BGU alumnus Ziv Sherzer has organized several missions to restore the eyesight of members of Mongolia’s Eagle Hunters (See Page 2).
While some academic collaborations remain on paper, others become living partnerships, thanks to the exchange of students and staff. BGU signed a cooperation agreement with Duy Tan University in Da Nang, Vietnam, which came alive this summer when Nancy Hurvitz and Keren Levitin from the Department of Nursing of the Recanati School for Community Health Professions were dispatched to teach at the newly created nursing school there.

"The visit to the Women and Children Hospital in Da Nang was a time warp and opened our eyes to a different reality. It was a combination of old equipment and technologies in the intensive care departments and old approaches and treatment strategies," they said.

The School of Nursing at DTU is only two years old. The highlight of the two-week teaching session was definitely the simulation, which enabled the students to think through relevant practices. The scenario was translated from Hebrew into Vietnamese, enabling the students to practice their skills in a near real-world situation.

The two BGU nurses also taught classes in basic nursing, ethics, critical thinking and evidence-based practice, and coached the faculty on how to develop a teaching staff. The final week was devoted to instruction in new teaching techniques and their implementation. The response to their classes was very positive, the two concurred.

"There is no doubt that this visit was a fascinating and important experience. It is a first-rate anthropological and professional experience and we are sure that there is room to pursue the connection and our continuing contribution as a department to further nursing in Vietnam," they agreed.

Eagle Eyes

Though BGU alumnus Ziv Sherzer has traveled all over the eastern hemisphere, he was inexplicably drawn to Western Mongolia and to the eagle hunters who live in the mountains.

"There was something magical about these people, their honesty, their welcome," he reminisces in his garden in Sede Boqer, where he works as the guiding center director at the Sede Boqer field school. When his adoptive grandmother Elda wished for an operation to remove her cataracts in order to see her grandchildren before she died, Sherzer swung into action. "When her eyesight returned, what she told me moved me more than anything else that has happened to me."

After three years of effort, he organized an expedition in 2011 consisting of a group of American, Indian and Israeli surgeons. They performed 120 operations on cataracts and other eye ailments in rural Western Mongolia, with the support of Virtue Foundation, a New–York-based NGO. Two years ago, another delegation was sent and, this year, Sherzer was determined to expand this unique mission to an area that completely lacks modern medicine.

This past May, the graduate of the Albert Katz International School for Desert Studies returned to Western Mongolia, 1,600 kilometers from the capital Ulan Bator, to broaden the expedition to treat people from four different districts, instead of only two.

"The 2014 mission was the most successful of those carried out by the Virtue Foundation over the past three years. With the same team and equipment, they were able to perform 172 operations," Sherzer reports.
The Medical School for International Health, in affiliation with Columbia University Medical Center, hosted three Ethiopian medical students in their final year of studies for an extended internship earlier this year. The three students from Gondar University spent two months doing rounds at Soroka University Medical Center and taking classes. While MSIH has offered its own students clerkships in the developing world in their last year, this is the first time that medical students from the developing world have been brought to Israel to get a glimpse of state-of-the-art medicine.

That glimpse was a great motivator for Naomi Teshome, 23, of Addis Ababa. "It makes me want more for my country. It has strengthened my commitment," she says. Ethiopia does not have enough doctors for its population of 10 million, the three explain. Specialists are lacking, as is equipment. "I saw technology in use on a daily basis here that until now I had only seen in books," Teshome wryly remarks.

For example, "echocardiographs would really make a huge difference if we had portable ones. It’s expected to replace the stethoscope," she avers. But Teshome is hopeful about the future of medicine in Ethiopia. "It will for sure catch up and it will be a quicker transition then."

Dr. A. Mark Clarfield, director of MSIH, was very enthusiastic about this pilot project. "This is a natural extension for BGU in the spirit of Beer-Sheva. We have long turned our face to the community in southern Israel. Now we are extending this to our neighbors in Africa. We thought that it would be better for our students and for our Ethiopian partners if there was more of a back and forth between our two universities. These three students certainly learned a great deal while they were with us in Beer-Sheva, but they also taught us much as well."

