, disease burden, reduction in antibiotic-resistance and disease modification.
2. Research on appropriate study design in acute otitis media. This includes among
others, studies on bacteriological eradication (middle ear fluid clearance of bacteria), effect on antibiotic-resistance and bacteriological response, relation between bacteriological and clinical outcome, and effect of antibiotics on bacteriology of subsequent infections.

3. Epidemiology and effect of vaccines on early childhood pneumonia. This includes participation in the World Health Organization Working Group on Pneumonia, understanding the relation between various chest radiographic patterns and virus and bacterial pathogens, population-based hospital use for pneumonia, carriage of pathogens during disease and health, and an attempt to define the patterns of pneumonia most likely to respond subsequently to pneumococcal vaccine.

**Selected Publications:**


The Genetic Institute of Soroka Medical Center is the sole provider of genetic services to the Negev population. This service includes clinical genetic diagnosis, counseling and follow-up, prenatal diagnosis and various molecular genetics testing.

The institute is comprised of about 30 employees, among them 3 MDs, 3 PhDs, 3 genetic counselors and other laboratory workers. The whole genetic research team includes about 28 people: physicians, PhD researchers and graduate students (about 12) and field coordinators.

The main research focus of the institute is the identification of genes causing genetic diseases in the Bedouin population. This research is being conducted under the academic umbrella of the Faculty of Health Sciences at the Ben-Gurion University of the Negev.

The Negev Bedouin population is a traditional society in transition from semi-nomadic to a sedentary life style and is characterized by high consanguineous marriages (about 2/3 of the married couples). Twelve years ago we have embarked on a research strategy to map and clone genes from various hereditary diseases, some of which are either very rare elsewhere or even newly identifies in this population. The research use the unique advantage of an isolated population with high birth rate and the unique advantage and thus a large number of affected individuals per family, which enables fast linkage analysis and gene cloning thereafter.

This basic research is accompanied by a long term community based program aimed at promoting the use of the research results by the population, for prenatal diagnosis and carrier screening in order to decrease the incidence of hereditary diseases.

The research, which was initially done in collaboration with researchers in the University of Iowa, is now being conducted exclusively in Beer Sheva. So far we have identified nearly 15 new genes and additional several new mutations in previously known genes.
Among the disease genes identified are: Three new genes for the Bradet-Biedle Syndrome, a gene for malignant infantile osteopetrosis, a gene for newly described disease of Bartter syndrome + deafness, a gene for nephronphthisis, a gene for hypoparathyroidism + dysmorphism + growth and mental retardation, genes, each for hypomagnesemia, cogenital hemolytic syndrome, anophthalsmia, two genes for hereditary non-syndrome deafness, recessive gene deletion causing cystinuria, renal stones and retardation and more.

New mutations in known genes, identified in Bedouin population including MSUD, GSD 1 and 3, growth hormone deficiency, cogenital glaucoma, Niemann-Pick type C and more.

Various research projects are currently involved with functional studies of most identified genes, utilizing state of the are genomics, proteomics and bio-informatics technology, as well as linkage mapping of several other disease genes such as for arthrogypiosis, neurological disorders, familial male infertility and others.

New research projects involve multifactorial disorders such as psychiatric diseases, neural tube defects, cogenital heart defects, celiac disease.

Future plans include the establishment of stem cell research in collaboration with researchers in the fields of pharmacology, virology and developmental genetics.

In addition, the Genetics Institute is engaged in community based socio-anthropological research in collaboration with epidemiologists and behavioral sciences researchers of the Ben-Gurion University, specializing in socio-cultural issues involved in the delivery of genetic services in traditional communities.

**Selected Publications:**


### Pulmonology

**Head:**
Prof. Asher Tal, MD.

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### Senior Staff members:

Dr. Micha Aviram, MD.

Dr. Soliman Alkrinawi, MD.

