



Transcript:
The Future Is Now: Precision Medicine, Stem Cells & More

Benyamin Cohen:

Hello everyone. And welcome to the “Hadassah on Call” podcast. I'm your host, Benyamin Cohen. We've got a special episode today. Our guest is Professor Yoram Weiss, who is currently serving as the acting director general of the Hadassah Medical Organization, which means he oversees everything.

Prior to that he was the director of the Hadassah Ein Kerem Campus. And previously he held the position of Chairman of the Department of Anesthesiology, as well as the Director of the Center for Surgical Critical Care Medicine.

We're going to chat with him today about his vision for the future of the hospital. We'll talk about what he's learned from the double crises of COVID and Ukraine, how new technologies will reshape medical care in the coming years, and why he thinks Hadassah is uniquely poised to be one of the world's best hospitals.

Professor Weiss. It's great to have you back on the show.

Professor Yoram Weiss:

Happy to be back.

Benyamin Cohen:

We have so much stuff I'm looking forward to talking with you today about. About Hadassah's work in Ukraine, about the COVID situation, about your vision for the future of the hospital. You became the acting Director General of the Hadassah Medical Organization in July 2021. So almost a year ago. And since you took the helm, there's really been these two crises that nobody could have predicted. You have the coronavirus, even after the vaccine came out, we had Delta and Omicron, and now with the

war in Ukraine. And I know Hadassah has a lot of efforts sending medical teams to Ukraine. How did your training prepare you for this kind of a situation where you're leading in a time of crisis?

Professor Yoram Weiss:

Well, I should say that my career has been with Hadassah for years in a crisis because coming back from the States in 2000, as you remember, I took over the Surgical Intensive Care Unit and I was running the Surgical Intensive Care Unit during the time of the second intifada, where we had explosions in Jerusalem. Buses exploding and cafes exploding in Jerusalem and dealing with a lot of severely injured patients.

Professor Yoram Weiss:

So, this was one crisis. And then as director of the Intensive Care Unit, I was involved with the swine flu. If you remember the outbreak that was also in Israel and also all over the world. And then we were preparing also for a major outbreak that we thought may affect us. And finally, since January 2020, have been heavily involved as the director of Ein Kerem because only Ein Kerem took care of COVID patients at the beginning.

Professor Yoram Weiss:

And we were heavily involved in managing the Corona patients. I took the decision together with a previous CEO to decide, to commit the entire Round Building to COVID in order to separate between the COVID patients and the other activity in the hospital. And therefore, we set an example in Israel for the ability to continue to work and treat patients while at the same time we're treating COVID patients.

Professor Yoram Weiss:

So, to understand that while we have Corona, we have to continue support and treat our patients that have other diseases and need other interventions. So, the managing COVID, later on the Delta and Omicron was basically a direct extension of what we've done before and with the same basic, which is, we need to continue live as much as we can while treating our patients to the best of our abilities.

Benyamin Cohen:

You devoted an entire building to a massive COVID ward?

Professor Yoram Weiss:

At the beginning, we devoted the entire building. Later on in the second, this round with Omicron, we had much fewer patients. So, we had only two departments in the old building, which was much easier. The whole load of patients was this time, much smaller than the one we had during the Delta, which started before we had the vaccination. And there, we had both in the second wave and in the Delta wave, which I would say the English wave.

Professor Yoram Weiss:

And then the Delta wave, we had more than 150 severely COVID patients hospitalized in the building. And some of them in critical condition at a certain point, we had more than 50 patients ventilated in the English wave. And then the Delta wave, which came from India.

Benjamin Cohen:

Wow. I was reading an article, I think it was in the Jerusalem Post where you were quoted as saying, "Hadassah's contribution in the past year during the war against the coronavirus will be remembered forever." What did you mean by that?

Professor Yoram Weiss:

Well, I think that if you remember, during the first three or four outbreaks, when we didn't have yet the vaccination, the major site of infection in Israel was unfortunately within two communities. One, the ultra-Orthodox community in Jerusalem. And the second one was the Arab community. And we took the brunt of taking care of the most complicated patients.

Professor Yoram Weiss:

Hadassah had the highest load of severely critical patients in Israel. And as I said, we treated at a certain time, more than 50 ventilated patients. While at the same time, we continue to provide regular intensive care services to the other activities of the hospital.

