When surgeon Alex Zendel goes to work at Mt. Sinai Hospital in the Bronx, he sometimes doesn’t come home for three days.

“It can be a very tough three days around surgeries such as organ transplants.”

The 41-year-old is half-way through a two-year APF clinical and research Fellowship. This is his clinical year and to say he’s busy is an understatement.

Zendel is a transplant and hepato-pancreato-biliary (HPB) surgeon in training. HPB, also commonly referred to as liver surgery, involves principally the liver, pancreas, gall bladder and bile ducts. Zendel performs primarily cancer and transplant surgeries, many of which involve the liver.

“It’s just a marvelous field in general and for me in particular,” he says. “It’s a challenging area demanding excellence and precise execution. There’s this great combination of brain and manual work.

“This subspecialty also offers great variety, including the opportunity for me, with transplant and oncology, to offer really sick people their last solution.”

In August, 2017 Zendel began the research portion of his fellowship at Montefiore Medical Center in conjunction with work being done at Albert Einstein College of Medicine, its academic partner. Albert Einstein has a liver institute and Montefiore has a liver transplant program. They were studying the autophagy process as it affects liver cancer.

(Autophagy -- consumption of the body’s own tissue as a metabolic process occurring in certain diseases)

As a surgeon, Zendel was uniquely suited to the part of the job that required him to help collect liver samples at the hospital.

But then he had to take them back to the university lab for experiments.

Before he could do those experiments, Zendel had to take a crash course in basic laboratory research. “It took me a couple of months to learn the methods and another couple of months to learn to do the experiments. It’s tough work to do in one year, people usually come for longer.

“But it was thrilling to learn these skills and to be a part of this wonderful project. Also it was a great introduction to medicine in New York.”

He hopes this research, while not yet complete, will be published. But he’s also going to be working on other projects during his clinical phase. “I want someday to be a clinician with research activities, likely more clinician than researcher, but science training always helps you to be a better clinician.”

Zendel had been involved in seven publications and presented work abroad prior to coming to New York. It was mostly about clinical topics, not heavy on basic science.

“A research schedule, while very demanding, is not as hectic as a clinical schedule. So this time permitted me and my family to adjust to a completely new living situation. It allowed me to enter my clinical fellowship better set up for a life that allows for ‘basically no free time.’”

And since July, 2018 ‘basically no free time’ is just about what Zendel’s had. Wife Alina staffs the home front full time.

Dad, Mom, 43, a nurse who works as a hospital medical tourism coordinator, and sons Lior, 12 and Idan, 8 make up the Zendel family. They came to the United States from Ramat Gan, a city in the Tel Aviv district.
Ramat Gan is also home to Israel’s largest hospital, Chaim Sheba Medical Center, where Alex completed his internship and general surgery residency and where Alina works.

Zendel, born in the large industrial Russian city of Samara, came to Israel at 15 for high school. He was part of an international youth program – Naale – meaning “Teenagers to Israel without Parents.”

(In fact, last year Zendel attended an anniversary gala in New York in honor of some of Israeli programs receiving U.S. support and got an award on behalf of Naale. “And here I am in New York on a fellowship. It was like the closure of a circle.”)

After high school his parents Yakov, a computer engineer and Faina, a teacher joined him and they stayed, making Aliyah in 1996. Zendel then joined Atuda, an elite program that allows participants to forgo immediate military service in lieu of completing specialized higher education. They later enter the IDF in positions relevant to their fields of study.

He attended medical school at Ben Gurion University of the Negev at Beersheba.

After internship Zendel signed on as a battalion physician in the infantry’s famous Givati Brigade. “For two years I was a field physician, really doing everything along with the soldiers. I deployed for many missions and was able to provide a lot of help during both emergencies and regular times.

“Next I was a medical officer for four years with Yahalom, the IDF Special Forces combat engineering unit.”

After that assignment Zendel returned to Chaim Sheba for his residency in general surgery, remaining on active duty. During residency he did another two years in management at IDF Medical Corps headquarters, trauma branch. He also commanded a field surgical tactical unit.

One of the high points of Zendel’s surgical and military careers was his deployment, near the end of his residency, to Nepal after the 2015 earthquake. He journeyed to one of the largest field hospitals outside of Israel. “I’m very proud of that work.

