

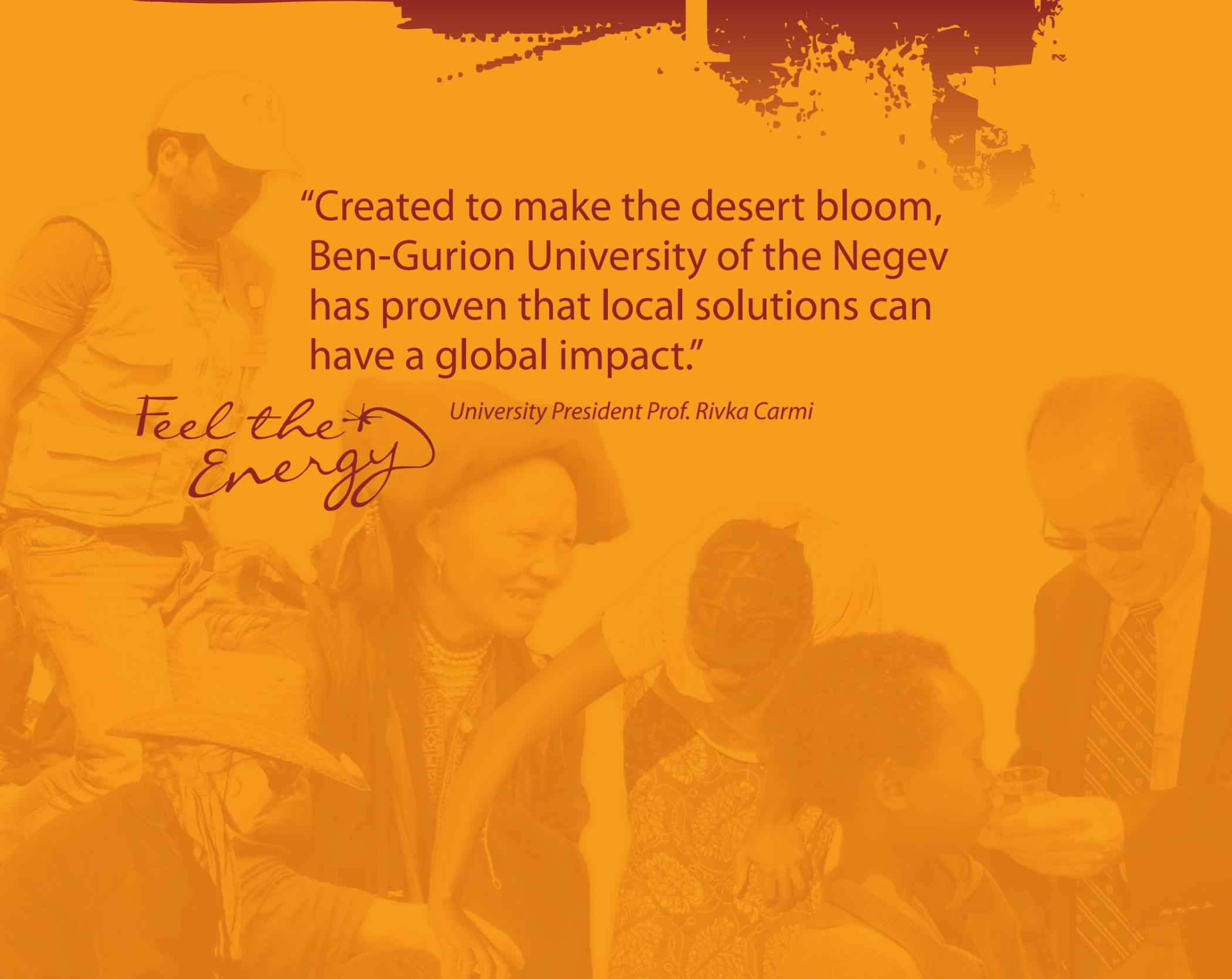
Ben-Gurion University of the Negev

# making a g**lobal** impact

"Created to make the desert bloom,  
Ben-Gurion University of the Negev  
has proven that local solutions can  
have a global impact."

*Feel the\*  
Energy*

*University President Prof. Rivka Carmi*



# ecological impact



## Seeds of Hope

After 30 years as a researcher at BGU, Prof. Dov Pasternak moved to Africa a decade ago to be closer to those he had been trying to help. Over time, he has perfected a system for low pressure drip irrigation, which he developed in Beer-Sheva and called the "African Market Garden (AMG)." Since then, he has shepherded it through testing to rapid installation.

"In 2001, I resigned my position as the Head of the Institute for Agriculture and Applied Biology at Ben-Gurion University to move to Niger to work at the International Crops Research Institute for the Semi Arid Tropics (ICRISAT) as a principal scientist. There, I perfected a system for low pressure drip irrigation and tested it in eight West African countries. The African Market Garden is now spreading rapidly, with more than 10,000 units installed or under installation in dry West Africa," Pasternak writes from Africa.

Intent on promoting many different ideas and projects, Pasternak notes his involvement in developing a system for utilization of degraded lands, called the "Bioreclamation of Degraded Lands." Degraded lands are restored and used by women's groups to produce rain-fed vegetables and fruit trees.

Mass dissemination started in 2011 with 45 systems now in operation in Niger.

With a background in agricultural studies, Pasternak also introduced 11 quality vegetable varieties and 30 fruit tree varieties to dry West Africa and helped disseminate a highly productive variety of the Moringa tree in Niger.

In recognition of Pasternak's impact, USAID has initiated two large food security programs, one in Niger and the other in Senegal, based on the technologies and crops that he introduced and developed. In both projects Pasternak is acting as Senior Advisor.