Professor Yoram Weiss:

So this both to internal medicine and anesthesia were giving us the ability basically to provide these services. And this is really thanks to these two departments that took the brunt of taking care of the most critical patients.

Benjamin Cohen:

I mean, I think you touched on this, but how do you... It's like juggling. You have to deal with the COVID situation, but other diseases, as you know, don't stop. People still get cancer. People are still having babies and people still need treatments. And you have to be able to walk and chew gum at the same time, as they say.

Professor Yoram Weiss:

That's exactly the issue and the issues also how to identify those that come in and are asking for other services. But at the same time are very symptomatic for COVID and can put at harm way, other patients. So, we had a very strict protocol on how to do that. And it worked very well. And we didn't have an outbreak thank God, in the hospital with other patients, but definitely this was critical.

Professor Yoram Weiss:

And I should say that very early in the disease, we realized that it's critical to make everybody understand that they need to come to the hospital if they have other problems. Because I don't know what happened in the states, but here in Israel, during the first outbreak, very quickly we realized that some patients didn't present to the hospital when they have major medical issues. And then we admitted them with severe complications.

Professor Yoram Weiss:

So actually, we intervened on radio and TV, making people understand that they must come to the hospital if they have a problem. Because you don't want a chronic problem to become acute or an acute problem to become a hyper acute problem, which obviously goes with a much higher morbidity, complexity and possibly death. So, this was very important to convey to the public.

Benyamin Cohen:

Yeah. And Hadassah has really been at the forefront. Each month we interview different doctors and I've been impressed with all of the new innovations that have come about because of COVID. Whether it's the multidisciplinary clinic, the research into long-COVID patients, new drugs coming out of it. What has been your assessment of how the hospital has responded?

Professor Yoram Weiss:

Well, I think that Hadassah has proven itself as an amazing hospital when it comes to really addressing COVID on several areas. First of all, the clinical work, which I just mentioned, which is the key issue and what we did there also we introduced a very organized system in order to put all our treatment protocols very quickly on one level and really providing the same standardized treatment to all our patients, having a review board of the literature that met on a regular basis in order really to review the literature and provide the most advanced treatment.

Professor Yoram Weiss:

Then we have the research and development where I think we undoubtedly have proven ourselves, both in new drugs, both in treating all drugs that were used in COVID and see if they can meet and help us treat COVID. And finally, our involvement, which was critical in development of the Israeli vaccine, which has been developed, thanks to phase one and phase two, were developed thanks to Hadassah and not to other hospitals, because really, we took the leading role in doing that.

Professor Yoram Weiss:

And finally, development of ventilators that were prepared to be used.... Very low-cost ventilators to use those in a case that will need it. At the end, we didn't need them, but we used it. And as I told you, before and I told others, I learned during one of our meetings in the U.S., that people in Vietnam have actually used our ideas in order to put them really into work on their patients because they needed it.

Professor Yoram Weiss:

So just putting that on the internet on a free platform was an amazing feat. And finally, the act that we translated all our treatment protocols on a regular basis into three languages – Russian, Spanish, and English –and these were put on our sites for faithful use for people all over the world.

Professor Yoram Weiss:

I can tell you that when we were in Argentina talking to them, when we went to a system, I can tell you that they mentioned it, that they used it in South America. A lot of hospitals used our protocols.

Benyamin Cohen:

I know it's hard to predict, especially in this kind of environment, but what do you think lies ahead for Israel and Hadassah with regards to the coronavirus?

Professor Yoram Weiss:

I think it's not Israel and Hadassah, it's the world and COVID because it's the same and I'll be open with you. We don't know. And the reason we don't know is that at this point, it looks as if it's under control. Here in Israel, we have at this point, less than 200 severe cases in Israel, which is really nothing for the Israeli Healthcare System. Please remember that severe are not critical.

Professor Yoram Weiss:

So, the number of critical patients is even much, much, much lower. So, corona at this point in Israel is under control. And it looks as if, in most of the world it's under control at this point. But let's realize that just if we had already over the past two years, we had three major variants that came out and we never know when there's a new variant that may come out. So, let's take it with a grain of salt and be very optimistic. But at the same time, realize that we need to be very much aware of new developments that may occur that aren't expected.