Tailor-Made Course for Chinese Health Officials Created

BGU led a unique workshop on emergency preparedness and response for Chinese senior officials from Shanghai. The workshop was designed to enhance relations between Israel and China, while bolstering global disaster management through international cooperation.

In early September, twenty professionals from the Office for Health Emergency Management of the Shanghai Municipal Commission of Health and Family Planning, led by the director of the Office, He Zhichun, participated in a Health Emergency Management Training Course, a unique workshop created by BGU’s Faculty of Health Sciences Department of Emergency Medicine and the PREPARED Center for Emergency Response Research, headed by Dr. Limor Aharonson-Daniel, in collaboration with Israel’s Agency for International Development Cooperation (MASHAV), the Ministry of Foreign Affairs and the Ministry of Health.

During the three weeks of the course, the participants were exposed to cutting-edge knowledge in disaster management. The course was designed and run by Dr. Bruria Adini of the Department of Emergency Medicine; it consisted of lectures presented by leading Israeli professionals and visits to relevant agencies, including first responders such as Magen David Adom, hospitals, the Home Front Command and many others. This workshop is the first of several such workshops planned for Chinese officials at BGU in the coming years.

 Initiated by the Office of International Academic Affairs and Overseas Student Program in cooperation with the Health Systems Management Department, the Department of Emergency Medicine and the PREPARED Center (which won the Council for Higher Education tender), the Global Health Summer Course provides students with a comprehensive learning experience that combines classes, guided tours and practical workshops. Students are also assigned to a weeklong hands-on practicum in an Israeli institution that applies Israeli innovations in global public health.

"The course has been very good," said He Zhichun, praising the educational experience. "We have learned some new methods inspired by your country’s approach. We have been particularly impressed with the risk assessment used in Israel for health emergencies and the measures to take in response to this assessment."

For more information about the course, please contact study@bgu.ac.il.
Dr. Itai Kloog and his colleagues are creating cutting-edge air pollution and air temperature predictive models to map out the distribution of air pollution and temperature. Utilizing satellite imaging, the models offer far larger and more accurate coverage areas than ground-based monitors. Kloog uses the models in epidemiological studies of the effects of air pollution and extreme climate on mortality, hospital admittances, birth outcomes, diabetes and more.

Kloog, of the Department of Geography and Environmental Development, develops these models to predict the amount of micro-particles in the air and to predict air temperature fluctuations. “We are advancing the field of epidemiology and risk assessment. Our environmental exposure models are used in health outcome studies of global import. The World Health Organization (WHO) recently listed air pollution as the thirteenth leading cause of death in the world – claiming the lives of two million people each year,” says Kloog.

He and his team are in high demand. They have analyzed the State of Massachusetts, New York City and its environs, and have begun collaborations with groups at the University of Michigan and Brown University, and in Mexico, France, Italy and the EU.

Kloog uses data from satellites, whose imaging capability is advanced enough to approximate the amount of particles in a one-kilometer column. “The problem with ground-based monitors is that they attribute the same value to someone living in an urban downtown area, right next to the monitor, and to someone who lives 20 kilometers away in the suburbs. There were whole swaths of land where the residents were just being left out of epidemiological studies, because the models weren’t sophisticated enough,” he explains.
Silencing Snail Fever with Prawns in Senegal

Amit Savaia, now 28, went to Africa for three months of volunteering after completing his undergraduate degree in science. Along with four other students from BGU, he helped build a computer platform to connect African farmers to their neighbors.

What truly tugged at his heartstrings was the problem of schistosomiasis, the “snail fever” caused by ingesting parasites. This disease causes the characteristic swollen belly in African children.

While mortality rates from snail fever are low, it is the second most socioeconomically devastating disease in Africa, after malaria. The chronic illness can damage internal organs and lead to slowed growth and cognitive development. In adults, it carries an increased risk of bladder cancer.