"I also introduced an improved variety of a fruit tree domesticated in India called in Israel the Indian Sheizaf in four Sahelian countries – Senegal, Mali, Burkina Faso and Niger. This fruit tree is spreading fast in all these countries, particularly Niger. It provides nutrition and income to farmers in the poorest places in this region," he continues, noting the satisfaction he has received from seeing so many different ideas being implemented successfully.

## Saving Lives Through Clean Water

Adam Abramson takes field research very seriously. He arrived in Simango Village, Kazungula District, Southern Province of Zambia in January 2011 for two years to empower over 5,000 residents toward prosperity through developing sources of clean water with income-generating gardens – all on a microfinance platform, as part of his doctoral work at the Albert Katz International School for Desert Studies.

His dissertation project is hands-on, while analyzing whether the financing approaches for cost recovery they are attempting to implement could be applicable throughout Africa. Extreme poverty and recurring water-related diseases such as cholera and diarrhea have trapped many underserved rural areas in a vicious cycle. Like much of rural Zambia, 98.5 percent of residents of the Simango area – the village "catchment" area includes 16 villages that all use the Simango Village school – earn less than \$1.25 a day, and many go hungry through the long dry season as they depend wholly on their yields of rain-fed maize to meet their subsistence needs and household expenditures.

Water sources are commonly contaminated or located far from households. A very recent survey carried out in collaboration with the Rural Water Development course taught by Prof. Noam Weisbrod from the Zuckerberg Institute for Water Research revealed that of the 70 percent of households in the area that use improved water sources, only 35 percent keep that water free from fecal contamination by the time it is consumed.

Using microfinance, Abramson is offering families a chance to improve their lives by implementing a three-step self-financed water improvement program: to develop a clean water source, plant a garden, and earn income.

## Potential Long Term Impact

By creating income opportunities in combination with improved water sources, short-term health impacts are more likely to be sustained long after the initial project is implemented. Also, since every improvement is self-financed, users can choose their own upward path, according to Abramson.

"It has been exciting to see people in Simango catch the vision that they can do it themselves. The church has already signed up and is ready to garden to pay for its own borehole," he adds.

After graduating from Harvard University in 2004 with a degree in environmental science and public policy, Adam came to BGU to do his master's degree at the Albert Katz International School for Desert Studies, where he graduated with an M.Sc. in Desert Studies, specializing in Water Resources and Management. Captivated by the topic, he stayed on to do his Ph.D. He and his family will be in Zambia until October 2012.

To learn more about the project:  
<http://www.globalgiving.org/projects/abundant-zambia/>

**Field log:** June-July 2011: Currently, three community gardens are now underway to help residents finance various water improvements.

Unfortunately, just last week there was a surprisingly extreme frost that killed the 15,000 pepper plants that were planted in the first garden. This is discouraging for all of us, including the community, but we are determined to replant and continue the efforts.

We have started to implement the BioSand Water Filter program, and have all of the materials now to construct them in Simango. These low-cost household water filters can be produced locally from cement, sand, crushed stone and quarry dust.

With the help of the Rural Water Development course, which came to Simango for eight days in early July, we have drilled our first borehole by hand using a drilling approach developed by Water4.

We have surveyed over 170 residents and are interested in how they make choices regarding water improvements, including several alternative financing approaches which are in fact a central part of the research program.

## Syllabus: Rural Water Development

**Problem:** Over 1.1 billion people living without a safe water supply; 2.4 billion people having no sanitation facilities; 2.4 million people, primarily children, dying annually from diseases associated with the lack of access to clean water.

**Solution:** Members of the Zuckerberg Institute for Water Research (ZIWR) developed a course on Rural Water Development taught by Prof. Noam Weisbrod, which features Israeli experts who work in Africa and other developing countries.

The course includes a ten-day trip to a rural area in a target country in Africa where an appropriate readily available technology is implemented. Launched in 2009, the first group of students travelled to Ethiopia. In 2010 they worked in Samfya in Northern Zambia, in cooperation with the NGO Water-For-All. This year students were in Simango, a village in Southern Zambia, where they worked with Adam Abramson, who is doing research in the area.

"During our recent trip to Simango, we were working on two hand-dug wells, one of which was a failure, and one a success," Weisbrod recalls. "Pumping and slug tests were also carried out in the few existing wells to define the hydraulic properties of the local aquifer. This information currently does not exist and is essential for future development of the area as efforts are being made to introduce irrigation to the local farmers," he explains.

"We were also involved in educational activity in the local school, teaching kids about environmental health issues and using various pre-designed games and activities to emphasize the importance of simple hygiene procedures, such as using clean water.

"Additionally, together with the local population, we made an extensive unique survey to test for *E. coli* in various water sources being used for drinking in the local villages around Simango, as well as in the containers used for drinking in each of the surveyed huts. More than 190 samples were collected and analyzed within 24 hours using a new technique that enables fast and semi-quantitative results even in a rural village in Africa, without the need for a microbiology laboratory that obviously is not available in the area. The results are being statistically analyzed, but from preliminary data, the disadvantages of surface-exposed water resources (rivers, open pits, etc.) became very clear in comparison to deep boreholes. Moreover, the impact of the way some of the local families clean their drinking containers on the quality of their water was noticeable," he adds.

These trips successfully fulfilled two major goals, says Weisbrod. The students are exposed to water-related problems in rural areas in developing countries that they couldn't learn about in books, while they are able to genuinely help – even if in a small way – introduce their know-how in solving water-related problems to otherwise forgotten communities.



Prof. Dov Pasternak shows African farmers how to prune their grapes



## The Sand Seas of Uzbekistan

Doctoral student Shimrit Maman from the Department of Geography and Environmental Development is one of the few researchers in the world studying the sand seas of Uzbekistan. Using state-of-the-art remote sensing methods, she is able to map regions that have otherwise defied measurement.

Maman was the first researcher to accurately map the 500,000 square kilometers of sand dunes in central Asia using Optical Stimulated Luminance (OSL) technology, which analyzes sands made of quartz through their exposure to sunlight. It is part of the ecological mapping of the area.