Benyamin Cohen:

Yeah. Well, we have a lot to talk about today. A lot of different topics we want to cover. So, I want to move on from COVID and talk about Ukraine. We had you on our last episode. I'm not sure if everyone listening to this episode has listened to that one. So, I'll do a little advertisement here.

Benyamin Cohen:

If you haven't listened to the previous episode where we spoke with Professor Weiss and a couple other doctors from Hadassah about the great work that Hadassah is doing in Ukraine. Can you give us an update on the current medical delegation and any new efforts you're doing with the situation in Ukraine and the refugees coming to Israel?

Professor Yoram Weiss:

So currently we have a delegation there. I should say that we have a delegation and we're holding three positions, one in Korczowa, which is the main refugee center. Then we have, excuse me, the main

refugee center is in Pashmichelle and there we have our main delegation, which is treating... And today they're very busy. I just spoke to them because there was a bombardment in a city, very close to the border, and there is an increased number of refugees crossing the border today.

Professor Yoram Weiss:

There's another smaller refugee center, which is in Korczowa, where we have also one physician of us who's coming there every day. And we have also at the Ukrainian consulate, that is near the border there, also we're assisting them with some assistance. I should say that now we are working together with the hospital in Lublin who's also providing physicians and working together with us.

Professor Yoram Weiss:

And finally, that we are in talks with an organization called Physicians Without Borders, which is a very famous originally French organization. But it's today an international organization. And they're speaking of a trauma train that will leave a train coming towards Poland.

Professor Yoram Weiss:

And we are involved in both helping them organize that, and also helping the Lublin hospital to prepare. And maybe we'll send the team from Israel in order to address this train and help take care of these patients when they arrive and possibly if needed, transfer them also to Israel. So this is where we are at this point with Ukraine.

Benyamin Cohen:

What's a trauma train?

Professor Yoram Weiss:

Well, they're talking about the possibility from areas in Ukraine that are today under siege by the Russians, that if there's a possibility and they open, that they will try and evacuate severely injured patients by this train directly into Poland to reach tertiary, which are very high-level hospitals in Poland in order to treat these patients.

Professor Yoram Weiss:

Now, this is a possibility. We're waiting for them to let us know when it comes out into fruition. But we have our trauma team here in Israel, which with us on a Zoom meeting where we prepare that, and we're waiting for them to give us the marching order and, if needed, we'll send physicians from Israel, from Hadassah to help the hospital in Lublin, which is a tertiary, very good hospital to help them address these issues. As you remember, last time we discussed that we are working very closely with the Lublin hospital, and we have a very close collaboration with them.

Benyamin Cohen:

And what about in Israel itself? I know Hadassah has these Youth Aliyah Centers. Can you tell us about that?

Professor Yoram Weiss:

Well, we have the Youth Aliyah Centers, which I should admit we are much less involved with them because these are Youth Aliyah, but I should say that we're treating also refugees that require assistance at Hadassah. And our hospital is open for these refugees who are in Jerusalem, if they need, we admit them and we take care of them.

Benyamin Cohen:

And do you, yourself, plan on going to the region at all?

Professor Yoram Weiss:

There's a possibility that I will be in Poland towards the end of the month. And we'll see what happens with that.

Benyamin Cohen:

In your position at Hadassah, you're basically overseeing so many different things. We've talked about COVID, we've talked about Ukraine. I want to pivot now and talk about different areas of the hospital, and you could tell us a little bit about each part.

Benyamin Cohen:

So, the first thing I wanted to talk about is Hadassah Sharett Institute of Oncology. It's one of the top cancer centers in Israel, and it's cited in Newsweek as one of the world's best specialized hospitals for oncology in 2022. I really want to know what your vision is for cancer care at Hadassah.

Professor Yoram Weiss:

Well, I should say that I think cancer treatment is really the big revolution that we are seeing these days happening in front of our eyes, because previously the treatments we had for cancer was like taking an atomic bomb and killing everything that divides very quickly, and this is the oncological medications that we had until chemotherapy.

Professor Yoram Weiss:

What we have now is personalized medicines, or if you want personalized or specifically dedicated medications that hit directly on cells that our cancerous cells, and it's like a guided missile. Now I should say that this goes also with a revolution in the diagnosis of cancer. And I truly believe that in the future,

we will not talk anymore about lung cancer or liver cancer. We'll talk on the genetic composition. What is the reason that this cancer occurred? What is the change in our DNA, if you want, in the composition of the cell that caused the cancer.

