

# BIU NEWS BYTES

Bar-Ilan University



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*All you need to know in a glance*

## BIU Newsbytes: All you need to know in a glance

This is the inaugural edition of Bar-Ilan's e-newsletter *BIU Newsbytes: All you need to know in a glance*.

This e-newsletter will be published at least four times a year and is designed to keep its readers updated on leading stories and breaking news about the University on an ongoing basis.

### BIU Archaeologist Decodes the Dead Sea Scrolls

The National Geographic Channel screened a television special recently on the subject of the Dead Sea Scrolls. Among the experts interviewed was BIU archaeologist Prof. Hanan Eshel of the Martin (Szusz) Department of Land of Israel Studies and Archaeology. The TV special examined the modern-day impact of these ancient treasures, and how 60 years after their discovery, they are still revealing new clues and shedding new light on the world as it was 2,000 years ago. Prof. Eshel is noted for recently discovering the fifteenth Dead Sea Scroll.

### Bar-Ilan University Law Faculty Takes the Lead!

BIU's Faculty of Law ranked first this year among all Israel universities and colleges and universities abroad whose students passed their bar exam in the first sitting. 98% of Bar-Ilan students who took the bar exam for the first time passed it successfully, leaving Tel-Aviv University and the Hebrew University behind (*Maariv*, *Yediot*).

Among the factors leading to this success: the faculty's dynamic dean, Prof. Yaffa Zilbershatz, an International and Constitutional Law expert and the first woman to hold this position; the small number of students per class; the helpful guidance of law lecturers; and free preparation courses enabled by the faculty.

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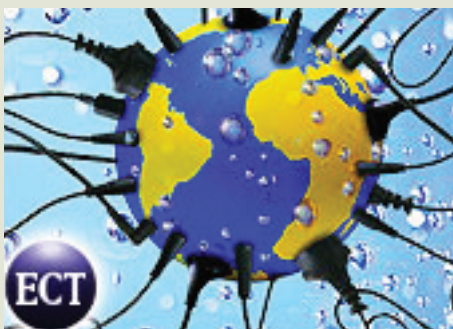


### BIU Faculty Member Receives International Women of Courage Award

Dr. Ruth Halperin-Kaddari, Moses Schupf Fellow and director of BIU's Rackman Center for the Advancement of the Status of Women at the Faculty of Law, was the recipient of this year's prestigious U.S. Secretary of State International Women of Courage Award (*Globes*). She was presented this award by senior US State officials, on behalf of US Secretary of State Condoleezza Rice, at the residence of the US Ambassador to Israel Richard H. Jones. "The award is being given to Dr. Halperin-Kaddari for her social leadership and her work for the advancement of women and social change in Israel by means of her expertise in feminism and law," said Ambassador Jones.

## BIU Doctoral Student Makes Waves with New Jellyfish-Shaped Map of Internet

BIU doctoral student Shai Carmi is part of a team of Israeli researchers that has created a new map of the Internet, revealing the worldwide network in more detail than ever before. The Bar-Ilan team found that the Internet has three principal components, comparable pictorially to a diagram of a jellyfish. The new map was published in the July 3 edition of the *Proceedings of the National Academy of Sciences*.



The result is not just a better understanding of the Internet's structure today, but also a way to predict and track changes over time. Shai Carmi, who is conducting his doctoral studies under the supervision of renowned BIU physicist Prof. Shlomo Havlin, is the recipient of the prestigious "Adams" scholarship.



## Goodman Faculty of Life Sciences Researcher Discovers Stress Kills Sleeping Sickness Parasites

Sleeping sickness is a parasitic disease affecting close to 100,000 sufferers in Africa. Without treatment, the disease is fatal, with progressive mental deterioration leading to coma and death.

Dr. Shulamit Michaeli, the incumbent of the David and Inez Myers Chair in Gene Expression and Infectious Disease and an internationally renowned microbiologist who heads the graduate school of the Department of Plant and Environmental Sciences in the Mina and Everard Goodman Faculty of Life Sciences, has discovered that exposing the lethal parasite to physiological stress can result in its death. The scientific journal *European Molecular Biology Organization - EMBO* reported recently that Dr. Michaeli and her team's ground-breaking research could lead to a drug that will eliminate this scourging disease.



