



FALL 2009

IT'S A NANO WORLD

MANIPULATING MOLECULES
TO CHANGE OUR LIVES

EVOLUTION AND ITS LINK TO DISEASE

YIDDISH MAKES A COMEBACK

NEW MEDIA AND THE MIDDLE EAST

STUDENTS GIVE BACK

FROM THE TOP

Dear Friends,

It has been my honor and privilege to serve as president of AABGU and to support what I believe is

the most remarkable educational community in the world. I am delighted to pass the baton to my good friend, Alex Goren, who assumes the helm at the end of September.

I have totally enjoyed the experience of the last four years and am proud of how much BGU—and AABGU—have grown. The past year saw an unprecedented growth of the student body and BGU researchers are publishing in more renowned journals and are forging more international collaborations than ever before.

This issue of *Impact* reflects that growth in a number of ways. This edition's features showcase so many ways in which BGU is leading not only in science and technology, but in ways that improve the hopes of people everywhere and matter to Jewish life worldwide.

Our centerfold story presents the dawning era of nanotechnology, and how BGU specialists from many disciplines are coming together to solve today's most urgent problems. Their work with particles that measure as small as one billionth of a meter staggers the imagination.

BGU's focus on multidisciplinary research is attracting top scientists and scholars to Israel in many departments, and the principle is effective for the humanities, too. You will see this particularly in reading about the work of the brand new Center for Yiddish Studies and the cross-cultural media experiment that brings bloggers together from all over the Middle East.

I thank you for sharing this adventure in what can be achieved when we work together.

Wishing you a happy New Year,

, Carol D. Saal, President

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39TH ANNUAL BOARD OF GOVERNORS' MEETING

"RENEWABLE ENERGY — that's the effect returning to BGU always has on me," declared BGU Board Chairman Roy Zuckerberg at the Board of Governors' opening plenary session.

BGU is indeed a leader in developing renewable energy sources (and there was a symposium on the subject), but, as Zuckerberg explained, the "renewable energy" he was referring to was the vitality and inspiration he draws from the annual gatherings in Beer-Sheva.

It was a small but very enthusiastic American delegation, who took advantage of the more intimate atmosphere to get to know one another and to meet with as many researchers and students as they could.

STRENGTH OF CONNECTION

In the 2008-2009 academic year, the BGU community was confronted by some of the most difficult challenges it has faced in its nearly 40-year history. From the global financial meltdown resulting in painful budget cuts, to the frightening missile attacks on Beer-Sheva during the war in Gaza. BGU's friends, students and employees were called on to cope in

"It's no small thing to come over during this continuing economic crisis, yet you continue to come and support us. You are our true friends."

> -RUVIK DANILOVICH. MAYOR OF BEER-SHEVA

unprecedented ways. And cope they did in those trying times.

"If there is a silver lining to what has happened," BGU President Prof. Rivka Carmi told the participants, "it is in rediscovering the strength of the

BGU connection inside the University and around the world when it is needed most."

Carmi's comments were echoed by Beer-Sheva's new mayor Ruvik Danilovich: "What is exceptional is your faith," he declared. "It's no small thing to come over during this continuing economic crisis, yet you continue to come and support us. You are our true friends."

DANCE THE NIGHT AWAY

The Student Evening is the annual special occasion when students and Associates are able to get together. Sponsored by AABGU donors Aileen Whitman of Pennsylvania and Art and Edie Hessel of Washington, D.C., the evening is always the most popular event of the Board of Governors' Meeting, and this year was no exception.

"There was such a lovely ruach (spirit) in the hall," commented AABGU President Carol Saal following the event. "The kids always dance and invite people up to dance with them. I danced too-it was wild!"

Saal, together with the United Kingdom's BGU Foundation Treasurer Eric Charles, energetically conducted the annual auction to raise funds for student projects and programs.

"We were worried the auction would be less successful than previous years because there were far fewer attendees," Saal acknowledges. "In the end I was overwhelmed by the response of the small group, and the fact that we got funding for 90 percent of the projects."

"The Hebrew language is my passion and my devotion and the fire in my bones," declared Prof. Emeritus Amos Oz, one of Israel's best-known authors and political voices, during the festive event marking his 70th birthday. The tribute to Oz's literary career and his role as an educator at

BGU included a musical rendering of his novel, The Same Sea, by singer Ronit Ophir.

Oz, the incumbent of the S.Y. Agnon Chair in Hebrew Literature, joked to the audience that the "concentrated dose" of compliments he has been receiving during the on-going birthday celebrations have been like "reading an obituary. You have ruined my motivation to die."



Roy J. Zuckerberg, BGU Board of Governors chairman, giving remarks upon receiving an honorary doctoral degree

SECRET OF SUCCESS

Several bright, young researchers inspired delegates with their tales of "returning home" after post-docs and lucrative offers in the U.S. and abroad. They explained why they chose to return to Israel and, in particular, why they came to Ben-Gurion University. "If you want to plant something small, and have it grow bigger, this is the place to do it," declared Dr. Eli Lewis, diabetes expert in the Department of Clinical Biochemistry.

More than 100 people took advantage of the chance to see firsthand the Molecular and Cellular Obesity Lab, the Weiss Family Laboratory for Nanoscale Systems, the Earth and

Continued on Page 4

BOARD OF GOVERNORS' MEETING

Continued

Planetary Image Facility and the Lab for Human Factors in Road Safety.

At the Guilford Glazer School of Business and Management, lecturers and MBA Honors students presented some exceptional projects, and explained why Israel is likely to emerge from the current global financial crisis stronger than before.

They were treated to a special lecture by Roy Zuckerberg: "Let me



Credit: Photo Campus

tell you what made Goldman Sachs so successful." Offering advice to the students on the traits of outstanding employees, he cited, "loyalty, teamwork, energy and integrity. And be a good listener."

That evening Zuckerberg again shared his experiences with the BGU family—this time in a far more formal setting as he accepted an honorary doctoral degree in a stirring outdoor ceremony. Five other extraordinary leaders also received BGU's highest honor: Dr. Mohammed Al-Hadid, president of the Jordanian Red Crescent Society; actress Gila Almagor; artist Dani Karavan; historian Prof. Anita Shapira; and Chairman of the Konrad-Adenauer-Stiftung, Prof. Bernhard Vogel.

During his address Zuckerberg, who among his many contributions to BGU helped create the worldrenowned Zuckerberg Institute for











Water Research at the Jacob Blaustein Institutes for Desert Research, recalled how former BGU President Avishay Braverman persuaded him to become chairman of the Board of Governors.

"I told him I was too busy," he related, to which Braverman retorted: "This is not about how busy you are; this is about a country that needs leadership and an institution that needs leadership, so don't tell me how busy you are!' That answer convinced me there was no way out. It's been an exciting adventure, and I feel this university has given me a great deal more than I have given it," he concluded.





- 1. A group of delegates visited the Weiss Family Laboratory for Nanoscale Systems, where they received a take-home slide of the name of the facility in gradually decreasing font size. They would need a microscope to read the smallest letters.
- 2. Sandra and Aventura Vice Mayor Billy Joel
- 3. Harold Vinegar, the former chief scientist of Shell, and his wife Robin unveil the refurbished Founders' Wall, where theirs is among the newest names. The Vinegars recently made aliyah and Harold is teaching geology at BGU.
- 4. Friends, delegates from AABGU's Northwest Region and Prof. Rivka Carmi gather for the Ita and Eitan Dayan Garden dedication in memory of Jacob Dayan's parents (Jacob and Riki Dayan are 2nd and 3rd from right).
- 5. Lloyd Goldman, AABGU vice president, dances the hora with President Prof. Rivka Carmi and students at the annual Student
- **6.** Lis Gaines, AABGU past president, was joined for dinner by her granddaughter, who is serving in the IDF.
- 7. AABGU President Carol Saal and board member Ellen Marcus
- 8. Zoom Fleisher with Edy and Sol Freedman at the Chairman's Ball

LOOKING AHEAD BY DORON KRAKOW EXECUTIVE VICE PRESIDENT

THE ARRIVAL of the High Holiday season in Jewish tradition is a time of reflection. We look back on the preceding year and consider our lives and deeds against the backdrop of the events that shaped us. The Hebrew year 5769 was certainly eventful.

It witnessed what has been described as the most significant worldwide economic decline since the Great Depression. Companies which had long been household names and which had dominated their industries, like General Motors and Bear Stearns, crumbled under its weight. The worst of the Ponzi schemers literally made tens of billions of dollars disappear while damaging our sense of trust in advisors and financial institutions.

5769 saw war with Hamas in Gaza. Three years after Israel's unilateral withdrawal from the region, an extraordinary concession to a sworn enemy in an unparalleled reach for peace, Hamas rained missiles across the border, shattering the lives of tens of thousands of Israelis. And as Israel took steps to protect the citizens of Sderot and throughout the region, Hamas broadened its radius of attack, and for the first time in 60 years missiles rained down on Beer-Sheva, Netivot and Ashdod.

5769 witnessed the increasing specter of hatred spewing forth from the leaders of Iran, North Korea, Venezuela and from Al Qaeda's leadership hunkered down across the globe. We saw major political change in Pakistan, the Russian invasion of Georgia and a coup d'état in Honduras.

But, 5769 was also a year of hope and opportunity. Elections held in both the United States and Israel brought new parties to power, and great expectations accompanied high hopes in both countries. Following nearly eight years of war, democratic elections were held in Iraq and a growing sense of security among its citizens allowed U.S. and coalition

troops to begin their withdrawal from major cities.

At Ben-Gurion University, 5769 was a year of pride and achievement. BGU scientists moved closer to a cure for diabetes that will free sufferers from the need for insulin injections. They unlocked the mysteries of the blood-brain barrier in pursuit of preventing the onset of post-trauma

epilepsy. In the only country in the world to see its deserts recede in the last century, they hosted the United Nations Conference on Combating Desertification at Sede Boger, attended by hundreds of



researchers from 60 countries. They took the latest solar energy research to market in the form of new photovoltaic cells, which may transform the future of the energy industry. And, BGU remained the #1 destination among aspiring undergraduate students in Israel.

During the rocket attacks in January, BGU's students, faculty and staff volunteered in the community and remained by the sides of their neighbors most in need. AABGU launched a successful emergency campaign, and the University emerged from the war unbowed and more determined than ever to continue its quest to build the Negev and anchor the future for the southern half of Israel.

5769 was a tough year, but we can be very proud of the part we played in it. May 5770 bring with it increasing strength and achievement for Ben-Gurion University and for the people of Israel. May it be a year of growth, renewal and prosperity. And may we all be inscribed in the Book of Life.

Wishing you all a shanah tovah u'metukab—a happy, healthy and sweet New Year.

BGU TECHNOLOGY USED IN FIRST SOLAR ENERGY FARM

ZENITHSOLAR, an Israeli start-up company, launched its first "solar farm" near Tel Aviv in April, based on concentrated photovoltaic (CPV) systems developed by Prof. David Faiman, chairman of the Department of Solar Energy and Environmental Physics at BGU's Jacob Blaustein Institutes for Desert Research.



Israel's President Shimon Peres with children of Kibbutz Kvutzat Yavne during the ribbon cutting ceremony. BGU President Prof. Rivka Carmi is far right and ZenithSolar CEO Roy Segev is left of Mr. Peres.

Faiman says the new system will harvest more than 70 percent of incoming solar energy (as compared to industry norms of 10 percent to 40 percent).

"By concentrating solar energy to a level 1,000 times more intense than natural sunlight and taking advantage of the higher efficiencies at which solar cells operate under these conditions,

> only minute amounts of expensive PV material are necessary to produce large amounts of power," Prof. Faiman explained.

Faiman believes that systems such as ZenithSolar's will eventually be able to operate economically without the need for subsidies.

