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The cover of this week's issue is a mosaic titled “Victory,” located at the National Cancer Institute in Kyiv. Created by Halyna Zubchenko and Hryhorii Pryshedko between 1970 and 1971, the mosaic symbolizes the institute's scientific and technological progress in the fight against cancer.

In the mosaic, a patient, with his doctors, directs gamma rays onto a black monster symbolizing cancer.

The National Cancer Institute of Ukraine was founded in 1920 as the Kyiv X-ray Institute, and, in 1925, with a radium donation from Marie Curie, changed its name to the Kyiv Radiology Institute. The mural honors the institute's history of radiation therapy.

Radiation therapists received a significant dose of radiation while administering treatment and often suffered from radiation sickness, which is shown in the mosaic through the dark circles under their eyes.

While this is a Soviet-era mosaic, Zubchenko and Pryshedko were Ukrainian artists. Both left a significant impact on the arts in Ukraine. Pryshedko also studied with Diego Rivera.

The mosaic is made of smalt, ceramic tiles, slag, and colored glass, and measures 9 by 12.7 meters.

A video celebrating the institute's 100th anniversary—and the mosaic's 50th—is available [here](#).

EDITORIAL



For your freedom and ours За вашу и нашу свободу

By Paul Goldberg

In 1968, my country went to war.

As Soviet tanks rolled toward Prague, newspapers described the invasion of Czechoslovakia as an act of “friendship.”

I was nine, old enough to know that nine years hence, I would be at risk of donning a Soviet Army uniform. I knew also that I would sooner shoot my commander than shoot a Czech.

Today, my former country’s tanks are rolling again, trampling a peaceful, independent state. I’ve been using WhatsApp to let my family and friends in Russia know that my thoughts are with them.

I know exactly what they are feeling: the deepest, darkest shame anyone can possibly imagine. I felt it in August of 1968, and I feel it now.

Today, as bombs fall and Russian troops amass around Kyiv in the midst of something Putin describes as a “special military operation” aimed at “denazification,” I think of the Russian boys inside the war machines. How can they do it? Aren’t all of us brothers and sisters who speak very similar languages? I can’t speak Ukrainian, but I can understand it—everything.

It could have been me, rattling toward Kabul as part of another disastrous Soviet adventure. Luckily, my parents had the foresight to emigrate in 1973.

Today, as I listen to Russian-language speeches by Volodymyr Zelenskyy, I hang on to his every word, because I hear a man who has read many books, has an epic sense of humor, and, just as importantly, has a range of emotions. Listening to Putin is another experience altogether—his is the dull language of a power-crazed ignoramus. The experience is akin to being kicked in the gut in a dark courtyard in St. Petersburg.

Beyond these feelings—deep shame and contempt—I have nothing.

Rationally, I can’t process it, and I am not sure anyone can. Why would a man who seems to like money and the palaces it can build take a step that unambiguously leads his empire into poverty?

As they bomb Kyiv, the Russians are literally destroying the cradle of the Russian civilization, the city of Kievan Rus’, also the city of Gogol and Bulgakov.

Putin’s Russia is not Brezhnev’s USSR.

On Aug. 25, 1968, when eight brave men and women staged a demonstration on Red Square, theirs was an extraordinary act of bravery—and, yes, patriotism, in the genuine sense of the word. I would meet two of these heroes—Larissa Bogoraz and Pavel Litvinov—subsequently, while reporting books on the Moscow human rights movement.

On Red Square, the demonstrators unfurled two banners:

“Long Live Free and Independent Czechoslovakia,” read one.

“For Your Freedom and Ours,” read the other.

A few weeks prior to the demonstration, the great Russian poet Aleksandr Galich wrote a song in which he invoked the 1825 Decembrist revolt on the Senate Square. It’s called “The St. Petersburg Romance”:

**Can you come to the square,
Dare you come to the square,
Can you come to the square,
Dare you come to the square,
When that hour strikes?**

[Here](#) is a recording of Galich explaining the history of this song—and singing it.

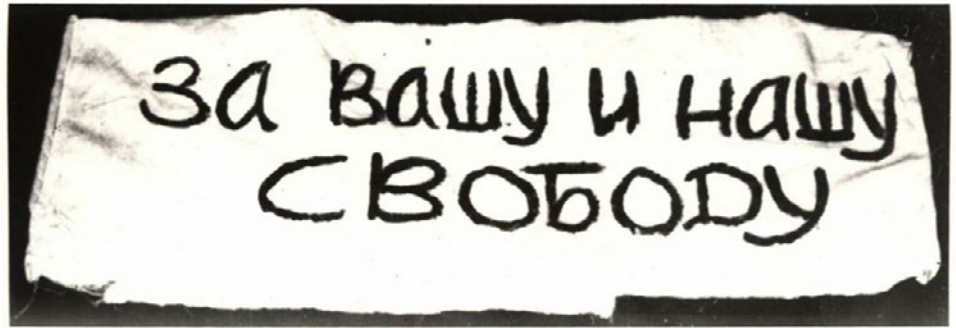
After August 1968, I could no longer justify rooting for the USSR in sporting events. During the 1969 Hockey World Championship, the word “we” lost specificity, spilling across borders, dripping off the map. “We” included the valorous eight who protested the invasion—excluding those who ordered it.

I cheered for the U.S. as the USSR crushed us 17:2. Next came two games between the USSR and Czechoslovakia—our chance to impose limits on tyranny, to triumph over tanks.

“Stand firm, Nedomanski! Go, Cerny! Skate on the Holik brothers, Jiri and Jaroslav! Long Live Free and Independent Czechoslovakia! Skate for your freedom and ours!”

I jumped for joy as we, the Czechs, whipped the USSR 2:0, then did it again 4:3.

This form of protest may not be possible today, as Russia is being expelled from world athletic competitions in what amounts to genuine denazification.



A banner from the 1968 Red Square demonstration reads “For your freedom and ours.”

In 1968, the actions of the Red Square demonstrators constituted a singular act of bravery. Today, thanks to Larisa, Pavel, their six valorous friends, their children, grandchildren, and spiritual heirs, it’s no longer a singular act.

In Russia, in Moscow, my beloved hometown, people are coming out onto the squares and getting arrested by the thousand. On March 2, Aleksey Navalny, a genuine Russian patriot now in the midst of a bizarre trial, issued this Galich-like [call to action](#):

“Putin is not Russia, and if today’s Russia has a reason to feel pride, we should be proud of the 6,835 people who were detained because—spontaneously—they came out into the streets with signs, ‘No to war.’”

Wherever you are—in Russia, Belarus or on the other side of the globe—come out onto your city’s main square at 7 p.m. every weekday and 2 p.m. on holidays and weekends.

“There is not a day to waste,” Navalny writes from his cell.

Nataliia Verovkina, a Ukrainian oncologist who spoke with *The Cancer Letter*’s Matthew Ong had this to say to her Russian colleagues:

Dear Russian doctors, please go to the protests, stop this bloody war, because it threatens not [only] Ukraine,

it threatens all the world, it’s threatening patients that we are treating together, because our patients are the same as Russian patients.

And currently, we cannot provide them with essential medical care. Please, go to the protests, stop Putin, stop this war, because it’s threatening the whole world, and you also.

Today, the number of Ukrainians who have crossed the borders has exceeded one million, and more are heading toward the borders. Some of them are doctors, some are nurses, some are scientists, some are patients.

Yes, it’s possible to capture Kyiv, just like it was possible to overrun Prague or quell the Warsaw ghetto, but victories of this variety are Pyrrhic. And no, Putin will not succeed at holding Ukraine—it’s been tried.

Meanwhile, the Ukrainian refugees need our help. That’s why we have started putting together a compilation of resources available to refugees, some of whom could very well be colleagues you have met at the meetings of ASCO, AACR, and ESMO.

I say this as a Russian, a [writer](#), and, yes, a patriot: Today all of us—all people of reason and goodwill—are Ukrainians.

Сьогодні ми всі українці.

This will not change.

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Verovkina spoke with
Matthew Ong, associate editor of
The Cancer Letter.

A



CONVERSATION WITH
THE CANCER LETTER

Ukraine NCI's Nataliia Verovkina: "We left Kyiv yesterday. We don't know what will happen with us even in one hour."

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We are faced with shortage of drugs, chemotherapy drugs, and other essential medication for oncology treatment, whether curative or palliative treatments.

”



Nataliia Verovkina, MD, PhD

*Medical oncologist,
Research fellow,*

*Research and scientific department of chemotherapy of solid tumors,
National Cancer Institute, Kyiv, Ukraine*

Nataliia Verovkina, a medical oncologist and research fellow at the National Cancer Institute of Ukraine, is now in the town of Vinnytsia, having travelled there from Kyiv to get her son away from the war zone.

“I want to return to work, but first, I have to get my son to safety. I have a responsibility for my son,” Verovkina said to *The Cancer Letter* at noon local time on March 4, one week into Russia’s invasion of Ukraine.

She spoke with Matthew Ong, associate editor of *The Cancer Letter*.

A video of this conversation is posted [here](#).



Matthew Ong: Dr. Verovkina, thank you so much for taking the time to speak with us.

Nataliia Verovkina: Hi Matt. Thank you very much.

Are you currently in Kyiv and are you actively treating patients?

NV: Personally, me, no, but my colleagues currently in Kyiv are trying to organize a process for treating patients. Currently in Kyiv, we have three oncology hospitals that are delivering oncology services.

By yesterday, we could provide some chemotherapy to our patients who are left in Kyiv, but we are facing a huge

problem simply because patients have trouble simply getting to the hospital because of the military state in Kyiv. But we experience huge problems with delivering drugs to the hospital, because of our state in Ukraine.

The next big problem is palliative patients who cannot come to the hospital and are kept in their home. So, this is an urgent situation with palliative care for our patients who are in the conflict zone, not only in Kyiv. I can speak for Kyiv, but in other hotspots of Ukraine, I think the situation is much worse.

