

Moss Points the Way

Hikers know that moss on a tree trunk always points north. According to new research by a TAU scientist and his colleagues, this plant, with an ancestry of 450 million years, may also provide a new “compass” for stem cell research, helping scientists understand better how to program stem cells for medical purposes.

Dr. Nir Ohad of the Department of Plant Sciences at TAU’s George S. Wise Faculty of Life Sciences, together with Prof. Ralf Reski of the University of Freiburg, Germany, have discovered that the polycomb (PcG) group of proteins plays an important role in regulating stem cell differentiation in



Common moss could play a role in the success of stem cell therapies

moss, which is the point at which a stem cell “decides” to become a leaf or a shoot, for example. This mechanism, apparently an ancient one controlling genetic expression, is common to plants and humans alike.

“We may not yet have found the switch that turns stem cells into tissue in humans,” Ohad said, “but we have found a key component that makes this switch work properly and that might be utilized to keep stem cell reprogramming from going awry.”

The study, which was reported in the journal *Development*, was funded by the German-Israeli Foundation (GIF).

When Zoe Coleman, a six year-old living in the Ramat Aviv neighborhood close to TAU, asked to meet another girl whose father was suffering from terminal cancer like her dad, Jeremy Coleman, it took her parents several months to find an appropriate play date. When it finally happened, Zoe, now eight, benefited tremendously from the experience of meeting someone else in a similarly difficult situation.

The experience inspired Jeremy, who has since died, and his wife, Pamela Becker, both TAU business school graduates, to establish Jeremy's Circle, an organization that provides support and play dates for the children of family members suffering from cancer. "We decided to turn things around and create a social initiative from all this pain and suffering," says Pamela.

The initiative was taken under the wing of TAU students whose own lives had been affected by cancer, and they volunteered to mentor children facing a similar loss. The program they established, Circle of Giving, is run by Hillel at TAU in cooperation with Jeremy's Circle and is coordinated by TAU student Lynn Brill.

Since Jeremy's death in 2008, the project has expanded with the help of family and friends to include a nationwide play date database that matches children according to age, gender and location and holds special fun days during school vacations.

The first event the organization held, after Jeremy's death, was a Hanukkah party for kids from all over the

country. "One of the mothers started to cry. She told me that she hadn't seen her kids have such fun in ages," says Pamela. "The message is that even in a sad situation, it's OK to have fun."

Applying business know-how

The management skills that both Jeremy and Pamela acquired while studying for their MBAs at TAU's Faculty of Management—Leon Recanati Graduate School of Business Administration helped them set up the organization. Jeremy, a Brit, and Pamela, from the USA, met in 1996 and married in 1999.

Jeremy worked as an international business strategy consultant and also led regional competitiveness projects together with Palestinians, Jordanians and Egyptians. Pamela is a marketing consultant specializing in advertising and marketing strategies for Internet companies. "The MBA degree from TAU helped accelerate both our careers," says Pamela.

The TAU mentoring project came about as a result of a chance meeting between Lynn Brill and Pamela's mother at the GA Assembly of the United Jewish Communities that took place in Jerusalem this year. Lynn, 26, a TAU student in communication and political science, was a young teen when her mother fell ill with cancer. "From age 11 to 14, I accompanied my mother to all her treatments. My parents were divorced and I was the oldest sibling. During that time I really needed support, which is why I decided to take this program upon myself."

Lynn says that the first pilot program has had positive results. "Children involved with cancer take on an enormous burden of responsibility," says Lynn. "The program takes them away from grief and pain and allows them to be just kids."

For Omri, 29, a TAU psychology student in the program, the program represented a chance for him to "close a circle." Omri's mother died 10 years ago from cancer, while he was a soldier in the IDF. "I welcomed the idea of getting closer to a young child undergoing the same experience. It enabled me to deal with my own experi-

ence of loss," he says.

Omri was matched with eight-and-a-half year-old Ido whose mother died of cancer one year ago. The two met for weekly meetings of one and a half hours during the three months of the pilot program. Ido's younger five year-old brother was also teamed up with a TAU student-mentor.

Omri believes that the program gives children the positive support they need: a fun and trusting relationship with an older person. "I have no doubt that our time together, playing games, contributed to Ido's well-being," he says. "I was surprised that the meetings held such importance for the child within such a short time."

The experience has helped Omri redefine his professional goals and direct his studies toward child psychology. "I was challenged to enter the world of a child who cannot express his grief in words, and can only share with you his creative life," says Omri. "This is the model I would like to follow in my work."

As for Omri's own loss, the

Closing

first two years after his mother's death were the most difficult. "We were in a constant flux of reassessing and restructuring our family relationships," he says, adding that his mother, who volunteered in organizations dealing with patients' rights, would be proud of his participation in the program.

Maayan Blumenfeld, 25, a TAU student in psychology and special education, was motivated to join the program by the loss of her younger brother.

Maayan was matched with 14 year-old Lior, whose mother died a year ago from cancer. "At first it was hard to get close to Lior, who was the oldest child in the program. However, after a few months, we formed a close and trusting relationship based on fun activities such as solving puzzles. I saw him gain self-confidence."

For Maayan the experience was very

meaningful as Lior was the same age as her brother when he died.

Head of TAU's Hillel chapter, Pnina Gaday, says, "The most amazing thing about this project is that everyone involved has a connection to cancer. The students don't do it for extra credit or scholarships but are motivated by a real desire for *tikkun olam*."

Pamela Becker (seated left) with children Leo (top) and Gil, students Lynn Brill and Maayan Blumenfeld and Zoe Becker.



a Circle

A social program resulting from the pain of one family is helping children experiencing the loss of a relative to cancer