"Determining whether a sand sea is stable or active has ecological implications for the entire region," she explains.

"I've already contended that the assertion that the sand seas are active is incorrect, and that they are in fact stable," she adds. Using commercial satellite imagery and Google Earth Pro, Maman was also able to determine that the Russian mapping of the region was inaccurate.

Based on her study, researchers, including her Ph.D. advisors Prof. Dan Blumberg and Prof. Haim Tsoar from the Department, can now begin to assess when the climatic change that stabilized the sand sea occurred, and what its implications are.

Maman is part of a larger study on desertification in the region being

run by Dr. Leah Orlovsky of the Department of Solar Energy and Environmental Physics at the Jacob Blaustein Institutes for Desert Research (BIDR). Orlovsky is coordinating a four-year ecological research project in Kazakhstan, Turkmenistan and Uzbekistan that began in 2009 and is funded by the European Union to investigate the pattern of airborne salt-dust deposition across Central Asia, and set up a database for monitoring the region. The multinational project is developing monitoring systems that are expected to serve as a basis for regional strategy and tactics to mitigate adverse change.

For the duration of the project, several working groups dealing with aeolian – or wind-caused – erosion from sand and dust storms, will study these processes within the participating countries with the aim of suggesting possible land reclamation and plant-life recovery measures. Maman's work is critical to the project.

"Shimrit's work contributes a much better understanding of the long-term environmental changes in Central Asia, which hosts one of the largest sand seas in the world but is still very much understudied compared to the wealth of information that can be gathered there on climate and environmental change," says Blumberg.

# health impact

Feel the Energy



## Preventing the Next Viral Outbreak

"Infectious disease is the greatest problem in the world today from a medical standpoint," virologist Dr. Leslie Lobel declares. Having trained as a physician and virologist at Columbia University, Lobel came to Israel to find a job that would send him where he wanted to be – helping people cope in Uganda and Kenya and identifying the next generation of viral threats in the cradle of virology – central Africa.

### A Matter of Survival

"In Africa, it's about day-to-day survival, which focuses one's research and provides an impetus to help effect change through science," he says enthusiastically.

Lobel, a member of BGU's Center for Emerging Diseases, Tropical Diseases and AIDS, who is studying the immune response to the Ebola virus, says the disease is spreading farther and farther away from the equator, which should be a warning to the developed world in this age of global warming and globalization. Other infectious diseases are also rampant in the developing world, and some that have been wiped out in the developed world may be returning in new strains.

"Ebola is 60 to 90 percent lethal. It's not completely clear why. Where is Ebola when it is not killing people? Likely in bats, but that's never been proven," he notes. Rabies related viruses have also been killing people in South Africa, he says, and they may pose a new threat to the developed world in the future.

During his time in Africa, Lobel is learning what the citizens of Uganda and Kenya really need so that he can adjust his research accordingly. As a result, he has begun focusing on animal diseases and on producing cheap diagnostics.

"Africans mostly need help with animal diseases, although much of the industrial world focuses on the human ones. Animal diseases have a direct impact on the food supply and therefore on nutrition," he explains, which in turn has a direct impact on human health. "In addition, animal viruses play a role in social stability and security within central Africa, as lack of food is a cause of much social unrest. Therefore being a virologist in Africa at times requires wearing several hats: that of scientist, diplomat and physician."

### Manipulating Viruses

Part of Lobel's fieldwork includes tracking the viral environments. He tries to figure out how viruses are transmitted and where they may lie dormant. He claims that viruses could possibly play an important role in biology and medicine that isn't solely disease related.

"Certain viruses should be eradicated for global health and stability. We don't need most of the pathogens. But if we wipe them out totally, it could possibly affect evolution over hundreds of thousands of years to come," he says.

"From an anthropomorphic standpoint, viruses don't want to become too lethal because then they would kill off their host. Influenza is a great example. After the Spanish Flu of 1918 killed off so many, it then selected for a less lethal variant of its own accord," says Lobel. Finding a virus's ecosystem and manipulating its micro environment could be the key to preventing outbreaks of infectious disease. "The same resistance to therapeutics that doctors have found in bacteria appear in viruses as well," he notes. That is why cheap diagnostics are so necessary for African countries as they battle outbreak after outbreak. This will enable tracking of viral disease throughout Africa and in the developing world so that we can predict what might emerge in the developed world in the future.

Lobel believes that the future is bright for virology. "Our task is now to train the next generation and make students aware of the fact that infectious disease is now the most important discipline in medicine and will impact on global health in a way that no other discipline in science will."

Dr. Leslie Lobel (right) with Ugandan colleagues in Kampala



## A Classroom in Africa

Working together with MASHAV – Israel's Agency for International Development Cooperation at the Israel Ministry of Foreign Affairs, researchers and clinicians from the Faculty of Health Sciences and the Soroka University Medical Center are now regularly teaching "update lectures" in advanced medical fields throughout Africa.

Last winter, Dr. Arnon Broides, a specialist in pediatric emergency care, traveled to the Ethiopian capital to present six lectures on clinical immunology to students and physicians at Black Lion Hospital, the largest public hospital in Addis Ababa.

Dr. Inbal Fuchs, Global Health Clerkship Coordinator at the Medical School for International Health (MSIH), explains that the University has an existing relationship with the coordinators of clerkship programs around the world. "I wrote to our coordinator in Ethiopia, Dr. Amha Mekasha, and he requested a lecture series by a pediatric clinical immunologist," she notes.

Black Lion Hospital treats more than 350,000 patients a year in a country where the infant mortality rate is 79/1,000, one of the highest in the world. It is estimated that more than 8 percent of the population of Addis Ababa is HIV positive. It is also the largest teaching hospital for the University of Addis Medical School in Ethiopia, with 350 residents and 600 interns.

