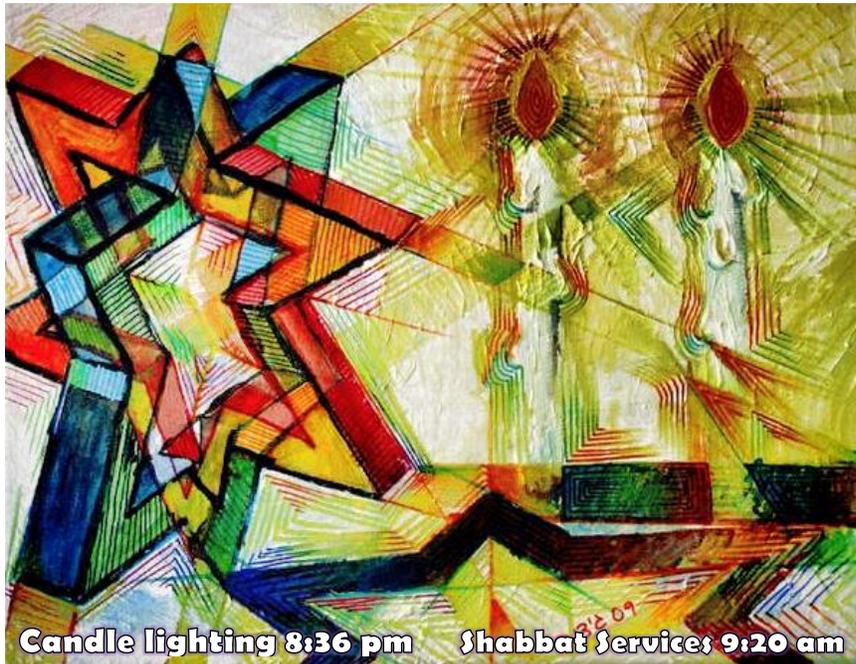




# Carnegie Shul Chatter

June 20, 2018



Candle lighting 8:36 pm Shabbat Services 9:20 am

## Be Proud!

As members of the Jewish People, we have two special reasons to be proud right now – two **very different** reasons.

The article on the following page, from the May 18 *Times of Israel*, highlights research that stands to make an immeasurable impact in the world of medicine. At right: a challenge to a long-held stereotype.



*Jewish notables – with notable achievements: Prof. Varda Shoshan-Barmatz and Houston Astros' Alex Bregman*

## Jews Having a Ball

June 8 was quite a day for Jewish baseball players in the Major Leagues, as five Jewish sluggers combined to hit six home runs on the same day.

Ryan Braun of the Brewers knocked two out of the park and drove in five runs, to lead Milwaukee to a 12-4 win over the Philadelphia Phillies who happen to have a Jewish manager, Gabe Kapler.

Kevin Pillar, the Toronto Blue Jays outfielder, hit his sixth homer of the year and third in seven games in a 5-1 win over the Baltimore Orioles.

Alex Bregman hit his eighth home run for the Astros. And the Astros selected his younger brother A.J. in the recent MLB draft, so it's possible that they could become the first set of Jewish brothers to play on the same team since Norm and Larry Sherry were members of the Los Angeles Dodgers from 1959 to 1962.

Ian Kinsler hit his seventh homer for the Los Angeles Angels.

Joc Pederson hit his seventh and his sixth in the month of June to help the Dodgers beat the Atlanta Braves. Incidentally, Pederson homered three times in two games against the Pirates on June 5 and 7.

And how about Josh Rosen, the UCLA quarterback who was drafted tenth overall in the recent NFL draft by the Arizona Cardinals?

Those Jews are pretty darned good at sports after all, aren't they?