Currently, many refugees are overwhelming ways of Ukraine. They try to escape Ukraine however they can. So now, there are many refugees in the Western part of Ukraine. People are seeking homes.

So many million people are homeless and left without homes. Many people try to escape to neighboring countries, such as Slovakia, Hungary, Moldova. Oncology patients try to seek oncology help in neighboring countries; coordinate our efforts with our European colleagues.

The next problem is the absence of medical records for refugees in European countries, so patients who ask for oncology help, doctors simply don’t know what to do with them because there are no medical records. The patients don’t know about the treatment, because they are the patient.

The same problem I expect in Ukraine, but it’s easier because patients have paper medical documentations and doctors in Ukraine can manage the situation easily. But we are facing problems with drug delivery, even essential drugs also.

So, I’m talking to you, please help the Ukrainian nation to stand against Russia. And we do our best to help our on-

cology patients, and all help is greatly appreciated for all sites. Thank you very much to the whole world and please help us to condemn Russia and stop Russian aggression in Ukraine. Thank you.

Can you also describe what kind of scenes you are seeing right now immediately outside your hospital? And can you give me a sense of what your everyday work right now is like at the institute?

NV: In my hospital, in the institution, my colleagues who are left in Kyiv try to come to the hospital. We do chemotherapy. Currently, all planned surgery is stopped, but we do our best to start these operations. Again, urgent surgery is possible.

In other Kyiv hospitals, children’s hospitals, there are children who stay who require—I’m a bit worried, I’m sorry—who require very special care. For example, children who are receiving high dose chemotherapy or bone marrow transplantation, some children are kept in these hospitals. And my colleagues from other hospitals also are having trouble managing these patients.

Currently in my hospital, there is no such patient, but the situation can change anytime, you know. I think the most [pressing] issue in Kyiv now is logistical issues [of] drug delivery and safety of the patients coming to the hospital.

Is there a way out of Kyiv for you, your colleagues, and patients if the situation gets worse for the capital city?

NV: Now, patients could be evacuated to safe places in Ukraine and they can receive all oncology medical help in re-

gional oncology centers. They just have to come to the center and ask for help.

Currently, Ukraine centers that are not in hotspots of the conflict can provide this help, but we are faced with shortage of drugs, chemotherapy drugs, and other essential medication for oncology treatment, whether curative or palliative treatments.

So, currently, we do what we can, but we don't know for how long our resources [will last]. Now, we try to estimate drugs that are currently in Ukraine, but the sources are limited, so we are asking for humanitarian help for our oncology patients.

What else do you want audiences in the United States and Europe to pay attention to?

NV: We have some patients, male patients, because of the military state of Ukraine, males from 18 to 60 years are not allowed to cross the border of Ukraine. Some of our patients are men who are undergoing curative treatment, oncology curative treatment.

And I think it is an urgent issue to establish a way for patients who need specialized oncology care for curative purposes to develop mechanisms to cross the Ukrainian border to receive the curative treatment outside Ukraine. This is a big issue.

Have your family and relatives moved to safety, or are they planning to?

NV: Currently, my family and my son are on the way to safer places in Ukraine. We left Kyiv yesterday. Currently, we are in Vinnytsia and we are traveling to

the western part of Ukraine. And really, we don't know what will happen with us even in one hour.

So, we are in a big stress. We are threatened, but we will stand for our country. We want to stop Russia's bloody invasion, and we demand all the world to help Ukraine stop this bloody and terrible war.

And I really appreciate you even taking the time during this crisis to communicate this. So, the World Health Organization also told me that oxygen supplies, even something as basic as that, are being exhausted across most hospitals. Are you seeing that as well?

NV: Some hospitals, yes. I cannot talk about my hospital, because currently we aren't doing operations. I think the situation will change, but I cannot tell you the exact information at this moment. I don't have enough information regarding my hospital.

Our audience includes more than 250 institutions across the United States and elsewhere in the world. If you could speak directly to them as you are now, what do you want to tell them and how can they send help?

NV: How exactly they can help our oncology patients; yes? We really have an urgent need for medicines for patients who cannot be evacuated from Ukraine, because many patients will not have the possibility to cross the Ukrainian border and these patients will require oncology help in Ukraine.

I think we would need medicines. I think we would need support for professional

societies, professional help, maybe consultation, because we will be organizing processes for treating our patients in Ukraine. The situation differs depending on the region of Ukraine.

So, medicine, financial—I think financial help is most efficient, and our government is working on this.

Are all the hospitals within the institute still in good shape through the war? Are they still able to get access to electricity and water supplies so far?

NV: In Kyiv today, yes. In Kyiv, for today, all the hospitals in Kyiv are working and we have electricity and water supplies on time, because our administration is working on this and monitoring this closely. In Kyiv, yes.

I don't know the situation in Kharkiv, I think the situation is much worse in Kharkiv, but I'm in Kyiv—I was in Kyiv till yesterday.

But what will happen the next day or next few [days], we don't know. Our soldiers, our rescue teams, the government and the administration are working hard to do their best for efficient work in the medical system.

My colleagues are working in hospitals more than hours, more than days, and some of them have been left in the working places since Feb. 24, when this war—terrible war—started.

Some doctors in Kyiv experience trouble getting to the workplace, because it might not be safe and there are problems with public transportation. And some doctors are willing, but physically are not able to get to work, because there is no way to get to the workplace safely.

Kyiv experienced huge air strikes, air raid sirens, so we have to hide in the shelter whenever we are at home, at the workplace, and it's terrible. I think it's terrible, terrible for all of us.

So, days [and] nights, we have to sleep in the shelter. Sometimes we have to spend many times in the shelter and my colleagues provide medical care for patients in shelters, but there are some patients who cannot be evacuated in shelters.

So, we cannot stop operations when the air [raid] sirens start, so the doctors are operating, even on the air strike sirens, and they do not stop in urgent operations. All my colleagues are working harder than they can. We do all our best to stop this nightmare.

And there are some patients in the intensive care unit who are also hard to evacuate to the shelter. So, they experience a huge problem with these, not only oncology, but other patients also.

If there's a chance for this conversation and this video to reach Russian audiences, do you have a message that you would like to share with them?

NV: Yes, especially Russians. I want to talk to my Russian colleagues.

Dear Russian doctors, please go to the protests, stop this bloody war, because it threatens not [only] Ukraine, it threatens all the world, it's threatening patients that we are treating together, because our patients are the same as Russian patients.

And currently, we cannot provide them with essential medical care. Please, go to the protests, stop Putin, stop this

war, because it's threatening the whole world, and you also.

Thank you so much for taking the time. And I wish you a safe journey, for your colleagues and your patients, and most importantly, your loved ones and your family. Thank you so much.

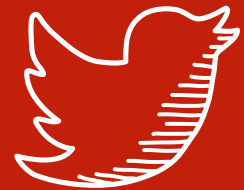
NV: Thank you. Thank you. Let's work here as Ukrainians.

“

Dear Russian doctors, please go to the protests, stop this bloody war, because it threatens not [only] Ukraine, it threatens all the world, it's threatening patients that we are treating together, because our patients are the same as Russian patients.

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Stakhovskyi spoke with
Alice Tracey, a reporter with
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A



CONVERSATION WITH
THE CANCER LETTER

Ukraine NCI's Oleksandr Stakhovskyi: “We are fighting for the truth”

“

Lots of volunteers, you can't even imagine how many volunteers are united right now. They are trying to send medications, trying to fulfill those gaps when something is needed and somebody is eager to give it.

”



Oleksandr Stakhovskyi, MD, PhD
*Department of Uro-Oncology,
National Cancer Institute, Kyiv, Ukraine*

Oleksandr Stakhovskyi, a urologist and oncologic surgeon at Ukraine's National Cancer Institute, is staying in Kyiv to treat cancer patients as the Russian invasion continues.

"We still have many patients inside Kyiv who need some oncological help. It'll be either consultations, telemedicine, or chemotherapy that we currently provide at the National Cancer Institute—but we don't know what will happen tomorrow," Stakhovskyi said to *The Cancer Letter*. "If tomorrow it's going to be bombing of Kyiv, and some bombs fall next to our institution, we will not be able to proceed with chemo."

Men between the ages of 18 and 60 have been banned from leaving Ukraine, leaving behind a team that consists predominantly of male oncologists. They are doing their best to support cancer patients while anticipating the day when their medical skills will be needed for front-line wartime care.

"A majority of doctors will stay with in Kyiv, waiting for the moment their help will be needed, but praying that this help will never be needed," Stakhovskyi said.

Most patients have been discharged from Stakhovskyi's institution, but a handful of them aren't able to leave because their homes have been bombed, or because they're from eastern Ukraine, which is facing more violence at this time. Stakhovskyi said he and his colleagues have been sleeping at NCI.

"It's sometimes safer to stay in hospital with your colleagues than back home by yourself," Stakhovskyi said.

Basic medical supplies and drugs are available, mostly thanks to coordinated humanitarian aid efforts, especially between Ukraine and Poland. But at Ukraine's NCI, oncology care has been pared down to immediately necessary treatments and online consultations.



Medical staff preparing IV solutions; bomb shelter at NCI in Kyiv.
Photos courtesy of Oleksandr Stakhovskyi

"Basically, we are not able to give them any care," Stakhovskyi said. "For the last couple of days, we started in Kyiv in National Cancer Institute chemotherapy, for patients who can come in, receive chemo, and go back home. We consult them online. The majority of our doctors are currently consulting patients via social media or phone number, email—online consultations."

Cancer care is, at the moment, very location-dependent, Stakhovskyi said. Priorities look a lot different in eastern Ukraine than in cities further west.

"It depends, first of all, on the primary risks. So, if your city is under fire, nobody's caring about oncology," Stakhovskyi said. "At this moment, we're trying to move patients to more safe places."

“So, to move them more western, and to Kyiv, over this line, which you can draw through Ukraine by the Dnieper river, which is basically dividing Ukraine into two parts. According to this river, we have the eastern part and western part. We know right now that all the western cities, they are more safe, so more oncological patients will find help there.”