"Israel has the capability to become the leading country in the promotion of alternative energy technologies,"

said Israel's President Shimon Peres before cutting the ceremonial ribbon with the help of children from Kibbutz Kvutzat Yavne, where the



Prof. David Faiman at the launch of the solar "farm"

half acre farm is located. "As I stand here looking at this solar farm, I feel great pride in my heart that such a small country has such great minds."

Speaking at the ceremony, BGU President Prof. Rivka Carmi said, "Ben-Gurion University is proud to be a partner in positioning Israel at the center of the world in developing unique solar energy technologies."

Roy Segev, chief executive officer and founder of ZenithSolar explained, "The potential for this technology to provide low-cost, accessible energy for customers around the world is enormous. Our system is simple enough to be applicable in almost any situation, whether it is industrial, commercial, residential or related to eco-tourism. There is currently no other comparable technology available in the world."

CHALLENGE MATCH ANNOUNCED TO BENEFIT NEGEV WOMEN

A generous couple from Northern California has announced a challenge grant for supporters of women's health issues, research and activities in the Negev region. They will provide up to a maximum of \$100,000 toward an endowment benefitting BGU's Center for Women's Health Studies and Promotion.

While donations in any amount will be appreciated, the couple has agreed to forfeit the naming of the fund to a person who, or foundation that, matches their contribution.

The Center for Women's Health Studies promotes health and awareness among the women of the Negev through community health services, training programs, curriculum development and research. It emphasizes

healthy behavior, disease prevention and early detection, and hosts local, national and international conferences.

The Center's director, currently Prof. Julie Cwikel of the Charlotte B. and Jack J. Spitzer Department of Social Work, will use the interest from the endowment to meet priority needs. A pioneer in social epidemiology, Prof. Cwikel is studying the connections between society and health, and is using that knowledge to promote better women's health.

For more information or to make a donation, please contact Daphna Noily at AABGU, 240 Tamal Vista Boulevard, Suite 260, Corte Madera, CA 94925, (415) 927-2119, dnoily@aabgu.org or the regional director of your local region.

BGU GARNERS PRESTIGIOUS AWARDS FOR ARCHITECTURE AND ENVIRONMENTAL EXCELLENCE

TWO BUILDINGS on the Marcus Family Campus designed by Raquel Vert, of Los Angeles-based Vert Architects, were awarded first prize in two different categories in the "Best Project of the year 2008/9 Competition."

Vert Architects received the prestigious prizes for outstanding architectural design of the Deichmann Building for Community Action and the Spitzer-Salant Building for the Department of Social Work, which form a single complex at BGU.

The complex also received the Yuli Offer first prize for "Advancing Architecture in Israel," a prize awarded to the top three projects submitted for all categories. The European Union



competition is the most prestigious and influential architectural contest in Europe and Israel.

BGU'S IACOB BLAUSTEIN INSTITUTES

for Desert Research (BIDR) won the CleanTech 2009 Excellence Award in the category of Outstanding Academic Institution in the Field of Environmental Studies.

The award was presented at CleanTech 2009 – the 13th Annual International Summit and Exhibition for Environmental Quality, Renewable Energy, Infrastructures and Water Technologies. The conference took place at the Israel Trade Fairs and Conventions Center in Tel Aviv.

AN EYE-OPENING ISRAEL EXPERIENCE

THE AABGU YOUNG Professionals Israel Experience brought 13 individuals from across the United States to explore the Negev. The week-long trip in March provided the professionals with a unique desert adventure, while they learned how BGU is advancing Israel and the world.

From the moment participants gathered at JFK Airport, strong friendships began to form. "We knew we had a dynamic and warm group who would make the trip memorable and amazing," said Daniel Dubrow of New York.

On the first day, the tour guide drove the mission attendees into the *Ramon Mabktesh*. Through a reenactment, much like spilling water on a sandcastle, they learned how the landform is not actually an impact crater, but rather the world's largest erosion cirque or *makhtesh*.

During this introduction, the participants realized the crucial role the Negev desert plays in both Israel's history and its future. This emphasized the formidable task BGU has in fulfilling the government issued mandate to develop the Negev. In the subsequent days, they would witness how BGU faculty addresses this

challenge through water, agricultural and medical research.

The young professionals experienced some extraordinary desert weather, from sandstorm to rainstorm, which Israelis humorously thanked them for bringing. The flash floods witnessed in Ein Avdat put the magnitude of the storm in perspective. Nearly all of the regional annual rainfall accumulated in this one downpour.

The Negev visit would not be complete without touring the Sede Boqer campus with Prof. Avigad Vonshak, director of the Jacob Blaustein Institutes for Desert Research. Tamar Huberman of New York said, "We saw how fish grow in the desert and stood in awe under the world's largest solar dish. The ingenuity on display at BGU took our breath away."

As the group headed north to the Marcus Family Campus in Beer-Sheva, they enjoyed an inspirational visit to the Open Apartments Program. Participants learned first hand from students how they live and volunteer in the impoverished communities of the city (see pg. 22).

At sunrise the next day the group hiked Mount Masada, where an archeology doctoral student gave a tour. Participants wandered through the ruins, visited the synagogue, saw the mosaics and frescos, and learned the remarkable story of how the Zealots fought off the Romans. After the long morning, a relaxing float in the Dead Sea and a healing Dead Sea mineral mud bath were the perfect ways to relax.

In Jerusalem, an informative walking tour of the Old City whet everyone's appetites for exposure to the city's modern day offerings. Venturing to the

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ALEX GOREN leads an international life.

He spends most of his time in the U.S. and considers himself American, but also feels "spiritually Italian," having been raised in that country. He is often in Israel where his daughter and two of his grand-children live, and spends quite a bit of time visiting other family members in Canada. And, with his brother James, Alex—formerly vice chairman of the New York and Foreign Securities Corp.—operates an international money management and investment firm, Goren Brothers.

Alex's relationship with BGU also has international roots. In the 1970s, his family owned a very large spinning mill in Israel, run by Alex's father and his maternal grandfather, a textile expert.

"When my grandfather was getting too old to run that kind of firm," Alex says, "he decided to sell it, and asked for help from Pinchas Sapir, who at the time was Israel's finance minister. After a while Sapir came back and said, 'I have a client who'll pay a good price. The other side of the coin is that you're going to give me all the money, because we're building a university in the Negev."

How did the family react? "We thought it was a very good idea. My father was happy to be rid of the problem and the money seemed to be going to a very good cause. Of course, Sapir came back and said it wasn't really enough, so we created a family fund to help pay for the building."

That fund became the Cukier, Goldstein-Goren Foundation—which bears the name of Avram (Dolphy) Goldstein-Goren, Alex Goren's father, and Mordechai Meir (Max) Cukier, his grandfather, the textile expert. Since 1972, the Foundation has generously supported BGU and numerous other educational, cultural, health and social welfare projects around the world. Alex serves as president.

In addition to funding the Cukier, Goldstein-Goren Building that is home to the Pinchas Sapir Faculty of Humanities and Social Sciences, the



ALEXANDER M. GOREN NEW YORK, NY

AABGU PRESIDENT-ELECT

Foundation established an undergraduate loan program that recently transformed into a scholarship endowment. Further, because Alex's father had always been interested in Jewish history and studies, the Foundation funded and dedicated the Goldstein-Goren International Center for Jewish Thought. The Center offers a number of advanced study scholarships, runs international conferences and awards the prestigious Goldstein-Goren Book Award every three years for the best book on Jewish thought published during that period.

Currently, the Gorens just finalized the naming of the Avram and Stella Goldstein-Goren Department of Biotechnology Engineering with a new generous gift.

Alex feels that the disposition to give is part of his family heritage. "We've been brought up in our father's and grandfather's traditional ways, to contribute to worthy things and fill charitable needs."

Are his three children continuing the tradition? "I hope so," he says. "They seem to be on the right track. We do feel if we're fortunate enough to have done well there's a duty in giving back."

Alex is married to Brooke Kroeger, director of NYU's Arthur L. Carter Journalism Institute and a noted author. Although his schedule is split between running his business and the Foundation, plus skiing, tennis, music, reading and doing the daily cooking (specializing in Italian), he also gives time to BGU. This too has family roots.

Alex was living in Israel in the 1970s when his uncle—a BGU board member who lived in Canada—decided to cut back on his traveling. Alex took his place on the board and became very active.

"It was very exciting," he says of BGU's early days. "The University was small and there were always financial challenges." He recalls when there were only a few broken-down buildings in a sea of dirt. "Now it's a gorgeous campus with a lot of world-class departments. It's really become a great university on an international level."

Alex is first vice president of AABGU and has chaired numerous board committees. He takes the reins of leadership of the organization at the end of September.

"Being involved in BGU gives a lot of satisfaction," he says.
"Personally, I think that in the short to medium term view, it's the most important university in Israel because the Negev is the natural place for expansion. The future of Israel's growth is the Negev and BGU is right there in the middle of it. And every center that wants to have culture and science needs a great university in its midst.

"I believe everyone should give what they feel comfortable giving. If someone is very busy, money is welcome. But if people have something to contribute from the viewpoint of experience, giving the time is also very important.

"I think BGU is an extremely important institution to support. For us, it was a very good investment."

IACOB SHOCHAT'S mellifluous voice carries the inflections of three countries: Lithuania, where he was born and grew up, Israel, where he lived and worked as a young man, and the United States, where he has resided since 1980.

Describing his early years, Jacob says his experience under communism in the former Soviet Union confirmed Winston Churchill's claim that the inherent virtue of socialism is equal distribution of miseries.

"The former Soviet Union was an anti-Semitic place and the anti-Semitism came from both directions, from the top and from the bottom," says Jacob. "In many instances, this kind of hostile environment helps you to become a stronger person. It made me spiritually stronger and helped me to part with any illusions about socialism."

Jacob's parents, who lost many family members to the Holocaust, managed against great odds to send him and his sister to college. He studied electronics and graduated from a local university in 1970. A year later, at age 24, he was able to immigrate to Israel with his parents.

He found an entirely new life. "Israel was a wonderful place. We received a very warm welcome and the absorption period included learning a new language, serving in the army and finding a job." He enjoyed all of it.

"There was suddenly this feeling of freedom. It translates into speaking what's on your mind without fearwithout constantly being on guard that you might say something that might be misinterpreted by a neighbor or friend or informant."

Serving in the Israeli Army was gratifying: "I did not any longer have the terrible feeling of being a defenseless Jew. I was in the army when the Yom Kippur War broke out, and remember how empowering it was to feel that now we can defend ourselves."

The job he subsequently found was with Elscint, a technology company that became a major producer of advanced medical imaging equipment.



JACOB SHOCHAT MAHWAH, NEW JERSEY

MAKING A LIFE BY GIVING

When in 1980 the firm began marketing its products in the U.S., Jacob was given the opportunity to move there as a company representative based in New Jersey. A decade later he decided to establish his own business.

Dynamic Imaging became a highly successful producer of Picture Archiving and Communications Systems (PACS), which Jacob describes as digital technology that allows radiology departments to create a soft copy environment and work more virtually. After 16 years of growth, the business was acquired by General Electric. Almost immediately, he got involved in several tech startup companies in Israel, which he considers "an outstanding environment for technology development."

Jacob's involvement with BGU began on a very personal level. "A close woman friend unfortunately died at a young age from breast cancer, and all her relatives lived in Beer-Sheva. I decided the best way to memorialize my friend would be to establish a scholarship in her name at BGU. After that I found out what a wonderful institution it is and decided to get involved on a larger scale.

"I'm convinced that it's not just a place that became one of the world's leading universities, but that it has a team of the most dedicated, determined people, at both the University and AABGU."