### Department Facility:

The service includes the following:

**Asthma Outpatient Clinic:** All three physicians, once a week, see children aged 1 week to 18 years, diagnosis and treatment of asthma, including pulmonary function tests, challenge tests (exercise and Histamine), allergy skin tests, etc.

Education of the patients with teaching of inhalation techniques and proper use of inhalers is done by the physician and nurse clinic.

**Cystic Fibrosis Clinic:** Headed by Dr. Aviram, staff includes also the clinic nurse, a dietician, a social worker, and a physiotherapist. About 30 children with CF are followed in our clinic.

**Bronchopulmonary Dysplasia (BPD):** Once a week we follow preterm infant who developed post prematurity chronic lung disease. RSV immunizations are given during winter months by the pediatric pulmonary clinic staff to all eligible infants.

**Sudden Infant Death Clinic:** Follows infants who have experienced life threatening events, or have a family history of SIDS. Indication for home monitoring and home monitoring follow-up are provided, as well as teaching cardiorespiratory resuscitation of the family members.

**Sleep Disordered –Breathing Clinic:** Infants and children with snoring and suspected sleep apnea are examined. Indication for surgical intervention with or without a sleep study (over night polysomnography) is determined. When needed, treatment with continuous positive airway pressure (CPAP) is instituted with follow-up. We have a four beds sleep laboratory with emphasis on the pediatric age group.

**Flexible bronchoscopy:** We have a bronchoscopy suite in which elective (once a week) and urgent diagnostic bronchoscopies are performed (>200 a year). Bronchoalveolar lavage is done when needed, and all procedures are recorded on a video recorder for further analysis and/or teaching.

In addition, the staff of the Pediatric Pulmonary Unit is available for routine consultations from the three pediatric wards, as well as the PICU, NICU and neonatology (>13,000 deliveries per year), Pediatric emergency department, and Day-hospital Unit.

All three staff members are involved in teaching of pediatric residents, medical students, as well as students of the various schools of the Faculty of Health Sciences.
**Research Interests:**

Our main research activity relates to clinical trials.

**Childhood Asthma:**

In the past we have been interested in the monitoring of theophylline in children with asthma (Aviram M et al Pediatrics 80;894,1987; Tal A et al, J Allergy Clin Immunol 86: 238-243, 1990) but more recently our interest is in the use of corticosteroids in childhood asthma. Since the early 1980’s we studied the effect of corticosteroids and beta-agonist in infants with acute wheezing (Tal A et al, Pediatrics 71; 13, 1983), as well as infants and children with acute asthma (Tal A et al, Pediatrics 86: 350; 1990). In order to explore the systemic side effects of inhaled corticosteroids we have measured 24 hr cortisol in a group of asthmatic children and did find a significant systemic effect (Phillip et al, Pediatr Pulmonol 12: 84, 1992). In another study we did not detect any systemic effect on the immune system caused by long term inhaled corticosteroids (Levy J et al, J Allergy Clin Immunol 95: 806, 1995). The next project involved deposition studies of drugs inhaled by young children using a spacer with mask (Tal A et al, J Pediatr 128: 479, 1996), and recently we were involved in a multicenter study, the first one which shows the beneficial effect of the combined treatment of budesonide and formoterol in children with chronic asthma (Tal A et al, Pediatr Pulmonol 34: 342, 2002).

**Current research:** We are currently interested in the effect of leukotriene receptor antagonist in young infants with RSV bronchiolitis, and the effect of short courses of inhaled and/or oral corticosteroids in children with acute asthma exacerbations.

Dr. Soliman Alkrinawi is studying the long term follow-up of young children with post adeno-virus bronchiolitis obliterans (about 30 patients).

We are also involved in preliminary studies that are aimed to explore the role of mutations in the Toll-like receptor-4 on the prognosis of infants with acute RSV bronchiolitis.

In addition, we are involved in few multicenter studies regarding influenza prevention in asthma, and long term inhaled steroids in childhood asthma.