Some patients, including NCI’s entire pediatric oncology ward, have been evacuated across the border into Poland.

“People are putting everything on the table,” Stakhovskiy said. “Whatever they will do, they try to volunteer, they try to help—if not with weapons in their hands, at least with a car, with food, with petroleum, sending money to the army. It’s great to see how the nation united against one opponent, against Russia.

“We are optimistic. We are fighting for the truth. So, they’re not going to succeed.”

Stakhovskiy spoke with Alice Tracey, a reporter with *The Cancer Letter* on March 3.

Alice Tracey: How is the conflict in Ukraine affecting cancer care and oncologists?

Oleksandr Stakhovskiy: NCI is a leading structure and we are working close together with other regional oncological centers.

So, in Ukraine, it’s a little bit separated. Oncology patients are receiving their oncological care in oncological centers, and those are in every Ukrainian region. Basically, you have the region around three, four million people and you have an oncological center in the middle, which is related to the big city.

In Kyiv, there are two—there is a local Kyiv one, and our facility, which is called National Cancer Institute. And as I know, from today, or even for the last seven days, basically there was not routine work done within these facilities.

I would say most likely a couple of western oncological centers, they probably did have some surgeries, but in Kyiv or in major big cities where this war is happening now, there is nothing with oncological patients. Basically, we are not able to give them any care.

For the last couple of days, we started in Kyiv in National Cancer Institute chemotherapy, for patients who can come in, receive chemo, and go back home. We consult them online. The majority of our doctors are currently consulting patients via social media or phone number, email—online consultations.

But if we talk about surgeries, for example, and I’m a surgeon, first of all—it is basically on pause right now. It’s impossible to do because we are in a city where they bomb us every day and our OR theaters are usually on the upper floors. So, it’s quite dangerous to do any kind of surgeries. And usually oncological surgeries are not that urgent.

So, we can pause, we can see what will happen in the next couple of days, and then figure out who will need surgery now, who may wait for their surgery due to specific location, like prostate cancer may be delayed, for sure, or we can send somebody west to those centers which are not under that kind of attack and where it can be done more safely.

It’s very hard to calculate the number of people affected because, I mean, I’m sure in Kharkiv, nobody’s going to work right now at all—the whole city’s bombed for the last three days and we are seeing this bombing during the daytime. So, I’m sure nobody’s caring about oncology at the moment.

It sounds like it’s very much on a city-by-city basis and also on a patient-by-patient basis, just doing what you can. You said that you’re communicating with people via social media and doing telemedicine—has the internet connection been good? Have you been able to stay in touch with people?

OS: I mean, yes. Luckily, for the last seven days, we are still with internet and with all our communication programs, like WhatsApp, Viber, Telegram, they’re still working.

That’s basically that’s how we get our information. Basically nobody’s watching TV right now. Everything is done through telephones, through iPhone. For doctors, for sure. So, doctors usually do that. We are chatting through our institution, that’s how we’re communicating with each other.

I’m interested also—you said things are very different depending on the city you’re in? That some cities are in a lot more danger?

OS: It depends, first of all, on the primary risks. So, if your city is under fire, nobody’s caring about oncology, obviously in Kyiv it’s a different situation.

We know we are kind of a goal, we know that Russians would like to take Kyiv, but since the majority of doctors who are in the city—I mean, obviously we have lots of female doctors, but let’s face the truth, that females may travel with kids away since we’re in this war status of Ukraine.

Males from 18 to 60 are prohibited from leaving the country. So, you have a major number of oncologists, and they are

majorly male. Unfortunately, we have lots of males, so they're not able to leave the country.

So, then if you go down to the specialists, and if you will try to get into his head, I mean, he was studying to be a doctor for a long, long time, and now he's an oncologist, a surgeon, or chemo, radio.

There are definitely numbers of people who are taking weapons and going to this territory military units, and basically working as soldiers. We have those. In the National Cancer Institute, we are super specialized in every field—like urology for me, like Andrew [Andriy Beznosenko, chief medical officer, NCI Ukraine; president of Ukrainian Society of Medical Oncology] who was talking to you before, he's in pathology, we have all these gynecology guys, and very specific specialists, highly trained by fields.

So, they prefer to stick to medical facilities. Luckily, there are not currently any battles within the city, so there is not a huge number of injured or killed people in care. So, there is no work for us being, for example, a surgeon or even a medical doctor or medical personnel, within these military medical facilities which are organized within the city.

So, we can go to work, but at work, we are discharging patients [who] were in clinic. They're postsurgical—we discharge almost everybody. We still have two or three patients, maybe up to 10, who are not able to leave [for] home because their home is destroyed. Those guys stay with us—or somebody will be from the eastern part of Ukraine, like from Luhansk, where basically they started the conflict.

Those guys literally are not able to go back home, because they're stuck in our institution and we are not able to kick them out. So, we are working as a hospital. That's also a difficult situation.

But what I'm trying to say to you is that a majority of doctors will stay within Kyiv,



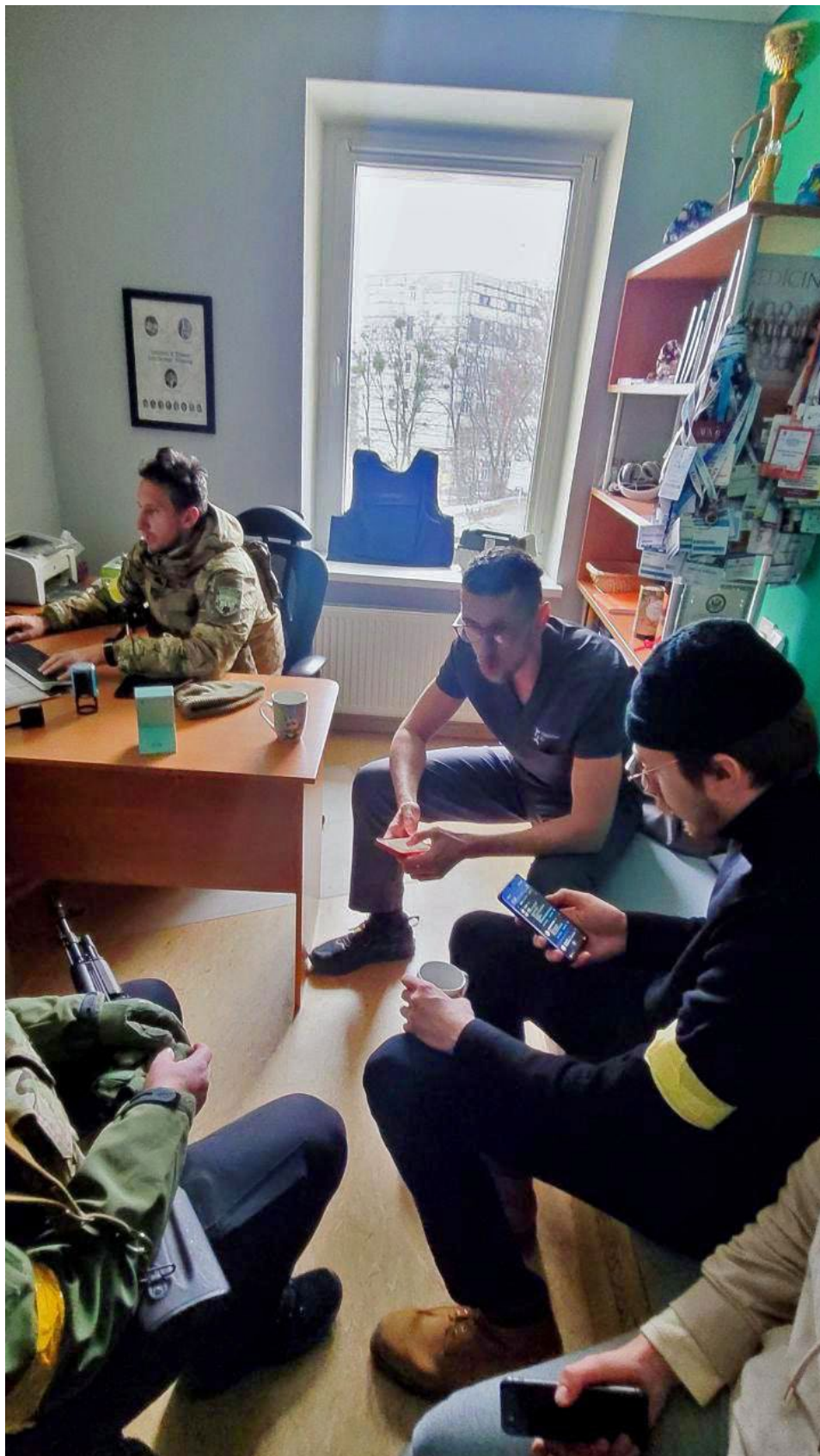
(Above) Workers and patients sleeping during bombing; bomb shelter at NCI in Kyiv.

(Below) Patients receiving treatment; bomb shelter at NCI in Kyiv.

waiting for the moment their help will be needed, but praying that this help will never be needed, that this conflict will not touch Ukraine.

Then you go to the eastern parts, where all these affected cities, like Kharkiv, for example, which is bombed for the last three days, and we have all these awful videos from that city—I'm sure that nobody's caring about oncology at all. I don't know the status of our oncological colleagues from there, but I believe they





Stakhovskyi and his brother Sergiy, a Ukrainian tennis star who joined the military force; NCI in Kyiv

are trying to escape Kharkiv, to move to Kyiv or to other western cities.

At this moment, we're trying to move patients to more safe places. So, to move them more western, and to Kyiv, over this line, which you can draw through Ukraine by the Dnieper river, which is basically dividing Ukraine into two parts.

According to this river, we have the eastern part and western part. We know right now that all the western cities, they are more safe, so more oncological patients will find help there.

In terms of Kyiv, it's a big city, it's usually around four or five million people. So, we still have many patients inside Kyiv who need some oncological help. It'll be either consultations, telemedicine, or chemotherapy that we currently provide at the National Cancer Institute—but we don't know what will happen tomorrow.