Many BGU students have since benefited from the Victoria Itin Scholarship Fund. Jacob has generously supported major equipment purchases for the Biochemistry Department and the Brain Imaging Research Center (BIRC), including funding for the salary of a neurologist. He was a generous donor to the BGU-Negev Emergency Fund, and through that effort participated in the purchase of a much needed MRI machine for the BIRC. His latest commitment and the most generous to date is funding for the Shochat Family Library for Science and Technology, to be constructed on the Marcus Family Campus.

Moreover, Jacob serves on the AABGU national board of directors, and the Philadelphia chapter board of directors, where he is a leader of its Health Sciences Resource Committee.

His magnanimous generosity will be recognized when Jacob is the guest of honor at the annual Philadelphia Chapter tribute gala on November 15, 2009.

Why does Jacob think BGU matters? Perhaps because of the challenges he had to face in his own early life, he admires the uniqueness of BGU's achievement.

"It's hard to imagine that in a desert you can build this kind of oasis, and that it's all been done since the 1970s. In almost every field it's involved with, BGU is on the world-class level. It's the best monument to people's determination and know-how, and to the Jewish spirit.

"I'm a strong believer in something else Churchill said—'we make a living by getting. We make a life by giving.' In my own case, life was basically good to me and I feel you should share good fortune. Giving is an art: You have to find worthwhile causes. After 11 years of association with BGU and AABGU, I can't think of a better place or a better cause."

"EDUCATING ISRAEL'S JEWS is what's important," says Sumner T. White. "Without education you're lost."

In line with this conviction, Sumner has been a generous supporter of BGU for many years and has purchased several charitable gift annuities (CGAs) from AABGU, providing income for both the University and for himself.

Born in Dorchester, Massachusetts, Sumner graduated from Bentley College and also studied business and finance at Northeastern University. He then enlisted in the military and became a Korean War veteran. "I grew up in the Army," he says, "and enjoyed it." He left after five years and was faced with choosing a career.

Sumner's mother was experienced in handling money, having run, "for fun," an unregistered, neighborhood mini-bank called an uxie, which gave people the chance to save small amounts and borrow money in case of emergency. "She advised me, go into insurance; all our insurance friends have money," he recounts. "Bingo!"

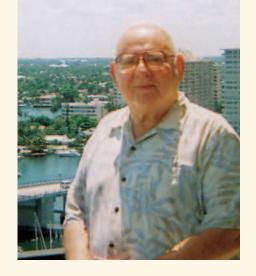
A second fortunate piece of advice came his way soon afterward when Sumner had lunch with a dental student.

"He said the people he knew needed a good insurance man, and an electric light bulb lit up in my head. There were plenty of medical and dental schools in Boston and I was allowed to go into the dorms. I spent 30 years in those institutions. People knew me for four years and when they left I told them 'I'm as far away from you as a telephone call.'

"So I insured people all over the country. They trusted me. When they were hustled, they said they were already insured.

"Nobody had developed that market. I would never have succeeded without that luncheon."

Sumner White is a life member of the Million Dollar Roundtable, a highly selective club that consists of the top



SUMNER T. WHITE FORT LAUDERDALE, FL

A HAPPY MAN, HAPPY TO GIVE

echelon of life insurance agents. He built one of the largest clienteles of physicians and dentists in the country, serving 5,000 clients, and in 1979 was lampooned live on stage by the Harvard Medical School—a memory he cherishes. He was also recognized by the industry as "number one in the world for selling and marketing techniques for young professionals."

"I had a wonderful career out of nothing," is the way Sumner describes it.

His immediate success put him in a position to invest, and here too he made good choices. "I asked myself, what does this country need? Communications, electricity. So I bought telephone companies, electric utilities. I became financially independent and able to give money away."

This seemed natural to Sumner, who believes in taking care of people—family, friends, good causes.

"It's a marvelous feeling to give out money and help people. I give from my heart," he says, "and I'm charitable both to my family and charities. If you have money it's wonderful to give it away while you're still alive." People should be educated to give, he feels, as he was through his mother's charitable activities and the example of generous family members, who gave even if all they could afford was candy. His advice to others? "Just write a check."

Sumner loves Israel and has visited BGU several times, and was there for the recent groundbreaking of the new Advanced Technologies Park. "BGU is unbelievable!" he thinks, and is also excited by "how the city [Beer-Sheva] is growing in all directions."

Sumner says he is a happy lifelong bachelor. For years he split his time between Boston and Florida, but has lived in Ft. Lauderdale fulltime for the past 20 years. He glories in his 19th floor apartment with a huge terrace and 20-mile view. And he has maintained his reputation as a premiere party-giver. In Boston, he threw parties in Kenmore Square, which drew up to 800 people every other Sunday night—"all of whom had to be properly dressed," he recalls.

Florida is less formal: "No jacket or tie here," he says, and likes the casual dress code at the dinner parties he attends several times per week and of the frequent dinners, luncheons and large parties he gives. "I enjoy entertaining and spending the money; I enjoy life," he says.

Does Sumner White, who will be 80 in October, have a personal fountain of youth? He notes that both his parents lived full long lives and were never ill. "So it runs in the family; we're healthy. And I eat a lot of tomatoes—maybe there's something in them that keeps me young." There may be something to that. But that's a topic for a future *Impact* article.

Or perhaps attitude accounts for his bon vivant spirit, and also the success he attributes to luck. "I've always been a happy person with a good outlook," he says. "Always happy and content."

WHILE I WAS SLEEPING

DR. RACHEL BARKAN, a member of the Department of Business Administration at the Guilford Glazer School of Business and Management, was seriously wounded when a Grad missile fell in Beer-Sheva this past winter only a few feet away from her car.

"I had just come back from a sabbatical year at Fugua School of Business at Duke University, with several projects nearing publication and others still in different phases of writing, analyzing or data collection. It was a wonderful year, a second honeymoon with science. I was full of energy and enthusiasm. There was so much to do."

Things changed abruptly that afternoon on Jan. 15, 2009. "I spent the first 24 hours after the attack in surgery and intensive care due to the missile shards in my stomach and intestine. Once my life was out of danger—thanks to the professionalism of my doctors at Soroka University Medical Center—the major issue had become my leg and foot which were severely damaged.

"This will require a long and labor intensive process that will hopefully end with my gaining full mobility, if not the athletic lifestyle and shapely legs that I had before this happened," she relates.

Ironically, her professional expertise includes risk taking and the erosion of safety measures due to negligible probabilities of catastrophes. This is part of her greater area of research that spans decision-making theory and organizational behavior.

"Just before leaving the office that day we were talking about the small probability of being hit by a missile, as opposed to a car accident," she explains. "But, of course, there is a huge difference between the greater theoretical discussion of probabilities and the reality of being that .00001 percent that is actually affected."

It is impossible not to acknowledge this coincidence. She nods knowingly, and stresses that unlike the participants in her studies who ignored safety measures because of the negligible probabilities, she actually followed the instructions of the Home Front Command.

"I parked my car and was about to get out and lie on the ground, but the missile came before I managed to open the door. In a sense I was lucky, as the car took most of the hit. The shards had to go through it before getting to me. I probably would not have survived the hit otherwise."

She tries not to analyze the situation too much. "Many people become completely focused on the unanswerable question of 'why me?' I try really hard not to do that.

"As someone who believes in statistics I have to tell myself that it was a random event, that it was not a message from the universe, that 'stuff happens'. I try to adopt an outside perspective, where nothing is personal; every event happens with some probability," she explains, sounding more like a lecturer than a victim.

Continued on Page 31



During the Israeli war with Hamas in January, AABGU launched the BGU-Negev Emergency Fund to provide immediate emergency funds to the University during its time of crisis. In a brief emotional address at the Board of Governors' Meeting in May, Dr. Rachel Barkan, an expert in decision making and behavioral economics who was struck by a missile, expressed her deep gratitude to the AABGU and University community for its support. These are her remarks:

Being hit by a missile defies imagination. Looking at the scars, experiencing the pain, I am shocked—time and time again—I was hit by a missile. A part of me died. A part of me lives.

Thinking about that day, those moments, I am still amazed that I found the strength to get out of the car, and even more so, that I was able to recall and say Prof. Aviad Israeli's phone number before losing consciousness.

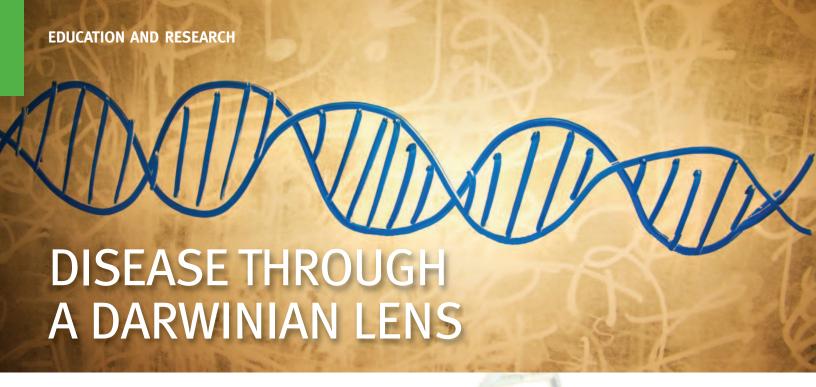
I am lucky and blessed to have Aviad's friendship, and it so happens that Aviad specializes in crisis management—both as a researcher and in real life.

Aviad triggered a supportive network of men and women—dear friends—members of the BGU community. All of them rose to the occasion.

When my parents arrived at Soroka hospital after three hours of a tormenting drive in the dark—both meanings apply—they were embraced, not with big titles and academic positions, but by people.

The president was simply Rivka, the dean—Arie, the chair—Ayala, and so many others. There is something so Jewish and so Israeli about arranging an apartment for them to stay in, making beds, loading a fridge with food day in and day out, supporting them, embracing them with love.

While I was sleeping—so to speak—Ben-Gurion University was a family. Thank you.



WHAT HAPPENS when you cross a background in archeology with a fascination for genetics?

You get Dan Mishmar, a molecular biologist whose offbeat approach to genetics is producing new insights into how species mutate, and how a number of complicated diseases may connect to human evolution.

Dr. Mishmar came to BGU in 2004, holding a joint position with the National Institute for Biotechnology in the Negev (NIBN) and the Department of Life Sciences, where he is a senior lecturer and researcher.

He had studied archeology as an undergraduate, becoming interested in human evolution. "This led me to a critical decision point," he says, "whether to continue and study physical anthropology and investigate human evolution via 'stones and bones,' or study human genetics."

Genetics won. He earned an M.Sc. and then a Ph.D. in the field under the supervision of the human geneticist Prof. Batsheva Kerem at The Hebrew University. For postdoctoral work, Mishmar joined the lab of Prof. Douglas C. Wallace, a renowned expert specializing in mitochondrial genetics at the University of California-Irvine. "We were the first to show that human genetic variation in the mitochondria was shaped by natural selection," he says.

These studies set the stage for Mishmar's current research. Now his work is generating interest within the international scientific community, and earning his team prestigious publication credits.

Mishmar is identifying the association between common genetic varia-

tion in humans and susceptibility to diseases including type 2 diabetes, cancer and schizophrenia. His premise is that mutations in our DNA occurred over thousands of years within the framework of Darwinian natural selection. That is, our ancestors responded to environmental changes, such as cli-

mate shift, with mutations that increased their chances of survival. But today, these same mutations predispose us toward certain diseases.

Mishmar focuses on the role of mitochondria, which are organelles,

or small particles within cells, that are inherited only from the mother. They are the cells' powerplants, generating energy, and are essential to every cell's survival and our ability to perform the functions of living. Mitochondria's role in the emergence of new species has been investigated recently, but the idea that they are responsible for our susceptibility to illnesses startles many.

"The concept that the same principles that drive evolution toward the emergence of new species govern the emergence of diseases is new," Mishmar explains. "A clinician looks at the genome of a tumor, or other disease, and compares it to the normal population, looking for new mutations that do not occur there. I assume the mutations are already part of the population and have had a survival function. When these same mutations reoccur in the correct environment, they can cause disease."

