

Mixing Torah and flour

Staff at the Jerusalem College of Technology believe Talmud students should work as well. **Judy Siegel-Itzkovich** interviews its new president, Prof. Noah Dana-Picard.

"Without flour, there is no Torah.
Without Torah, there is no flour"

— Pirkei Avot

Learning a profession and supporting one's family – as well as studying Torah – has been the norm in Jewish life for thousands of years – and the great Spanish-born sage and philosopher Maimonides (the Rambam, who was also a leading medieval physician in Morocco and Egypt) is one of many examples. Except for a small number of prodigies, declares Prof. Noah Dana-Picard, men who spend all their lives in front of a Gemara are neither desirable nor beneficial to Jewish society. A society can't survive if all its members do the same thing, he insists. All functions have to be filled, from bus drivers and sanitation workers to doctors, university professors and rabbis.

Dana-Picard, the new 55-year-old president of the Jerusalem College of Technology (JCT), is a deeply observant and highly respected mathematician born and raised in France. In an extensive interview with *The Jerusalem Post* on the Givat Mordechai campus, he recalls that all the haredim men he knew in France pursued a secular education so they could get a job and support their families. It is the same in American haredi enclaves, but unfortunately not so in Israel.

"A great man in the Torah who taught me operated a store," adds the professor, who came on aliya with his family in 1984. "And the Rambam himself writes that knowing the logic of mathematics and astronomy is a way to reach an understanding of God."

But Dana-Picard, the fifth president of JCT, has encountered haredim men in Jerusalem who needed a calculator to multiply 6 by 10 because they had learned little or no arithmetic during their yeshiva studies. It is difficult to really understand the Talmud in depth, he notes, without having a basis in math and the sciences.

DANA-PICARD grew up in the shadow of the Holocaust. His grandparents from Alsace were hunted by the Nazis, interned in the French camp of Schirmeck and survived by being hidden in Nice. His paternal grandfather, Binyamin Dana, went to Nice from Tunis during the early 20th century and met Cecille Picard, his grandmother. His father, who fought as a Partisan during World War II, went to a special French court to change his family name to Dana-Picard in order to memorialize his many murdered relatives.

Noah realized as a teenager that math was intriguing. He earned one doctorate at the University of Nice in algebraic geometry, and when he came to Bar-Ilan University found he had to earn another in non-commutative algebra. "There I learned how to be a mathematician."

His parents often visited Israel, and after his father died, his mother came on aliya; a sister remains in France. But the country of his birth "is not a good place for Jews today. France has given up on itself, and as a Frenchman, I speak in understatement. I worry about the Jews there, as only last week newspapers reported that two were attacked. I rarely visit."

The softspoken Dana-Picard, who goes by his French first name Thierry when publishing his research (more than 60 articles) in foreign journals, feels at home in linear algebra, infinitesimal calculus (dubbed by students, who have a love-hate relationship with the abstruse discipline, as "infi") and complex variables. He also sits on the editorial board of several prestigious mathematics publications.

CONTRARY TO its image, mathematics "develops all the time. God decides that certain knowledge comes to the world. It's amazing at mathematics conferences to see people from different countries speak about the same thing they developed independently, giving concepts almost the same names. It is wisdom, alive and developing."

He joined the JCT faculty in 1991 and served for a decade as director of JCT's department of applied mathematics, working hard to generate interest in one of today's advanced theoretical fields. He also specialized in geometry and technology-based math education, and worked as an adviser for mathematics at the Weizmann Institute of Science's department of science education.

His wife Carole, the mother of their four grown children, has for a decade been in charge of all French publications in the Absorption Ministry. He gives her most of the credit for his pursuit of a career according to Torah principles. Since leaving the absorption center, they have lived in Jerusalem's Pisgat Ze'ev neighborhood, where he became a founder of the Nahalat Emet synagogue and lectures on Torah subjects. He sports greying red hair and a well-kept beard, a white crocheted kippa, a tie around the collar of his white shirt and tzitzit hanging from the top of his dark blue trousers.