If tomorrow it's going to be bombing of Kyiv, and some bombs fall next to our institution, we will not be able to proceed with chemo. Doctors majorly stay in the hospital.

With my colleagues here for the last five days, we can go home, but when you go back to hospital, it's sometimes safer to stay in hospital with your colleagues than back home by yourself. It's kind of frustrating to stay in a flat when your city is under attack.

I imagine that the travel part could be dangerous, too.

OS: Yes, we are not supposed to travel at night at all. I don't know how to say it in English, but yes, you usually have limited traveling time during the night.

How are supplies—drugs, medical supplies? Are they limited?

OS: I can tell you officially, and I can tell you unofficially. So, we have a pediatric oncology department, and we were able to evacuate all of them to Poland, because Polish hospitals were able to accept our oncological patients—children patients.

We were happy to do that a couple days ago. Yesterday, the last portion of kids were traveling to western Ukraine and from there to Poland, and this is good. So, we are not keeping kids right now, in terms of supplies.

I mean, we have basic supplies in Ukraine right now. We have lots of volunteers. I personally have a number of professors from Canada, the States, from Germany, from France. The guys I was talking to before I was taught by, and everybody's sending us emails, do we need need any help?

And a number of businessmen from Ukraine, they created a hub somewhere in Poland where you can just send your medications, any help, to the hub, and that hub will accept, and then send it exactly to the point in Ukraine where it's needed the most.

Pharmacies are working to midday, the first half of the day. So, still some basic medicines can be bought in Kyiv—definitely Kharkiv, those bombed cities, need more medications, but within Ukraine we are able to bring it there.

Lots of volunteers, you can't even imagine how many volunteers are united right now. They are trying to send medications, trying to fulfill those gaps when something is needed and somebody is eager to give it. They are using their own cars and bring the medical supplies where they will be needed.

In Kyiv, it's okay right now, because we are not having these big air strikes, but we believe if this continues and Kyiv becomes a battlefield, it will be needed here from the other side. I know all my friends, or friends of friends, who are sending humanitarian help to Ukraine. That's how my friends say, who know this situation from eight years ago, when Ukraine was receiving lots of help from the outside, because of war at Donetsk.



We still have two or three patients, maybe up to 10, who are not able to leave [for] home because their home is destroyed. Those guys stay with us.



We received lots of humanitarian aid, which was really close to expiring. Imagine you are a hospital somewhere in Europe or whatever, and you have a number of medications that are close to expiring, but not yet. And for you, it's a very good thing to do to participate in humanitarian help—you're getting rid of your close-to-expired medications.

Sometimes they need it. Sometimes it's not the stuff you really need on the battlefield, because it's really specific what you need on the battlefield. You need gauze, you need stuff to stop the bleeding, but you sometimes don't need other pharmacy stuff like anti-hypertensives for those with diabetes, because those guys are not in the field with weapons.

I mean, Ukraine is currently receiving lots of help, because the world would

like to help, and it's really touching. But sometimes, the logistics are really tough—nobody was prepared for this.

I imagine it takes so much coordination.

OS: Yes, it's not easy, but people are putting everything on the table. Whatever they will do, they try to volunteer, they try to help—if not with weapons in their hands, at least with a car, with food, with petroleum, sending money to the army.

It's great to see how the nation is united against one opponent, against Russia. It's really nice, but it's tough.

Well, thank you for making the time to talk to me, I know that you're incredibly busy. I really do appreciate it and I hope that you and your family are safe.

OS: Lots of people send their families away while staying here. That's how, at least, we can focus on what the problem is, because, you know, it's very hard to keep your families next to you and then to deal with patients and organize hospital care for the injured. It's very hard to combine the two.

So, the guys who I know who are still stuck in the hospitals usually send their families to western Ukraine, or even Poland. At least we are not worrying about that part and we can focus on our work.

Well, thank you. We'll hope everything will be good. I mean, we are very positive we'll stay on our land. We are optimistic.

We are fighting for the truth. So, they're not going to succeed.

As bombs fall, international efforts are ramping up to help Ukraine's cancer patients, doctors, and refugees

By Matthew Bin Han Ong

On March 2, a bus filled with Ukrainian children was getting ready to leave Odesa for the border of Moldova, Ukraine's closest neighbor.



Evacuees from eastern Ukraine near the railway station in the western Ukrainian city of Lviv, March 2, 2022.
Source: Shutterstock

As the port city on the Black Sea braced for an onslaught from Russian tanks and artillery, St. Jude Children's Research Hospital was working with allies on the ground to secure transportation and evacuate children with cancer. The kids were ready to go.

Then bombs rained down on Odesa.

"They could not move," Carlos Rodriguez-Galindo, director of St. Jude Global, chair of the Department of Global Pediatric Medicine, and executive vice president at St. Jude Children's Research Hospital, said to *The Cancer Letter*.

"These kids will probably never be able to get out of Odesa."

Similar scenarios are playing out across dozens of cities across Ukraine, especially in border provinces, experts say, as civilians try to escape intensifying bombardment and Western European, American, and global health organizations scramble to help evacuate patients and health professionals from cities under siege.

The United Nations notes that as many as 7 million Ukrainians have been displaced, with more movement expected across the region. At this writing, more than one million Ukrainians have fled the country, according to UN estimates.

"I have worked in refugee emergencies for almost 40 years, and rarely have I seen an exodus as rapid as this one," UN High Commissioner for Refugees Filippo Grandi said in a statement March 3. "And unless there is an immediate end to the conflict, millions more are likely to be forced to flee Ukraine."

The World Health Organization estimates that at least 3.8 million Ukrainians affected by the crisis are in need of health services. How can U.S. and international health organizations help?

Beyond sending supplies, academic centers and health groups in the U.S.

can support humanitarian efforts by leveraging or establishing relationships with Western European institutions to organize and support care for displaced patients, experts who are coordinating evacuation efforts in Ukraine say.



The majority of the children that we are hearing from are trying to escape from these situations, and that's what we're trying to do, to try to help them get into Poland safely, or try to get them into other countries in Europe in an organized manner.

— Carlos Rodriguez-Galindo



"The situation is dire," St. Jude's Rodriguez-Galindo said. "It is chaotic and catastrophic, with a very unsafe environment, right now with a full deployment of the Russian army. It's very difficult for physicians, for patients."

"There have been news about children with cancer trying to be protected from all the bombing and the instability by going down to underground facilities in hospitals."

Basic healthcare infrastructures—not to mention cancer care—are crumbling throughout the region, U.S. and European experts said.

"Essential health services have been disrupted and are collapsing and jeopardize the treatment of chronic/non-communicable diseases, including diabetes, cancer, and cardiovascular diseases," WHO officials said to *The Cancer Letter*. "Access to primary, secondary and emergency healthcare services and medicines has been disrupted on both sides of the contact line."

According to Ukraine's Ministry of Health, more than 100,000 Ukrainians are diagnosed with cancer each year—that's the number of patients who have recently received or are actively receiving care.

"We hear that they are running out of supplies, that they cannot access medications and much of the equipment that is required to prepare and deliver chemotherapy, etc.," Rodriguez-Galindo said. "For pediatric cancer patients, which is the population that we are trying to assist, the situation is as bad as you can see on TV."

WHO has convened national, regional and international partners to support a coordinated response to managing cancer care needs among refugees from Ukraine across Europe, André Ilbawi, WHO focal point and technical officer for cancer control in the Department of Noncommunicable Diseases, said to *The Cancer Letter*. The first WHO consultation took place on March 3.

"WHO also recognizes the need to address internally displaced cancer patients and coordinate with the Ministry of Health of Ukraine to support domestic needs, including procurement support and maintaining essential health services," Ilbawi said.

As the war in Ukraine escalates, international health organizations are focused on setting up a regional coordination task force to respond to disruptions in the product procurement and supply chain for drugs and medical supplies.

“The oxygen supply situation is nearing a very dangerous point in Ukraine,” WHO officials said. “Trucks are unable to transport oxygen supplies from plants to hospitals across the country, including the capital Kyiv. The majority of hospitals could exhaust their oxygen reserves within the next 24 hours. Some have already run out. This puts thousands of lives at risk.”

Global health experts say there is a need for coordinated action—with European health authorities as well as professional societies—to facilitate transportation for patients at functioning hospitals and cancer centers in Ukraine and get them to healthcare institutions outside the country where there is capacity to meet their needs.

“The immediate health priorities include providing the fleeing population with access to EMS and to surgical services to treat trauma caused by violence and military operations,” WHO officials said. “Additional priorities include provision of access to essential healthcare services and medication including for mothers and children, HIV and tuberculosis patients as well as patients suffering from NCDs, access to mental health and psychosocial support.”

Ukraine’s remaining cancer networks, which were fragmented to begin with, are now focused on evacuating patients to the west, sources say. In areas where movement has been prohibited by Russia’s encircling armies and ongoing shelling, healthcare workers and patients alike are sheltering in place.

“The majority of the children that we are hearing from are trying to escape from these situations, and that’s what we’re trying to do, to try to help them get into Poland safely, or try to get them into other countries in Europe in an organized manner,” Rodriguez-Galindo said. “We cannot oversee everything, because everything happens so quickly. So, we just try to provide a system for

an organized transfer of patients, using Poland as the best route, just because it’s usually what works best.”

Individuals and organizations interested in supporting St. Jude’s efforts in Ukraine can contact the hospital [here](#).

Ukrainian physicians and healthcare workers appear to be staying put to continue providing first aid and essential health services.

“What we hear is that the doctors are staying there. And so, that worries me a lot,” Rodriguez-Galindo said. “It’s difficult to reach out to them, just because they’re so busy—they try to simplify the conversations—but they are there.”

The U.S. government is sending [nearly \\$54 million](#) in humanitarian assistance to Ukraine, Secretary of State Antony Blinken announced Feb. 27—nearly \$26 million from the Department of State and \$28 million from the U.S. Agency for International Development. USAID administrator Samantha Power [traveled](#) Feb. 28 to the Poland-Ukraine border in a show of solidarity.

