



COMMUNITY OUTREACH

BIU Summer Science Research Internships for YU Students

BIU is now offering a unique summer internship program to students enrolled at New York's Yeshiva University. The first-of-its-kind program will enable talented YU undergraduate science majors to work in the research group of one of Bar-Ilan's more than 180 distinguished faculty members in the biological and/or physical sciences. "We want to afford YU students the opportunity to be involved in our cutting-edge research and to understand the special relationship that exists between scientific excellence and the values that are common to both Bar-Ilan and Yeshiva," says Prof. Chaim Sukenik, the program founder and acting director. The program, which is jointly sponsored with YU, will begin in June, 2011 and provide students with up to an eight-week research appointment.

For further info, contact Prof. Chaim Sukenik of the Bar-Ilan Institute of Nanotechnology and Advanced Materials (BINA) and the Department of Chemistry chaim.sukenik@biu.ac.il.

BIU Student Union's Community Involvement Project

This year, some 100 Bar-Ilan undergrads are volunteering in one of 33 non-profit *chesed* organizations, in the framework of the BIU Student Union's community involvement project. The venture operates under the auspices of the Dean of Students Office and its Sybil Wigdor Social Involvement Unit. Students who work 60 hours per annum helping the elderly, the needy, and underprivileged youth, as well as people with physical, mental or emotional challenges, will be credited for one year-long general academic course. In addition, several hundred BIU students, who tutor children as part of the *Perach* project or volunteer in certain non-profits or cities, receive scholarships for their good works.

BIU's Social Involvement Unit, which was recently dedicated in memory of Sybil Wigdor, provides personal tutoring, equipment loan, special workshops and other critical services to some 1,000 students with physical, learning and medical disabilities in order to ensure their academic success.



Reaching Out to Enrich Israeli Youth

Representative of Bar-Ilan's broadening outreach activities for Israeli youth are the following important projects:

- **Science Enrichment for Disadvantaged Youth:** Some 175 boarding school pupils from underprivileged homes around Israel are gaining an insider's view of the world of science and academia through hands-on BIU science enrichment, combined with basic Jewish heritage study and a healthy dose of nurturing support to fuel their drive to succeed. This unique initiative is run by BIU's Division for Youth Science Activities, in cooperation with the Legacy Foundation of New York.
- **Nano Research Program for the Gifted:** A special joint program with the Ramat Gan Municipality brings outstanding pupils into BIU labs for a year-long encounter with the latest nanotechnology research breakthroughs.
- **Council for Higher Education chooses BIU to Supervise Ramla's New Pre-Academic Preparatory Program:** Bar-Ilan has been chosen to supervise a new pre-academic preparatory program designed to help young city residents upgrade their scholastic achievements. Ramla's Mayor, Mr. Yoel Lavi, noted with great satisfaction the decision of the government to launch the new program under BIU's auspices: "This is the most important decision for the city of Ramla and its residents who seek to improve university admissions statistics." BIU's pre-academic preparatory programs are in great demand, and are considered among the best in the country.



EXPLORING OUR PAST AND FUTURE

Philistine Temple Uncovered in Goliath's Hometown

BIU Archaeologists have unearthed the first Philistine Temple to be found in ancient Gath and evidence of a major earthquake in Biblical times, during excavations at the Tell es-Safi National Park near Kiryat Gat. Prof. Aren Maeir of the Martin (Szusz) Department of Land of Israel Studies and Archaeology notes that the discovery may shed light on the type of temple destroyed by the blinded Samson in the hometown of the warrior, Goliath.

On another archeological research front, investigations of the famed Balsam plant conducted by Department Prof. Zohar Amar, in collaboration with Dr. David Iluz, have led to another groundbreaker: the plant's restoration to the Land of Israel after 1500 years! At a recent conference held in the city of David in Jerusalem, it was revealed that the Balsam plant – revered for its unique perfume, extraordinary medicinal properties and its use in the Temple incense – has been successfully grown in Ein Gedi, centuries after becoming extinct.

Pioneering Work on Jewish Secularization Wins Noted Prize

Prof. Shmuel Feiner of BIU's Israel and Golda Koschitzky Department of Jewish History has won the 2010 Zalman Shazar Award for Research in Jewish History for his book, *The Origins of Jewish Secularization in Eighteenth-Century Europe*. Through "listening to the voices" of key participants in this process, Feiner reconstructs one of the most significant transformations of modern Jewish history. A leading scholar of Jewish intellectual history, Feiner holds the BIU Samuel Braun Chair for the History of the Jews in Prussia. He is also Chair of the Leo Baeck Institute in Jerusalem and will soon receive the prestigious German Humboldt

Research Award. His other books include *Haskalah and History: The Emergence of a Modern Jewish Historical Consciousness* and *The Jewish Enlightenment*, winner of the Koret Jewish Book Award.

The Sociology of Modern Medicine Explored at 13th Nitzotzot Conference

Nitzotzot, BIU's flagship Torah and Science Dialogue Program, focused on the "The Authority to Heal – The Sociology of Modern Medicine" at its latest conference. BIU sociologist Dr. David Rier discussed biomedical authority dilemmas and challenges. *Nitzotzot* founder, Rabbi Shabtai Rappaport, who heads the Ludwig and Erica Jesselson Institute of Advanced Torah Studies Beit Midrash, examined whether doctors are "Divine agents" or simply emissaries of the patient. Law PhD candidate, Rabbi Attorney Hezi Margalit spoke on the limits of authority in modern halakhic rulings. Since its 2009 launching, *Nitzotzot* has brought together scientific experts, rabbinical scholars and outstanding PhD candidates to explore how research breakthroughs impact upon Torah and vice versa.