Looking at disease as an evolutionary process is hard for clinicians to absorb, Mishmar knows, but he believes in the idea's potential.

"If we better understand how evolution moved, we can understand the genetic basis of many, many complex disorders. Since mitochondria play a central role in disease, if we understand how they work and the way they changed our ability to



Dr. Dan Mishmar, molecular biologist

survive in different conditions in ancient times, we can understand the mechanics of the disease.

"And we'll understand a lot about the way certain people develop diseases and others have a lower tendency toward those same diseases. This may help us ease the lives of patients. I think it can lead to new ways of curing diseases, or even a prevention approach."

Mishmar's own biggest surprise came from his work with cancer, in the context of a collaborative effort with his graduate student, Ilia Zhidkov, and another BGU scientist, Dr. Eitan Rubin, a bioinformatics expert. Analyzing the mitochondrial genomes (DNA sequences within the mitochondria) of 98 different unrelated individuals. Mishmar and his colleagues found that combinations of mutations tended to occur in tumors in precisely the same DNA building blocks that changed during evolution.

The resulting article earned Mishmar's team the cover spot of a prestigious journal called Genome Research earlier this year. "We show, strikingly, that evolution repeated itself in cancer," Mishmar comments. "Mutations that accumulated during thousands of years of human evolution have reoccurred in mutational combinations in tumors."

"If we better understand how evolution moved. we can understand the genetic basis of many, many complex disorders."

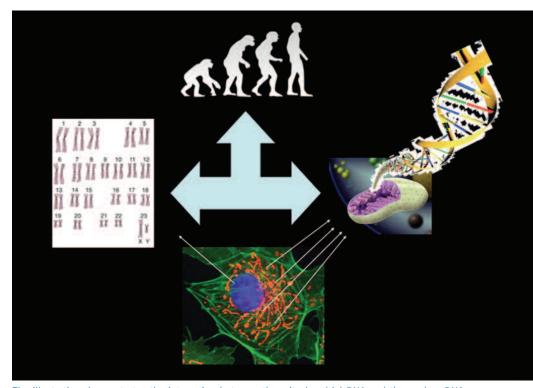
- DR. DAN MISHMAR

Mishmar's lab uses a combination of research approaches, including population genetics: analyzing the DNA sequence of large populations to compare individuals and find variations. Using statistical methods,

the researchers look for associations between variations in the mitochondria DNA and susceptibility to diabetes.

Schizophrenia, too, is seen as a complex disorder caused by the C. Wallace at UC Irvine, as well as with other researchers at Yale, and in Sweden and China.

"All the projects I am involved in," he explains, "aim at deciphering the functionality of common genetic vari-



The illustration demonstrates the interaction between the mitochondrial DNA and the nuclear DNA ("cross talk") and its importance for evolution.

interplay of genetics and the environment, and the lab is trying to isolate the genetic component—difficult because multiple components are involved. The lab also uses molecular biology techniques, such as growing cell cultures to look at the effects of mutation on cell survival.

Mishmar is happy to be at BGU: "I got exactly what I wanted. BGU is a wonderful environment to work in, the best for me, because I don't see a lot of places where you can easily collaborate with peers. Here it happens frequently."

One current collaborative project, a study of genetic diversity in chameleons, came about through a chance meeting in the elevator with a BGU ecologist, Dr. Amos Bouskila. He also continues to collaborate with his postdoctoral mentor, Prof. Douglas ants, their role in disease susceptibility, but also their role in the emergence of high energy demanding traits during evolution, such as flight capability in bats."

Mishmar says he's an armchair archeologist these days, and misses the fieldwork. He teaches basic genetics and is offering a new class in human genetics and genomics. Unsurprisingly, students find the field exciting: Mishmar has had to decline a number of applications to work in his lab.

"I like to teach very much and find it very satisfying when students understand and ask questions about the data that are almost novel.

"And with the research. I like best when students come to my lab and don't do what I tell them. It's extremely satisfying when they bring new ideas—this is why we are here." ■

ISRAELIS PRESERVE THEIR YIDDISH ROOTS

"FOR YIDDISH it's the 11th hour," says Prof. Moshe Justman, dean of the Faculty of Humanities and Social Sciences. "People with living memory of it as a spoken language in Eastern

Europe are growing older and fewer. Every year we postpone preserving this culture, we lose something."

Moreover, the leading scholars in the field are



Prof. Moshe Justman

retiring, without leaving a cadre of young scholars ready to take their place. It adds up to "a terrible tragedy," Justman says, "because Yiddish culture is a treasure with intrinsic value, and because it's so important to understanding our culture today."

Justman, a professor of economics, has a personal background in Yiddish: His grandfather was a Yiddish journalist and author, and his father had a deep affection for the language. Thus he was fully sympathetic to the idea of creating a major center for Yiddish studies at BGU. The idea had resurfaced periodically for years but not come to life, in part because it was difficult to find an eminent leader for such a center.

But recently, Justman took up the search again. He called to ask the advice of Prof. David G. Roskies, an internationally known scholar and author of Yiddish studies who teaches at New York's Jewish Theological Seminary (JTS). It was a fortuitous conversation—"a miraculous story," in Prof. Roskies' words.

"Moshe told me how 20 years earlier BGU began working to make

its economics department one of the best in the country by bringing in exactly the right people. And now they would like to do the same thing with Yiddish. I was blown away,



Prof. David G. Roskies

though not completely surprised—I knew the time to build something new for Yiddish in Israel is now, and knew about the exceptional Department

of Hebrew Literature at BGU. I could see all the synapses connecting—the right time, the right place."

A month later, Roskies visited BGU. "When I saw what the place had become I was completely sold."

Beginning with the spring semester this February, Roskies will split his year between the JTS and BGU, running the Center for Yiddish Studies.

"It's important to understand that this isn't about people speaking Yiddish," says Justman. "I don't think the university will revive the language all of a sudden. It's about understanding and preserving Yiddish culture, especially high culture in Eastern

Europe—literature, the theater, the press, poetry—primarily between 1860 and 1940. The university is the

place to do this."

It is fitting for the new Center to be part of the Department of Hebrew Literature, Justman notes, because Yiddish has been a missing piece of its Diaspora cultural studies, and because many leading Hebrew writers were steeped in Yiddish culture and wrote in that language.

"The culture is hardwired by Yiddish but we don't realize that some of the things we say or do are rooted in it. A lot of this goes on in our collective subconscious and bringing it to the fore helps us understand our own culture better."

Because Yiddish culture was a core element of the Ashkenazi Jewish identity, Roskies observes, it makes sense that widespread interest has begun to develop.

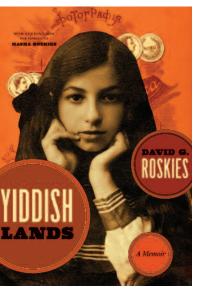
"When you go looking for who you are and where you come from, you see first that secrets of the past are encoded in that other language. You heard it from your grandparents but it had always been devalued and you assumed it had nothing to tell us. Now suddenly in the 21st century, it holds out a certain promise, to unlock

something about who you are."

To Roskies, who customarily spends two months per year in Israel, the growing interest signals a coming of age for the country. Yiddish has carried the stigma of the Holocaust and persecution from the 'old country' for decades. Its use was further discouraged by government campaigns to establish Hebrew as the nation's dominant. unifying language.

However, Modern Hebrew has been

shaped by Yiddish to a remarkable degree, Roskies says, in its cadence and irony, and how the two



The cover of Prof. Roskies' newest book, an award-winning memoir of his mother that contains a CD of her singing Jewish songs

ערשמער מאי פאראד פון "די יונגע״



"The May 1st Parade of Di Yunge." New, modernist Yiddish poetry group Di Yunge (The Young Ones) follow their muse: death. 1911 (Der groyser kundes). Courtesy of Edward Portnoy

languages play off against each other. Having grown up studying "bookish" Hebrew in a Yiddish day school, he noticed on his first visit to Israel how many colloquial expressions had come from Yiddish. "But 99.9 percent of Israelis had no idea of that!"

How Hebrew and Yiddish interact

"The [Israeli] culture is hardwired by Yiddish but we don't realize that some of the things we say or do are rooted in it...bringing it to the fore helps us understand our own culture better."

- PROF. MOSHE JUSTMAN

is at the heart of the Jewish sensibility, Roskies explains. Jews had two languages: Yiddish, the spoken vernacular, and the high status religious scriptural tradition of Hebrew. "At times the discrepancies between what God promised and what you see in everyday life are pretty great. Parody is a way of living with that."

This idea is embodied by Sholom Aleichem's character Tevye, Roskies points out. "In this great literary invention, a simple salt-of-the-earth milkman tempers his speech with

snippets from the liturgy, playing with misquotes, parodying them. Sholem Aleichem based it on what he heard. The play between biblical promise and everyday reality is built into Yiddish folk speech."

One of Roskies' longstanding dreams is to team-teach

a course on Yiddish-Hebrew parody with BGU's professor and author Haim Be'er, which he hopes to be able to do in two years. More immediately, he plans to organize a day

of study devoted to the place of Yiddish at BGU, inviting colleagues from every department to converse on what Yiddish could mean to their fields and how it can interface with them.

"I know how to reach out and build constituencies," he says. "If I can interest and intrigue people in different areas, then we can figure out ways to work together."

The overarching goal is to turn BGU

into the center of Yiddish studies in Israel by creating an academic fellowship of Yiddish scholars already working in the field. "We're stronger than people realize, but there's no umbrella organization," Roskies says. "We'll bring everyone together to brainstorm: What can be done that no one can do individually; what can

we accomplish by pooling resources?"

He hopes, too, to train his successor so someone is in place for the long term, along with a cadre of graduate students.

Prof. Justman hopes that the Center will fulfill its role, preserving the heritage of Yiddish literature and culture, by reaching out to larger audiences. The big picture includes publishing scholarly works and classics, organizing conferences, cataloging and analyzing the tremendous output of the Yiddish press in Eastern Europe, and perhaps even reviving the Yiddish theater tradition and publishing popular plays and songs.

With Roskies as a bridge, BGU and the JTS have begun meeting to explore potential collaborations. "We see this as a first step in a partnership," says Justman, "initially through Jewish literature, with a faculty and student exchange

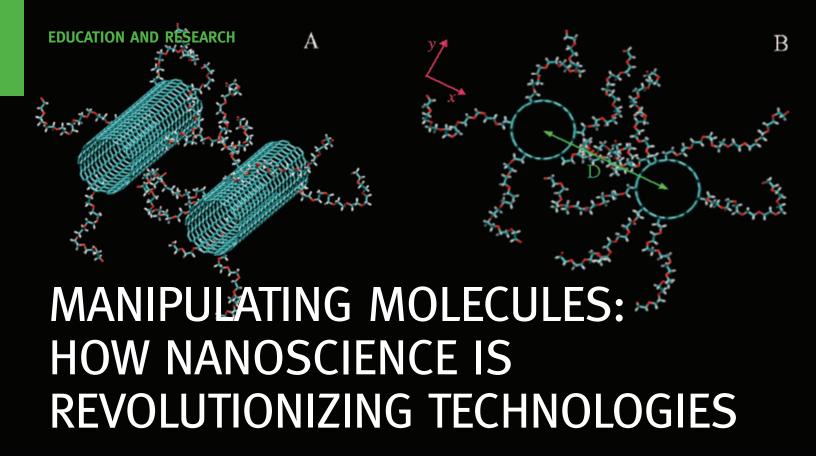
הציאריגע הספות אין אונוער ראדיסאַלער סלויו



"This Year's Procession In The Radical Synagogues." Illustrates people representing Zionism, socialism, rightists and leftists. Mocks large number of political splinter movements in Jewish life. 1921 (Der groyser kundes). Courtesy of Edward Portnoy

program, and perhaps in other graduate study fields later."