Interestingly, the Ethiopian doctors had requested a series of lectures on a topic that was largely impossible for them to implement given the current state of their laboratories, Broides says.

"It was mostly about knowledge enrichment. They don't have the capability right now to actually implement clinical immunology. I taught them immunology from the basics to the newest discoveries," he notes.

Broides explains that the doctors had good basic background knowledge, but that some of their treatments resembled those acceptable in Israel 30 years ago rather than the most recent treatments.

"Their treatment of asthma is the same as that recommended here 30 years ago, but that's the point – to help improve their knowledge and practice."

The doctors were very appreciative of Dr. Broides' time and efforts.

In addition to the lecture series, "MASHAV also agreed to deliver a donation of used medical textbooks belonging to MSIH students through diplomatic mail, and after authorization by the Black Lion Hospital library, those books were flown to Addis," adds Fuchs, who coordinated Broides' visit and the book donation.

## The Anatomy of Change

When Prof. Ze'ev Silverman from the Faculty of Health Sciences stepped off the plane in Kathmandu, he and his wife looked forward to helping a fledgling medical school develop its anatomy courses and to fulfilling a long-held wish on their "bucket list" – seeing Mt. Everest from close up. They quickly learned that summer in Nepal is monsoon season and the Himalayas are hidden by thick clouds, but were much more successful with their primary mission.

Silverman spent a month in Nepal to help train medical students and young faculty members at the Patan Academy of Health Sciences (PAHS) – a two-year old medical school that was founded to train physicians willing to work in the country's underserved rural areas. Silverman was the latest in a series of BGU physicians and educators who are helping the PAHS realize its mission. Based in Nepal's third-largest city, Patan, PAHS seeks students with a more idealistic bent, often from lower socio-economic areas.

"Life expectancy in Kathmandu or Patan is about 65 years; outside the cities, it's around 40," Silverman explains. "A lack of medical services in rural Nepal is behind the disparity," he adds. While other medical schools exist in the country, PAHS, started by a group of visionary physicians led by Dr. Arjun Karki with the help of many people, including BGU's Prof. Mick Alkan, is offering significant financial incentives to try and change the equation and bring quality medical services to the countryside. In addition to scholarships to socio-economically disadvantaged students, students are accepted to study at PAHS only if they commit to a rural posting for two to four years after graduation.

### Valuable Lessons for All

Another element that distinguishes PAHS from most other medical schools in Nepal is its teaching approach. "PAHS has adopted a Problem-Based Learning (PBL) framework rather than a traditional systems-based curriculum. The emphasis is on student learning, much of which is done outside of the classroom," he explained. "But the school is urgently in need of everything," says Silverman, "including teachers, books, bandwidth... but they make up for a lot with talented, dedicated people."

Silverman sees in PBL advantages and drawbacks. "Frontal lecture time is only about a third of what it would be here. That's really very little and leaves lots of room for holes in their knowledge. On the other hand, while I was figuring out how to help my Nepalese colleague, Mr. Satish Ghimire, teach his anatomy courses, I found that it really forced me to organize and prioritize – to teach only what was essential."

Even as Silverman was giving the new medical school the benefit of his 25 years of teaching experience, he realized that he was himself learning some valuable lessons that he could bring back to BGU. "I'd like our Human Anatomy course to incorporate some of the positive features of PBL," he says. "And hopefully, beginning this year, it will."

"Over and above any personal satisfaction, I really felt that my work at PAHS was a form of *tikun olam*," he said. If physically up to it, Silverman who suffers from MS and walks with a crutch, hopes to return again this winter. "Everest beckons," he says.



## Unraveling the Causes of HIV in Africa

It would not be an exaggeration to talk about Prof. Zvi Bentwich and a life's work that could impact millions in the same sentence. The internist and immunologist set out on his path 30 years ago, when he became the first Israeli researcher to specialize in AIDS. Along the way, he noticed a strange corollary among Ethiopians with HIV/AIDS – 80 percent of them also had intestinal worms.

### Identifying Parasites

Bentwich is convinced that intestinal parasites play a key role in relation to HIV, tuberculosis and malaria. The worms activate the immune system, but also force it to burn out faster, he believes. They therefore make the host more susceptible to infection, less able to cope with the infection and render the vaccination less effective.

A study in primates found that those infected with Schistosomiasis (a type of intestinal parasite), were 17 times more likely to get infected with the simian strain of HIV, which lends support to his suggestions.

Intestinal parasites are part of a grouping called Neglected Tropical Diseases (NTDs), which plague a quarter of the world's population. They usually affect the poorest of the poor since their prevalence is closely linked to poor personal hygiene and sanitation.

### Applying the Results

Bentwich has taken the research he did in Israel and applied it in Ethiopia. The country of around 80 million has an NTD infection rate of 30-40 percent. Starting with three pilot projects in coordination with local NGOs, which reached 30,000 people, he expanded to one of the country's smaller cities and has eradicated worms in nearly the entire population of 250,000.

The program was so successful that Bentwich and the Center for Emerging Diseases, Tropical Diseases and AIDS (CEMTA), which he founded at BGU, have become advisors to the Ethiopian Health Ministry.

The next step is to raise funds to continue the deworming project. Simultaneously, Bentwich would like to raise enough money to do the definitive study on the connection between worms and AIDS, TB and malaria. He believes that deworming could significantly reduce the African population's susceptibility to AIDS. Its added advantage is that it is an inexpensive process to fund.

"There is no health-related intervention which is as cost-effective. The drugs are very cheap, and administering them once or twice a year yields very good results. The cost for AIDS treatments per year per capita is hundreds of dollars. For TB, it's tens of dollars. For NTDs, it's just a dollar per year per capita," Bentwich says.

US President Barack Obama recently included NTDs in his Global Health Initiative, so Bentwich is hopeful that the attention and funding needed for this essential, yet simple process will now be available.