Professor Yoram Weiss:

And thanks to that, we'll have specific drugs that will target these cells. So, we have it these days, a revolution, both in the diagnosis. Some people will call it relatively well-known as Foundation One, which is a rush company who provides this platform. And this platform is going to increase in more and more genes that will find that our genes that are potential targets for treatment and will talk about specific changes in the cell. And these drugs we'll target.

Professor Yoram Weiss:

Now, the reason we are leading in this area at Hadassah is because we have some groups at Hadassah, at our Cancer Institute who are working on just exactly this specific personalized medications that are so important, which have completely revitalized some cancers that a few years ago, we had cancers where you thought that your life expectancy was a year. Patients can survive today five, six, seven, eight years.

Professor Yoram Weiss:

And it's amazing what these medications do. And the more time goes by, the more we have new medications that come in. So, if one line of medications fail, you have the next line of medication that comes in, and that's why it's so important. The other two areas that will come into play both in cancer, but also in other areas.

Professor Yoram Weiss:

And I should say that personalized medicine will also be very much important. I believe in the future, in all the immunomodulatory diseases like Lupus, et cetera. So, what we have also is the stem cell technology, which is actually maturing these days. And I don't know if you're aware of, but Hadassah just now sold to a very famous company, the Lineage company from Genentech, we sold them a stem cell technology that was developed at Hadassah by two researchers, Benny Reubinoff and Eyal Banin on macular degeneration, which is a disease that in elderly people causes actual blindness.

Professor Yoram Weiss:

And we can reverse this blindness by using stem cells. I, by the way, believe that in the future, and this was my previous line of research before I went into managing in hospital is, I believe the stem cell research will actually be also part of us being able to create organs, real organs from the patient outside, and transplant to the patient.

Professor Yoram Weiss:

So, for example, we'll take a patient with a liver disease and using his stem cells will be able to create his own liver and put the liver back into the patient and not needing any more transplant from other patients. And finally, there's the CRISPR technology that is coming in, and this is a very amazing technology. This is technology that allows us to correct problems with the way that DNA is written and correct it to the right way.

Professor Yoram Weiss:

And there, we have a group by Professor Stepenksy in our institution who's developing these days a treatment for multiple myeloma, which is a blood cancer. So, Hadassah is really at the forefront of these three remarkable technologies that are here in order to change really the way medicine will be in the next 10 to 15 years.

Professor Yoram Weiss:

And I think that's the reason that really Hadassah should focus these days on these technologies, because this is the future for medicine in the world and Hadassah is leading this change.

Benyamin Cohen:

So just to summarize that, so basically there's an umbrella of personalized medicine and one area, the first area you talked about, is precision medicine. So instead of doing radiology on a cancer patient that impacts their entire body, you're able to, if I'm saying this correctly, you're able to target a tumor and just focus on that area?

Professor Yoram Weiss:

Exactly. Instead of giving the chemotherapy that kill cells, not making the difference, which cells they divide are normal and which cells are cancerous cells. Here, you're providing a medication that targets exactly only the cancer cell.

Benyamin Cohen:

And then you talked about stem cell therapy, which we've known about before. I know Hadassah has been doing work with multiple sclerosis and stem cell therapy, but now you're saying it's evolved. And there's so many more things that you could be using stem cells for. And then finally, you talked about CRISPR, which is basically... Is it modifying the human genome? You're modifying your DNA?

Professor Yoram Weiss:

No, it's correcting the human genome. It's taking a misspelling in the human genome and correcting it to the right spelling.

Benyamin Cohen:

So, we've obviously heard a lot about Jewish genetic diseases. Is CRISPR technology something that could help in a situation like that?

Professor Yoram Weiss:

Not necessarily. But in blood diseases that come from the blood, leukemia, lymphoma, multiple sclerosis, et cetera, it may help. It may help later on in other diseases. I'm not saying it won't, but at this stage we're using it especially for cancers that are cancers related to the blood system.

Benjamin Cohen:

One more technology I wanted to just discuss briefly is something called nanotechnology. First, before we talk about what Hadassah is doing with nanotechnology, can you briefly explain in layman's terms, what is nanotechnology?