"All of it together is a dream come true," Roskies says-"the interest in Yiddish, the Center, the institutions coming together—and that it's happening in the worst economic climate in living memory is even more miraculous! It's a very Jewish scenario." ■



BGU RESEARCHERS ARE TALKING

to atoms.

"It's not only because the international scientific community sees it as one of the most promising areas of technological innovation and human development. The great appeal for Israel is that with nanotechnology, the only thing that counts is brainpower: no need for natural resources or vast terrain—only the human mind."

These are the reasons that BGU is investing hugely in state-of-the-art nano equipment and facilities, explains Moshe Gottlieb, Frankel Professor in the Department of Chemical Engineering and head of the interdisciplinary Ilse Katz Institute for Nanoscale Science and Technology (IKI). Established in 2000, the IKI is now leaping forward with a cadre of handpicked young researchers and a soon-to-be finished cutting-edge facility that took years to plan and build.

Combined with the University's strength in many fields that relate to nanotechnology, BGU is positioned to take a leading role in research identified by Israel, and the U.S. too, as high priority.

Investigation into "nanotech" dates

back to the 1990s, but as basic science starts leading to practical applications, interest has been accelerating, Prof. Gottlieb says. He compares the out-



Prof. Moshe Gottlieb, director of the Ilse Katz Institute for Nanoscale Science and Technology

look to that of microelectronics and the Internet decades ago, when scientists were excited by the possibilities and eager entrepreneurs began to create an Internet-linked world.

"Here, too, Israel excelled," he says. "To be an Internet powerhouse, all you needed was imagination and boldness." But there is a crucial difference, he explains. While Internet innovation might take only a few hundred dollars and a phone line, nanotechnology requires highly sophisticated equipment and specially enhanced laboratories. The Israeli government, the Negev Foundation and the Yeshaya Horowitz Association funded the new \$20 million building and some major equipment, and several American supporters contributed generous amounts, but the scientific infrastructure still needs development.

Determination is high, Gottlieb says. "To be in the forefront of scientific development, BGU cannot afford not to be part of this game. Nanotechnology goes way beyond even the Internet in potential implications, because it will affect health, medicine, energy, all the way to everyday commodities—almost every aspect of life."

Top Illustration: Carbon nanotubes and polymers from the work of Prof. Rachel Yerushalmi-Rozen

WHAT IS NANOTECH ABOUT?

Essentially, nanotechnology is about size. While scientists come at the research from a wide range of perspectives, from chemistry and physics to materials engineering and biology, the focus is on manipulating the structure of materials at incredibly small sizes, in dimensions comparable to those of some large molecules such as proteins. This is nanoscale.

The basic unit, the nanometer, is one billionth of a meter. There are more than 25 million nanometers in an inch. One human hair ranges from 15,000 to 180,000 nanometers (depending on its color).

Such a scale defies the imagination, and is becoming familiar territory to nanoscientists only because of breakthrough equipment such as the scanning probe tunneling microscope, optical spectroscopy, fluorescencebased single particle tracking and other devices that bring research to new frontiers of knowledge.

Why are researchers so fascinated with this nano world? Because when any material on that scale is investigated, it behaves in totally different ways than larger pieces of the same material.

"We are blessed with very good students. That's a major and critical factor, to have good people to do the work and push the research forward."

-PROF. YUVAL GOLAN

"As you go below some critical dimensions, there are physical changes in the properties of materials," explains Prof. Yuval Golan of the Department of Materials Engineering. "Even with something simple, like color, the change has far reaching consequences. If you want to make

a light-emitting device, like a laser, for example, just by changing the size of the material, you can change the color of the emitted light."

Materials on the nano level can become transparent instead of opaque. combustible instead of stable, chemically active instead of inert, and act as conductors instead of insulators. Nanomaterials can also be amazingly strong.

While nanomaterials have always been produced naturally (like volcano emissions or DNA molecules) and by man (smoke), scientists are now working feverishly to understand their characteristics and how they interact with each other and with biological systems.

They are also experimenting with controlling the production and design of materials to pave the way for

useful applications. This is a "bottomsup approach:" assembling molecules in certain wavs (or causing them to selfassemble) to produce materials with new desirable characteristics as opposed to the traditional way of manufacturing. which starts with large pieces of a material and typically ends up with substantial waste.

The specific potentials are mindboggling: thin plastic sheets that can convert light into electrical energy... incredibly small transistors to power computers...lightweight materials of unprecedented strength...membranes for filtering and desalinating water... nanostructures that can diagnose diseased cells and deliver drugs.

"Nanotechnology will be of great importance in developing solutions to our century's major challenges," Gottlieb says. "We're trying to map the areas where we have a critical mass of researchers and can make a

meaningful impact." These include alternative energy, biological/medical applications and methods to reduce man's impact on our environment for example, by water treatment or recycling the polluting ash produced by coal into useful products.

"Of course, we are still very much at the science stage," Gottlieb continues. "We have great hopes and expectations, but in order to develop the technology, you first have to develop the science. It still will take some work to move industry to actually develop the products. This is where we are now."

To enhance the scientists' capabilities, a new group of research fellows has been recruited to act as the Institute's "human infrastructure." They are highly educated people dedicated



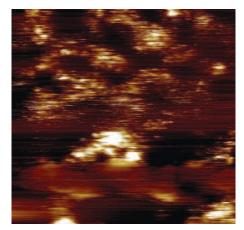
A fabricator working in the "clean room" of the Weiss Family Laboratory for Nanoscale Systems

to developing techniques for using the very advanced equipment, keeping it updated and helping individual researchers use it productively. The fellows will run eight service labs. A nanofabrication facility is also available to build devices that are way beyond the ordinary workshop's scope.

Some of the 29 faculty members from nine different departments that comprise the core of the IKI will move into the new building. Other researchers will stay with their current laboratories, but will benefit from the

central services, seminars and opportunities to collaborate more efficiently.

As Prof. Iris Visoly-Fisher, a nano researcher and senior lecturer in the Department of Chemistry says, "Having all the equipment and experts sitting in the same place will be a huge



Prof. Iris Visoly-Fisher's topographic image of hybrid photovoltaic material taken with an atomic force microscope. Image is 100 x 100 nanometers.

improvement, and certainly will elevate the level of nano research. And it will have a psychological meaning. We'll have a physical center to go to, to meet in and the experts who help me almost daily in the same place."

"The new facility will be a milestone in the development of nanotechnology at BGU," Golan agrees. "I'm really confident that it will position BGU well for this extremely competitive research."

And, says Gottlieb, the Institute is critical to another long-range goal: attracting more of the brightest and best young faculty members by providing the collaborative opportunities they value.

EXPLORING THE NANOSCALE

Prof. Rachel Yerushalmi-Rozen of the Department of Chemical Engineering is interested in how the properties of nano materials differ from larger materials, how imposing different dimensions on them affect their properties and the interface between materials.

"It's fun and fascinating," she says.
"Things really become different when
you come down to smaller dimensions
and we haven't explored this region

thoroughly—so many things are waiting for us there."

In practical terms, she believes in 10 or 15 years we'll use nano structures regularly. "When we find correlations between structure and the properties we're looking for, instead of a cook-and-look process, we can design-engineer. We'll have a route to lead from theory all the way to final materials that will exhibit interesting properties."

For 11 years Yerushalmi-Rozen has worked with structures called carbon nanotubes, which were accidentally discovered in 1994 by a Japanese microscoper. Carbon single wall nanotubes are cylindrical structures that are one nanometer in diameter with a length that can be many microns. There are also multiwall nanotubes, cylinders within cylinders, which are larger.

Nanotubes occur naturally when you burn organic material like lamp oil, Yeruashalmi-Rozen says, but before their official discovery, no one had noticed or made use of them. "Nanotubes are exciting because they have the best properties," she explains. "They're the best conductors, the strongest and toughest material and the most flexible. They conduct heat very well and can be integrated into other materials, probably including polymers."

Nanotubes can also be used to manipulate molecules. Yerushalmi-



Prof. Yuval Golan's scanning electron microscope image of isolated nanocrystals shows effect of chemical solutions being deposited on semiconductor films.

Rozen has found that when carbon tubes are mixed in a controlled way with a collection of molecules dissolved in water, "the nanotubes tell the other molecules how to arrange themselves."

Because they are still too expensive for the plastics industry, which requires very cheap materials, applications thus far are limited. Nanotubes are added to plastics to produce very strong and lightweight tennis rackets, and have been used as tiny probes for measuring on the atomic scale.

But the long-range prospects inspire Yerushalmi-Rozen. They include plastic solar cells that can be used to coat the roof of a house for generating electricity; cheap disposable electronics; plastic materials to replace silicon in transistors; and

"We're pushing toward the edge of knowledge in every field we look at."

-PROF. RACHEL YERUSHALMI-ROZEN

drug-delivery systems. Making spacecraft lighter and stronger, and improving their energy storage and life support systems are other potential outcomes of this technology.

CREATING A NEW ENERGY FUTURE

Prof. Iris Visoly-Fisher joined BGU's Department of Chemistry in 2007 as a senior lecturer and head of the Molecular Optoelectronics Lab. She has a goal: to make alternative energy practical. She believes that basic research on the fundamental properties of molecules and their structure will help this happen.

The photovoltaics, central to solar energy, for example—the systems used to convert sunlight into electricity—now depend on silicon semiconductors. "The way solar cells are made today uses very expensive machines with high temperatures and pollutants.

You can stretch traditional chemistry only so far with silicon," she points out.

"We're trying to mix things in a glass and build new materials based on organics like plastic that will be low cost, flexible and lightweight. It's the essence of nano—we're looking at the single building block so every molecule goes to the address we set for it, and we can direct our nano building blocks where we want them."

Ultimate success will mean not only inexpensive solar energy, but also human-scale products such as portable devices to replace batteries that can be carried in a purse.

"We want to push the chemistry to develop materials that are cheap, clean, easy to work with and betterit all goes together," Visoly-Fisher says.

The chance to work with BGU's extensive array of alternative energy specialists, especially scientists in the solar energy center, is a big plus for her. "Unlike other universities that developed an interest in the field only recently, BGU has been working on this for 20 years and it shows," she observes. Combining nanotechnology interests with energy research gives BGU a chance to make a real difference, she believes.

And she values the collaborative atmosphere that in fact attracted her to the University. "The fact that there are a lot of young researchers in my department and the nano institute appealed to me. People to talk to who share your interests and the way you think—that's very important to me. And it works."

TALKING TO ATOMS

The Atom Chip Laboratory that Dr. Ron Folman heads is focused on nanotechnology's most extreme frontier: the atom itself, one-tenth the size of a nanometer. This research falls under the umbrella of "quantum mechanics."

Although atoms have been "known" for some 2,500 years since the ancient Greeks hypothesized their existence, only recently are we able to "communicate" with them in complex ways,



Dr. Ron Folman next to a vacuum chamber where atoms are isolated, as required for quantum features to dominate their behavior

thanks to new instrumentation and understanding.

Dr. Folman was recruited five years ago by the Department of Physics, and by IKI, to establish the Atom Chip Lab. It was—and remains the only such lab in Israel, and is one of about 30 located in premiere institutions around the world.

Folman also developed and heads the Weiss Family Laboratory for Nanoscale Systems, a nanofabrication facility that makes atom chips for the Atom Chip Lab, for BGU researchers, for researchers in other parts of the world and for the high-tech industry in Israel.

"When things are extremely small and isolated from their environment, they behave in very strange waysdifferent from the laws of nature we're used to," Folman explains.

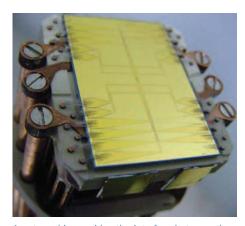
"For example, a particle can be in two places at once. And if two particles interacted in the past, and are separated by light-years, when someone manipulates one—tries to measure it, perhaps—the other particle instantly knows and changes its behavior." This phenomenon is called "entanglement."