Bentwich's Center has also brought many BGU students to Africa under its auspices. Students from the Medical School for International Health and the Africa Centre have taken part, as have students from Duke University in the US. Ethiopians have even come to BGU for graduate studies.

Bentwich comes from a prominent family dedicated to the public good in Israel. He is the grandson of Dr. Hillel Yaffe, a legendary malaria fighter for whom the medical center in Hadera is named. His father, Joseph, was an Israel-Prize winning educator.

### A Reason for Hope

"It's very heartwarming work. A little effort can affect a lot of people. Worms affect health and mobility and are a developing world problem," Bentwich says.

Bentwich sees the beginning of a serious change on the African continent in the last ten years. "Generic drugs have arrived and they're cheap. There have been massive amounts of aid given and more to come. All in all, it's made a significant difference," he declares.

# Feel the Energy



6

**Martina Israelsson**  
Exchange student from  
Malmö University, Sweden  
"The people are very  
warm and welcoming"

**Jeremy Kaplan**  
Ginsburg-Ingberman  
Overseas Student Program,  
from The College of New  
Jersey, USA

"It's amazing to see all  
these students from  
different countries and  
that we are all getting  
along so well"

**Asif Khan**  
Doctoral student at the  
Albert Katz International  
School for Desert Studies,  
from Uttarpradesh, India

"The laboratory is  
highly respected and  
has international  
collaborations with  
important universities"

**Lani Warsaw**  
Ginsburg-Ingberman  
Overseas Student Program,  
from Salisbury University,  
USA

"It is about experiencing  
Israel"

**Ben Flotken**  
Ginsburg-Ingberman  
Overseas Student Program,  
from Hendrix College, USA

"It's the people and the  
history – you get to feel  
the spirit of it all"

**Karin Rath**  
Exchange student from  
the University of Teacher  
Education, Styria, Austria

"You have no choice but  
to use Hebrew when you  
are in Beer-Sheva"

**Bing Bai**  
Master's student at the  
Albert Katz International  
School for Desert Studies,  
from Henan, China

"Being part of the  
international community  
on the Sede Boqer  
campus enriches the  
research culture"

7

**Narissa Puran**  
Medical School for  
International Health,  
from New York, USA

"The program integrates  
excellent medical  
training with culturally  
relevant issues"

# educational impact



## A Multicultural Education

Nine Northeastern University health science majors spent a month at the Leon and Mathilde Recanati School for Community Health Professions experiencing multi-cultural medicine first-hand, program organizer Anita Finkelman says.

Finkelman was the Northeastern representative behind the program, which was organized locally by the Department of Nursing.

"The students were amazed at the whole experience – superb lectures, field trips, the welcome that they received from all, the campus, and their connections with students," Finkelman wrote in an email upon returning to Boston. "Three of the students had been to Israel on a Taglit program, and they said this was better – it didn't involve running around Israel for 10 days barely able to take in what was happening. All the students felt they had a once-in-a-lifetime opportunity to live for a month in Israel and to get to know Beer-Sheva."

"The students commented that some of the strengths of a Northeastern study abroad from an organizational perspective were: a small group made this a better experience and enabled them get to know each other, as they did not know each other before the trip; the small size offered them more in-depth experiences and more opportunities to discuss issues in depth; and it was an inter-professional group of students and faculty leaders," Finkelman continues.

One of the highlights of their month here was a meeting with nine Bedouin nursing students.

"The students had the opportunity for a private meeting, student-to-student with nine Bedouin women nursing students. I left them alone not knowing really what would happen. When



## Regional Disaster Preparedness Training

Disasters recognize no political borders. The Syrian-African Fault Line, a major generator of earthquakes, runs along the Jordan River Valley between Israel and Jordan. A large earthquake could have devastating consequences on both sides of the border. For the past two years, the Israeli Magen David Adom (MDA), together with the Jordanian Red Crescent (JRC), have sent personnel to participate in a BGU-planned training program.

Under the maxim, "He who saves a single life actually saves the whole world," emergency aid personnel from Israel and Jordan participated in a joint training exercise this past spring to simulate the potential for cooperation and preparedness after an earthquake in the region.

### A Joint Effort

The exceptional event brought together nearly two hundred people – including trained professionals from both countries and academic faculty and students from the University – to simulate the creation of a camp for "internally displaced persons" at Timna.

"Watching members of the JRC build a tent with two BGU students as if they had been working together forever gave me a huge feeling of satisfaction," says Dr. Bruria Adini, a member of the Department of Emergency Medicine and the academic director of the Jordan-Israel Collaboration in Disaster Preparedness and Management program that brought 14 Jordanian students to BGU to do their bachelor's degree in Emergency Medicine. "There was

this incredible energy as both the Israelis and Jordanians found their common language and worked together. The cooperation was real and not just something we had talked about," she says.

The Jordanian students spent two years studying in a special English-language program while integrating with the Israeli students in the parallel program. They are now completing internships in Jordan organized through the Red Crescent.

The exercise took place during the 4th conference of the Development and Strategy Forum (DSF) comprising key officials from MDA, JRC and BGU that serves as a platform for regional cooperation and was held in the presence of members of the International Committee of the Red Cross and the European Union, who have supported the cooperative initiative since it was founded over two years ago.

H.E. Dr. Mohammed el-Hadid, President of the Jordanian Red Crescent and past Chairman of the Standing Commission of the International Red Cross, who has been involved in promoting cooperation between the two societies, commends the DSF initiative and BGU's role in creating it. "The seed that was planted here by Ben-Gurion University is growing into a tree that will provide the shade for us to sit under and which will protect us in the future."

BGU is the only university in Israel to offer academic degrees in Emergency Medicine and is home to PREPARED: The Center for Emergency Response Research, headed by Dr. Limor Aharonson-Daniel.