“Being in the military has helped me to be a better doctor and a better surgeon. Every stage, while tough, has helped get me where I am today.

“You learn the very very important skills of working under pressure and decision making. Nothing is more important in surgery than good decision making skills – for every step of patient management – from pre-op workup to surgery to post-op management.

“And you’re always working on your interpersonal skills – being thrown into new situations, under different circumstances, with different people. Teamwork, for example, is also an invaluable operating room skill.”

Zendel decided to become a doctor while still in Russia. His school was affiliated with a local university’s biology and medical faculties and he was exposed to the subject matter at a relatively early age. “I also had doctors in the family – we were kind of a ‘physician family.’

“But mostly it was a combination of the ideas of helping people and doing something challenging. By that time I was always thinking surgery was the most challenging and attractive.”

In medical school Zendel’s choice was only reinforced. “Surgeons see the results of their work much faster. I want to see the results of my work NOW. That’s the satisfaction you can get very fast and you really help and save lives – not that others don’t save lives too. And it’s not as though there isn’t stress and the lack of success and a lot of things you carry with you that you can’t help.”

Later in school, as medical students got to scrub in on surgeries, Zendel observed that people with similar medical interests and “a special type of character” gravitated toward surgery. “And sometimes you feel they are closest to what you are and you feel that’s where you need to go.
“You also see examples of surgeons you start to admire and you want to be like them. They can really influence your career decision, what you go for.”

Zendel chose a residency in general surgery, but soon became attracted to liver surgery and later transplant work. Again he made a decision by watching and learning from others in the field.

“You like the way they work, how they handle the challenges and how they interact with patients. And you try to understand how their minds work. And you decide you want to be like them.

“Then you weigh in the satisfaction you get from your work.

“Transplantation is the outer edge of liver medicine with its technical and mental challenges. Maybe that, in and of itself, attracts a certain type of person – a person who enters the most difficult fields, chooses the hardest routes, tries to have every decision be the hardest decision, etc.

“And you get satisfaction from that too.”

Zendel also did a lot of liver oncology surgery during residency. Chaim Sheba may be the main referral hospital for surgical oncology in Israel, he says. “I got lots of experience.”

After making all these career life choices he decided to make his subspecialty official with a postdoctoral fellowship in the U.S.

And that’s how he ended up sometimes spending 72 hours, nonstop, at work in a hospital approximately 5,670 miles from home.

**DID YOU HAVE TO LEAVE ISRAEL TO GET THIS KIND OF TRAINING?**

“Absolutely. You simply can’t do it in Israel. There is no formal training of this kind for this in Israel. Even if you go for informal training, you can’t get the volume and diversity you get at a place like Mt. Sinai, where you also get the expertise of many different surgeons to learn from. And your ability to get the transplant experience is limited in Israel because of the relatively small presence of transplant programs due to different issues, including cultural and religious ones. The community of certified liver and liver transplant surgeons is very small.”

**IS THE PROCESS OF GETTING A FELLOWSHIP SUCH AS THIS ONE DIFFICULT?**

“Very difficult. You are competing against every candidate from everywhere in the world. And U.S. applicants get first preference for U.S. fellowships. Coming from outside the U.S. you truly are an underdog. I was very excited to get my first choice.”

**WHY MONTEFIORE AND MT. SINAI?**

“Montefiore and Albert Einstein are nationally known for groundbreaking liver research and their Marion Bessin Liver Research Center is funded at a prestigious federal level. I learned so much there.

“Mt. Sinai is internationally acclaimed for patient care and HPB surgery. The work there is absolutely cutting edge. It’s a state-of-the-art facility with world renowned people. It hosts the Recanati/Miller Transplantation Institute (RMTI).

“As important to me as the facility was the quality of the teaching. It’s superior at Mt. Sinai and this is well-known.

“The diversity and volume of patients was also a major factor in my choice. You just don’t see either in Israel. The volume of some procedures here at one hospital is larger than the volume in all of Israel. At Chaim Sheba we might do three to four liver surgeries a week. Here I, myself, am involved in about six to seven a week and we have four fellows and many many surgeons. Also, not all abdominal organs are transplanted in Israel, but Mt. Sinai does them all, including intestines. Last year Mt. Sinai got into the top 10 centers in the country in terms of volume of abdominal transplants. Also, there’s a tradition of Israeli fellows at Mt. Sinai and I was able to talk to former fellows and get the ‘real’ information while I was researching...
fellowships, not just what’s on the Internet and in interviews.”

