



American Healthcare Professionals and Friends for Medicine in Israel

2001 Beacon Street, Suite 210, Boston, MA 02135

Mum’s the word – and baby too, for Dr. Amir Aviram, an APF 2017-2018 Clinical Fellow in Maternal-Fetal Medicine at Sunnybrook Health Sciences Centre in Toronto.

“Maternal-fetal medicine (MFM) is just a wonderful area. There are the intellectual challenges and the good you do. ...the fact that you are part of one of the most intense and emotional part of the lives of a mother and usually a partner. It is different from anything, and from other specialties in medicine. For me, it’s the best, the most!

“And, of course, you always have at least two patients. You have one patient, the grown-up, with whom you deal most of the time. She can deliver her concerns. But you also have one patient (or more) who doesn’t speak and can’t convey their distress and what bothers them.

“You have to be kind of like Sherlock Holmes, collecting clues – a detective using ultrasound and blood work, fetal monitoring, etc. You gather all of these clues and you try to reach a diagnosis and a treatment plan that will benefit both mother and baby. And sometimes you call in other specialties including: cardiology, endocrinology and nephrology.

“In regular obstetrics and gynecology (OB-GYN) you typically have one child per mother and you do regular surveillance. But when anything goes astray, you go to MFM. In MFM essentially something is at a higher risk of going wrong or has already gone wrong,” says Aviram, an attending physician in MFM at Lis Maternity and Women’s Hospital, part of Tel Aviv Sourasky Medical Center.

An MFM specialist is an OB-GYN who has completed an additional two to three years of education and training in medical, surgical, obstetrical, fetal and genetic complications of pregnancy and their

effects on both mother and fetus, according to the Society for Maternal-Fetal Medicine.

As Aviram noted, MFM specialists are high-risk pregnancy experts. According to the MFM society, “High risk” labels may be attached to pregnant women with chronic health problems including: hypertension, obesity, renal disease, HIV and diabetes, or to women facing unexpected problems during pregnancy such as: early labor, bleeding, separation of the placenta and high blood pressure. Women carrying “multiples” also often are considered high risk.

In other cases it’s the fetus requiring a specialist. If birth defects or growth problems are identified, prenatal treatments including blood transfusions and surgery can be performed.

Aviram attended medical school at Tel Aviv University’s Sackler Faculty of Medicine after an IDF stint as a human resources officer. Now he’s a captain in the reserve branch of the army medical corps.

It was only when military service was coming to an end that he contemplated medical school. “I was kind of a ‘late bloomer,’ choosing among: economics, law and medicine,” he says. “And in the end, I decided I wanted to do something that was both intellectually challenging and that would also make a significant difference in people’s lives.

“In medicine the impact is much more immediate. In many areas of medicine, particularly in OB, you get to see the results right away – the good of what you do.

“In law the resolution can take ages.”

In the fifth year of medical school, Aviram chose OB-GYN, or it chose him. “It’s funny, because I was kind of sure it wouldn’t be an OB-GYN because

that's what my father is. But I was doing my OB-GYN rotation and it became clear it was what I was going to do.

"I loved the intense moments on the delivery floor, full of patients in these amazing parts of their lives."

It was in that fifth year that Aviram also chose MFM. "It was the only reason I chose OB-GYN." After medical school that the 39-year-old Jaffa native completed his internship at Meir Medical Center in Kfar Saba (about 25 minutes from Tel Aviv).

Then he headed to an OB-GYN residency at Rabin Medical Center's Helen Schneider Hospital for Women in Petach Tikva (a few miles from Tel Aviv). "I wanted to train at a tertiary center, with a large volume of cases, where my exposure would be maximal. I also wanted to train in a place with a supporting work atmosphere. I found those in Rabin.

"I actually knew the place well because I'd already done a rotation there."

At Rabin, Aviram found his mentor, Yariv Yogev, then chief of Helen Schneider's maternity division.

Yogev is now head of the OB-GYN department at Lis. Aviram completed the last half year of his residency there when Yogev relocated.

"A mentor is someone who, on the one hand, can teach you and educate you and, on the other hand, motivate you to reach your potential.

"We met when I was a young resident. He introduced me to the academic and research world. He helped me when I didn't know how to do it.

"My first manuscript had 14 versions. Yogev was the head of labor and delivery and he still had time at 1 and 2 a.m. to read it and correct it again and again and send it back to me so I could learn. I think that's a lot of dedication."

(Aviram published 60 articles before coming to Toronto and had presented research abroad. Since

arriving in Canada he's published about eight articles from his research in Israel. And about four from his work at Sunnybrook are in different stages of publication.)

He also learned much from watching Yogev manage clinical situations. "Not only is he clinically skillful, but he has an amazing way with patients -- talking to them on their own level, responding to them and their families.

"I hope I manage to do that today as a clinician myself."

Aviram believes good patient/physician relationships are key to good care. "A lot of the time this is how you gather information about the baby.

"And at times you have to convey information that is serious, but don't want to alarm the patient and family. It can be very delicate, like 'walking between the raindrops.'

"In MFM you might have a relationship of several months and many parts might not be very relaxed, so people skills are absolutely very important."

He also enjoys the "people" part of teaching medical students and residents.

