



## Bright Flight

**Israel's brain power is increasingly global and mobile, and the country is moving to keep academics at home.**

By Dina Kraft, Special To The Jewish Week  
Wednesday, May 12, 2010

Tel Aviv — Israeli Science Minister Daniel Hershkowitz announced recently that the country was unintentionally subsidizing the entire Western world to the tune of some \$3 billion with its exported brain power.

“We have one tremendous resource and that’s our human capital,” Hershkowitz told a recent conference on education, basing his estimate on the amount Israel invests in training its academics, thousands of whom are working abroad. “But we are bearing witness to brain drain abroad.”

Some 25 percent of Israeli academics now have positions overseas, many in top American universities and research institutions — a figure so high that Israel has the dubious distinction of having the worst case of academic brain drain in the world. (By contrast only between 2 to 4 percent of academics from Western countries have professorships abroad.)

The trend is especially visible in the sciences and economics. For example, 33 percent of all computer science academics from Israel now hold professorships in top tier American universities alongside 29 percent of all Israeli economics Ph.Ds.

Although the exporting of brain power is being felt most acutely in Israeli universities which are struggling to recruit their best students home, increasing numbers of educated Israelis in high-tech and other sectors, along with those in the arts, are following higher salaries and better professional conditions and opportunities far from Israel’s shores.

One problem is that Israel’s standard of living may be on the rise, but not at the rate it is in Western countries.

“It’s a bad omen because it is becoming increasingly difficult to keep our best and brightest here,” said Dan Ben-David, a professor of public policy at Tel Aviv University and head of the Taub Center for Social Policy Studies in Israel.

Ehud Eiran, currently doing a post-doc in political science at Harvard University, says that the predominant question discussed at gatherings with fellow Israelis in Boston is whether or not “to stay or go.”

“By and large we are the only ones who want to head back,” he said of himself and his wife. “We are the minority.”

The reasons people cite not to return are professional considerations and concern over the direction the country is heading.

“Some people say, ‘Our parents were refugees and ran away from their homes to Israel and now it’s Israel that is the unsafe place,’” said Eiran. Referring to the Iranian nuclear threat, he adds: “Secular Zionism was meant to create a safe and stable home for Jews, but when our prime minister states that Israel is faced with circumstances similar to those of Jews in Europe circa 1938, I suspect that some Israelis might draw a different conclusion than the one [Benjamin] Netanyahu intended, and prefer to leave.”

As a small country with limited resources and an unstable security situation, the fact that some citizens will seek opportunities abroad is not a new development, especially in a globalized market. But recent studies indicated that the numbers of those leaving and not returning is on the rise, most notably among the educated.

**A study from the Shalem Center, a Jerusalem think tank, examined the types of people who emigrate abroad and found that “they come disproportionately from the upper echelons of the educated.” Furthermore, the study’s authors, Eric D. Gould and Omer Moav, both Hebrew University economists, found that while it is usually developing nations that suffer significant brain drain, Israel is the rare example of a developed country experiencing such a dramatic loss of its talent pool.**

**Among those leaving in disproportionate numbers compared to native-born Israelis, their research found, are the more educated immigrants from the former Soviet Union. Their study examined the period between 1995 and 2002 and found that 4.7 percent of Israelis with masters’ degrees emigrated abroad but that the number was higher — 6.9 percent — for immigrants to Israel, most of whom were from FSU countries.**

Compounding the brain drain problem is that so much of Israel’s potential work force, most notably the ultra-Orthodox and Arabs, do not work. This forces those who do work to carry a disproportionate tax burden. Taxation among the top 20 percent of income earners in Israel is one of the highest in the world.

“In Israel we have this huge weight of a very large and growing segment of the population which is not receiving the skills or education to work in a modern economy,” said Tel Aviv University’s Ben-David, referring to the increasingly substandard education in general in Israel but particularly in the Arab schools where budgets are lower and ultra-Orthodox schools where pupils, particularly the boys, receive minimum instruction in anything but religious studies.

The percentage of Arabs who do not work is twice the average of other developed countries in the Organization for Economic Cooperation and Development (OECD) and roughly six times the OECD average among the ultra-Orthodox. Both groups are the most quickly growing populations in the country — over one half of today's elementary school students are either ultra-Orthodox or Arab.