## A Global Citizen

As a self-described "global citizen" fascinated by different cultures, MIT student Ting Mao leaped at the opportunity to come to Israel for an internship on the MISTI-MIT program 2011. Born in China, schooled in Singapore and now a junior majoring in Economics and Math at MIT, Ting is helping Dr. Oren Rigbi of BGU's Department of Economics conduct traffic enforcement measures evaluation research.

"When the opportunity to go overseas arose, I thought it would be a great cultural experience." I'd never been to the Middle East, it was unknown and mysterious," the cheerful 21-year-old says, "I wanted to explore it while I'm young."

Ting first became interested in Jewish and Israeli culture after taking a Holocaust History class in her freshman year. "History seems to be an inseparable part of Jewish life, which is really interesting to me," she remarks.

Ting believes that it is her own multi-cultural background that made her interested in other cultures. Born and raised in a medium-sized city in Hubei in south central China, she moved to Singapore at age 14 to attend middle and high school on a scholarship. From there, she moved to the US for college at MIT.

"My many years overseas have exposed me to many different people and I take every opportunity to meet more," she says. Ting lives with Israeli roommates and constantly looks for more people to talk to about Israeli culture and their experiences. She signed up for a Salsa class because she couldn't find ballroom dancing.

Ting would like to do economic research professionally after she graduates and was looking for a worthwhile experience to further her aspirations. MISTI-MIT turned to Rigbi to request that he take on the summer intern.

"It was an opportunity to reveal Israel to someone – my way of doing something good for the country. In addition, she comes from a good school and her background seemed relevant," Rigbi says. He started her on her own project when she arrived and, while it won't be completed during the span of her internship, it will further the overall research.

Ting is enjoying the challenge.

"One of the biggest challenges in economic research is to clean up the data, and it's a chance to hone some solid skills," she says, with several computer programming manuals spread out in front of her.

Regarding working with Rigbi, "he's giving general help and advice and he's approachable. He's also trying his best to give me a good experience here in Israel as a whole," Ting says.

The only thing missing?

"I love to cook Chinese food, but I haven't been doing much cooking here since I can't find the right spices in Beer-Sheva."



## BGU over Berkeley

Ilan Jen-La Plante, 25, and Brian Moshofsky, 27, have made what many would consider a surprising choice – they left their Ph.D. programs in Chemistry at the University of California, Berkeley to pursue them in the Department of Chemistry and the Ilse Katz Institute for Nanoscale Science and Technology (IKI) at BGU.

They did this in order to study with Dr. Taleb Mokari, a new recruit to BGU and a member of both the Department of Chemistry and IKI, whom they met while he was doing his post-doctoral fellowship at Berkeley. Mokari has already won international recognition for his work in nanomaterials and is the recipient of a Fulbright fellowship, a prestigious European Research Grant and the Krill Prize.

"This is an opportunity to understand what goes into building a lab and what goes on in a smaller university," Jen-La Plante says.

"We were a cog in a big machine at Berkeley. Here we decide what to build, design or buy for our lab," Moshofsky points out.

While Moshofsky thought he would miss the famous speakers that Berkeley draws, "I was pleasantly surprised by the really big name speakers that come to our symposiums here."

Neither Moshofsky nor Jen-La Plante had heard of BGU before Mokari's offer, "but the brand new labs and equipment were a big draw," he adds.

Moreover, "the work/life balance is better here," Jen-La Plante adds. "There is a lot of competition and pressure at Berkeley that you don't feel here," Moshofsky concurs.

Aside from the academic incentives, they were both eager to come and experience a new language and culture.

"Israel commands more media attention than it should, given its size, and I wanted to see for myself," Moshofsky says.

"There's an interesting cultural cross section. It has inspired me to read more history. In the US, the cities are maybe 300 years old. Here, there are cities that are 3,000 years old," Jen-La-Plante adds.

Despite the threat of terrorism, they actually feel safer in Beer-Sheva than Berkeley. "We would get emails about armed robberies or laptop theft around campus almost every day. It didn't feel safe to walk around at night," according to Moshofsky.

"In Israel, we feel much safer in day-to-day life." Part of the reason is the warm community atmosphere they encountered in Beer-Sheva. "People are outside eating dinner, there's a lively community," he says.

"Here, people throw open their homes to you. I'd like to bring that cultural trait back to the US," Jen-La-Plante declares. The two will be staying in Beer-Sheva until the end of their doctoral studies in about three years.

## International Academic Programs

Ginsburg-Ingberman  
Overseas Student Program (OSP)  
Short-term academic programs  
taught in English

Medical School for International Health  
A four-year medical degree in collaboration  
with Columbia University

Albert Katz International School  
for Desert Studies  
M.A./M.Sc. in Desert Studies,  
M.Sc. in Hydrology & Water Quality,  
and a Ph.D. program

The International Master of Arts Program  
in Middle East Studies (MAPMES)  
A one-year multi-disciplinary M.A. program  
that provides in-depth knowledge of the  
Middle East

The Honors MBA Program  
An intensive one-year MBA program,  
with a focus on finance, entrepreneurship  
and marketing

Foreign Literature and Linguistics  
Bachelor's and master's degrees in English

International Summer School  
This German-speaking program offers students  
of various disciplines and backgrounds the  
opportunity to learn the Hebrew language in a  
rich academic environment

The Politics of Conflict Program  
A one-year M.A. program offered by the  
Department of Politics and Government that  
examines the different ways in which global  
and local processes have formed numerous  
sites of conflict, both within Israeli society and  
in its relations with its neighbors

The Israel Studies International Program  
A master's program that integrates historical  
and contemporary perspectives and focuses on  
the emergence of Zionist ideology, the building  
of the Yishuv (the pre-state Jewish community  
in Eretz Israel), and the State of Israel

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I came back in the noise level was high with much laughter. One of my students said: 'Anita if you want us to stop you are going to have to tell us to.' It was amazing to see 18 young women from two totally different worlds talking – and they were not talking about professional issues but young women issues. They are now communicating via email and Facebook," she recounts.