Savaia vowed to help Africa beat this problem. While earning a master’s degree on his way to a Ph.D. in Desert Studies and Biotechnology at BGU this year, he worked with the Bill & Melinda Gates Foundation-funded organization Project Crevette to develop a natural way to stop schistosomiasis in Senegal – using cultured prawns based on research conducted at BGU.

He is concentrating his efforts on the local watering hole in the Lampsar Village in Senegal. Savaia tells ISRAEL21c that it is next to impossible to get the villagers to stop swimming and urinating in the water, which keeps the parasitic cycle going.

Says an impassioned Savaia: “Schistosomiasis, also known as bilharzia, has no sustainable cure or treatment. The only drug used today to heal the people is an old drug called Praziquantal (PZQ), which kills the mature worms inside the body. There is no vaccine, even though many companies are trying to make one.”

The back story is that a river in Senegal was dammed and, consequently, female prawns – the natural predators of snails – were prevented from laying their eggs. The parasite-carrying snail population in the watering hole skyrocketed, and the snail-fever parasite grew with it.

Working on the project since 2012, Savaia proposes using advanced breeding methods to reintroduce prawns into the river. The catch is that these prawns are particularly delicate and hard to grow, especially in captivity. “Not many people have done it before and we had only one reference on how to do it,” he says.

But he has much hope for the approach. It is innovative, sustainable, and creates a triple winning situation for the farmers, villagers and fishermen, he says.

Once he is able to offer proof of concept, “it could be applied in many more countries. These prawns are distributed almost all over the western coast of Africa. Senegal isn’t the only place where a dam caused such a problem.”

Savaia’s academic supervisor, Prof. Amir Sagi, has done decades of research on prawns and crustaceans. Savaia also works with Prof. Dina Zilberg, Ben-Gurion’s expert on aquatic animal health.

When the prawns are reintroduced into the dammed river, they successfully eat the snails that harbor the parasite and a negative cycle is stopped. The question is how to turn this basic research into a project that Africa can do for itself.

Savaia was strongly affected by witnessing, first hand, the damage done by the parasites.

“When you take people’s urine samples and filter it in order to find out how sick they are [by counting the number of eggs in the sample], we find urine as red as blood. This results from the eggs sitting on their kidneys and intestines.”

Savaia’s dream is big, but he’s unstoppable. “We want to establish farms to teach farmers how to produce the prawns so they can sell some on the market as a crop, because they are delicious, and the rest will be released into the river by agreement with the Health Ministry.

“This way, everyone will be happy,” concludes Savaia.
Let’s get wet! The Hydro Camel team of engineering students competes in an international competition with their autonomous submarine. The sub has to complete a specific set of tasks underwater – all without hands-on direction from its creators.

The BGU chapter of StandWithUs created the Trail adventure this year, bringing a delegation of journalists, bloggers and photographers from around the world to experience the Israel National Trail (INT), exploring the culture and history of Israel along the way. The international “trailers” were joined by fellow Israeli travellers from all walks of life, embodying the warmth of Israeli hospitality.
Engineering students join BGRacing to build a Formula One racecar to enter into student competitions in Austria and Italy as their final undergraduate project. This year they will build two cars: the regular one and, for the first time, an electric one.

These iGEM students have a sense of humor, but are deadly serious about their research. The team competed in the iGEM, a prestigious international competition in the field of Synthetic Biology and Genetic Engineering. Their project is the Inner Doctor – a personalized program to treat the Metabolic Syndrome.
The Tempus project on Transnational Academic Careers in Child and Youth Welfare (TACHYwe) focuses on international comparative social work through student exchanges, courses, and e-learning environments. Headed at BGU by Prof. Julia Mirsky, Chair of the Charlotte B. and Jack J. Spitzer Department of Social Work, the BGU team works in partnership with Israeli colleagues at the Hebrew University of Jerusalem, Sapir Academic Center and Haruv Institute, and with the Universities of Hildesheim and of Trier, Germany, The Free University of Bozen-Bolzano and Fondazione Emanuela Zancan, Italy, Moscow State Regional University and Don Technical University, Russia, and Trinity College Dublin, Ireland.