Needed to raise funds for the constant development of JCT, Dana-Picard does less research now and travels

more to Jewish communities. "Some people at a conference in Copenhagen told me they came specially to see me, JCT's president, with my kippa and tzitzit." But he does not like extremism in the name of religion. Asked about the scandal of the hassidic school of Emanuel separating Sephardi from Ashkenazi girls with fences, separate classes and recess hours, Dana-Picard notes: "I myself am a mix of Sephardic and Ashkenazic. May God forgive them for what they have done!" There has been extremism and separatism among the various haredi populations, and between them and the rest of the Israeli population. "I grew up with a wide variety of Jews, but whether observant or not, we all felt part of one Jewish community. Today in Israel, these sectors don't know each other."

And when he sees floor-washing cloths labelled "kosher for Pessah," he adds: "I thought the greatest mitzva of Pessah is to tell your children about the Exodus!" But he did not like the tenor of the recent statement of Tel Aviv Mayor Ron Huldai, who worried about the growing number of haredim men lacking a secular education, and calling them "parasites" for studying in yeshivot while leaving the supporting of a family to their wives.

Yet the recent Taub Center for Social Policy Studies report by Dr. Dan Ben-David on the dangers of a growing under-educated haredi sector is realistic.

"BUT I AM optimistic. The haredi word is undergoing a major change. It has begun slowly due to haredi women," the mathematician says. "They have received more of a secular education in their schools, but they can't work only as kindergarten or school teachers; there aren't enough jobs. So many have gone on to study computers and gone into programming in hi-tech. Even though some work only with women like themselves, others do not, and are exposed to the bigger world. They earn more money and preserve their religious and cultural values." He has heard stories about how these more advanced women observe their husbands, "but I haven't encountered such cases myself. Yet sometimes we have women call and ask how they can get them to study engineering or other subjects at JCT." In Europe, most of the Jews were poor, but there is no reason to be poor in Israel today, he declares. One salary is not enough when raising a large family, "and roles in the family are changing." When the visionary, Viennaborn physicist Prof. Ze'ev Lev (William Low) established JCT (originally dubbed Machon Lev) 41 years ago with seven engineering students in a Bayit Vegan apartment building, he dreamed of teaching high-level science and engineering combined with Torah to modern Orthodox and haredim men. But until the past decade or two, it was mostly modern Orthodox students – before Israel Defense Forces service in the academic Atuda or after their compulsory service – who were attracted to the school.

A decade ago, JCT developed a special framework – Machon Naveh – for haredi yeshiva students who could spend evenings studying for a degree. Today, JCT schools have more experience teaching haredim men (and women) engineering and other hi-tech professions than any other institution of higher learning in the country, says Dana-Picard.

HIS PREDECESSOR Prof. Joseph Bodenheimer declared in his first *Jerusalem Post* interview as president more than 16 years ago that he would open a similar college for religious women – even though the idea aroused much opposition from some board members and rabbinical staffers.

Today, JCT's Machon Tal in the capital's Givat Shaul quarter has the country's second-largest academic nursing school, plus most of the fields in which the men at Machon Lev earn undergraduate degrees – electronic engineering, applied physics/electrooptical engineering, medical engineering, software engineering, computer sciences, computational chemistry, industrial engineering, managerial accounting and information systems, technical management and marketing. Both sexes are taking a new master's in business administration that includes a heavy dose of Jewish business ethics and a master's in telecommunication. There is also Machon Lustig – a haredi women's institute for technology and management in Ramat Gan – and on the main JCT campus a technological yeshiva high school named "Torah Umada," for over 200 boys, with special programs for French and English speakers.

Dana-Picard says there are 300 haredim men at JCT, most of them – with black kippot or long sidecurls – studying in the same classrooms with national-religious male students in their modern dress and crocheted skullcaps. It is not a common sight, even in Jerusalem. "They learn together, they pray together. They get to know each other, although they don't try to change each other. I am very optimistic."