On March 3, the U.S. Department of Homeland Security [granted Temporary Protected Status](#) for 18 months to Ukrainians on U.S. soil.

U.S. institutions interested in sponsoring Ukrainian physicians, health professionals, and scientific experts in STEM fields can do so through existing immigrant and non-immigrant pathways. These include the [J-1](#) exchange visitor program, [H-1B](#) temporary work visas, or [employment based immigration](#) processes, federal officials confirmed with *The Cancer Letter*.

At this writing, nearly 1,000 labs around the world—primarily in the

U.S. Germany, Switzerland, Sweden, and Poland—have expressed support for Ukrainian scientists.

The full list of institutions, which includes employment and funding information, is available [here](#).

UMANA, U.S. cancer groups: Reaching Ukrainian refugees

Urgent non-government initiatives to transport humanitarian and medical supplies from the U.S. to Ukraine, via Poland, are also underway.

The [Ukrainian Medical Association of North America](#), a nonprofit composed of 19 branches throughout the U.S. and Canada, is leading one of these efforts, which includes working with international delivery companies to charter planes and get supplies to the frontlines.

Solomiya Grushchak, a physician and a member of UMANA, is involved in scaling up the organization’s humanitarian response.

“Refugees have been displaced to Poland and are trying to connect with people from Chicago through the Ukrainian relief efforts to get supplies,” Grushchak, chief resident at the John H. Stroger, Jr. Hospital of Cook County, said to *The Cancer Letter*. “That includes not only medical supplies, but also humanitarian aid—things like non-perishable food, diapers, clothing, blankets, sleeping bags.”

“For medical support particularly, the Ukrainian Medical Association, obviously, wasn’t expecting this atrocious geopolitical crisis of such magnitude, and are adjusting our strategies and optimizing procedures as we go along.”

A conversation with Grushchak appears on [page 28](#).

Grushchak's family is in Ukraine. "My close family is in Lviv and Ivano-Frankivsk, which is on the western side, closer to the Polish border," Grushchak said. "They haven't decided to leave, even with all the resources that we've provided them to try to move forward with either a visa to the United States or to Poland."

For more information on the response effort, Grushchak can be reached [here](#), and UMANA [here](#).

UMANA's list of items, requested by Ukraine's Ministry of Health, can be downloaded [here](#).

"Ukrainian Medical Association of North America stands with Ukrainian people in their hour of need," UMANA President Olena Gordon said to *The Cancer Letter*. "In partnership with the Ukrainian government, we are centralizing the collection of medicine and medical supplies destined for Ukrainian hotspots.

"We are in particular need of medicine, so please reach out to us at umanahelpua@gmail.com. For monetary donations, please go to umana.org. 100% of the funds will go to aid the Ukrainian people."

In terms of immediate patient placement and care, most of the medical and humanitarian aid will need to originate in Europe or be channeled through Western European countries, St. Jude officials said.

"A good network in Europe will be critical for that. That's the main help," Rodriguez-Galindo said. "If *The Cancer Letter* reaches some of these centers, obviously, that would be great. And that is at two levels: One is medical care, so that these kids do not have interruption of care. They can be seen at the right time. Some of them were ready to receive a bone marrow transplant, others need-

ed surgery. The institutions have to be responsible for that.

"And second is family and psychosocial support. We're not only talking about the children, but also the entire family."

The unprecedented influx of Ukrainian refugees into Poland over the past week means that the surplus of patients in need of care will have to be transferred to neighboring countries—an effort that will require greater regional coordination and fundraising.

"The system in Poland is going to be saturated in the next few days. Now, the next step is to start moving patients, as they cross the border to Poland, directly after the first assessment, to Germany, institutions that have already opened their doors," Rodriguez-Galindo said. "So that's probably the second phase—start moving people to Germany.

"As other institutions in other European countries volunteer, then we need to develop the next phase, which is where to send patients, how to send them, how to coordinate that transportation for families, etc., which is more complicated. But that will be the next step."

The American Society of Clinical Oncology is working with its European members and international partners to respond to the crisis.

"We and our members are providing active support for oncology care in Ukraine and in countries that are receiving these displaced patients to help avoid life-threatening disruptions in their cancer care," ASCO officials said in a statement.

More than 179,000 newly diagnosed cancer patients are among the "Ukrainian people suffering from Russia's unprovoked aggression," the American Cancer Society said.

"We are committed to leveraging our expertise and vast network to help Ukrainian cancer patients and their families, as well as the Ukrainian oncology research and care community," ACS said in a statement.

Russia's war on Ukraine threatens years of research collaborations and community building, the American Association for Cancer Research said.

"The AACR is outraged at the widespread suffering and death stemming from Russia's shameful invasion of Ukraine and joins the world in calling for an immediate end to this unjustified aggression," AACR said in a statement.

The American College of Surgeons said several communities within the U.S. are organizing efforts to support refugees from Ukraine. "We encourage all ACS members to consider helping to provide [these groups](#) with much needed material or financial support," ACS officials said in a statement.

St. Jude, WHO: Getting Ukrainians to Western Europe

While many healthcare workers have stayed in cities under siege, some have evacuated to hospitals closer to the western border, as patients move with them.

Many of the nation's state-of-the-art health facilities, including Kyiv's National Cancer Institute, are concentrated in the capital city—the Kremlin's primary military and political target. Community services throughout the provinces that provide cancer care are also experiencing similar disruptions, as supply lines are cut and care is interrupted as patients and their families make the hazardous trek to western Ukraine and Poland.

“When the crisis started, immediately, our partners in Ukraine, hospitals as well as foundations, asked for help, ‘Can you guys help us coordinate?’” St. Jude’s Rodriguez-Galindo said. “Together with them, on the ground, we developed this plan.”

St. Jude’s efforts focused first on evacuating critical patients from Lviv—the closest major Ukrainian city to the western border—to Poland, opening up hospital beds for patients that fled from Kyiv.

“We moved this first batch of patients as soon as possible,” Rodriguez-Galindo said. “Over subsequent days, we moved in different batches, 20, 15, 25 at a time, from Kyiv to Lviv. These children could stay in Lviv. Those that require immediate care, who are not in good condition, are transferred to another country.”

That process required setting up an operations hub, which coordinates immigration with partners in Poland and keeps track of patient records.

“In a very structured manner, what we did is create a virtual command center to facilitate that,” Rodriguez-Galindo said. “That means keeping a registry of all the patients that need to move, with medical records for all of them.”

“We have a group of volunteers that are translating these records, whether the records are in Russian or in Ukrainian, into English rapidly within six to eight hours. In the U.S., honestly, what we have been asking, as we have been developing this structure, is for more help from volunteers with language skills.

“So, that has been going on for five or six days. Now, with the bombing, it is going to be stopped.”

St. Jude is able to quickly scale up its triage and evacuation capabilities for children with cancer because of exist-

ing partnerships with four cancer programs in Ukraine. The collaboration created a platform for health systems assessment at the country level, which brought Ukrainian physicians, Ministry of Health officials, and professionals at health foundations together to develop national plans.

“Obviously, all this is now falling apart, because of what we are seeing,” Rodriguez-Galindo said.



Where are all the other children? That’s what I don’t know. How many of them haven’t been able to leave, or decided to stay? How many have crossed the borders, and now are somewhere in Europe, but without us knowing?

— Carlos Rodriguez-Galindo

Transportation for cancer patients is conducted through the consulate of Poland in Lviv, and buses or private cars are escorted by police to the Polish border.

“We work with the [Herosi Foundation](#) in Poland and the [Tabletochki Charity Foundation](#) in Ukraine. The Herosi Foundation receives these patients, and they have their own arrangements with volunteers and buses that then distribute these patients to Polish in-

stitutions that have accepted them,” Rodriguez-Galindo said. “Then, depending on diagnosis and age, they stay in Kraków or they go to Warsaw, or they go to other places.”

St. Jude officials estimate that almost 100 children with cancer have made it to Poland thus far, through their network’s efforts. More than 100 children are on the move, and are expected to reach the Polish border in the next day or two.

St. Jude estimates that there are at least 1,500 to 2,000 children with cancer in Ukraine who are on active treatment, not only for new diagnoses, but also for ongoing therapy.

“I have shared with you maybe a few hundred; so, where are all the other children? That’s what I don’t know,” Rodriguez-Galindo said. “How many of them haven’t been able to leave, or decided to stay? How many have crossed the borders, and now are somewhere in Europe, but without us knowing?”

St. Jude is also keeping tabs on another group of patients that may be en route to Moldova or to Romania, and the hospital is working with partner foundations and institutions in those countries to track patient outcomes.

“These patients then eventually get situated in any of those countries, but many of them, I believe, are seeking care in other European countries,” Rodriguez-Galindo said. “As we started creating this system, we were linked to several organizations in Europe that were also trying to create a platform for that. That side of Europe represents, for this particular purpose, the national societies—the national societies of pediatric oncology in Germany, in Spain, and Italy, they’re trying to put all this together.”

St. Jude is building a registry of institutions across Europe that are willing and able to take Ukrainian patients. This

resource logs the capacity of these institutions, and information on whether the governments are providing free care for these patients.

“This is how we have set it up so far. The majority of countries or governments in Europe have expressed complete support, and that all refugees will have access to free healthcare,” Rodriguez-Galindo said. “And in many countries, this has been made specific as well for childhood cancer. We feel comfort-



Much of this propaganda war actually didn't work to Putin's benefit, because Ukrainian people are very prideful and they're willing to sacrifice and uphold their traditions and their culture even in times of crisis.



—Solomiya Grushchak

able with that. Poland was the first one.

“We are trying to work as well with Doctors Without Borders and the Red Cross, just to leverage some of their capacity on the ground, now during war times. CCI, Childhood Cancer International, a parent organization with multiple branches in Europe—they have mobilized all their resources to support logistics, families, and patients,” Rodriguez-Galindo said.