"Working with bright young minds is challenging. Students that get accepted to physician programs in Israel are the brightest and the best and you have to work hard to make things captivating for them.

"Teaching others to see the beauty of the field as you do, that's a great achievement.

"I love see students' reactions to childbirth, for example. Big guys with five years in the military weep at their first deliveries."

Was it necessary to leave Israel for this type of education?

"Yes, there is no such program in MFM in Israel. Also, while the volume of deliveries at Lis is greater (12,000 a year as opposed to 4,500 a year at

Sunnybrook), the volume of patients in this high risk category is greater at Sunnybrook because it is a referral center for all of Ontario. And in Israel vs. Canada fetal therapy and some forms of medical management are considered less of an option and termination is more likely.”

Why did you choose this program in particular?

“The reputation of this program precedes it; people who have been here recommend it very highly. And for a fellowship, you really want volume, you want to see and do many many procedures. Here the volume is very educating because you see and do a lot.

Dr. Jon Barrett, head of MFM at Sunnybrook, is wonderful to work with as is Dr. Nir Melamed, Associate Professor of MFM. They are my mentors here.

“And when I complete my fellowship I will receive certification from the Canadian Royal College of Physicians and Surgeons with a sub-specialty in MFM.

“Also, this program is very strong in both clinical and research. And since I want to focus on both in my career, it was a great choice for me. I consider myself a physician/scientist.”

Speaking of research... you're working on some unique material.

“I'm studying the placenta and its role as an indicator of abnormalities in both the fetus and the mother. While clinicians have long known of the importance of the placenta; after birth most, in Western medicine, consider it essentially medical waste,” says Aviram. “We must remember that it is a very sophisticated organ worth more attention during and after birth. A lot of MFM arises in the placenta.

“For example, we now know more about the relationship between the placenta and preeclampsia. And we know that different placental lesions are associated with different clinical scenarios such as: hypertension, diabetes and fetal

growth restriction (when a fetus is not meeting expected growth markers).

“Also, there are placental differences between singletons and multiples.”

Aviram uses ultrasound to examine placentas in utero. After birth he sends the placenta to pathology to quantify changes and compare the actual organ to what he's seen during pregnancy.

And you've recently received a grant for some research in another area?

Yes, this trial aims to explore ways to ameliorate perineal pain in women with perineal tears during delivery or episiotomies.”

What's a day like?

“I get up at 6 a.m. and by 8 a.m. we're doing patient rounds and or deliveries. A delivery is often pretty short, because as a physician you usually don't show up for more than the last 20 minutes or so unless there is surgery to be done or a crisis.

“But we have rush situations regularly: a cord prolapse, the baby's head suffocating, bleeding all the time, preeclampsia all the time. We see emergencies on a weekly basis because we are a referral center.

“My most intense patient experience probably was one where the mother was 52 years old with chronic hypertension, diabetes, fetal growth restriction and was carrying triplets. We did help her get to 33 weeks though.

“Typically about two to three days a week are spent on the in-patient wards. And part of the week I'm doing ultrasounds, to learn how to scan.

“Then we also have to do educational rounds, make presentations and complete literature reviews.

“Depending on what's going on, I'm home by about 4:30 or 6:00 p.m.

“There are eight MFM specialists and I’m on service with all of them and I learn a lot from each and every one of them. You can pick the things that fit you. It’s really like a grocery store – the amount of new things you can see and learn from, it’s amazing.

“It’s intense in the sense that moving to another country is – different language and patients and colleagues with different cultural mores and beliefs. But the work/life balance is more reasonable. In Israel you’re always ‘on.’ You’re always getting calls from the hospital. Here, when you’re ‘off,’ you’re ‘off.’ But mostly OB is OB everywhere.”

When do you find time for the research you mentioned?

Right now it’s squeezed in between the house, the kids and clinical work. So, it’s nights and weekends. But in July and next year I’m expected to get dedicated research time. “

What’s it like for your family?

Aviram’s wife and three children accompanied him from Even-Yehuda (about 30 minutes from Tel Aviv) to Toronto for two years. Mom, Yael Weiser-Aviram, 38, a physical therapist, is finishing necessary exams to practice independently in Canada. The kids are: sons Yoav and Ofir, 10 and 5 and daughter Adi, 8.

“My wife is amazing in her ability cope, he says. “My work life is very similar to what I did in Israel. I just get up in the morning and go to work. Granted, I need to speak English and the protocols are somewhat different, but my wife and kids have had to change their lives completely in addition to supporting me. It’s been much more of an adjustment for them than for me. My kids are speaking an entirely different language and my wife is not working in a profession she loves.

“But I think the time here, being on our own, has made our family tighter and closer. We really feel it here. And as I said before, the work/life balance is much better than in Israel. That helps a lot.”

Any travel?

“We’ve had lots of trips, around Ontario, to New York City and Washington D.C., and this summer to Nova Scotia. This summer we we’ll also go back to Israel for a visit.”

What do you hope to do with your Sunnybrook experience when you return to Israel?

“I hope to continue to expand our understanding of the relationship between placental pathology and clinical diseases in pregnancy.

“Also, I want to maintain my Canadian ties for research and clinical collaboration.”

American Physicians Fellowship for Medicine in Israel

P: 617-232-5382 • F: 617-739-2616 • info@apfmed.org • www.apfmed.org