PROF. NOAH Dana-Picard: Maimonides showed contemporary Jewry the way by combining medical studies and practice with outstanding Jewish thought and commentary. (Judy Siegel-Itzkovich)

Even though the national religious men are going to IDF service or already serve in the reserves and the haredim do not, "there are excellent relations between them. In my eyes, it is a privilege to defend the country." But as the vast majority of haredim receive little or no training in secular subjects – English, math, physics or other sciences – they have a lot of catching up to do. A short pre-pre academic program is offered to determine who among the applicants is suited for a degree. "I heard from some lecturers that haredim men sometimes find it difficult to meet deadlines. When they studied Talmud for its own sake in *yeshivot*, there were no deadlines, and they did not get homework or grades. But I have not seen it myself. These students are very nice people and very successful. I love all of them and regard them as my children."

JCT advertises its academic programs for haredim in some of the sector's newspapers and magazines, but it does not send representatives to yeshivot to bring them in. "It is largely passed by word of mouth. The average student is married, around 23 or 24 and has a few children," says the college president.

JCT's educational advisers and teachers teach applicants math, English and computers in small groups to get to know them and identify those with potential. Most pass, but those who reach the application process are already motivated. Those accepted attend an intensive year-long preparatory (*mechina*) program, funded largely by scholarships. "There is nobody qualified for JCT who is turned away because he or she can't afford it. That is our job – to find philanthropists to donate scholarships," says Dana-Picard. "They don't turn into native English speakers or math geniuses in a year, but they pass matriculation in these subjects; in the average Israeli high school, a lot of time is wasted."

The *mechina* staff are "very devoted; they stay after hours and work in small groups," he says. While JCT's programs for haredim men do not attract students from extreme communities such as Jerusalem's Meah Shearim, Dana-Picard thinks that eventually they will.

Although haredi yeshiva heads and other leading rabbis naturally want to increase the numbers of their own students, "there are those who support our work. They realize that not all are suited to studying Talmud, and some are better off learning a trade," continues Dana-Picard. "I believe, however, that everyone should learn a trade and a profession, not only those unsuited to Torah study. It is a *mitzva* to study Torah and support your family!"

THE HALAMISH program instituted by Iscar industrialist Eitan Wertheimer ensures that all students get a laptop computer. Even if they don't have Internet access at home, they can use it freely – filtered by the Rimon service – throughout the growing campus. Many lectures are available online from JCT's Web site, which is useful for the haredim to go over material just as it helps those who serve in the army cope when they are called for reserve duty.

The number of engineering graduates in the country is increasing, but there are still not enough, and there are fields not yet taught at JCT that will be offered. Prof. Manuel Trajtenberg, head of Israel's Council for Higher Education, has asked all the institutions to present programs for the coming five years.

"We want to train water and solar engineers, and are thinking of social work as well as a nursing school for men, as there is demand for that," says Dana-Picard. "We want to teach nanotechnology and computer communications and have a master's degree in applied physics for men and women."

ALTHOUGH IT is not a university and does not get research funding from the Council for Higher Education, its faculty and students do conduct research. "We have a lab, for example, that has developed solar energy panels that absorb light from both sides," says Dana-Picard.

With over 1,000 graduates and student bodies swelling from year to year – there are currently 3,000 students in all the JCT institutions – Dana-Picard intends to forge stronger ties with alumni.

"As president, I have sent out e-mail messages to all staffers, and from next month I intend to do the same for all graduates. We are also in the process of strengthening ties with industry, so that while still taking classes, students increasingly work with companies on projects, giving them a leg up on good jobs later."

Dana-Picard is also aware that the small sign saying just "JCT" in English and its Hebrew equivalent on the main Givat Mordechai campus does not identify the college to many who drive or walk by. "The Torah teaches us to be modest, but the institution must make itself better known, and we will do that."

[For the sake of full disclosure, the author's two sons are JCT students, one an electrooptics engineering graduate in the Atuda and now a student in the MBA program, while the other is completing his first year in electronic engineering as an Atuda candidate.]



JCT is the only place in Israel where haredim and national religious young men study academic subjects – such as electrooptics engineering, software engineering and managerial accounting – side by side and pray and eat together. (JCT)