Professor Yoram Weiss:

Nanotechnology is basically the name for using very small particles in order to either diagnose or treat a problem in medicine. I'll give you an example. One, you're speaking of very small chips that you may be able to insert into, let's say, into the bloodstream. And these are very small components. These are smaller even than the pin of a needle. Okay? So, it's much, much smaller. You can't see them, and these will be able to monitor the composition of our blood. So, this is one example.

Professor Yoram Weiss:

The other example is, you could put samples of very small pieces of gold into a protein and this protein, as I explained before, will target a certain cancer cell. And then you use certain devices in order to heat these small pieces of gold and they will basically burn the cells that you just now infected with a specific missile guided that you sent to them.

Professor Yoram Weiss:

So, these are examples of the use of nanotechnology, both for diagnosis and treatment. And this is a technology that will come into fruition over the next few years. I truly believe so.

Benjamin Cohen:

And this is a passion of yours, nanotechnology?

Professor Yoram Weiss:

I was involved in the past with developing a device for diagnosis in nanotechnology. And unfortunately it didn't work and we stopped it, but I truly believe that nanotechnology is another innovative technology that will come into play within next five to 10 years.

Benjamin Cohen:

When we return, Professor Weiss talks about how Hadassah is helping incubate medical startups. Plus, the future of telemedicine is more advanced than you might think. All that and much more after a quick break.

Benjamin Cohen:

If you're enjoying this conversation, you may want to check out our last episode where we spoke with Professor Weiss and two other doctors about Hadassah's efforts to help Ukrainian refugees. One of the people we chatted with was Dr. Rely Alon, who is sending Hadassah nurses to the Poland Ukraine border.

Dr. Rely Alon:

It doesn't mean if they're Jews or not Jews, to help people, whatever they need. Even they need a soup or they need tea, or they need someone to talk to, or they need a bandage because Hadassah nurses even now, or anywhere, any part that they can take part and help people all over the world, we can do that. And we are doing that.

Benjamin Cohen:

You can find that episode of "Hadassah on Call" on Apple Podcasts, Google Play, or wherever you get your podcast or on the web at hadassah.org/hadassahoncall that's hadassah.org/hadassahoncall.

And now back to our conversation with Professor Yoram Weiss.

Benjamin Cohen:

Why is cancer such a big focus for Hadassah Hospital?

Professor Yoram Weiss:

Well, I would say the following, I think Hadassah should focus these days into cancer. I think that Hadassah, the reason is for a few reasons, because I think first of all, it's our strength. We need to continue strengthening it. And I think also that it brings other advantages to the hospital because it brings in other technologies.

Benjamin Cohen:

Such as?

Professor Yoram Weiss:

Please understand that the new technologies that we just discussed that are being brought in cancer are technologies that will be an entrance for us, both in diagnosis and treatment for very advanced technologies that will serve later on also other diseases.

Professor Yoram Weiss:

And secondly, these are technologies that bring in other technologies with them, both in the diagnosis, both in imaging, both in treatment and both in surgery. And for these reasons, these technologies are basically catapulting the hospital into higher heights of excellence. Exactly what we want to achieve at Hadassah.

Benjamin Cohen:

Which is a perfect segue way into my next topic I wanted to talk to you about. You know, with all these technologies that you've been talking about. I know Hadassah Hospital in on the in Ein Kerem campus has been ranked one of the best smart hospitals in the world for 2021 by Newsweek magazine. Could you first explain what is a smart... I would hope all hospitals are smart, but can you explain what a smart hospital is?

Professor Yoram Weiss:

Well, I think that when you talk about a smart hospital, what you're talking about is the computer technology that is being used. And I think that the reason we were given that is because of our effort to address the issue of artificial intelligence in the BI, but especially artificial intelligence and our ability to work with providing our patients with the information they need. Basically, providing in full transparency, their medical record, and also very soon their imaging data into their cell phones and into their computers.

Professor Yoram Weiss:

And finally, the infrastructure we have in order to foster startups that can flourish at Hadassah. And today we have more than 650 people that work in different startups. And in our incubator at Hadassah where we're helping small companies that are just starting their way in order for them to succeed. And 13 of the companies were able, thanks to their ability to work with us, to assure financing in order to continue to their second phase of development. So, I think this is very, very important for us.