Seemingly bizarre characteristics like these provide a base for new kinds of technologies and applications: super-accurate measurement

of time, highly accurate navigation systems, secure communications, new brain scanning equipment and other medical instruments. But most of all, what excites scientists is the prospect of quantum computing.

Computers could become incredibly fast, Folman explains, by exploiting the atom's ability to be in more than one place at a time. Super computers are probably 10 to 20 years into the future, Folman thinks, but other applications are already happening, such as quantum communications for secure banking transactions.

He describes the research as learning a whole new language, so people can communicate with atoms in increasingly sophisticated ways and get answers back from them. (His business card—suggested by students—reads, "We talk to atoms.") Part of the challenge, he explains, is in maintaining the atom's all-important isolation, while at the same time interacting with it so it does what is wanted, and in effect, reports back.



An atom chip provides the interface between the nano world and the outside "normal" world. Ultimately, this means the ability to make smaller and more complex devices to further probe nature's secrets and advance human technological goals.

Working on this smallest-of-all scales doesn't limit Folman's vision for both the research lab and the nanofab facility. "My goal is not only to bring cutting-edge science to the Negev, but to eventually attract high-tech industry, creating jobs that will lure strong communities to come here."

CAN ENEMIES BECOME 'GOOD NEIGHBORS'?

MIDDLE EAST MEETS SOCIAL MEDIA

A YEAR AGO, "Twitter" was a new way for young people to communicate, and other generations were only starting to acknowledge its potential. But in June, along with other social networking media like Facebook and YouTube, Twitter transfixed the world as the basic tool by which Iranian citizens connected with each other and with the world.

As the government prevented reporters from covering the protests and shut down the traditional channels, a torrent of Twitter messages kept telling the story in short urgent blasts, amplified by jarring eyewitness videos, much of it shot on cell phones.

Within a few days that most traditional medium, *The New York Times*, was wondering whether digital media would be the means for transforming the Middle East.

Dr. Tal Azran of BGU's Hubert Burda Center for Innovative Communications observed events closely. "What was surprising is the extent to which people could actually communicate and in this respect challenge the government," he says. "What's new, too, is that this is horizontal communication, people communicating directly with each other, not the traditional vertical top-down model."

Azran was also surprised that the Iranian government didn't manage to stop the new media as thoroughly as, for example, the Chinese have. "Usually the government wins, but now the people are

actually winning in many ways. It's important how much the social media helped create a global public opinion for the Iranians. You can see that in Israel—we don't communicate with Iran but the images are all over the newspapers and social networks, so we feel the Iranians' pain and sympathize.

"Bloggers actually fed the mainstream media. So blogging itself is the big story."

On the other hand, the government did manage to block a lot of opportunities for communication and did suppress the rebellion. "At the end of the day technology has its boundaries," Azran says. In short, the issues are complicated, including those linked to the uncharted and unpredictable territory of new media.

Exploring these issues in the "cool" environment of academia

is the Burda Center's

THE BURDA CENTER

In itself, the Center's origins suggest how fuzzy the old barriers are growing: between traditional media and new media, between countries and people.

Housed in the Department of Communication Studies since 1999, it is funded by Germany's Hubert Burda Foundation. Dr. Burda, a media



BGU's Good Neighbors' Blog (gnblog.com) is a forum for peaceful exchange among bloggers from the Middle East. During the Iranian election scandal, some put their lives on the line to report.

magnate who built his empire on traditional media (sewing magazines), identified Israel as being "of enormous importance to Europe in the domain of the new media," and specifically wanted to promote German-Israeli collaborations.

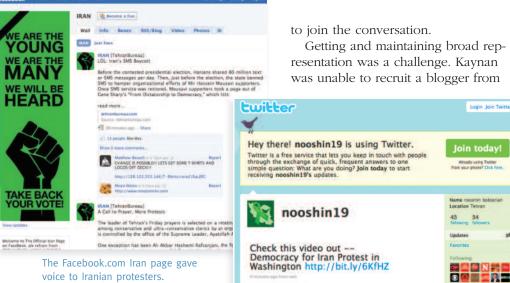
The Center holds international conferences such as "Cool People in the Hot Desert," which draws high-tech specialists, entrepreneurs and scholars to BGU every two years. It publish-

es books on media and brings major media figures in to speak. Last year Riz Kahn, well-known host of an Al-Jazeera English TV show, attracted an audience of 300.

THE GOOD NEIGHBORS EXPERIMENT

Dr. Yael Kaynan

The Burda Center also sponsors research on the emerging world of digital communications. One special project is a Web site called Good Neighbors (gnblog.com), which for three years has given bloggers from



Twitter allowed Iranians to share election

protest atrocities with the world.

all over the Middle East a forum to exchange ideas and information.

"It was initiated because of the special circumstances we live in," says Dr. Azran, who is the Burda Center's strategic manager and a lecturer in the Department of Communication Studies. "We wanted to bring together some of the leading bloggers from all the countries—Jordan, Lebanon, Syria, Iran, Iraq, Egypt, Sudan, Palestinians and Israel—to test a psychological idea, the contact hypothesis: When people who are supposed to be 'the other'—the enemy—meet on a personal and equal level, will they like each other better? We wanted to see if it happens online."

The idea originated with Dr. Yael Kaynan, who arrived at BGU four years ago as a senior lecturer and applied for a project grant. "My field of study is psychology, relationships and group dynamics on the Internet, so the project combined a lot of interests," she says. "How do people relate to conflict situations? How do we forge bonds with our neighbors? The questions became very personal when I moved here."

Kaynan actively recruited bloggers known in their own communities and a good number initially agreed to contribute. Like many blog platforms, Good Neighbors is also open to commentators from anywhere who want

Gaza, for example, but did convince a West Bank Palestinian to take part. Some groups, like the Bedouins she approached, were reluctant to post in English, which is required, even though they speak the language well.

And of course, participants must have Internet access. This is surprisingly widespread in Palestinian territories, Kaynan says, but not in countries with large percentages of very poor people, like Egypt. Iran, Azran notes, has long had a strong blogging culture.

Local political pressures against participating in the project can be intense. In Syria interacting with someone from an enemy country is against the law, and the Lebanese have lately been heard from less often and similar reasons are suspected. Most of the bloggers post secretly, identifying themselves only by country and using online names such as Big Pharaoh, Free Cedar and Yaser.

Maintaining the site logistically is not simple. "It takes a lot of resources because hackers constantly try to take it down," notes Azran, "so it needs a lot of security, especially during war." War takes a toll on participation as well. The recent war in Gaza cost the site nearly a third of its regular bloggers, Azran says.

Despite all the obstacles, the site is lively and opinions are presented in a serious, civilized and often passionate tone. Postings about the Iranian uprising had an on-the-scene urgency. One participant from Iran, Elinor, had previously been blocked from accessing the Internet but was able to blog about her insights on the unfolding situation, prompting other bloggers to express concern for her safety. A video shot in Vanak Square testified vividly to the Iranian protestors' anger, frustration and bravery.

Other comments provided informational tidbits and personal reactions. One, from "Ibraheem," a Lebanese, read in part:

Ending war in the human experience requires more than watching television and disapproving; or feeling shocked or hopeless or political activism. It requires a change of consciousness. Until you change the consciousness of war in yourselfthe consciousness of enemies, allies, villains and righteousness—you will continue to create wars.

At more peaceful moments, Good Neighbors' exchanges are of a more everyday nature, about local concerts, for example. Kaynan thinks this information, too, contributes over time toward new attitudes, demonstrating common interests.

The site's value is as a naturalistic study, she says. "There are no controls, unlike a lab setting, where you can control everything. When you put it out you see what's happening with individuals and how they relate, with all the things going on in the real world—like war."

The results can surprise. Azran recalls that during the civil war between Hamas and Fatah, "commenting on the Lebanese refugee camp, some Fatah people said Israel treated people better than the Lebanese, a discourse that is very rare to hear."

Kaynan found a set of Palestinian interactions personally enlightening. "Many people tend to look at Palestinians as having uniform views, but I learned that there was a wide variety of views and factions, and different beliefs about 'one state' versus 'two states.' So I saw that they're not so different from the Israelis in having

Continued on Page 31

STUDENTS OPEN THEIR **APARTMENTS AND THEIR HEARTS**

FOR MANY BGU students, the university experience is more than just studying, career preparation and social life.

To Mohamed Abu Saelek, a pharmacy major who grew up in a Bedouin village, it's showing kids from a low socio-economic background like his own that they too can go to college and plan for a successful life.

For Nadav Shem-Tov, an electrical engineering student, it's getting

actually making students part of the neighborhoods.

In exchange for free rent, they live in underprivileged areas in Beer-Sheva and dedicate at least eight hours per week to improving the lives of the residents in some way. They may give courses in community centers, tutor children, arrange parties, paint walls, make household repairs, or just listen to their neighbors' problems. They

Candidates for Open Apartments are carefully screened through an interview process and workshop, Sarousi explains. "It's a demanding thing, not like putting in four hours and then going home. It needs a special student who knows how to live together with people and communicate." Each neighborhood has a coordinator to help with problems, as well as oversight from the program's general coordinator, Ilan Kalgrad.

Coming from a wide range of backgrounds and educational interests, the students reflect Israel's own diversity, Sarousi says.

Nadav, the electrical engineering student, says that he was initially afraid of meeting people from cultures unlike his own. "In my first student years I didn't manage to know anybody else different from my own friends and family. I didn't know how to speak with other people before, how to behave," he says. "But I wasn't an outsider very long—every time you're in the street it's like you know everybody, no matter what the age. The neighborhood people are very supportive, like one big family. It's a lifestyle I didn't

know before." Nadav works with children, running activities, playing games and organizing holiday events. He also teaches math



Six student participants in the Open Apartments program: Shir Varon, Shmuel Boanish, Keren Green, Nadav Shem-Tov, Mohamed Abu Saelek and Libat Apolet

involved with very unfamiliar cultures and being part of a community where "everybody knows everybody and it's like one big family."

And to Shir Varon—an MBA Honors student headed for a business careerit's a chance to "build bridges between people and be part of something that is greater than me."

The three are among 100 BGU students who participate yearly in Open Apartments, a unique BGU program now in its 31st year of operation. The program bridges the university world and its surrounding communities by

also adopt families and are available 24 hours per day, every day.

"These communities have many very poor immigrants and unemployed people, and the University seems far away from their natural life," explains Vered Sarousi Katz, who directs the Community Action Unit of which Open Apartments is a part. "Our students show that the University can be very close to the community without being judgmental or patronizing. They'll do anything to help, to be there for them, but see their neighbors as people who contribute to their lives, as well."



Shir, the MBA student, also grew up in an area "totally different" from Beer-Sheva and sought a new experience. "When I was interviewed, I knew everyone was saying they wanted to contribute, and I wanted to do that too, but to tell the truth, I also wanted to be part of a community, to belong to a place. And I wanted to experience a life that I know exists in Israel but wasn't familiar with."



Nevertheless, the reality brought surprises. "At the beginning, coming to the neighborhood was a shockthe social, cultural and economic gap was a hard adjustment. But once you cross the chasm you learn a lot about society and yourself," says Shir.

Shir gives a lot of time to middle school teenagers. "I like when they come to cook, watch TV or just talk. I help with their homework. I think every time we meet it's a good time, though sometimes it can be hard." There are especially satisfying moments, like when a boy he helped with a school project called to say he got an "A."

Shir hopes eventually to become a business executive, and because of Open Apartments he will look for a company that is strongly involved in volunteer activities. "I think that especially in this country, we need to find bridges between people, and sometimes there is just a lack of experience between residents in the middle of Israel and places like Beer-Sheva."