The resistance by Ukrainians is proof of their collective strength and commitment to a free Ukraine, said Grushchak, the Chicago physician with family members who have chosen not to leave Ukraine.

“They, I think, are hopeful that all of this ends and they're just very prideful and they love their country. They love their life in Ukraine,” Grushchak said.

“I think that goes to show that much of this propaganda war actually didn't work to Putin's benefit, because Ukrainian people are very prideful and they're willing to sacrifice and uphold their traditions and their culture even in times of crisis.”

Updates from WHO officials on the ongoing crisis follow:

- WHO is working closely with our offices in Ukraine and neighboring countries, as well as partners to rapidly respond to the health emergency triggered by the conflict and to minimize disruptions to the delivery of critical healthcare services. WHO continues to deliver much-needed support on urgent health needs.
- The WHO director-general has announced the release of a further US \$3.5 million from WHO's Contingency Fund for Emergencies (CFE) to purchase and deliver urgent medical supplies. WHO's humanitarian health support is expected to increase following further needs assessments. This assistance complements the trauma care and medical supplies which WHO helped to pre-position in health facilities.
- Partners involved in the implementation of the Re-

gional Refugee Response Plan (RRRP), including WHO, is assisting 2.4 million refugees and asylum-seekers in neighboring countries.

- WHO country offices in Poland, Republic of Moldova, Hungary, Romania, Slovakia, and in other European countries are working closely with Ministries of Health to address the immediate health needs of refugee arrivals. All offices are scaling up capacity through staff deployments. In neighboring countries, WHO is operating under the inter-agency response as part of the RRRP coordinated by UNHCR.
- The WHO emergency center in Poland will be used to deploy emergency medical supplies to support the immediate needs of affected population both inside and outside Ukraine
- WHO, working with international partners, is working toward the following actions for cancer care among refugees: convene strategic partners; formulate a compelling narrative and integrated plan; invest effectively to make an impact; and monitor implementation and promote accountability.

Statements from U.S. cancer groups and professional associations follow:

American Society of Clinical Oncology



ASCO stands with our Ukrainian members, the worldwide oncology community, and healthcare providers around the globe in condemning Russia's unprovoked war on Ukraine. We call for an immediate cessation of these hostilities and demand full protection and safety for all Ukrainian patients, healthcare workers, and medical facilities.

As a global cancer society, ASCO represents oncology professionals in Ukraine and its neighboring countries including Poland, Romania, Moldova, Slovakia, and Hungary, now receiving thousands of fleeing Ukrainians. From within Ukraine and the surrounding regions we are hearing daily reports of cancer treatment interrupted by acts of war, including damage to medical facilities and shortages of critical supplies. Countless patients now need to find cancer care in new and unfamiliar surroundings with limited medical records and minimal resources.

Together with our European members and international partners, we and our members are providing active support for oncology care in Ukraine and in countries that are receiving these displaced patients to help avoid life-threatening disruptions in their cancer care.

Interruption of life-saving cancer care simply adds to the massive pain and needless suffering caused by war. We are compelled by our vision of a world where cancer is prevented or cured and every survivor is healthy, to work together with all of our members to protect the health and well-being of people with cancer everywhere.

American Cancer Society



More than 179,000 newly diagnosed cancer patients are among the Ukrainian people suffering from Russia's unprovoked aggression. Disruptions to cancer treatment pose a grave risk to their very survival. As a global organization, the American Cancer Society stands in solidarity with all Ukrainians. We are committed to leveraging our expertise and vast network to help Ukrainian cancer patients and their families, as well as the Ukrainian oncology research and care community.

American Association for Cancer Research



As the world's first and largest organization dedicated to accelerating advances against cancer, the AACR and its more 50,000 members from around the world stand in solidarity with the citizens of Ukraine during the Russian attack on their country.

Ukrainian cancer patients of all ages are vulnerable especially at this time while their care is interrupted by acts of war, criminal attacks on medical facilities, and dwindling food and supplies.

As a global cancer research organization, the AACR is committed to supporting its members in Ukraine and the entire Ukrainian cancer community. We call for the immediate protection and safe passage to other countries of all cancer patients and of the cancer researchers and medical providers who are needed to maintain the momentum of cancer discovery and care.

Progress against cancer depends on the scientific and clinical contributions of experts from around the world to maintain the high quality of our medical research enterprises and healthcare services. This abhorrent war, which has been instigated by Russia's leaders, is isolating and interrupting the lifesaving work of scientists and clinicians in Ukraine and Russia, threatening years of effective research collaborations and community building. Limiting the exchange of innovative ideas, practices, and data across borders will significantly retard cancer research and have an adverse effect on public health.

The AACR is outraged at the widespread suffering and death stemming from Russia's shameful invasion of Ukraine and joins the world in calling for an immediate end to this unjustified aggression.

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American College of Surgeons



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With anguish, we are following the developing human tragedy in Ukraine. The loss of life is profound, and the destruction of infrastructure is devastating. The American College of Surgeons denounces this violence leading to unnecessary suffering and loss of human life.

This is a complicated emergency that places innocent people in peril and in harm's way of armed conflicts. It will lead to food and water insecurity, limited—or no—access to medical care, and will separate and displace families and friends away from their homes without a safety net.

Even though many of us live at least a continent and ocean way from this escalating tragedy, we encourage all to act in good faith from afar. Now is the time for all of us to help, in any way we can, to mitigate the suffering of people who are in desperate need.

Several communities within the U.S. are already organizing efforts to support refugees from Ukraine. We encourage all ACS members to consider helping to provide these groups with much needed material or financial support.

This [article](#) from National Public Radio lists organizations that are already working to make an impact. We're also aware of these two groups:

- [Cleveland Maidan Association](#)—Assistance to Ukrainian refugees

- [Razom for Ukraine](#)

If you know of other relief efforts of which we should be aware, please feel free to share that information with us. Groups that offer medical assistance are of particular interest, but right now, assistance will be needed to support all facets of the refugees' lives.

We thank you for your support as we all keep those affected by this tragedy in our thoughts and prayers. Further updates will be forthcoming, as appropriate.

European Society for Medical Oncology



European Society for Medical Oncology

ESMO expresses profound sadness about the unfolding tragedy in Ukraine and the suffering of people. We would like to confirm our solidarity and unconditioned support to all oncology professionals and cancer patients, with no geographical boundaries.

The Society is currently reviewing possibilities to be of concrete help for our members and their patients, in collaboration with national and transnational oncology societies, as well as the International Cancer Foundation.

Our thoughts are with all those who are suffering, and we call for a rapid return to peace.

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Grushchak spoke with
Matthew Ong, associate editor of
The Cancer Letter.

A



CONVERSATION WITH
THE CANCER LETTER

UMANA's Solomiya Grushchak: Ukrainians are willing to sacrifice and uphold our culture even in times of crisis

“

What should be highlighted too, is just that there's huge support from not only the Ukrainian community in Chicago, but everywhere else in the United States.

”



Solomiya Grushchak, MD

*Chief resident, John H. Stroger, Jr. Hospital of Cook County;
Member, Ukrainian Medical Association of North America*

Ukrainian communities across the United States are sending essential medical and humanitarian supplies to Ukraine via organizations, including the [Ukrainian Medical Association of North America](#), said Solomiya Grushchak, a member of UMANA.

“There is a huge initiative to provide support as much as possible,” said Grushchak, chief resident at the John H. Stroger, Jr. Hospital of Cook County. “That includes not only medical supplies, but also humanitarian aid—things like non-perishable food, diapers, clothing, blankets, sleeping bags—to Poland, in addition to things like helmets, protective gear for both civilians and the military.”

Grushchak’s family has chosen to remain in Ukraine. “My close family is in Lviv and Ivano-Frankivsk, which is on the western side, closer to the Polish border,” Grushchak said.

“In times of need, it seems like everybody has been able to band together, but it’s still very critical at the moment. Everything is changing minute by minute.”

Grushchak spoke with Matthew Ong, associate editor of *The Cancer Letter*.

Matthew Ong: What do the circumstances look like right now for people you know in Ukraine? How can our audience help?

Solomiya Grushchak: At the moment, some families decided they are staying, particularly because men ages 18 to 60 wouldn’t be able to cross the border or are willing to. A lot of people are leaving cities and going to the outskirts of cities.

There is a huge initiative to provide support as much as possible. Refugees have been displaced to Poland and are trying to connect with people from Chicago

through the Ukrainian relief efforts to get supplies.

That includes not only medical supplies, but also humanitarian aid—things like non-perishable food, diapers, clothing, blankets, sleeping bags—to Poland, in addition to things like helmets, protective gear for both civilians and the military, and that is then to be transferred to Poland and then via courier to Ukraine.

That’s all volunteer-based. Right now, there are several different non-profit organizations assisting with refugee aid.

For medical support particularly, the Ukrainian Medical Association, obviously, wasn’t expecting this atrocious geopolitical crisis of such magnitude, and are adjusting our strategies and optimizing procedures as we go along.

Can you tell me a bit more about yourself, about the Ukrainian Medical Association, and your role within it?

SG: Sure. I’m actually born in Ivano-Frankivsk, which is on the Western side of Ukraine. All my family is actually in Ukraine at the moment, except for a cousin in New York.

In Chicago, luckily, there is a huge Ukrainian diaspora, and I was involved in Ukrainian dance, Ukrainian scouting, and then one of the organizations was the Ukrainian Medical Association. And through that, that’s how I actually decided to pursue a career in medicine, through mentors that I established.

Since then, I’ve partaken in fundraising efforts. Back when conflict started, several years ago, during the Orange Revolution, and then the aftermath, we did partake in a [mission trip](#) through Ukraine, providing supplies for both

Lviv, Kyiv and the military hospitals and public hospitals there.

Obviously, now this is on a much larger scale, since these people have a pretty decent understanding, are very helpful and willing to be involved. Whereas at that point, I think it was not quite well known—the long conflict between Russia and Ukraine, a long history of conflict.

What can our network of U.S. centers, associations, and cancer organizations do for physicians, health professionals, and scientific experts in and out of Ukraine right now?