The aim of the project is the internationalization of social work with children and youth and the sharing of knowledge to enhance student training.

“TACHYwe is an exceptional opportunity for us, the scholars, and even more so for the students, to encounter different approaches and interventions, different services and social welfare policies, and to discover at the same time how much we all have in common,” explains Mirsky.

The department’s Ph.D. students have traveled to the Former Soviet Union and Italy for field work and to Ireland for a summer course. Hagar Binoun-Chaki and Meriam Haj-Houri visited The Free University of Bozen-Bolzano as part of the EU-funded project. Binoun-Chaki’s dissertation focuses on grandparents of autistic children in Bedouin society, was struck by how much country-specific ideologies matter in child welfare.

“I thought child welfare is about universal issues. Though research has shown the important influence of culture, I only knew about it theoretically.

“The issue I found most fascinating was the inclusion of children with special needs. Almost everyone we met emphasized the ideology of inclusion and the need for a society that teaches acceptance from a young age. Knowing the field in Israel, I knew that the goals of individual children’s rehabilitation may often be in conflict with the needs of society. Does the focus of Italian society on inclusion come at the cost of reduced individual rehabilitation?!”

“Once in Bolzano, a young man with a developmental delay boarded the bus. He had dysmorphic features and his behavior was quite unusual. I watched the other passengers treating him affectionately. No one whispered or stared; his presence seemed natural and he acted quite independently. From then on, I began appreciating the Italian ideology,” she recalls.

Binoun-Chaki also learned to appreciate the Israeli system.

“True, I am proud of our country, offering various services to people with special needs and to their families. Before I went to Bolzano, I always felt that we have too few services and that they are not good enough! Now I realize that we have more services than other countries and that we are doing a lot in order to help children with special needs and their families. Nevertheless, I wish we’d learn from Italy. I wish we’d have a stronger ideology of inclusion and an inclusion policy embedded in legislation,” she concludes.

A group from Moscow State Regional University also visited Israel, and the participants were impressed with Israel’s dedication to the social health of its citizens. They were particularly intrigued by the efforts to integrate immigrants from the FSU.
A Fascination with Israel

An increasing number of Chinese students have discovered BGU’s Israel Studies program. Dr. Ma Danjing, a lecturer at the Institute of Jewish Studies at Henan University in Kaifeng, China, and a post-doctoral fellow at the Ben-Gurion Research Institute for the Study of Israel and Zionism (BGRI), is studying the parallels between the development of Israel and China.

“I am from a socialist country and my doctorate is on Jews in the Soviet Union. As a start-up nation, I know we have much to learn from Israel. So I will start with one of its dominant ideologies during the establishment and early period – Labor Zionism,” she explains.

Chinese interest in Israel Studies has been steadily growing, resulting in a significant number of students at the BGRI.

Prof. Pingan Liang of Shanghai International Studies University attended this year’s Association of Israel Studies Conference hosted by BGRI in Sede Boqer and explained some of the fascination. The Chinese have become very interested in Israel and in Jewish culture because they “are very impressed by the wisdom of Jewish figures, such as Karl Marx, Albert Einstein and Sigmund Freud. They want to know more about this country, including its social system, social values, its resources of energy and power. Many Chinese are getting to know that Israel is very advanced in the hi-tech field,” he explained.

Ma Danjing is part of the prestigious Council of Higher Education Program of Fellowships for Outstanding Post-doctoral Researchers from China and India – 2014-2015. Supervised by Dr. Avi Bareli, her research focuses on the Israeli Labor Party.