**Pediatric Sleep Medicine:**

Our main research interest in Pediatric sleep medicine is the clinical implications of obstructive sleep apnea syndrome (OSAS) in children. We have previously shown a high percentage of right ventricular dysfunction in children with OSAS, that was completely reversible following adenotonsillectomy, the treatment of choice in children with OSA (Tal A et al, Pediatr Pulmonol 4; 139, 1988).

We have also shown that growth is affected in children with OSAS because of decreased secretion of growth hormone (Bar A, et al, J Pediatr 135; 76,1999).

We have recently completed another project to study the polysomnographic changes after adenotonsillectomy in children with OSAS (Tal A, Chest 2003, in press).

Currently, we are prospectively evaluating neurocognitive and behavioral functions in children with OSAS before and after adenotonsillectomy. The first paper describing a significant improvement in cognitive functions in children ages 5 – 9 year of age following surgical treatment of OSA has been recently accepted to the Journal of “Sleep” with minor revisions, and our current research involves younger children (ages 2- 5 years).

Another aspect of OSAS in children is the economical impact of OSAS (healthy care utilization). We are involved in studies that are examining this aspect in collaboration with the Head of the sleep laboratory (Ariel Tarasiuk PhD) and the department of Health Care policy in the Faculty of Health Sciences (Haim Reuveni MD). The first paper has recently indicated an increase in health care utilization of children with OSAS (Reuveni C, Pediatrics 110:68-72, 2002), and the second, showing a significant reduction in health care utilization following
adenotonsillectomy is provisionally accepted with minor revisions (Tarasiuk A, Pediatrics 2003).

One of our fellows, Dr. Aviv Goldbart, is currently in Louisville, Kentucky, studying the effect of intermittent hypoxemia on the brain in the rat model. On his return (July 2004) we plan to continue this basic science line, and expand our research on OSAS to the animal model and molecular biology level.

**Cystic Fibrosis:**
Research in CF is basically involved our participation and collaboration in studies that involve patients from few centers in Israel. Drs. Tal and Aviram are co-authors on a number of important publications conducted by several Israeli researchers.

Since the last 5 years, Dr. Aviram is mostly involves in these collaborations that its fruits can be seen in his list of publications.

### Selected Publications:


# Nephrology

**Head:**
Prof. Daniel Landau, MD.

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## Department Facility:

The Pediatric Nephrology Unit of the Soroka University Medical Center was recognized as an independent unit in 1997. It is composed of a team of 2 physicians (D.L. and Hanna Shalev, MD) and a specialized R.N. (Juliette Haddad) and takes care of children with a high variety of diseases in the interest of a Pediatric Nephrologist, including the “regular” chronic renal diseases as well as a high number of genetic renal diseases, some of them originally described by this team. The team provides, in collaboration of other units in our hospital, provides a comprehensive care for children with end stage renal disease, transplanted patients and predialytic therapy.

## Research Interests:

Prof. Landau has established a long standing interest in 2 major fields:

1. Diabetic nephropathy and the specific role of the GH-IGF system in it. This is done using animal models as well as cell culture systems. The work is done in collaboration with Dr Yael Segev from the Dept. of Microbiology and Immunology at BGU-FHS. Dr Segev has a research facility located at the Soroka campus, enabling a fruitful collaboration over the past 8 years.

2. Phenotypic and genotypic characterization of unique genetic renal diseases prevalent in the Negev area, mainly among the Bedouin population. This has lead to the description of several new clinical entities, including: the infantile variant of Bartter syndrome and deafness (later identified to be due to mutations in the newly identified Barttin gene); the familial type of hemolytic uremic syndrome due to complement factor H deficiency; the familial type of hypomagnesemia and secondary hypocalcemia (due to the recently identified TRPM6 gene); the infantile type of nephronophtisis; an autosomal dominant nephropathy (shown to be linked to AD-MCKD gene locus in Chr. 1).