## Thanks to BIU Yiddish Returns to Birobidzhan

A three-week Yiddish program began this summer in the Russian Far East. The summer program in Birobidzhan has drawn instructors and participants from around the world. It was created by Prof. Boris Kotlerman of BIU's Rena Costa Center for Yiddish Studies, at the behest of the Birobidzhan Far Eastern State Academy for Humanities and Social Studies.


Birobidzhan is the capital of the "Jewish Autonomous Republic", created in 1934 as an alternative Jewish homeland. Yiddish is still the region's second official language after Russian, although it is spoken only by a handful of the 4,000 remaining Jews. In its heyday in the 1930s, the region was home to 50,000 Jews from Russia, Europe and the United States. Stalinist purges decimated their ranks, and by 1949 the grand experiment was over.

## The Chicken or the Egg: Stem Cell Research at BIU

Familial Dysautonomia (FD) is a genetic disease present at birth in male and female Jewish babies, primarily causing dysfunction of the autonomic and sensory nervous systems. For those suffering from FD, hope came recently in the form of an Israeli chicken egg.

In 2001, a team led by BIU Prof. Ron Goldstein of the Mina and Everard Faculty of Life Sciences implanted human embryonic stem cells into chicken embryos to study the early stages of normal cellular development. Now, Prof. Goldstein, internationally-renowned embryonic stem cell expert, is using embryonic stem cells to create FD-carrying human nerve cells in an attempt to better understand how the degenerative genetic disease works and to test possible treatments.

## BIU Researchers on Government-Funded Mission to Find Water-Saving Solutions



Israel is taking an increasing chunk of the growing world market for water-technology, with exports expected to increase 28 percent in 2007. One of the world leaders in developing water desalination and filtering technology, Israel exported \$850 million worth of water technology in 2006 to countries around the world, with 2007's exports projected to reach \$1.1 billion. As water demands grow and resources shrink creating a global water shortage, new technologies are needed to increase the supply. As a result, the government decided to invest heavily in the development of the water technology industry in Israel and allocated NIS 120m through 2008 in the national budget for the cause.

Bar-Ilan University is a key member of a new consortium of water-technology companies and institutes that will receive an initial budget of NIS 15M from the Office of the Chief Scientist to develop water-saving solutions. The aim of the consortium is to find effective solutions to battle bio-fouling and also to develop new and useful methods to treat and save water. The Bar-Ilan team is represented by water-technology experts Prof. Shlomo Margel and Prof. Jean-Paul Lellouche of the Department of Chemistry and Dr. Ehud Banin of the Mina and Everard Goodman Faculty of Life Sciences.

## BIU Diaspora Students get a Taste of Israeli Workplace

This summer, more than 50 institutions, under the auspices of the Yavneh Olami religious Zionist organization, employed eighty aliya-minded student volunteers from the Diaspora, in a six-week-long Summer Internship Program.

Among the student volunteers were many from BIU. What drew them to the program was the chance to immerse themselves in Israeli society and culture. "Being in an Israeli society is a useful experience to have if I'm going to live here," said Mia Lazarus, a robotics student at BIU.

## BIU Cryptographer Guest Speaker at US Conference

Dr. Andrew (Yehuda) Lindell, of BIU's Computer Science Department and Chief Cryptographer of Aladdin Knowledge Systems, was a guest speaker at the elite Black Hat 2007 USA which took place in Las Vegas this summer. A leader in USB-based authentication and secure Web gateways, Black Hat provides advanced education to security professionals within global corporations and federal agencies. Dr. Lindell, a renowned specialist in authentication methodologies and technologies, presented a session detailing online privacy during the acclaimed six-day IT security event.

Dr. Lindell has carried out extensive research in cryptography, and has published more than 40 conference and journal publications. He has authored two books: the first on secure cryptographic protocols, and the second an undergraduate textbook titled "Introduction to Modern Cryptography." In his position as Chief Cryptographer at Aladdin, he has worked on the cryptographic and security issues that arise in the design and construction of authentication and software protection schemes, smartcard applications and more.

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