She arrived at the BGRI as a short-term visiting scholar last year and took classes in the Israel Studies International MA Program. “During my MA study, my interest was wide ranging, from Judaism to Jewish history. Finally I focused on Eastern European Jewry and wrote an MA thesis on Hasidism,” she adds.

Explaining her interest in Israel Studies, she says, “Jews are smart and mysterious people and I want to dig deeper about them.”

Danjing hopes to bring Israel and China closer together.

“What I hope to do with this post-doc in Israel Studies – I think it can lay a solid foundation for me to do research in the future; moreover, I can introduce Israel’s advanced experience to the Chinese public and make policy recommendations to our government by writing books and articles; last but not least, I will teach the course on Israeli history after I come back to China. I think this study experience in Israel will equip me with more knowledge and insights about this country.”

“The outlooks of our Chinese students are fascinating. It is a privilege to teach them. I hope that working with Dr. Ma Danjing will yield illuminating and inspiring research on Israeli politics,” says Bareli.

Jinjin Yu has also come from the same Chinese Institute to do her MA in the Israel Studies International Program. She is struck by the similarities between China and the Jewish people. “We each have our own tradition, culture and a long history. We can teach each other. Israel is amazing and I am so lucky and happy to be here,” she explains.

The BGRI is expanding its outreach to Chinese students studying scientific subjects in Israel, and will be offering week-long seminars introducing them to contemporary Israel and Jewish identity.

Prof. Zaki Shalom
Awarded Honorary Professorship by Chinese Israel Studies Institute

Prof. Zaki Shalom (in suit) from the Ben-Gurion Research Institute for the Study of Israel and Zionism (BGRI) received an honorary professorship from the Glazer Institute for Jewish and Israel Studies at Nanjing University this summer, in recognition of his academic achievements and his contribution to the promotion of Chinese-Israel academic relations.

Shalom’s acquaintance with the Chinese academe began through Liu Jinjiang, who came to Israel to write his thesis about David Ben-Gurion’s leadership. After spending several months at Midreshet Ben-Gurion, Jinjiang returned to China, where he became involved with the Center of Jewish Studies, Shanghai. Jinjiang invited Shalom to come and lecture at various academic institutions in China.

Over the ensuing years, the BGRI started an English-language degree program, which, in conjunction with SIGNAL – the Chinese Student Enrichment Program, attracts Chinese students.

The evolving relationship resulted in this year’s honor. The honorary professorship is an expression of the great appreciation academic institutions around the world, including China, have for Ben-Gurion University of the Negev, in general, and the BGRI, in particular,” explains Shalom.

“During my visits to China in recent years, I learned to recognize the great longing there is in China for a connection with academic institutions in Israel, and the great appreciation, almost mystical, that they feel for Israel and the Jewish people. We can take advantage of that feeling to deepen the connection for the benefit of both sides,” he adds.
Ben-Gurion University of the Negev (BGU) and the Massachusetts Institute of Technology (MIT) signed an agreement this year to create a Seed Fund promoting and supporting early-stage collaborations between MIT researchers and their counterparts at BGU. It is the first Seed Fund that MIT has launched in Israel through its MIT International Science and Technology Initiative (MISTI).

“We at BGU are excited and looking forward to tightening our collaboration with MIT faculty and students,” said Prof. Joseph Kost, Dean of the Faculty of Engineering Sciences.

“The agreement we signed will enable MIT and BGU to move forward in key areas of research that are important to both institutions,” said MISTI MIT-Israel Faculty Director and MIT’s Dean of Graduate Education, Prof. Christine Ortiz.

“In order to strengthen the collaboration between MIT and BGU, we launched an MIT-Israel/BGU Seed Fund to support budding collaborations between faculty and research scientists at MIT and their counterparts at BGU. We see this as another step in creating widespread, lasting relationships between the scientific communities at MIT and BGU and hope to launch other MIT-Israel Seed Funds in specific areas of interest and with other Israeli academic institutions,” said David Dolev, Managing Director of MISTI MIT-Israel and Assistant Director of MISTI.