Finkelman's own connections to BGU extend to her family as well. She and her husband, a doctor, have both given lectures at the Faculty of Health Sciences, and their daughter is a third year medical student at BGU. "I will be submitting a proposal to the Northeastern International program in the fall for another study abroad at BGU in 2012," she concludes.

# social impact



## Africa Centre Student Delegations Put Theory Into Practice



BGU student Inbar Kupersmidt with local youth in Santchou, Cameroon

Our belief is that the best way to learn about anything is from personal experience. That is why one of the main focuses of the Centre is the volunteer program in Africa, through which students travel to Africa for an extended period of volunteer work in local communities. From the initiation of the program in 2006, B.A. graduates have traveled to communities in West Africa and Southern Africa, where they work in a range of development projects for a minimum of three months. Each delegation works with the people of the community to determine priorities and project goals. We thus teach students that development should be approached from the bottom up, and projects should be based on local priorities, knowledge and resources. Approached in this way, students listen and learn from the communities about their needs and goals, and aim to develop projects that can have a lasting impact through local support.

### What We Do in Africa

Projects are developed by merging the community's needs with the students' knowledge and expertise. As a result, volunteer work varies from education and teaching on a wide range of subjects (such as English, biology, health issues, computers); establishing or expanding community centers that provide workshops and classes to children, women and elderly; and organizing youth movements and instructing teachers. The delegations have fostered a spirit of cooperation with local communities and leadership, and continue to maintain contact after leaving.

### Computers and Wikipedia

While the program has been running, we have been aware of the growing need for access to computer technology and instruction in the communities visited thus far. As a result, recent delegations have set up computer centers in these communities with hardware and software donated from generous contributions from Hamakor – The Israeli Society for Free Software and Open-Source Code – and the Israeli Wikimedia Foundation. Donated equipment has been installed with open source programs and offline Wikipedia in the relevant language. These centers have benefitted many members of the community, from adults to children.

### Where Have We Been So Far

#### Tanzania - 2006

The first delegation of 10 students who volunteered in Tanzania were those who initiated the program along with Tamar Golan. In the first month, each volunteer was sent to a different village where they stayed with a local family and learnt about the community's interests and needs. They taught in local schools and ran afternoon activities for children and youth. In the next two months they established a community center for young women. The center continues to operate with local staff and runs various classes and workshops for the young women of the surrounding villages.

#### Angola - 2007

Seven BGU graduates travelled to Angola in the following year. They learnt Portuguese prior to their arrival and learnt about the country's history from local lecturers during the first week of their stay. They volunteered in the Wako Kungo-rural development project. The students gave seminars on alcoholism, aids and hygiene, taught English and ran after-school programs for children and youth.

#### Cote d'Ivoire and Ghana - 2009

**Cote d'Ivoire** - In September 2009, five graduates travelled to Cote d'Ivoire. The group included one nurse, two human sciences graduates and two electrical engineering graduates. They worked in the same village for three months on projects that included organizing a youth movement, seminars for teachers and adults on computers and public health and environmental projects such as compost toilets and garbage removal. **Ghana** - This delegation included four students who also stayed in a small village and took part both in formal teaching in the schools and in afternoon activities. The students established a library and computer room which was run by local youth. The young men and women from the village continue to remain in touch with the volunteers.

#### Benin, Angola and Cameroon - 2010

**Benin** - This delegation included seven students who volunteered at SONGHAI – a farm and school of agriculture for over 400 young men and women. The group assisted in projects and events and initiated an informal educational program. They also volunteered in a local orphanage. **Cameroon** - The delegation of seven students stayed in Santchou, Cameroon and worked in cooperation with the local NGO - Edingue. They established a community center, where they taught classes for children who could not attend school. They also ran computer and recreation activities for children and adults. They founded a young women's program and initiated science fairs at the local schools. **Angola** - The five volunteers to Angola stayed in Wako Kungo and Huambo. In the first week they were introduced to the country's history and politics by Angolan lecturers. During their stay they ran and organized various activities for children, youth and adults in the community. In Huambo, they volunteered in an orphanage and in a rehabilitation center for landmine victims.

## ... Yovo Yovo Bonsour! Sava Bien? Merci ...

Written by BGU student volunteers in the area of Porto Novo, Benin in November 2010

Yovo – that's what you call a white person here in Benin. Wherever you go – yovo. The moment you enter into view of a local, you will immediately be hailed: yovo! The truth is that the locals are very polite compared to the locals in some other developing countries.

### A Common Purpose

In Songhai as well, where we are staying, they greet each other every day: Bonjour! Bon soir! Bon travail! Thus the days pass in the youth village and it appears that we are learning to understand this place. Or maybe not? Do we really understand how things work in this village? Do the people of Songhai understand our honest and innocent intention to help? Or maybe the gap between the white man and the black man is so great and deep that even if we stay here for many years there will still be that suspicion, which exists between the races, that the black man sees the white man as a financial object, a source of wealth and a plane ticket to help him escape this continent! The man who comes to enjoy and take advantage of the continent without suffering daily life here. The path to building trust is still long but we are confident that in the end the locals will understand that we share a common purpose – to help the residents of the continent to support themselves with dignity in their land.

### Training for Leadership

The educational project is designed to teach the students in the youth village about leadership, entrepreneurship and teamwork, to give them the practical tools to cope after their training at the youth village. This is our "flagship" project – the reason we came and the way we believe we can leave our mark and have a lasting effect. However, the stage of coordinating expectations with the heads of Songhai has taken longer than we originally expected. We didn't take into account that every organization has bureaucracy – and in fact we encountered no small amount of difficulties.