## Selected Publications:


17. Shalev H, Ohali M, Kachko L, **Landau D**. The neonatal variant of Bartter syndrome and deafness: preservation of renal function. Pediatrics, accepted for publication
**Hemato-Oncology**

**Head:**
Prof. Joseph Kapelushnik, MD

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**Senior Staff members:**
Dr. Asher Moser, MD

**Fellows:**
Dr. Benjamin Gezunthait, MD  
Dr. Miri Ben-Harush, MD

**Department Facility:**

The Pediatric Hemato-Oncology Unit of Soroka University Medical Center was established in 1998 and includes in patients, out patient diagnosis, treatment and follow up services. Built as part of the new pediatric facility, the division will have access to all exiting pediatric facilities.

Treat all hemato-oncology problems, including leukemia, coagulation disorder, genetics diseases (such as thalassemia) and oncology cases, such solid and brain tumors.

In the near future a serves for stem cell transplantation will be open.

**Research Interests:**

- Minimal residual disease in leukemia.
- Drug resistant in solid pediatrics tumors.
- Stem cell transplantation.
- Stem cell plasticity.
- C.D.A TYPE-1
- Angiogenesis in pediatrics solid tumors.
Selected Publications:


**Endocrinology**

**Head:**
Prof. Esther Liberman, MD.

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**Senior Staff members:**
Dr. Eli Hershkowitz, MD

**Fellow:**
Dr. Neta Leventhal, MD

**Department Facility:**
The Pediatric Endocrinology Unit of Soroka University Medical Center was established in the 1980’s.

This unit comprises three clinics, namely:

1. **General Endocrinology**
2. **Growth Disorders**
3. **Diabetes**

The Unit functions as a treatment center and consultation for children of the Negev suffering from diabetes and/or hormonal disorders. Our educational services include teaching relevant health issues in schools, community clinics, individual family education and instruction, as well as students’ educational requirements as specified by the medical school.

1. **General Endocrine Clinic** – The clinic is the sole provider of Pediatric Endocrine services in the Negev. We treat children with the following:
   - thyroid function abnormalities
   - prococious/delayed puberty
   - developmental disorders of genital organs
   - female hirsutism due to hormonal or metabolic disorders
   - growth disorders due to hormonal bone disorders
   - oncological patients with hormonal deficiencies due to chemical or radiation therapies

2. **Growth Disorders Clinic** – The Ministry of Health acknowledges the Endocrine Unit as a treatment center for growth disorders with growth hormones. There are numerous patients requiring growth hormone therapy in the Negev, especially due to genetic abnormalities.

3. **Diabetes** – The unit treats over 200 patients with diabetes. Besides the medical and nutritional therapies the treatment includes a great deal of educational efforts and long-
term follow-up. The unit emphasizes advanced treatment to prevent the metabolic complications of diabetes using insulin pumps, continuous glucose sensors, intensive home monitoring programs and novel treatment strategies using new Insulin.

**Research Interests:**

- Clinical follow-up study of Congenital Adrenal Hyperplasia Due to 11 Hydroxylase Deficiency in the Jewish population.
- Genetic characteristics of 17,20 desmolase deficiency. Joint study: M. Zachmann the Children’s University Hospital & the Molecular Genetics laboratories Zurich – 1997
- The basis of the genetic defects of P450 Aromatase gene transcription causing the Aromatase excess syndrome.
  laboratory of molecular biology and human genetics
  E. Leiberman in collaboration with R. Parvari Ph.D
  – Ben-Gurion University –2000
- Sleep studies in diabetics
  E. Leiberman, N. Leventhal
  Ben-Gurion University –2002-2003
- Obesity & type II Diabetes in adolescents
  E. Leiberman, E. Herskowitz
  Ben-Gurion University –2003
  Efficacy of Glucovance in adolescents with type II Diabetes
  E. Leiberman, E. Herskowitz, N. Leventhal
  Ben-Gurion University –2000-2003