Benjamin Cohen:

Can you give an example of one or two of those medical startups that Hadassah is helping incubate?

Professor Yoram Weiss:

Well, I'll give you one example, which is an example. One of the things we have a lot is artificial intelligence technology is coming in very, very quickly. And many companies are providing artificial intelligence. And each one of these companies requires us to create a bridge between the company and Hadassah. And this is something that we are concerned with.

Professor Yoram Weiss:

So, we're working now on a universal bridge where all these companies will hook up through one universal bridge into the hospital. And this will provide much safer cyber security and privacy to our patients. So, this is just one example, and there are many others.

Benjamin Cohen:

And the end result is for a patient at home to be able to log on to the internet and have access to their medical records. And like you said, have access to their x-rays and other imaging?

Professor Yoram Weiss:

Well, this, they have already now, but what the artificial intelligence allows us. And I'll give you a very simple example. If you do a brain CT and, in your brain, you have now a bleeding. Now, first of all, an AI system goes and sees all our brain CTs automatically and brings up, up to the pile for the radiologists to have a look to CTs that look pathological. This is one thing.

Professor Yoram Weiss:

So, shortening our response time for those patients that need really quick acceptance, that their problem needs to be addressed very, very quickly. This is one thing. The other thing is these AI technologies allow us to analyze the data and help the radiologists, and then the treating physician understand what needs to be done in order for the intervention to be as efficient as possible.

Professor Yoram Weiss:

So, this is where AI comes in, both in early diagnosis and secondly, in zooming in the intervention. So, it fits best the problem the patient has.

Benjamin Cohen:

Has that been a shift in your career that you've seen from when you started until now, where it seems that the shift in the medical community has shifted from just treating patients, but being able to better diagnose and do preventative measures on patients?

Professor Yoram Weiss:

Well, I should say that preventative medicine has existed for years. It's not new. What is new is AI and AI comes in over the past three to four years, really very, very strong. And if you look at the number of AI technologies and computer software that we're using, it's increasing exponentially. And I believe that in the near future, it will continue to increase exponentially, both in imaging and also in our other data, which means looking at the data of the patient, analyzing all the medical records, looking at electrolytes and stuff like that. Electrolytes, meaning blood tests.

Benjamin Cohen:

While we're on the topic of smart hospitals and technology. I know personally, and I'm sure other people as well, we've all experienced some form of telemedicine over the last two years. It's basically just going on a Zoom call, on a web call with your doctor and talking to the doctor.

Benyamin Cohen:

Is the future of telemedicine more than just talking to your doctor over the web, or will there be a time when you could take vitals or blood pressure, or maybe even help with a medical procedure or something virtually?

Professor Yoram Weiss:

So, this is not the future. This is here. In Israel. This is here and this is here to stay. During the COVID outbreak, what Israel did is, in the health management organizations, which are the sick funds, they treat our patients outside of the hospital. They provided patients with telemedicine and with the ability to measure blood pressure and saturation, stuff like that, and report it to their patients.

Professor Yoram Weiss:

I can tell you that we are going one step further and we're opening very soon a department that will be solely based on those patients that instead of being in the hospital will be at home and will be monitored from home to the hospital and will have a physician coming once or twice a day... Once a day or twice, every two days to see them. And these patients instead of being in the hospital will be at home and will be monitored from the hospital.

Professor Yoram Weiss:

So, this is an internal medicine at home department. And finally, we will have also a lot of other interventions, telemedicine that is coming in. We're talking about tele-pathology, we're talking about intervention through robotics, where a surgeon can sit in New York and do a surgery in Hadassah. So I think telemedicine is here with us to stay. And the number of platforms that will allow us to do telemedicine will just increase over the next few years.

Professor Yoram Weiss:

And it will be for the benefit of the patient because I truly believe that many patients today that are today in the hospital will receive their treatment at home.

Benyamin Cohen:

And the advantage of that would be?

Professor Yoram Weiss:

Well, think about it, when you're a patient, what is better, to be in a room that you don't know, a cold room in a hospital rather than to be at your home, surrounded by your loved ones? I would prefer home.

Benjamin Cohen:

When we return, Professor Weiss reveals the research he's most excited about. Plus, his hopes for the future of the hospital. All that and much more after a quick break.