There's no doubt that we have a joint purpose with the educators at Songhai, but from their perspective, they want to be sure that our program jibes with the spirit of the place – that we aren't harming the youth. The basis of the education here is conveyed through specific work – by example. We, on the other hand, are attempting to generate open and independent thinking, not by supplying a magic solution to a specific problem, but by developing tools for out-of-the-box thinking which can be applied to various problems they are likely to face in the future. Like the parable about the fish, we are trying to teach them the different techniques of fishing and not bring them the fish itself.

The Songhai educators want to work with us – but only if we do it their way, and there is no doubt that patience is the key word here. Until now, despite all that we have planned, we have only actually done one icebreaker activity with the students. We also held one Israeli-themed evening in the form of a Lag Ba'Omer bonfire, with pitot and za'atar, potatoes and African-Israeli music playing in the background.

### Bringing Happiness to the Children

Nevertheless, because of our strong desire to implement our educational program, we have also contacted the "Yedidya" orphanage which belongs to the "Tree of Life" organization which is half an hour away from Porto Novo in a village called Sakete. The place is a warm home for 30 children, aged 5-18, who either lost their parents or whose parents do not have the means to take care of them. The children were happy to meet us and welcomed us with open arms and smiles from ear to ear, singing and shouting. We try to get to the orphanage as often as we can, and so far we have run a number of activities on hygiene and illnesses, dreams and ambitions, cooperation and teamwork. It warms the heart to see the happiness on the children's faces over the little that we can give them – a drawing, a single game. It causes us to ponder the wealth that we received that we often take for granted.

Every time we discover anew the image of Israel in the locals' eyes – utopian, a powerhouse of knowledge and technology, particularly agricultural. Apparently there are religious elements to their perception and the Bible stories reinforce them. That's why we encounter extraordinary requests. The first week after we arrived, a young man came to the village. He had seen us on TV and his life's dream was to study agricultural development in Israel. He came armed with a notebook full of his achievements and his resume and asked our help in contacting the relevant authorities. We are doing what we can.

## The Banjara Gypsies

Dr. Phina Motzafi-Haller has studied cultures on nearly every continent. Always undertaking her ethnographic studies through a feminist lens, Motzafi-Haller has studied women's culture in Botswana, analyzed Canadian feminism, explored Middle-Eastern and Arab feminist philosophies, researched Israeli women of Mizrahi working class background and most recently begun a new study among an Indian nomadic people called the Banjara Gypsies.

The Banjara Gypsies are a nomadic group and the study, initiated in conjunction with an Indian sociologist, aims to examine the access of women in the group to the health services of the state. Motzafi-Haller hopes to conduct a comparative study using Israel's own nomadic people – the Bedouin – in the same framework.

According to Motzafi-Haller: "The concept of 'safe motherhood' has been at the core of our proposal, and we were hoping to compare the parameters of safe motherhood, as well as the access of Banjara women to resources, with those of the Bedouin women in Israel."

A member of the Department of Man in the Desert at the Jacob Blaustein Institutes for Desert Research, Motzafi-Haller has focused on both the theoretical and the applied aspects of her multiple desert ethnographies. Theoretically, she insists that rather than hold all cultures up to a single Western feminist standard, one must examine the situation of women within their own culture. She has also worked as a consultant and taught many classes on the ways in which gender intersects with the international development arena.



## From Israel with Love...

The digital age affords luxuries to the developed world that the developing world just cannot afford. When the University purchased digital subscriptions to three journals, the Zalman Aranne Central Library was left with a surplus of hard copies.

Rather than just recycle them, librarian Ilona Geller wanted to find somewhere to donate them. Through Prof. Emeritus Hanan J. Kisch's contacts, she reached out to the Foreign Ministry with the idea of donating them to universities in the developing world. The reaction she received was extremely positive and the Ministry promised to take the journals off her hands and distribute them to several universities in Africa.



Ben-Gurion University of the Negev was established in 1969 with the aim to bring development to the Negev, a desert area comprising more than sixty percent of the country. The University was inspired by the vision of Israel's first prime minister, David Ben-Gurion, who believed that the future of the country lay in this region.

Today, Ben-Gurion University is a major center for teaching and research, with campuses in Beer-Sheva, including the Marcus Family Campus, as well as in Eilat and Sede Boqer, where Ben-Gurion lived in his final years and is buried. Close to 20,000 students are enrolled in the Faculties of Engineering Sciences, Health Sciences, Natural Sciences, Humanities and Social Sciences, the Guilford Glazer Faculty of Business and Management and the Kreitman School of Advanced Graduate Studies. Major University research institutes include the National Institute for Biotechnology in the Negev, the Ilse Katz Institute for Nanoscale Science and Technology, the Jacob Blaustein Institutes for Desert Research with the Albert Katz International School for Desert Studies, and the Ben-Gurion Research Institute for the Study of Israel and Zionism. New interdisciplinary programs are redefining the boundaries between the Faculties and attracting outstanding students. Its world-famous Joyce and Irving Goldman Medical School has become a model for community-oriented and global medicine, while social work and education degree programs supply Beer-Sheva and the region with the majority of its social service personnel.

In keeping with its mandate, Ben-Gurion University plays a key role in promoting industry, agriculture and education in the Negev. University-sponsored community colleges and pre-academic and continuing education programs make learning accessible to greater numbers of Negev residents, while a myriad of community action programs involving over half of the student body benefit the various communities in the region.

Ben-Gurion University is part of the global community, with researchers sharing their expertise internationally in such fields as hi-tech, bio-tech, medicine, arid zone agriculture, solar energy, water resource management, nanotechnology and more. The University welcomes exciting challenges in innovative fields of research and strives to bring new opportunities to Beer-Sheva and the Negev while continuing its pursuit of academic excellence and expanding its contribution to the community.

*Feel the\*  
Energy*



**Ben-Gurion University of the Negev**

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