**Selected Publications:**

6. Pipel, D., Leiberman E., Zadik, Z., Karel, C. Effect of growth hormone treatment on


# Gastroenterology and Nutrition Unit

**Head:**  
Zvi Weizman, MD  
Professor of Pediatrics  

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**Senior Staff Members:**  
Dr. Baruch Yerushalmi, MD  
Dr. Mauricio Binsztock, MD

**Department Facility:**  
The Pediatric Gastroenterology and Nutrition Unit of the Soroka University Medical Center provides all common diagnostic and therapeutic services in this field, for in-patients as well as for out-patients.

**Research Interests:**  
- Infant nutrition  
- Effects of probiotics and prebiotics on the GI tract  
- Genetics of celiac disease  
- Acute diarrhea: ORS; persistent diarrhea  
- Acute pancreatitis  
- Nutrition education

**Selected Publications:**


**Intensive Care**

**Head:**
Prof. Shaul Sofer, MD.

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**Senior Staff members:**

Dr. Tamar Bernshtein, MD
Dr. Danni Golan, MD

**Department Facility:**

The Pediatric Intensive Care Unit (PICU) of the Soroka University Medical Center was established in 1983. It is one of the busiest pediatric intensive care units in Israel with a constant occupancy rate of over 100%. The rate of admissions increased steadily over the years from 200 in 1984 to more than 500 in 2000.

The PICU receives an unparalleled diversity of most severe cases including traumas, near drowning accidents and burns. The unit also deals with severe infectious diseases, cardiac, respiratory and renal failure, and patients who have undergone open cardiac surgery and neurosurgical procedures. Many conditions are indigenous only to the Negev. Each day children’s lives are saved from scorpion stings or snake bites or intake of poisonous plants which are rare in other geographical areas.

The permanent staff of the unit includes intensive care pediatricians, nurses and social worker who accompany the child and his family throughout the hospitalization, trying to alleviate their anxiety and fear. The parents are allowed to remain near their child for unlimited periods and are even encouraged to help in simple procedures. This kind of familial atmosphere in the PICU helps the child and his family to cope with the severe and acute physical and mental situation.

Due to the high quality of care administered by our outstanding staff, the unit can record a 95% survival rate and the calculated “pediatric risk of mortality score” of the Soroka Pediatric Intensive Care Unit is on a level which equals that of the major university medical centers in North America and Western Europe.

The construction of the new PICU will be based on state-of-art conception. It will cover an area of 650 square meters, with 12 beds, a nurses’ station, utility rooms, storage space, parents’ room, offices, etc.
**Research Interests:**
Hemodynamic respiratory and metabolic changes following scorpion envenomation (human and experimental animal model), Epidemiology, pathophysiology and treatment of infantile hypothermia, Carbamate and Organophosphate intoxication in children.

**Selected Publications:**


# Neonatology

**Head:**
Prof. Ehud Zmora, MD

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**Senior Staff members:**

Agneta Golan, MD. – Director of Neontal Neurology Unit.

Daniella Landau, MD. – Director of Newborn Unit.

Kyla Marks, MD. – Senior Neonatologist.

Eilon Shani, MD. – Senior Neonatologist.

**Department Facility:**

The department of Neonatology is the largest of its kind in Israel. It provides services to 13,000 infants born each year at the Soroka Medical Center. The department has 24 beds of tertiary Neonatal Intensive Care Unit (NICU) and 34 beds of the Special Care Unit (SCN). Besides, included in the department are 103 beds for normal newborn infants who stay after birth with their mothers for 2-5 days before they are discharged home.

The department of Neonatology serves a special population of the Negev desert in southern Israel: 60% of the infant born in our institute are Bedouins. Among the Jewish population there are groups of new immigrants from Ethiopia and Russia. As a result of marriage between members of the same family (consanguinity) there is a high rate of congenital malformations and inherited diseases among the Bedouin infants. The consequence of it is a high rate of infants' mortality in the same population.