Keren Green says that she's been counseling children "all my life" and when she came to BGU, knew immediately that the program was for her. Compared to working in Tel Aviv

area camps, the kids are not easy. "They have a lot of problems. They come from broken homes; their parents don't have much money or are sick - you can see that on the kids; they tell you. You try to make them open to you, try to make them feel better, you talk to the parents and involve other people who can help."

She helps elementary-schoolers with homework in an after-school center. where she also does arts and crafts. "It's nice to get them off the streets and find them something to do-they love it," she says. But there are moments of truth, like "when you open the refrigerator and there's nothing in it...They need more help, a lot of it."

A management and political science major, Keren's long-range ambition is in fact to help: "This is just a beginning to what I'm planning to do. I'll work in a Jewish agency, raise money, whatever I can think of to help."

Shmuel Boanish is a 26-year-old politics and philosophy major and was happy to discover the Open Apartments Program. "I find it really impressive that you can come as a student and do something in the community, and it's really important to me. It's something that no other university in Israel does."

In addition to teaching children's art courses twice a week, Shmuel adopted a family from Ethiopia that has experienced more than its share of problems. The mother has been hospitalized in a coma, and her husband, who is out of work, spends much of the day with her. There are eight children.

"They are in my place or I am in theirs," Shmuel says. "I come home and they come to play on my computer; I help the older daughter with her English; I work with their social workers. The five-year old had a birthday and her parents weren't there-but we celebrated with cake and presents. I never saw a kid, or a family, so happy.

"It's not like a work connection, it's part of my life. This experience will stay with me, and the family will; they are like my family to me."

Shmuel plans to get a second degree and then hopes "to do some-

thing for Israel"—perhaps run a large community organization, or perhaps become an ambassador. "The Open Apartments experience will shape my future for the better," he believes.

And then there is Mohamed, who grew up in a Bedouin village. He works in a community center and runs a computer club. Kids came without knowing how to turn on the computer, he reports. "Now they know Word, Excel; they send messages to each other and are exposed to new areas not possible before."

The family he adopted is from Gaza, and came to Israel because they had cooperated with Israel and were in danger. Mohamed is teaching them Hebrew. "They have no language, a very bad socioeconomic situation, serious identity problems and very big difficulties integrating here," Mohamed says.

His own experience was not dissimilar. He became a BGU student as a result of the University's access program called "Promotion of Accessibility to Higher Education for Negev Pupils," which brings Jewish and Bedouin children to the University every Friday.

He takes his status as a role model seriously. "I like giving emotional and psychological support to the children



and family—it makes me feel like I make a real difference in their lives. The program made me more ambitious. I want to be a better person and help people who come from the same background I do to become better people and get a higher education. I believe that to create a better society, everybody should be doing this."

Continued on Page 31

FROM THE DESERT, SUN AND SEA... FOR THE WORLD ENVIRONMENTAL SYMPOSIA

A series of environmental symposia featuring BGU Prof. David Faiman, Prof. Avigad Vonshak and Dr. Nadav Shashar were held in the Great Lakes, Greater Texas, Mid-Atlantic and

Washington/Baltimore regions in the spring. Each expert discussed his research and the ways he is helping to green the environment in Israel and the world.

PROF. FAIMAN, chair of the Department of Solar Energy and Environmental Physics at BGU's Jacob Blaustein Institutes for Desert Research (BIDR), explained how his new technology is helping to create affordable solar energy (see pg. 6). Dr. Shashar, head of the BGU Dolphin Reef Laboratory in Eilat, discussed his collaborative work with Jordanian professors and students to restore natural reef environments in the Red Sea. Prof. Vonshak, director of the BIDR, shared the Institutes' research and experimentation with water purification, alternative energy and ecological and environmental conservation.

Two additional special guests were part of the Greater Texas symposia. Mark Kapner, senior strategy engineer at Austin Energy, discussed environmental engineering and policy and Austin's GreenChoice program, the nation's leading renewable energy marketing program, during the Austin symposium. Lorin L. Vant-Hull, professor emeritus of physics at the University of Houston, spoke about his work with solar energy projects for 30 years during the Houston symposium.

The events, many of which were co-sponsored with community partners, attracted large audiences of current AABGU supporters, regional leaders and new University friends.





Top: Profs. Faiman and Vonshak and Dr. Shashar are welcomed by reception hosts and Philadelphia Chapter Chairs Mona and David Zeehandelaar. Bottom: Dr. Shashar with Ray Daniels and AABGU Treasurer and D.C. Chapter Chair Art Hessel

GREAT LAKES

Ernie Simon, Chair Larry Goodman, Honorary Chair Judy Rosen, Director (847) 325-5009 jrosen@aabgu.org

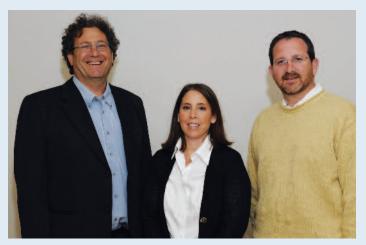
Harriet Winer, AABGU's vice president of development, visited the Great Lakes community and met with the region's new local leadership.

Paul Goodman, national and regional board member,

participated in the Young Professionals Israel Experience in March and extended his stay to visit BGU's Sede Boqer

"Developing the personal relationships with the professors and seeing their work in the lab and in the field really gives me a strong connection to the University," said Paul. He and his family are longtime supporters, but this was Paul's first visit to BGU. We know he'll be back!

Co-sponsored by seven community organizations, the successful environmental symposia held in Chicago attracted new community leaders, AABGU supporters, Governor's office personnel and many new BGU friends.



Dr. Nadav Shashar of the Department of Life Sciences, Regional Board Member Jody Schmidt and David Schmidt



Rabbi Jeffrey Weill of Temple Beth-El; Prof. David Faiman, chair of the Department of Solar Energy and Environmental Physics; Regional Director Judy Rosen

GREATER FLORIDA

Carolyn Yasuna, Associate Director (561) 237-2870 cyasuna@aabgu.org

An enthusiastic and committed contingent of South Florida residents traveled to the University in May to participate in BGU's 39th Annual Board of Governors' Meeting and celebrations. Among the group were Board of Governors' member Edy Freedman and her husband Sol Freedman, Sandra and Billy Joel, Joel Reinstein and Jenny Cohen, Board of Governors' member Lyon Roth, and Palm Beach Gardens philanthropist Zoom Fleisher, a first-time BGU visitor.

Associate Director Carolyn Yasuna and Zoom met with professors at BGU's Marcus Family and Sede Boger Campuses. Zoom, a retired entrepreneur and mechanical engineer, was particularly enamored with Professor Eran Sher, of the Department of Mechanical Engineering, and his students. After viewing and discussing a variety of innovative experiments in Sher's Internal Combustion Engine Lab, Zoom addressed the students about his experiences in creating, growing and managing a successful metal fabricating business for 40 years.

BGU founders and longtime leaders Edy and Sol Freedman joined Zoom to tour the Jacob Blaustein Institutes for Desert Research and hear Professors Avigad Vonshak and Eilon Adar discuss the critical issues of water management and sustainability.

Prior to their BGU visit, Sandra and Billy Joel traveled throughout northern Israel with close friends Sylvia and Jerry Herman. Once the Joels introduced their friends to the University, the passion was infectious, evidenced



Zoom Fleisher, Carolyn Yasuna, Edy and Sol Freedman in Sede Boger



Zoom Fleisher (right) and Prof. Eran Sher

by the Hermans' generous gesture of a founder's gift in support of the Open Apartments Program.

A series of parlor meetings and intimate opportunities to meet BGU professors is currently being planned for the upcoming winter season.

GREATER NEW YORK

Lite Sabin and Jessica Sillins, *Chairs*Kevin M. Leopold, *Director*Wendy Clarfeld, *Associate Director*(212) 687-7721
kleopold@aabgu.org • wclarfeld@aabgu.org

As part of an ongoing lecture series, the region hosted Dr. Eli Lewis of the Department of Clinical Biochemistry at the Bentley Hotel's Rooftop Lounge. Dr. Lewis discussed his recent advances in diabetes research, which allows a transplanted group of healthy islets to survive in the patient, thereby eliminating the need for otherwise necessary daily insulin injections. The audience appreciated his down-to-earth explanations of diabetes, the methods of treatment and his team's research.

Prof. David Roskies led a "class" on the poetry and life of Avrom Sutzkever and also illustrated the mission and vision of BGU's new Center for Yiddish Studies, which he will establish and head as of February 2010. In addition, Dr. Amir Shapiro of the Department of Mechanical Engineering brought his robots from his Robotics Lab and demonstrated their potential for improving crucial industries, including military and defense, medical and agriculture. Both of these events took place at the JCC of Manhattan.

On October 28, the region will present AABGU's Humanitarian Awards to Leonard Litwin, Jeffrey Gural, Jane Gural-Senders and Barbara Gural for their exemplary commitment and contributions toward Alzheimer's treatment. Prof. Alon Monsonego of the Department of Microbiology and Immunology will be the featured speaker, and will discuss his holistic approach to the disease, and how he is approaching completion of a vaccine that is





Top: Regional Co-Chair Lite Sabin with Oscar and Miriam Zanger at the Bentley Hotel for Dr. Eli Lewis' diabetes lecture; Bottom: Young professionals and their children enjoyed the wonder of Dr. Amir Shapiro and his robots

ready for Phase 1 human testing.

We are delighted to report that the Israel Experience mission was a tremendous success. Over a dozen young professionals explored the Negev and BGU's campuses during the weeklong trip in March (see pg. 7).

GREATER TEXAS

Sandra and Steven Finkleman, *Chairs* Deborah K. Bergeron, *Director* (713) 522-8284 dbergeron@aabgu.org

Dinner Chairs Lisa Lepow Turboff and Stephen Friedman planned a superb 8th Annual Gourmet Kosher Dining Extravaganza, which was held in the Omni Houston Hotel's new ballroom. Excitement was in the air in anticipation of dishes from six of Houston's top chefs.

Participating chefs were Amici's Bruce McMillan, Carmelo's Carmelo Mauro, Mockingbird Bistro's John Sheely, Mark's Mark Cox, Polo's Signature's Adam Puskorius and Omni Houston Hotel's Dean Sprague. The chefs created a unique award-winning kosher dining experience for a crowd of over 300. The "Men of the Evening" presented their



Regional Board Member and Dinner Chair Lisa Lepow Turboff, 2009 David Ben-Gurion Award recipients Haya and Dr. Jacob Varon and Regional Board Member and Dinner Chair Stephen Friedman at the Eighth Annual Gourmet Kosher Dining Extravaganza in Houston

charisma, charm and great food in grand style.

Haya and Jacob Varon were the evening's recipients of the David Ben-Gurion Leadership Award for their

contribution to the Houston community, Israel and Ben-Gurion University. Honorary committee members Anita and Roberto Eigler, Marla and Stewart Feldman, Raquel and Jacobo Goldberg, Vela G. and H. Fred Levine and Becky and Joe Williams were among presenters on a tribute video dedicated to the Varons.

Mark your calendars for February 24, 2010 for the 9th Annual Gourmet Kosher Dining Extravaganza.

AABGU's Austin environmental symposium speakers: Prof. David Faiman, Austin Energy's Mark Kapner, Prof. Avigad Vonshak, Dr. Nadav Shashar, Regional Director Deborah Bergeron



MID-ATLANTIC

Jack R Bershad, Regional Chair Mona & David Zeehandelaar, Philadelphia Chapter Chairs Connie & Sam Katz, Philadelphia Chapter Vice Chairs Claire Winick, Director (215) 884-4510 winickc@aabgu.org

The Philadelphia chapter participated in the Israel Bonds "Evening of Honor" community gathering in April. Shirley Tauber was named AABGU's honoree.