# Israeli researchers say they have found a way to curb growth of cancer cells

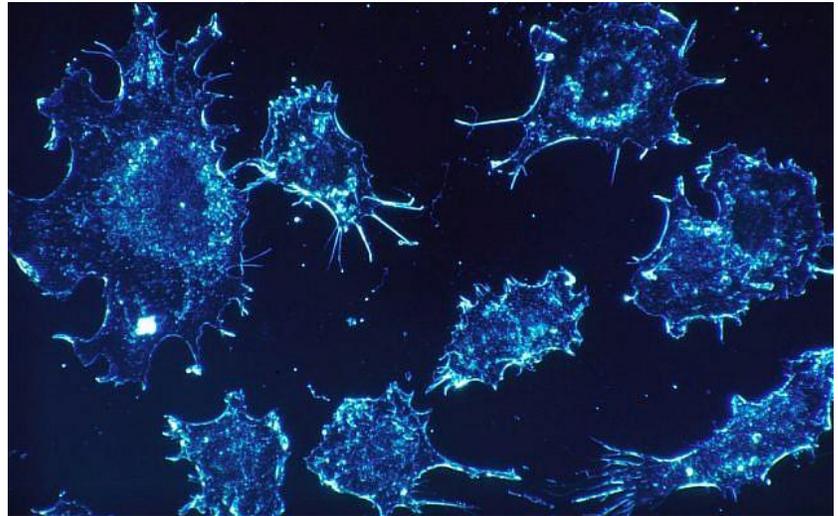
## Scientists at Ben-Gurion University develop a molecule that inhibits development of a protein that is active in many tumors

By Shoshanna Solomon 15 May 2018, 2:56 pm

A group of researchers at Ben-Gurion University of the Negev has developed a new molecule that they say inhibits the growth of cancer cells and also reprograms them to be noncancerous.

The new treatment is based on inhibiting the production of a protein, the voltage-dependent anion-selective channel 1 (VDAC1), highly increased levels of which are found in many solid and non-solid tumors.

The research was led by Prof. Varda Shoshan-Barmatz of the Department of Life Sciences and the National Institute for Biotechnology in the Negev Ltd. (NIBN), both of which are part of BGU.



*Cancer cells*

The VDAC1 protein regulates the mitochondria, which control cell metabolism. Cancer cells are known to have a very active metabolism.

“Cancer cells have hundred times more VDAC1 than normal cells,” said Shoshan-Barmatz in a phone interview. “So we said, let’s prevent, down-regulate its formation.”

The researchers thus developed a molecule called the siRNA, which when applied to the cells was found to stop the growth of cancer cells and when applied to mice with tumors, it caused the shrinking of the tumor. Not only that, explained Shoshan-Barmatz, the cells were found to go back “to their original normal-like state.”

The study was conducted on both in vitro and in mouse models of brain cancer, lung cancer and breast cancer.

Normal cells, which are not as needy of the VDAC1 protein, did not react negatively to the drop in the protein level, she said. The “treatment with siRNA against VDAC1 inhibited growth of cancer cells but not of noncancerous cells, pointing to a potentially safe treatment.”

And most significantly, she added, the siRNA treatment of various cancer types in mouse models “resulted in reprogrammed cancer cells metabolism, leading to reduced tumor growth, induced

disappearance of cancer stem cells and prompted cell differentiation. Thus, we discovered a code for reprogramming cancer cells so that they lose their oncogenic features.”

“Although still in early stages, we are excited with our results that demonstrate the potential of this novel molecule for cancer treatment,” said Shoshan-Barmatz.

BGN Technologies, the technology transfer company of Ben-Gurion University, is now in the process of patenting the molecule and the study will be published shortly after that, Shoshan-Barmatz said.

Dr. Ora Horovitz, senior vice president of business development at BGN Technologies, said that the researchers are “now seeking partners for the further development and advancement of this promising patented treatment,” bringing it to clinical trials in the hope that it will lead to a new path for cancer treatment.

The NIBN is an independent research institute that aims to facilitate and speed up preclinical trials of basic and applied biotechnological research.

## Carnegie Shul Annual Meeting



The Congregation Ahavath Achim Annual Meeting will be held on Sunday, July 1 at 2 pm in the Shul’s social hall. Our guest speaker will be Rob Goodman, Director of South Hills Jewish Pittsburgh, who will share insights on Jewish community developments in the South Hills.

We’d love to see you at the Annual Meeting!

Refreshments will be served.

## Yahrzeit Plaques

Commemorate a loved one by dedicating a yahrzeit plaque in his or her memory at the Carnegie Shul. These beautiful plaques, mounted on the sanctuary walls, are lit on the loved one’s yahrzeit, Yom Kippur, and days when Yizkor is recited. The names are also read aloud from the Bimah during services on the Sabbath of the yahrzeit and on Yom Kippur. To purchase a plaque, for only \$175, please email Mike Roteman at [mrmike7777@yahoo.com](mailto:mrmike7777@yahoo.com).



Please consider sponsoring a Kiddush in honor or in memory of a loved one, for only \$36. Your sponsorship will be announced from the bimah and in the weekly Chatter. To sponsor a Kiddush, email [mrmike7777@yahoo.com](mailto:mrmike7777@yahoo.com).