Meanwhile, international achievement tests show that Israeli students are falling far behind their OECD counterparts.

“It's an indication that our children are not being given the tools to compete in the market. In 10 to 15 years these children will not be able to compete economically with the kids beating them in tests today,” said Ben-David who sees a link between today's non-working population and the education system. “Forget paying for the country. Where are the doctors going to come from?”

To confront the brain drain conundrum the Israeli government approved a \$120 million plan in March to create 30 research centers with the hopes of luring Israeli scientists back to the country. According to the plan another \$280 million would go to a foundation geared to set up new biotech companies.

“The government views the bringing in from overseas of outstanding Israeli and Jewish scientists and technicians as an important policy tool in raising the level of excellence at institutions of higher learning and in strengthening the supply of skilled workers in the economy,” said a statement issued by Prime Minister Benjamin Netanyahu's office.

Michael Meijler, an organic chemist who recently returned to Israel after a post-doc at the prestigious Scripps Research Institute in San Diego to take a position in the chemistry department of Ben-Gurion University of the Negev, said the government plan is a good beginning.

“It's good that it at least shows some initiative but at the same time budgets for the universities need to be increased significantly,” he said. In the last seven years the state has cut the higher education budget by about 25 percent to about \$1.7 billion a year.

“It's not enough to establish specific centers; there are huge gaps in all of the departments in the sciences which results in an even heavier burden on the resources,” said Meijler.

Scientists, because of the state cuts, have had to scramble to find their own ways to raise money for their research, making it tough to compete internationally.

“And of course Israel benefits tremendously from philanthropists, especially Jewish philanthropists, but that money too has gone down because of the global economic crisis and this too hurts universities,” he said.

Meijler and his wife, also a chemist, were tempted to remain in the United States, where the lifestyle is easier, salaries are significantly higher, teaching loads lighter and resources for research more plentiful.

But Meijler, who recently won a prestigious one million euro grant from the European Research Council for his research on communication between bacteria, said he and his wife returned to be close to family.

He is vexed by the brain drain phenomenon he witnessed first-hand among friends and colleagues who have decided to stay abroad. "I'm troubled because this is the largest potential Israel has ... the Israeli mind," he said.

Micah Robinson immigrated to Israel from the United States 19 years ago, never imagining he might feel compelled to move back to America because of lack of job opportunities.

But at 41, with a Ph.D. in biology from the Weizmann Institute, and four young children, he found it difficult to make ends meet on the salary he had been earning at an Israeli biotech firm. He had ruled out academia because positions are so scarce. Until about 35 years ago Israel had a comparable amount of academic positions to the U.S. per capita, but since then, although the population has doubled, the amount of faculty positions have decreased.

Laid off two months ago, Robinson is now widening his job search to include biotech firms in the U.S.

"There is a feeling that science is not valued here when you offered 8,000 shekels a month [the equivalent of \$25,000 a year]," he said. "How is that supposed to make you feel when you know that, looking at salaries in the United States, you could be making between \$90,000 to \$100,000 a year?"

"If I could get a decent salary I would prefer to be in Israel," Robinson continued. "In many ways it's a better quality of life, there is more social cohesion, it feels like a better place to raise kids and there is a sense of working collectively for something larger than ourselves," he said.

Ben-David, who, after completing a Ph. D. at the University of Chicago, returned to Israel because it offered a unique feeling of belonging, said, "If Israel becomes an attractive place to be, people will come home."

Among those optimistic about the consequences of the increasingly mobile and global Israeli brain is Tali Aben, a former partner in Gemini, one of Israel's premier venture capital funds. After a total of nine years working and living in Silicon Valley she returned to Israel almost four years ago and is now working with international investors in the local clean-tech market.

For Israeli technology start-ups to successfully expand and develop, they almost always need a presence in the U.S., she said, and that means sending members of their Israeli teams to live there. Then there are the Israelis who work locally for large technology firms like Hewlett Packard or Intel who relocate abroad.

There may be thousands of Israelis in Silicon Valley today, but she said, "A lot of people come back. All the time."

The back and forth is good for Israel, she argues. “I call it cross-pollination.

“You feel like you are on the cutting edge of engineering and technology [in Silicon Valley]; you are so close to the pulse of what is going on. It’s very much of a global melting pot compared to what is [in Israel],” she said.