Benjamin Cohen:

As you're hearing on today's episode, Hadassah has been on the ground, helping on the border of Poland and Ukraine since the war began. You can help these efforts continue by making a donation to our Ukraine mission. Simply go to hadassah.org/ukraineresponse and click on the donate button while you're there. You can also make a contribution to our Youth Aliyah program, which helps shelter refugees from the Ukraine war. Again, that website is hadassah.org/ukraineresponse. That's hadassah.org/ukraineresponse. Thank you so much for your support.

Benjamin Cohen:

And now back to our conversation with professor Yoram Weiss.

Benjamin Cohen:

Is this the most exciting time in your career to be a doctor because of all these new innovations?

Professor Yoram Weiss:

You know, I had a career over 30 years, and I could tell you, I had not one day where I was bored. So to say that this is the most exciting time? No. But I truly think that what we're seeing now is really the fruition of many, many changes that occurred over a few years, but we see really in front of our eyes, what is happening in the medicine over the past 60 to 70 years.

Professor Yoram Weiss:

And this is the really exponential increase in our knowledge, in our ability to take now things that started in the '80s and '90s and bring them now into fruition for the benefit of our patients. And this is the amazing thing that is occurring now.

Benjamin Cohen:

So, one of the unique things about Hadassah is that it's not just offering medical services to patients, but it's a research institution. And so I'm wondering if you could give our listeners any sneak peeks at some... I know sometimes obviously research can take years sometimes to come out into the public. I'm

wondering if there's any research projects that are going on that you're particularly hopeful or excited about?

Professor Yoram Weiss:

Well, I'll tell you the truth. First of all, I spoke about the CRISPR technology about multiple myeloma, which I think is really an innovative intervention that we're really very happy about that. The other one is a few drugs. One of them is a researcher at Hadassah called Dror Mevorach developed a drug that is now being tested in phase two for sepsis and COVID obviously also.

Professor Yoram Weiss:

So, we're looking forward also on that drug and we have other interventions also. I should say that the thing that for me is the most important with researcher at Hadassah, it's the research it's driven by the researchers. It's not that we impose what needs to be developed. It's the researchers that drive the research and that's the importance of what's happening. And I'm really very, very proud about that because Hadassah, this year got 70% of the research grants that are competitive research grants in Israel. 70% of these went to Hadassah this year when it comes to the medical field. This tells everything about the research at Hadassah.

Benyamin Cohen:

As a person who oversees the whole operation, how do you create an environment where, obviously these doctors are very busy morning to night treating patients. How do you create an environment where there's room for them to also do the research as well?

Professor Yoram Weiss:

So, it starts at the university level where we have a PhD program, but in general, we're trying to put a lot of emphasis talking to our young physicians about the importance of research. And Hadassah certainly sees research as part of its three pillars. Pillars of excellence in clinical medicine, excellence in teaching and excellence in research and development.

Professor Yoram Weiss:

And I think this is something that we talk about. We discuss it with our physicians, we discuss it at the level of the administration and the heads of departments, and this trickles down to the physicians. And we're trying to support them with that.

Professor Yoram Weiss:

And I won't hide it that when many of them go to the U.S. to do their fellowship, we push them to do also research in the U.S. or in Canada, in Australia, wherever they are in order to bring back then the excellence and the technologies that they learned abroad in order for us to continue to develop our

research and development at Hadassah. So this is really part of the three pillars that we are focused on at Hadassah.

Benyamin Cohen:

What were the other two pillars?

Professor Yoram Weiss:

Excellence in clinical medicine and then excellence in teaching.

Benyamin Cohen:

And then research is the third?

Professor Yoram Weiss:

Exactly.

Benyamin Cohen:

What unique challenges does the Hadassah Medical Organization face in the next decade or two and how are you helping prepare for those challenges?

Professor Yoram Weiss:

Well, I think that the biggest challenge that we have is to be recognized by the government, that the government needs to support our activity that is being given for the state of Israel, for the people of Israel and the people of Jerusalem, and that it's not our donors that need to provide the funding for the medical activity that is being serviced to the citizens of Israel.