SG: Right now, this is the part where I’d like to get more of an opinion from the physicians in Ukraine, because I don’t have much contact with them at the moment, but I think spreading awareness is always important, fundraising for medical supplies through the Ukrainian Medical Association. I have information and contact on what supplies we’re trying to transport to Poland and then Ukraine.

And then, aside from that, assisting physicians to take refuge in other countries, both in Europe and in the United States. And then, if the need arises, to have physicians actually go there to the hospitals, because I’m sure that will be quite an issue after all this is over.

Are there any other comments that you want to get across?

SG: I’m just really proud of the response that we’ve received from the global sphere, and we hope that the conflict ends soon. We are thankful for the continued support from both within the medical field and abroad.

Did you say you have family members right now back home in Ukraine?

SG: My close family is in Lviv and Ivano-Frankivsk, which is on the western side, closer to the Polish border.

They haven't decided to leave, even with all the resources that we've provided them to try to move forward with either a visa to the United States or to Poland. So they, I think, are hopeful that all of this ends and they're just very prideful and they love their country. They love their life in Ukraine.

I think that goes to show that much of this propaganda war actually didn't work to Putin's benefit, because Ukrainian people are very prideful and they're willing to sacrifice and uphold their traditions and their culture even in times of crisis.

What should be highlighted too, is just that there's huge support from not only the Ukrainian community in Chicago, but everywhere else in the United States.

And it would be great to have a unified voice, unified force—and that's why I think the medical association promised to provide—but we really appreciate everybody else's initiatives and efforts. It's fantastic.

In times of need, it seems like everybody has been able to band together, but it's still very critical at the moment. Everything is changing minute by minute.

I hope that your loved ones are safe and I hope that everything will turn out okay for your family in Ukraine. Please reach out if there's anything we can amplify.

SG: Thank you, I appreciate that.



(Above) UMANA is receiving hundreds of pounds of medical supplies daily. (Below) UMANA's volunteers during the first few days of collection, as they organize supplies into three categories: hospital, surgery, and supplies for frontlines.

Source: UMANA





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Giving chemo in bomb shelters, Ukrainian oncologists treat and evacuate patients

By Alice Tracey

As the war rages around them, Ukraine's oncologists are scrambling to get cancer patients the treatment they need.

“Quite a lot of oncological centers have been attacked—I have no words about it,” said Tetiana Skrypets, a Crimean-born oncologist-hematologist who has previously worked for Ukraine's National Cancer Institute in Kyiv and is now a PhD candidate in Italy, at Università degli Studi di Modena e Reggio Emilia.

Scheduled treatment sessions, surgeries, and diagnostic procedures for cancer patients are among the casualties of this war. At some locations, drugs are in short supply.

“Basically, we are not able to give them any care,” Oleksandr Stakhovskyi, a urologist and oncological surgeon at Ukraine's National Cancer Institute in Kyiv, said to *The Cancer Letter*. “We discharge almost everybody. We still have two or three patients, maybe up to 10, who are not able to leave [for] home because their home is destroyed.”

A conversation with Stakhovskyi appears on [page 13](#).

Cancer patients have been forced into underground [bomb shelters](#), with pediatric cancer patients at centers like Ohmatdyt Children's Hospital receiving [treatment](#) in the facility basement.

“There are children who have, for example, acute leukemia, or other types of cancer where they need urgent treatment,” Darya Kizub, a Ukrainian-born oncology fellow at MD Anderson, said to *The Cancer Letter*. “They are giving them chemotherapy right now, even though there is war, and whenever there's an air alert, everybody goes down to the basement, which serves as a bomb shelter. Whenever the kids have a continuous infusion of chemotherapy, they have to be very careful to bring all of that to the basement so that the treatment can continue.”

Kizub received this information from the head of the pediatric oncology section at a hospital in the city of Ivano-Frankivsk. This source told Kizub that, at least at her hospital in western Ukraine, physicians are still able to get to work and offer treatment.

In other parts of the country, even getting to the hospital presents a challenge.

“There are quite a lot of difficulties. I'm not even talking about how to provide therapies,” Skrypets said to *The Cancer Letter*. “Quite a lot of people haven't got the possibility even to reach hospitals. Quite a lot of doctors are staying in clinics and can't go home because it's dangerous, and some of them can't reach hospitals to help because it's dangerous.”

In eastern Ukraine, where the fighting is at this time more intense, cancer

care is far more limited than in cities further West.

“You go to the eastern parts, where all these affected cities, like Kharkiv, for example, which is bombed for the last three days, and we have all these awful videos from that city—I’m sure that nobody’s caring about oncology at all,” Stakhovskyi said. “I don’t know the status of our oncological colleagues from there, but I believe they are trying to escape Kharkiv, to move to Kyiv or to other western cities.”

Hospitals are trying to coordinate the transportation of cancer patients from eastern Ukraine to western Ukraine.

“There has been a mobilization where everybody’s trying to help with medical supplies and humanitarian aid,” Kizub said. “In western Ukraine, things are actually safer than the rest of the country. What they’re doing is they’re accepting cancer patients from other areas in the country, which are, you know, less safe because of the bombs and artillery fire—including on the civilian infrastructure in the hospitals.”

Facing limited resources, hospitals in western Ukraine are also pushing to get patients across the border.

“In Western Ukraine, they’re also working on moving patients from oncology

centers there to other places in Europe,” Kizub said. “That’s something that they’re working on right now—to transfer them across the border, because they are accepting patients from all over the country and they have limited capacity.”

Skrypets said she is working with colleagues in Ukraine to assist cancer patients.

“We are trying our best just to save one life, one life,” Skrypets said. “We are trying to organize some networks with our European colleagues all over Europe to provide health care for patients who will be able to reach Ukrainian borders to

Source: Staff at NCI Ukraine





Source: Staff at NCI Ukraine

go, I don't know, in Poland, in Hungary, in Czech Republic, wherever, in Germany, in Italy.”

Reaching these countries can be difficult, because the political situation and refugee crisis have made travel treacherous, and not all patients are healthy enough to relocate.

“The main problem is to reach these places, when some patients have more difficult situations and need more advanced treatment,” Skrypets said. “I know that now in Poland, in Germany, also in Italy, they will receive all these therapies for free, because these people haven't got anything anymore. Here in Europe, we could organize everything. The more difficult thing is to reach these countries where they can have therapy.”

Online connectivity is crucial for coordinating these efforts—according to Kizub and Stakhovskyi, internet connections have been holding up in Ukraine. The Ukrainian Ministry of Health announced on Telegram that the Kyiv City Clinical Oncology Center has launched a hotline for patients with cancer, aiming to connect city residents to consultations and special and palliative treatments.

“The connections are very good. Ukraine is a country that is very connected to social media,” Kizub said. “So, people are talking to each other via WhatsApp, via another app called Viber, via Facebook.

“We hope it stays that way, because, I think, now that the Russian military's advance has stalled and they're frustrated, they're trying to decrease morale in the general population by bombing civilian infrastructure, including the power stations. They hit the main telecommunications tower in Kyiv, but so far, the country is holding up.”

Kizub said she is heartened by the channels of communication and the orga-

nized humanitarian efforts that have emerged from the conflict in Ukraine.

“The whole country is together, which is really wonderful,” Kizub said. “I think everything is just in very early stages, where unless you’re there, it’s even hard to provide aid. But, thankfully, there are aid networks that are developing where there are clear channels where you can send donations to Poland, then they get them over to Ukraine—and this includes medical supplies.”



Quite a lot of people haven't got the possibility even to reach hospitals. Quite a lot of doctors are staying in clinics and can't go home because it's dangerous, and some of them can't reach hospitals to help because it's dangerous.

—Tetiana Skrypets



Stakhovskyi said he and his colleagues will remain at NCI in Kyiv, helping cancer patients as long as they can and, if needed, deploying their medical skills for front-line care.

“People are putting everything on the table,” Stakhovskyi said. “Whatever they will do, they try to volunteer, they try to help—if not with weapons

in their hands, at least with a car, with food, with petroleum, sending money to the army. It’s great to see how the nation united against one opponent, against Russia.”

For many scientists, the Russian invasion of Ukraine has raised questions about scientific collaboration with Russia.

Scientists and research organizations across the globe, including in Russia, have condemned the Russian government’s actions. A letter written by Ukraine’s Council of Young Scientists, addressed to the European Commission and member states of the European Union and signed by over 130 people, pushes for a wide-reaching boycott of the Russian academic community.

“It’s really unfortunate, because we know that there are a lot of Russian people, and especially a lot of Russian physicians and oncologists, who are completely against the war, and who have put out statements to this effect and have even gone to protest—even though in Russia, when you protest, this can carry a heavy prison sentence, you can be assaulted by the police, you can be very heavily fined—it’s a high price to pay, but many people are still doing it,” Kizub said.

Scientists have made it clear that sanctions against Russia extend to the medical and research communities.

“Now Russians are saying that we hate them. No, we don’t,” Skrypets said. “I will not do any violence, nothing, I don’t care—but I will do my best not to cooperate with them.”

On behalf of Ukraine’s National Cancer Institute in Kyiv and Ukrainian physicians working abroad, Skrypets and some of her colleagues tweeted a letter urging prominent medical organiza-

tions to cease cooperation with Russia for the time being.

“Please, arrest membership of the Russian Federation and Republic of Belarus or their citizens till the end of the war in Ukraine, change the payment net for them, stop any cooperation, cancel joint events or those planned at the territory of the Russian Federation and Republic of Belarus, exclude [these] states from the list of new clinical trials,” the letter states. “Each step will support the global reaction to the revolting and mad actions of the Russian Federation against [the] people of Ukraine, it will save lives of our patients and ordinary people.”

The letter was tweeted at organizations including the American Society of Hematology, American Society of Clinical Oncology, American Society for Transplantation and Cellular Therapy, European Society for Blood and Marrow Transplantation, European Hematology Association, European Organisation for the Research and Treatment of Cancer, European School of Oncology, and European Society for Medical Oncology.

