



“It is such an honor to ‘come home’ to Bar-Ilan University. The University supports me in every possible way, and the collaborative culture among Bar-Ilan’s diverse range of researchers is enabling me to advance my research at a very successful pace. This level of cooperation among so many different departments and disciplines is rare in academia.”

Dr. Mira Barda-Saad, Senior Lecturer
The Mina & Everard Goodman Faculty of Life Sciences

A graduate of Bar-Ilan University, Dr. Barda-Saad returned to Israel in 2006 after a successful visiting fellowship at the Laboratory of Cellular and Molecular Biology of the National Cancer Institute at the National Institute of Health in Bethesda, Maryland in the United States.



THE PROGRAM FOR RETURNING SCIENTISTS

A National Priority for Israel’s Future



About Bar-Ilan University

Bar-Ilan University is the fastest growing academic institution in Israel, with a community of students numbering 33,000. One out of four academic degree holders in Israel is a BIU graduate. BIU’s mission is to conduct cutting edge research while training highly qualified professionals in the sciences, humanities, law, engineering, business, and the arts – all within a unique learning environment which fosters Jewish values and continuity. From its globally-recognized leadership in nanotechnology, Biblical archaeology, and engineering, to its 1,500 courses offered on Judaism-related subjects, Bar-Ilan University fuses high-level scholarship and Jewish heritage into tomorrow’s culture of excellence.



Bar-Ilan University

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Bar-Ilan University



From Brain Drain to Brain Gain

In response to the growing number of Israeli scientists and researchers working and living outside the country, Bar-Ilan University has taken a proactive role to reverse this worrisome trend. In an initiative spearheaded by Bar-Ilan University President Prof. Moshe Kaveh, the Israeli government instituted a special program to expand the nation's scientific ranks with incentives for 100 returning experimental Israeli scientists and new immigrants, outstanding in their fields, and who demonstrate the potential to make a meaningful impact in their specialty areas.

Bar-Ilan University is at the forefront of this initiative, and is committed to absorbing no less than 50 of these scientists for tenure-track positions – half of the total number at a rate of six to eight per year. The science faculties and the Bar-Ilan Institute of Nanotechnology & Advanced Materials (BINA) will be the home base for many of these returning Israeli and immigrant scientists, offering a unique, interdisciplinary foundation that encompasses a wide scope of exciting pioneering research areas.

Swelling the ranks of the University's faculty and enriching its students, this cadre of seasoned scientists is active in a wide range of research areas. From drug discovery and encapsulating anticancer agents to prevent toxic effects on healthy tissues to developing concepts to measure time and distance beyond classical limits, the research being conducted by Bar-Ilan University's returning scientists has far-reaching ramifications in medicine, communications and industry.

Bar-Ilan University is building the facilities to enable these world-class scientists to return "home" to Israel where their careers began – responding to the call of the hour to build a stronger Israel with an ambitious and bold plan to breathe new life into Israel's academic and research communities.



"The role we are playing to halt Israel's academic 'brain drain' is a top priority of national proportions. This program has the potential to entirely change the direction of Israeli science and research over the next decade."

Prof. Harold Basch,
Vice President for Research and Development

Prof. Basch is charged with the mission of overseeing the recruitment of 50 new experimental researchers to Bar-Ilan University's faculty – one half of the national goal of 100 among the country's universities.



Since 2006, these experimental scientists have joined Bar-Ilan University's ranks as part of the Returning Scientist Program:

2006	Ehud Banin	Life Sciences
	Mira Barda-Saad	Life Sciences
	Joseph Frey	Chemistry
	Yuval Garini	Physics
	Yoav Paas	Life Sciences
	Shai Rahimipour	Chemistry
2007	Jordan Chill	Chemistry
	Cyrille Cohen	Life Sciences
	Yanay Ofran	Life Sciences
2008	Laurent Benisvy	Chemistry
	Dror Fixler	Engineering
	Gil Goobes	Chemistry
	Oren Levy	Life Sciences
	Avi Pe'er	Physics
	Rachela Popovtzer	Engineering
	Orit Shefi	Engineering
2009	Shay Ben-Aroya	Life Sciences
	Sol Efroni	Life Sciences
	Doron Gerber	Life Sciences
	Arie Gruzman	Chemistry
	Sivan Henis-Korenblit	Life Sciences
	Tamar Juven-Gershon	Life Sciences
	Erez Levanon	Life Sciences
	Yarden Opatowsky	Life Sciences
	Amos Sharoni	Physics
	Eli Sloutskin	Physics
	Yaakov Tischler	Chemistry
	Avi Zadok	Engineering
David Zitoun	Chemistry	
2010	Lior Appelbaum	Life Sciences
	Daniel Freedman	Engineering
	David Lubman	Chemistry
	Gad Miller	Life Sciences
	Gilbert Daniel Nessim	Chemistry
2011	Amit Tzur	Life Sciences
	Beena Kalisky	Physics
	Tomer Kalisky	Engineering

Building on a Tradition of Excellence and Success

Meet three rising stars in their scientific fields who returned "home" to join Bar-Ilan University's faculty following successful postdoctoral work abroad:



Dr. Sol Efroni combines research experience in computer science and biology to perform pioneering systems in biology network analysis using powerful new research technologies. Dr. Efroni conducted his PhD studies at the Weizmann Institute of Science, specializing in immunology and computer science. On completion of his graduate studies, he took up a prestigious postdoctoral research position at the National Institutes of Health (NIH) – National Cancer Institute for Bioinformatics, gaining expertise in the new, rapidly developing field of Systems Biology. Dr. Efroni's laboratory identifies the biological networks underpinning the progression of tumor formation. His technique uses genome-wide network analysis to uncover hidden molecular targets that are critical to malignant formations, and to discover unknown and previously immeasurable associations between genomic elements.

Dr. Orit Shefi studies the structure and function of neurons. With a device called a pneumatic capillary gun – something she developed together with physicists at the University of California, San Diego – she uses laser light to target a very small area, then shoots specially-designed gold micro- and nano-particles into living tissues. While these particles do not damage the tissue, they do affect gene expression – something that has allowed her to identify genes that influence nerve growth. Dr. Shefi works with medicinal leeches (whose nerve cells are big, accessible and organized in a simple way) that have only one function – to sense pressure or touch. This makes it possible – using time-elapsd imaging – to track how changes in gene expression affect the nerve cells as they grow.



Dr. Avi Pe'er works with ultra-fast lasers that pulse at fantastically fast speeds and have significant implications for both basic research and practical applications in engineering, computing, medicine and the nanotechnology industry. Dr. Pe'er conducted graduate studies at the Weizmann Institute of Science. In 2005, he was awarded a Fulbright scholarship for post-doctoral work and took up a prestigious research position at the University of Colorado. At Bar-Ilan University, he is establishing the first Israeli laboratory with modern capabilities to generate and stabilize laser light and to explore new methods of precise measurement and control of light and quantum matter. Dr. Pe'er is a member of the Bar-Ilan Institute of Nanotechnology & Advanced Materials (BINA).