Professor Yoram Weiss:

This is one thing which is very, very important. The other thing is that Hadassah needs to recognize that it's working international environment and we will have to foster and develop our collaboration when it comes to research in teaching also. But especially in research with other institutions, because research is becoming more and more complicated. And I'm very much in favor of us collaborating with our institutions when it comes to research and development. And I think that these are the major issues that we have to deal with.

Benyamin Cohen:

Are there other issues like nursing shortages or bed shortages that you're trying to work on?

Professor Yoram Weiss:

We don't have a problem with bed shortages. We have maybe a slight problem with nursing shortages, but you should realize that the State of Israel has done a strategic plan for the healthcare system in Jerusalem until the year 2050. And there Hadassah Ein Kerem is going to grow from a 1,000-bed hospital to a 2,500-bed hospital. And Mount Scopus is going to grow from a 350-bed hospital to 1,200 bed hospital.

Professor Yoram Weiss:

So, we are basically speaking of Hadassah on both campuses as becoming the major medical hubs for Jerusalem. And to that, the government has added the possibility of us being given the possibility to develop an advanced hospital in Beit Shemesh. So, I think that from the number of beds, we don't need to be concerned with.

Benyamin Cohen:

My parents live in Beit Shemesh. They'll be happy to hear that.

Professor Yoram Weiss:

So, tell them that in a very short time, we're going to open a clinic. And I hope within a year-and-a-half, two years, we'll have an advanced clinic in Jerusalem with an advanced emergency room and advanced services and imaging in order to assist and serve the population of Beit Shemesh and patients that will be admitted to the hospital in Beit Shemesh will be actually admitted already to the hospital. So, if they need hospitalization, they will go direct into the wards from this advanced emergency room.

Benyamin Cohen:

Wow. Where if you and I were to have this conversation five years from now, I don't want to look too far in the future, because like, as you said, it's hard to predict, but even let's say five years from now, where do you, where do you hope the hospital will be?

Professor Yoram Weiss:

I hope the hospital will be the leading hospital when it comes to the diagnosis and treatment of cancers in Israel. I hope that we'll have an advanced... Will be at the end of working and building a new cancer center. I hope we'll have all the technologies, including product technologies and advanced technologies to treat cancers.

Professor Yoram Weiss:

Not only in medication, as I mentioned before, but also in the radiation technologies and diagnostic technologies. And I hope that Hadassah will evolve as a major center for both surgeries, advanced surgeries, robotic surgeries, and be also an area where we develop robotic surgery technology, which we did in the past. And we're doing now, but heavily involved in alpha and beta side of advanced technologies, techniques, both robotics and hybrid care.

Professor Yoram Weiss:

And finally have Hadassah also at the forefront of developing the new changes in internal medicine, which is basically bringing medicine to the patient's home instead of hospitalizing, if needed.

Benjamin Cohen:

Is there anything you want to share with our listeners? You know, many of our listeners are supporters of Hadassah in the United States and elsewhere around the world. And this is a rare opportunity we have to hear from you. So, I was wondering if there's anything you'd like to share with them?

Professor Yoram Weiss:

I want to share with them that I hope that Hadassah and the plans we have for the future will really speak to their hearts. And I should say that thanks to our donors all over the world, but especially in the U.S., but really all over the world, all over the world. Your support is extremely important to us because thanks to your support, we are able to achieve what we're doing. And I truly believe that the sky's the limit.

Professor Yoram Weiss:

And I'll tell you the truth. I would like to be a hundred times better than we are now. I want Hadassah to be within the 10 best hospitals in the world in five years. That's why I want Hadassah to be. Within the list of Newsweek, you mentioned before, but to be within the 10 leading hospitals in the world, that's where Hadassah needs to be.

Benjamin Cohen:

All right, Professor Weiss, before we conclude, is there anything else you'd like to add that we haven't covered? Maybe we can have you on again. Again, we can keep doing this.

Professor Yoram Weiss:

First of all, I'll be happy to be with you again. It's a pleasure and I really want to finish and thank once more, our donors and our supporters all over the world for their support and their contribution to our institution, which I should say we don't take for granted. And we really appreciate your support. Thank you very, very much.

Benjamin Cohen:

Well, thank you for your time, Professor Weiss. I know you're extremely busy and it's an honor, and we really appreciate you taking the time out of your busy schedule to talk on the "Hadassah on Call" podcast.

Professor Yoram Weiss:

It's my pleasure.

Benjamin Cohen:

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