There are five board certificate neonatologists and one neonatology fellow on the senior staff of our department. Five residents of the Pediatric training program of the division of Pediatrics rotate in our department simultaneously and are exposed to the busiest neonatal service in the country.

The department of neonatology at the Soroka Medical Center is one of the pioneering institutes in quality improvement in health systems in Israel. It won numerous prizes for quality improvement projects in medicine, including a special prize of excellence given by the president of the state of Israel. Its activities are based on quality management and it had

**Research Interests:**

Main research topics of the senior staff:

1. **Biophysical properties of lung surfactant:** The research is performed in collaboration with the institute of biotechnology engineering and the department of chemical engineering off the the Ben-Gurion University of the Negev and is run by Ehud Zmora MD.
2. **The Neonatal Neurology research group** (Agneta Golan MD, Kyla Marks MD, and Eilon Shani MD) runs several research projects including:
   - Neurological outcome studies in premature infants (Agneta Golan MD).
   - Development of EEG in premature infants after birth (Eilon Shani MD).
   - Near Infrared Spectroscopy studies of brain blood perfusion (Kyla Marks MD).
   - Body and head cooling after birth asphyxia (Kyla Marks MD).
   - Integrated EEG (Cerebral Function Monitoring – CFM) in Hypoxic Ischemic Encephalopathy in newborn infants. (Eilon Shani MD).

3. **Studies based on the National Neonatal Database**: Statistical studies on morbidity and mortality until discharge home of Very Low Birth Weight (VLBW) infants are run by members of the senior staff on various topics.

4. **Collaborative multi-center studies**: Senior staff members take part in multi center collaborative studies with the department of Obstetrics and Gynecology, the department of Pediatric Surgery and with other NICUs in Israel and abroad.

5. **Studies in human engineering**: Studies in Ergonomics in collaboration with the department of Industrial Engineering of the Ben-Gurion University of the Negev (Prof David Shinar) are conducted by Ehud Zmora MD:
   - Nurses behavior patterns in reaction to audio alarms in the NICU.
   - Human factors in medical errors.

6. **Creating information systems in Neonatology**: Creation of computerized information systems as an aid to quality management of the department of Neonatology, in collaboration with the department of Industrial Engineering of the Ben-Gurion University of the Negev (Prof Yael Idan) are conducted by Ehud Zmora MD.

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**Selected Publications:**


Metabolic Disease

Head:
Dr. Eli Hershkowitz, MD

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Senior Staff members:
Prof. Shimon Moses, MD
Prof. Nava Bashan, MD

Department Facility:
The Pediatric Metabolic Diseases Unit of Soroka University Medical Center was established to assist in the diagnosis and management of children with inherited metabolic disorders. Such diseases are common among the children in our area due to high rate of consanguinity. The patients are seen at the metabolic clinic and during hospitalization for acute crisis of their illness. The unit is regarded as a national referral center for patients who suffer from glycogen storage disorders - a group of disturbances in sugar metabolism. The pediatric metabolic laboratory (head: Prof. Nava Bashan) provides an invaluable support in the enzymologic studies of the patients.

Research Interests:
- Mapping the gene for the new syndrome of congenital hypoparathyroidism, dysmorphism, and growth and developmental retardation (HRD).
- Clinical, biochemical and genetic characterization of an apparent new syndrome: cystinuria, retardation, (growth & development), and seizures- 2p16 deletion syndrome.
- The Endocrine basis of CIPA - congenital insensitivity to pain and anhidrosis.

Selected Publications:


Department Facility:

The Pediatric Rheumatology Unit of the Soroka University Medical Center was established in 1984. The staff members of the unit follow about 800 patients a year. Most of them suffer from FMF and other Periodic Hereditary Fevers, Lupus, Kawasaki, Dermatomyositis and JRA patients.