Bestselling BIU Author Publishes "The Jewish Backpack"

Dr. Aliza Lavie's newly published book, *HaTarmil HaYehudi (Koren 2010)* is a multi-faceted exploration of the Bar-Mitzvah ceremony among Jewish communities around the globe. The book will appear in English as *The Jewish Backpack: A Bar-Mitzvah Odyssey through the Jewish World*. A sought-after speaker in Israel and overseas, the BIU Political Studies lecturer is author of the international bestseller, *A Jewish Woman's Prayer Book*, winner of the 2008 National Jewish Book Award.



MEDICAL AND SCIENCE DEVELOPMENTS

New Senior Medical Faculty Appointments toward October 2011 Opening

Profs. Michael Weingarten and Haim Breitbart have been named Vice Deans of BIU's new Faculty of Medicine, which is due to open its doors in Fall 2011 under the deanship of Prof. Ran Tur-Kaspa. Prof. Weingarten has extensive academic and clinical experience in Israel and abroad. An alumnus of the University of Oxford, he is a renowned senior family physician who has also headed the humanities division at the Sackler Faculty of Medicine at Tel-Aviv University. Prof. Breitbart, whose expertise in male infertility spans three decades, is bringing his vast experience in research and faculty development to the fore, drawing on his accomplishments as past Dean of the Goodman Faculty of Life Sciences.

This month, the Council for Higher Education approved the opening of two medical education programs for October 2011: a three-year program aimed at Israeli students who have completed three years of study abroad and require a three-year clinical program to complete their degree; and a four-year program focused on students who have earned degrees in life sciences or related subjects.

Novel BIU Molecule Gives Hope to Diabetes Sufferers

The innovative EDP-01 molecule discovered by Prof. Bilha Fischer of BIU's Department of Chemistry will be used by the Jerusalem-based biopharmaceutical development company BioLineRx, Ltd. to develop a new treatment for diabetes. Trials conducted over the past two years have shown that the molecule can lower high levels of sugar in the blood and it is felt that

the drug has potential for treating Type II (adult onset) diabetes. The rights have been acquired from Bar-Ilan Research and Development Company Ltd (BIRAD).

Bye-Bye to Bi-focals: Super Lens Provides 20/20 Vision

A super lens which can correct short- and far-sightedness, astigmatism and other visual impairments, and also create perfect clarity has been invented by Prof. Zeev Zalevsky of BIU's School of Engineering. The new lens enables the eye to see clearly whether the object is nearby or in the distance, without adjusting perspective. Zalevsky is now focusing on developing and marketing the technology, which could render bi-focals obsolete.

Lauding BIU's Recent Achievements

- BIU's Department of Computer Sciences ranks among the world's top 100, according to the latest Academic Ranking of World Universities (ARWU).
- Prof. Sarit Kraus, of the Department of Computer Sciences, is the recipient of Israel's prestigious 2010 EMET Prize, and most recently, a 2.3 million Euro research grant from the European Research Council (ERC) for her path-blazing research in Artificial Intelligence. The grant is among the highest ever awarded by the ERC to an independent researcher.
- Two faculty members of the Physics department, Profs. David Kessler and Boris Shapiro, have received awards from the Ministry of Absorption for being outstanding immigrant scientists.
- Prof. Arie Zaban, Director of the Bar-Ilan Institute of Nanotechnology and Advanced Materials (BINA), co-chaired Nanolsrael 2010 – the major international nanotechnology conference recently held in Tel Aviv.



IMPROVING SOCIETY

New MA Specializations in Intellectual Disabilities and Autism

The Jim Joseph Education Building is now the home for a new MA specialization track focusing on "intellectual disabilities," such as Down's and William's syndromes, among others. The program aims to equip students with better intervention methods for improving the cognitive, social, and daily functioning of people with mental disabilities. Another track, instituted last year, enables MA candidates to gain expertise working with children with Autistic Spectrum Disorder (ASD). These latest initiatives are part of the BIU educational strategy to produce highly qualified Special Ed practitioners and researchers who are focused on vital specialty areas.

BIU Expert Selected to Lead the Fight against Drugs

Dr. Yossi Harel-Fisch, a senior faculty member in Education and a world-renowned expert in the field of social research, was appointed Chief Scientist of the Israel Anti-Drug Authority. Dr. Harel-Fisch has been Israel's representative at the World Health Organization (WHO) for the past twenty years, and is the head researcher of the International Program which studies Health Risk Behavior of Adolescents and Children, conducted in over 50 countries around the world.

Noting that teenage smoking is on the decline, he attributes the disturbing rise in alcohol use to the lack of positive content in children's lives. "School should become a positive experience; clubs, youth movements or volunteering can help fill the void," says Harel-Fisch, who calls for Israel to implement a national program to get teenagers interested in productive ways to spend their time. Harel-Fisch urges authorities to relay a consistent message to fight alcohol use among minors: It is not legitimate for children under 18 to drink alcohol (except for ritual purposes); if you drink, don't drive or get into an intimate relationship.

Training Can Provide Equal Ops for Girls to Excel in Sciences

A new study published by BIU Education faculty in *Child Development* (Sept./Oct. 2010 issue) describes an intervention that is effective in eliminating the gender gap in spatial abilities. Given the value of good spatial skills in math and science, this is a promising direction for supporting girls' achievement and eventual contributions in these areas by cognitive education programs, according to the authors, Prof. David Tzuriel and Dr. Gila Egozi of BIU's Churgin School of Education. "Training that starts early can prevent gender differences in spatial abilities and provide equal opportunities for girls to excel in skills that are required for success in scientific domains," suggests Tzuriel.