“From its inception in 2007, the MISTI MIT-Israel program has striven to effectively recruit, select, and place outstanding students in unique internship opportunities in Israel. This past year the number of students participating grew to 77, the largest cohort the program has sent overseas, for a total of over 300 students since the pilot year of 2005. During these years, 40 MIT students did internships at BGU. Participants were drawn from 21 academic departments and a broad range of academic levels, ranging from freshmen to Ph.D. candidates,” he noted.

The Technical University of Munich (TUM), the leading university in Germany, has bestowed the honorary title of TUM Ambassador on Prof. Zohar Yosibash, head of the Computational Mechanics Laboratory in the Department of Mechanical Engineering at BGU.

The certificate reads: “The Technische Universität München honors Professor Zohar Yosibash as a former guest scientist at our institution. Through his outstanding research work he contributed to the international reputation of our university.” Twelve scientists from around the world who have had research ties with TUM received the honor, which was inaugurated this year.
Twenty-seven Palestinian students from universities including Al-Quds and Birzeit visited the Auschwitz-Birkenau concentration camp and the city of Krakow in March, as part of the trilateral research project “From Hearts of Stone to Hearts of Flesh – Encountering the Suffering of the Other,” supported by the German Research Fund (DFG).

This joint research study brings together researchers from Ben-Gurion University of the Negev, Friedrich Schiller University of Jena, and Tel Aviv University, along with the Palestinian civil society group Al Wasatia (meaning “moderation” in Arabic), founded by Prof. Mohammed Dajani.

Prof. (Emer.) Shifra Sagy, head of the Martin Springer Center for Conflict Studies and Negotiation, led the Israeli team, which traveled with the research team to Auschwitz. The research team also traveled with Israeli students to the Dheisheh refugee camp near Bethlehem, as well as to sites important to the Nakba narrative.

“The rationale is to know the other’s suffering: to know your enemy as a human being, his suffering, his narrative. Not only to concentrate on your own victimhood, but also to understand the victimhood of the other,” she explained.

“We are seeking knowledge,” Dajani told Haaretz. “We are seeking to know what has happened; why did it happen; how can it be prevented from happening again? I believe it is very important to break this wall of bigotry, ignorance and racism that has separated us from crossing over into this new realm.”

News coverage of the trip caused a major furor in Palestinian society. “When we Palestinians returned from the unprecedented visit, a voyage that broke historic barriers of ignorance and misunderstanding, we were welcomed not with thanks and congratulations, but with an explosion of criticism,” wrote Zeina Barakat, the Palestinian coordinator of the course, in The Atlantic.

Barakat angrily rejected the critics’ claims in her opinion piece: “We have opened a crack in the wall of ignorance. We have made Palestinians talk publicly about a topic that was once taboo,” she concluded.

According to Sagy, the course at BGU has had a profound effect on all the students who participated. “The Israeli students had a very emotional reaction to meeting Palestinians, not just as soldiers. This trip made them think a lot about the conflict.

“We distributed a questionnaire before and after – the course participants gave more legitimation to the other’s narrative, but also to their own narrative. They are much more prepared after this course and trip to reconcile, to understand the conflict more deeply.”
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 Elat and Sede Boqer. 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 research institutes include the National Institute for Biotechnology in the Negev, the Jacob Blaustein Institutes for Desert Research with the Albert Katz International School for Desert Studies, the Ilse Katz Institute for Nanoscale Science and Technology and the Ben-Gurion Research Institute for the Study of Israel and Zionism. New interdisciplinary degree programs are redefining the boundaries between the Faculties and attracting outstanding students. The University’s 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 services personnel. Repeatedly voted the most popular choice of Israeli undergraduate students, the University is known for its dynamic atmosphere and commitment to excellence in teaching and research.

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 nearly half of the student body benefit the various communities in the region.

Ben-Gurion University is part of the global community, with researchers sharing internationally their expertise 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 excellence and expanding its contribution to the community.