The staff members of the unit also provide consultation services for the Pediatric ER and the departments of pediatrics.

Research Interests:

FMF, Chronic Periodic Fever Syndromes, Brucella Arthritis, Kawasaki Disease

Selected Publications:


**Immunology**

**Head:**
Prof. Jacob Levi, MD

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**Department Facility:**

The Pediatric Immunology Unit of Soroka University Medical Center was established in 1985.

**Research Interests:**

- The genetic determination of primary immunodeficiency syndromes
- Evaluation of the mechanisms involved in primary immunodeficiency
- Evaluation of the multi systemic involvement of patients with Insensitivity to pain with anhydrosis.

**Selected Publications:**


**Neurology**

**Head:**
Dr. Zamir Shorer, MD

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**Department Facility:**

The Pediatric Neurology Unit of Soroka University Medical Center provides extensive outpatient clinic, consultation to the pediatric wards (including neonatology, emergency units and intensive care unit) and consultations to the community clinics.

Teaching –

1. Course of Clinical Neurology – 4th, 5th and 6th year medical students in the Faculty of Health Sciences, Ben Gurion University in the Negev, Beer Sheva.
2. Course of Neuroanatomy, 4th year medical students, branch of Columbia University, New York, USA.
3. Course of Neuroanatomy, school of physiotherapy, Faculty of Health Sciences, Ben Gurion University in the Negev, Beer Sheva.
4. Course of Neuroanatomy, Paramedical students, Faculty of Health Sciences, Ben Gurion University in the Negev, Beer Sheva.
5. Course of Clinical Neurology, Raccanati Nursing School, Faculty of Health Sciences, Ben Gurion University in the Negev, Beer Sheva.

The Pediatric unit also provides services of decoding muscular and nerves histology for the patients.

**Research Interests:**

- Electro-Physiology
- Epilepsy
- Muscle disorders,

**Selected Publications:**


Toxicology

Head:
Dr. Matityahu Lifshitz, MD.

Telephone: 08-6403621
Fax: 08-6400736
E-mail: matyl@bgumail.bgu.ac.il

Department Facility:
The Pediatric Toxicology Unit of Soroka University Medical Center was established in 1991, and it is the only poisoning center in the southern part of Israel. This center provides consultation services to all medical departments in the hospital, Community Clinics, Chemical Industries, and Ministry of Labor and Environment.

Research Interests:
- Poisoning in children and adolescents.
- Organophosphate and Carbamate poisoning.
- Unlicensed and off-label use of medications in pediatric patients.
- Drugs monitoring in human tears.

Selected Publications:
**Dermatology**

**Head:**
Dr. Haim Reuveni, MD.

*Telephone: 972-8-6403405  
Fax: 972-8-6403318  
E-mail: reuveni1@bgumail.bgu.ac.il*

**Department Facility:**

The Pediatric Dermatology Unit of the Soroka University Medical Center was established in 1995 in order to promote develop and advance education, research and care of skin disease in all pediatric age groups. To support children with dermatological diseases and improving the care of children. To educate physicians about advances in pediatric dermatology.

**Research Interests:**

- Atopic Dermatitis.
- keratinocyte cultures.

**Selected Publications:**


Clinical Pharmacology

Head:
Prof. Rafael Gorodischer, MD.

Telephone: 972-8-6400298/546
Fax: 972-8-6400016
E-mail: rafaelg@bgumail.bgu.ac.il

Department Facility:
The Pediatric Clinical Pharmacology Research Laboratory is located within the facilities of the Faculty of Health Sciences, Ben-Gurion University of the Negev.

Research Interests:
- Effect of disease on the pharmacokinetics and metabolism of analgesics and antipyretics in children.
- Drug utilization in children, adverse drug events in children.
- Micronutrients and drug effect in children.

Selected Publications (out of over 100 in peer-reviewed journals):
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