YOU’RE IN YOUR CLINICAL PHASE RIGHT NOW, WHAT’S IT LIKE? IT SEEMS INTENSE.

“Well, it is intense. For the past months, for me, if you count back it comes out to at least a surgery every day, five days a week, excluding on-call weekends. You’re on call two weekends, 24/7, a month and off two weekends.

“Some surgeries are as short as four to five hours for say... a kidney transplant. And some complex transplants can take 12 and 14 hours. Mt. Sinai also specializes in a unique subset of transplant surgery, ‘living donor transplants,’ which take quite a special expertise.”

Zendel shows up for work at 6 a.m. He goes home when it’s over.

“And yes, sometimes it’s a very tough three days,” he says. “Procedures involve preparation, surgery and follow-up management.

“Sometimes you go overnight for a day or two and then you might have a period when things are more relaxed.

“And you still have reading to do, work to present and meetings to attend.

“The fellowship is very tough and you make a lot of mistakes. You feel a lot of pressure from your mentors, but you are treated in a very humane and respectful way. Everyone is – it comes from the top down. There’s a real sense of teamwork.”

WHEN DO YOU SLEEP?

“It feels a little like the military, so I’m used to it. I’m OK with it. You rest any time you have time. And ‘you restart your engines’ when you need to. You try to stay on top of it, but sometimes it’s very tough.”

WHAT DO YOU DO/OR HAVE YOU DONE FOR FUN?

Well, the boys’ basketball activities take up a lot of time. But we’ve seen a couple of Broadway shows; the Bronx Zoo is near us; we went to the Statue of Liberty, the 9/11 Memorial and lots of other local things. We’ve traveled to: Florida, California, Niagara Falls, Toronto and Boston as well as around New York State.

YOU MENTIONED MENTORS – COULD YOU NAME SOME IN ISRAEL AND THE U.S.?

There are lots in both countries; this is just a few:

“Dr. Aviram Nissan, Head of the Department of General and Oncological Surgery at Chaim Sheba, was my main mentor in Israel during my residency, especially in the last years. He’s one of the most famous surgeons in Israel for liver oncology and a truly great person. He’s a model for me, the whole package – clinician and person. Patients love him; not only does he fight for them, he has wonderful relationships with them. He treats his team with respect and he is always challenging himself. He is not the usual ‘surgeon type.’”

“Dr. Sander Florman, Head of RMTI – under his management the attitude toward fellows is very good and very humane. Florman is an expert HPB surgeon and transplant surgeon.

“Dr. Kishore Iyer, Director of the fellowship program and Chief of Intestinal Transplant Surgery, is a real ‘father of the fellows.’ He follows everyone’s learning curves. We have ‘family meetings.’ And any time you have a problem you can come to him. Other fellowships are not always like this.”

HOW HAS THE APF FELLOWSHIP GRANT AFFECTED YOUR TIME IN NEW YORK?

“It has made my actually working every day at this pace a reality. I have the peace of mind, the freedom from other life issues – rent (New York is very expensive), putting food on the table, getting winter clothing, schooling (my children attend Jewish school) and more.
“When I was doing research it freed my mind, again in this way, but also allowed my mind to expand and just become steeped in research in a way that doesn’t always happen when you’re dividing your time between research and clinical work.”

WHAT DO YOU HOPE TO DO WITH YOUR NEW YORK EXPERIENCE WHEN YOU RETURN TO ISRAEL?

Zendel notes that the HPB field is one where fellowship training makes a big difference in delivering better care and observing better outcomes in the population. “I am eager to be a part of that,” he says.

“When I return to Israel I will join a very small community of truly well-trained and certified transplant and liver surgeons in Israel – only about 20. But then the first thing you do is start at a high-volume center under the supervision of a very experienced surgeon. You don’t get to run your own program right away. You need years more of experience.

“This fellowship training program will give me the opportunity to become involved in one of the big HPB programs in the country. And as the years go by I hope to become an expert. I will be involved in the current issues of transplant, but will do a lot of oncology surgery as transplant opportunities are limited.

“Without this fellowship I would not have the chance to become an active and important part of this field.”