Over 80 people attended the spring environmental symposium breakfast featuring Professors David Faiman, Avigad Vonshak and Dr. Nadav Shashar. The scientists captivated the audience at the event co-sponsored by Har Zion Temple, and later addressed Negev Forum guests at the home of Mona and David Zeehandelaar.

A cocktail reception in June featured the installation of chapter officers. AABGU Executive Vice President Doron Krakow was the speaker. Sam Greenblatt served as installing officer and Mona and David Zeehandelaar accepted the chapter chairmanship. Also inaugurated and in attendance were new Vice Chairs Connie and Sam Katz and a complement of talented and committed chapter and region associate chairs.

Jack R Bershad, Mid-Atlantic regional chair, who accepted the role of planned giving campaign chair, hosted a luncheon meeting in June. Estate planning professional Ellen Estes presented a program to enlighten chapter officers about the many advantages of planned gifts.

Members of the region's Tomorrow's Leadership and Negev Forum gathered for a program on the Ethiopian experience at a reception hosted by Pam Stein, newly appointed to the leadership team of Tomorrow's Leadership.

In September, a brunch will be hosted by Roslyn and Charles Epstein, featuring the installation of new chairs of the chapter's Health Sciences Resource Committee. Outgoing founding chairs Dr. Alton Sutnick, and Dr. Stanley Tauber of blessed memory, will be honored, and newest



Cathy Miller and Rabbi Eliseo Rozenwasser of Har Zion Temple; Prof. Avigad Vonshak; Ernest Scheller, Jr., then-Philadelphia Chapter Chair; Dr. Nadav Shashar; Harriet Soffa, member of BGU's Board of Governors; Prof. David Faiman; Regional Director Claire Winick and Dr. Steven Moskowitz of Har Zion Temple at the environmental symposium



New Philadelphia Chapter Chairs David and Mona Zeehandelaar and outgoing chair Ernest Scheller, Jr. (center)

members Drs. Donald Balaban and Robert Zikpin will be welcomed to the position.

Anticipating an exceptional annual community tribute dinner, the region announced that Jacob Shochat will be the November 15, 2009 guest of honor.

NEW ENGLAND

Max Schechner, *President*Mark Goldman & Ralph Kaplan, *Chairs*Harriet Winer, *Vice President of Development*(800) 962-2248
newengland@aabgu.org

On June 17, the New England Region hosted the 26th Annual Night at the Pops at the Boston Symphony Hall. The concert, "A Richard Rodgers Celebration," featured

the Tanglewood Music Center Vocal Fellows and was conducted by Keith Lockhart. The event was chaired by Lauri-Jo Kotzen and Shirley Spero. Funds were raised for BGU's Open Apartments Program, a unique community outreach venture. BGU students live rent-free in disadvantaged neighborhoods in exchange for weekly community service (see pg. 22).



As AABGU looks to improve its outreach and increase its revenue while minimizing expenses, streamlining operations under a severe economic climate has become a priority. The continuing recession and its growing impact on philanthropy have compelled AABGU to make some adjustments, including the closure of the New England regional office. The professional infrastructure and donor development is now being conducted out of New York's national office by Boston resident Harriet Winer, vice president of development.





Top: Pops Co-Chair Lauri-Jo Kotzen with Marjorie and Max Schechner Left: Norm and Carol Tasgal at the Pops Bottom: Lenie and Richard Fraiman; Mel and Bea Fraiman

AABGU acknowledges the long and successful history of the region and is enormously appreciative of the dedication and hard work of its professional staff and lay leadership and remains committed to the donors and leaders of the New England Region. We are grateful for your long-term support and look forward to a continuing partnership.

NORTHWEST

Sonny Hurst, *President* Daphna Noily, *Director* (415) 927-2119 dnoily@aabgu.org

A women's leadership forum is being developed to bring together an elite group of San Francisco Bay-area women who have demonstrated a deep connection to Israel and hold leadership roles. The inaugural Steering Committee meeting was hosted by Roselyne (Cissie)



BGU President Rivka Carmi and Roselyne (Cissie) Swig



The Prof. Daniel E. Koshland Jr. Promenade at the Jacob Blaustein Institutes for Desert Research was dedicated this spring in the presence of the late scientist and benefactor's son and daughter. Left to right: Prof. Raymond Dwek, FRS, longtime friend; Dr. Douglas Koshland; BGU President Prof. Rivka Carmi; and Phlyp Koshland

Swig in her beautiful home. BGU President Prof. Rivka Carmi was the featured guest. Future plans include a two-day overnight retreat in Sonoma County, a symposium devoted to important issues specifically impacting women and ultimately convening a series of international women's conferences at BGU.

Jacob (Coby) and Riki Dayan dedicated a garden in memory of Jacob's parents Eta and Eitan Dayan during BGU's 2009 Annual Board of Governors Meeting in May (see pg. 4). Dayan family members came from far and near, joining AABGU delegates and BGU dignitaries and faculty for the dedication.

In July, the region co-sponsored a lunch and learn program with the JCRC in San Francisco, featuring Prof. Jim Torcyzner from McGill University who spoke about the possibilities of building a real peace between Israel and



The Northwest Region and AABGU family mourn the loss of Charlotte Spitzer, who died surrounded by her immediate family in Seattle in July. Together with her late husband Jack, her generous support of the Charlotte B. and Jack J. Spitzer Department of Social Work and the Spitzer-Salant Building for the Department of Social Work ensured the department's establishment and continued development, allowing it to become one of the finest academic programs in Israel and a major player in serving the communities of the Negev. May her memory be a blessing.

Jordan. He specifically cited BGU's new Israeli-Jordanian Academic Emergency Medicine Program, co-sponsored by the Jordanian Red Crescent.

Suse Smetana, a generous donor from the region, has provided additional funding for a new fully equipped Mobile Eye Clinic which will travel to outlying regions of the Negev, providing eye screenings and medical care for immobile residents.

SOUTHWEST

Ruth Flinkman, Campaign Chair Philip Gomperts, Director (310) 552-3300 pgomperts@aabgu.org

Lottie Marcus celebrated a special birthday in Laguna Beach in February. AABGU board member Ellen Marcus, Ellen's husband Harvey Malyn and her daughter Jennifer Kaplan were accompanied by Regional Director Philip Gomperts. Lottie and husband Howard were also joined by a number of other friends and relatives.

In July, the region hosted three Robotic Future events, which featured Dr. Amir Shapiro of BGU's Department of Mechanical Engineering and head of its Robotics Lab.



Diane Glazer with Amir and Chaya Shapiro

Dr. Shapiro discussed the lab's latest research projects and presented fascinating demonstrations of the robots he designed based on animal physiology, including a snakebot and a balancing robot made from LEGOs.

Roy Zuckerberg, chair of BGU's Board of Governors, hosted the first Robotic Future event at the prestigious Los Angeles Hillcrest Country Club. Regional Campaign Chair Ruth Flinkman hosted a large group of friends at her elegant home to experience this captivating program. The third program was hosted in collaboration with the California-Israel Chamber of Commerce and the Consulate for Israel in Los Angeles at the Luxe Summit Hotel.

The three programs were very well attended by impressed audiences. Many attendees expressed sheer delight and excitement to see the very promising robotic future, where BGU is a leader in this field.



Ellen Marcus and daughter Jennifer Kaplan

WASHINGTON/BALTIMORE

Edie and Art Hessel, *Washington D.C. Chapter Chairs* Keren M. Waranch, *Director* (240) 482-4844 kwaranch@aabgu.org

World-renowned author, poet and BGU creative writing Professor Etgar Keret was in Washington, D.C. in March for a presentation sponsored by the Washington D.C. Jewish Community Center's Nextbook author series. Several AABGU supporters attended this humorous and informative presentation.

The region organized two well attended environmental symposia in May. The events were co-sponsored by several other organizations to expand the community of friends and supporters in the area.

Several VIPs attended the Washington, D.C. event, including the wife of the new ambassador to Israel, Sally Oren. The attendees at the Baltimore symposium were a mixture of long-time generous supporters, including Toby and Mort Mower and several members of the Blaustein family, and new friends of the University.

The region is proud to announce the recent hire of BGU alumna Rediet Teshome as the new development assistant. An Ethiopian-Israeli, Rediet and her family emigrated to Israel from Addis Ababa, Ethiopia in 1991. After graduation from BGU, Rediet worked at an absorption center for Ethiopian immigrants as an education coordinator for 400 students.

While her family currently resides in Jerusalem, Rediet moved to the United States in 2004. In addition to her role as development assistant, Rediet has been helping the region by speaking publicly about her experiences as an Ethiopian-Israeli and BGU alumna at several local synagogues and Hadassah groups.



D.C. Chapter Board Member Anat Bar-Cohen with the wife of Israel's new ambassador to the U.S. Sally Oren at the May 6th environmental symposium



Rediet Teshome speaking about her Ethiopian-Israeli experiences

Please check the Washington/Baltimore regions and events page at www.aabgu.org to learn about news and upcoming events.

ISRAFI FXPFRIFNCE

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Machane Yehuda to observe the shopping frenzy in preparation for Shabbat, they enjoyed delicious noshing and the buzz of Jerusalem life.

After another delectable Israeli meal following Havdalah, there were many teary goodbyes as everyone departed for their trips home or extended visits in Israel. Since returning to the States, participants have maintained communication through e-mail, Facebook and regional events.

Paul Goodman, a participant from Chicago, summed up the trip: "We in the U.S. often view Israel through the one-dimensional prism of the Mideast conflict, but a visit to Israel and the amazing people that make BGU a worldclass institution opened my eyes in ways that I could never have imagined. I intend to return again and again."

WHILE I WAS SLEEPING

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Her current research topics cover a wide range: the inability to stick to a chosen strategy simply because things work as planned, making people suspicious of their good luck; the differentiation between technical and functional aspects of service, showing why people tip waiters because of their smile rather than their effort. She examines the difference between inside and outside perspectives leading to gaps and reversals between choice and advice.

"Going back to the research that predates this 'life-changing event' allows a certain 'escape'," she says.

"It is the one anchor in my life where I can be me before the injury took over." ■

GOOD NEIGHBORS

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diverse viewpoints—that was before the Hamas political overthrow in Gaza and it was an eye opener."

Good Neighbors' reach goes far beyond its contributors. In one month tracked, it drew about 5,000 readers from 87 countries. Typically between 150 and 200 unique visitors read

postings daily. Additionally, comments are picked up and redistributed by other political blogs, further broadening the conversation.

WHAT HAS BEEN LEARNED

"I found that the biggest problem with the contact theory is that while people learn not to stereotype the people they're talking to, in many cases they think of them as exceptions to the rule rather than being typical. So they don't generalize past the people they communicate with," Kaynan sums up.

"But sometimes the tone softened, moving from very aggressive comments to 'I hear what you're saying, bro, but I completely disagree.' And one reader survey found some pretty major changes in people's opinions and stereotyping—some Lebanese and Israelis became very close, for example, and showed a high regard, a feeling of being alike."

On the whole, Kaynan believes that almost all participants experienced some movement toward greater understanding, if only baby steps.

"We don't make shifts in a country, but one person at a time. It takes time to undermine deeply rooted prejudices."

OPFN APARTMENTS

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Sarousi feels that the students' presence for 31 years has helped change the atmosphere of the neighborhoods and made them safer and cleaner. People tell her they appreciate the students and if they go home for the summer, the residents wait for them. But mostly, success is measured one story at a time—a boy who wanted to quit school explaining two years later that he changed his mind because of something a BGU student said, a family getting help because a student helped them write a letter, a formerly disengaged youngster inspired to win a school prize.

"We may not be changing the world in general," Sarousi says. "But we're doing a lot of good things there that really make a difference to a lot of people."

AABGU salutes our generous supporters who joined BGU's prestigious Ben-Gurion and Founders' Societies this year (contributions made through April 2009).

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