Skrypets said in her experience, Russia has been hesitant to get involved in nonprofit research projects, meaning that excluding Russian collaborators will not destine these projects to failure.

“We are in quite a lot of nonprofit projects, and also we would like to involve Russia in our projects, but unfortunately for nonprofits, they are quite closed. They didn’t want to share their data. They didn’t want to participate in nonprofits,” Skrypets said. “So, our European research will not fall down without Russia.”



GUEST EDITORIAL

Reflecting on 25 years of collaboration and friendship with cancer patients and physicians in Ukraine



By Julie R. Galow, MD

*Chief medical officer;
Executive vice president,
American Society of Clinical Oncology*

Ukraine has a special place in my heart, in my career, and in my life.

A Ukrainian breast cancer project first introduced me to the field of global oncology, along with experience of seeing first-hand the challenges (and rewards) of providing cancer care and conducting cancer research in a setting of constrained resources.

From my very first visit, I was astounded by the hospitality, ingenuity, and resilience of the Ukrainian people. I became fascinated by their history and culture, along with their contributions to art, science, and humanity.

I established strong connections and friendships in Ukraine that last to this

day, making the senselessness and brutality of Russia's recent invasion, and particularly its impact on cancer patients and health care providers in Ukraine, especially distressing and personal for me.

The Breast Cancer Assistance Program

In 1997, the US Agency for International Development (USAID) awarded \$3.8 million to assist the Ukrainian Ministry of Health in strengthening its breast cancer services.

I was asked by the Program for Appropriate Technology in Health (now

known simply as PATH) to serve as a medical oncology consultant on this Breast Cancer Assistance Program.

The three-year project was developed to prepare Ukraine for what was expected to be an increase in breast cancer incidence post-Chernobyl (a fear that never actually materialized). Programs were developed in collaboration with Ukrainian oncologists to address breast cancer screening, diagnosis, treatment, and rehabilitation.

On my first trip to Kiev, the PATH project director, Rosh Doan, and I were met on the steps of the National Cancer Institute of Ukraine by reporters. I was asked, "Can you please tell us about this American project, but don't



March for Life and Hope, 2003. — Photos courtesy of Julie Gralow

use the word ‘breast’ and don’t use the word ‘cancer?’”

I left it to my interpreter to figure out how to accomplish that, and was never sure exactly what she said or how the project was described by the press.

It was immediately clear that there was limited public discussion of the disease and its treatment, and that we would need to better understand the state of both cancer care and cancer information in the country in order to succeed.

In our initial assessment of treatment practice in Ukraine, we learned that treatment decisions were primarily based on drug cost and availability, not science or evidence. The number of

cases treated and exact regimens used were difficult to determine.

On more than one occasion, I was asked, “Do you want the official numbers or the real numbers?” Very low doses of chemotherapy were being used, with the explanation that Ukrainian women could not tolerate “Western” doses.

Improving early detection of breast cancer was deemed a high priority.

Therefore, a pilot was launched comparing screening mammography with clinical breast examination in Chernihiv in the North and Lviv in the West. We discovered on a site visit that the project budget had mistakenly not factored in the cost of the mammography

film, and the solution had been to ask women participating in the screening to self-procure their own film.

Somehow they figured out how to do that—just mind-boggling to me, and clearly demonstrating the ingenuity and perseverance of the Ukrainian people.

The pilot ended up showing that screening mammography was neither cost-effective nor sustainable with Ukraine’s level of resources at the time. But the project was still a success—helping define optimal utilization of scarce resources, and providing training in diagnostic mammography, needle biopsy techniques, and clinical breast examination to health professionals.

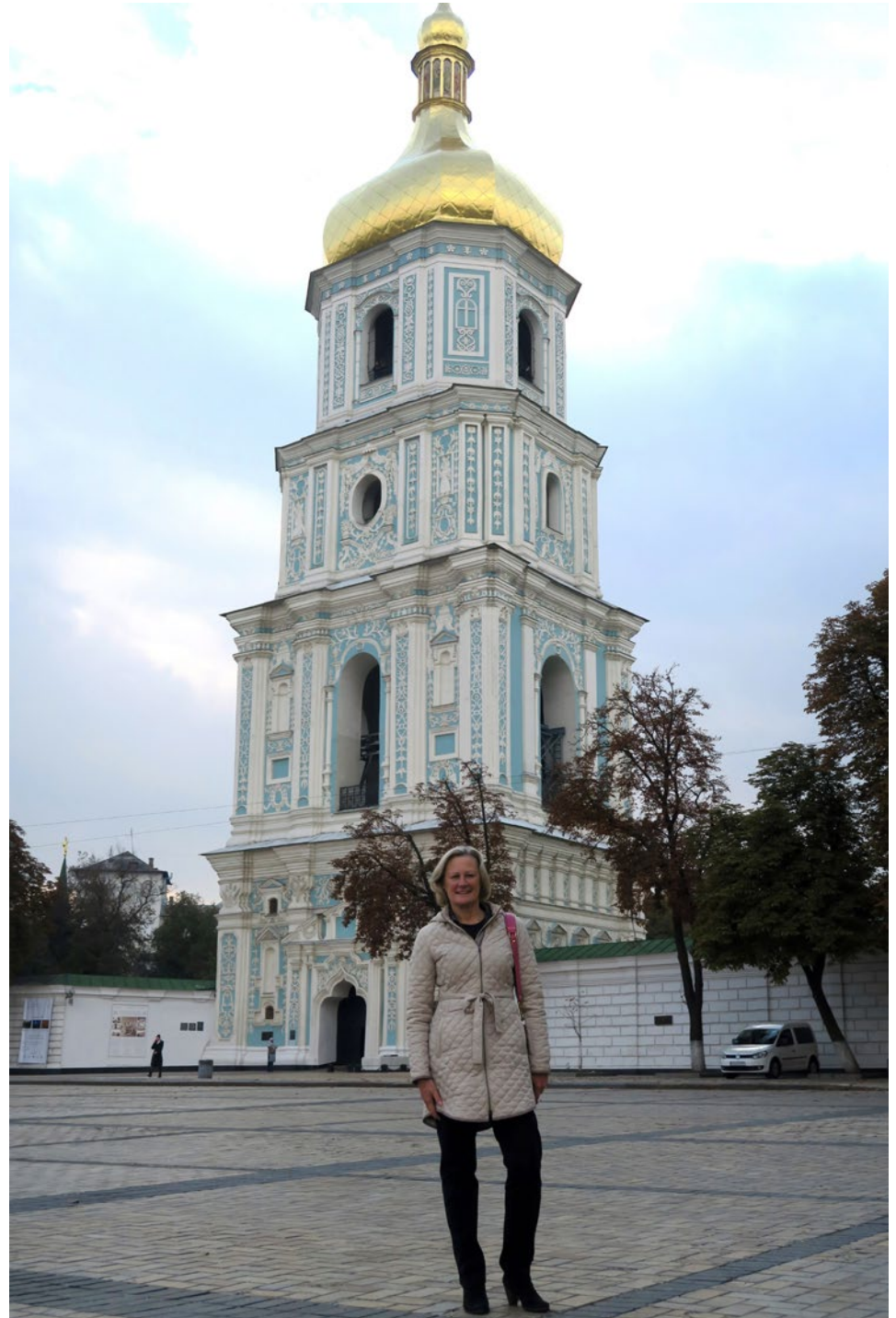
Education and experience with clinical trials were also felt to be a high priority for Ukraine. In response, Dr. Natalya Martsynkovskaya, from the Odesa Oblast Oncology Center, and I designed a preoperative chemotherapy trial to evaluate conventional “Western” chemotherapy, using standard Ukrainian supportive care measures.

The primary objective was to assess the safety and toxicity of this regimen (addressing whether “Western doses” could in fact be tolerated by Ukrainian women or not). The study also aimed to introduce physicians to multidisciplinary care and clinical trials standards, including creating dialogue between physicians and patients through informed consent.

Dr. Martsynkovskaya was invited to present the results at national and international conferences. From one of her presentations:

We have gained valuable insight into the challenge of conducting clinical trials in Ukraine, including issues of informed consent and acquisition of chemotherapy drugs. For the surgeon, neoadjuvant therapy shrinks the tumor mass, permitting breast conserving surgery, correspondingly improving the quality of life of the patient. This project will impact oncology practice at the national level in Ukraine, and benefit all Ukrainian women. It follows that neoadjuvant chemotherapy is a necessary part of the combined treatment of breast cancer with local spread. Therefore, the treatment strategy for such patients should be prescribed only by a team of specialists: pathologist, surgeon, chemotherapist, radiation oncologist.

I’m happy to see that perhaps, at least in some part due to this experience, Ukrainian sites are now regularly included in many large-scale, global oncology pharmaceutical trials.



Gralow at the Bell Tower of St. Sophia.

One of the sub-projects of the Breast Cancer Assistance Program, with the most durable impact focused on facilitating dialogue between breast cancer patients and their health care providers. Led by Amie Bishop, of PATH, focus group discussions were conduct-

ed with women who had experienced breast cancer.

Patients reported that they often were not told they had cancer, even when undergoing mastectomy. Many felt that they received false hope and inaccurate

information. Most wanted to know more about their diagnosis so that they could plan the future with their families. In parallel, surveys were conducted to understand health care provider attitudes and practices related to patient care.

Although some health professionals expressed support for more candor in discussions with patients, the cultural norm and official policy did not support discussing the cancer diagnosis with the patient.

The concern was that such frankness would dash the patient's hope for survival (a theme carried over from the Soviet days, as well-described in Solzhenitsyn's "Cancer Ward.")

In response, the project focused on identifying patients, doctors, and nurses willing to experiment with education and communication. Patient education materials were developed aimed at helping women understand their disease and participate in their own care.

Patient-physician dialogue was encouraged and clinicians were provided training and tools to facilitate these discussions. Although doctors were initially averse to working with breast cancer survivors, they began to solicit their help, especially in convincing women to seek necessary treatment.

The project also introduced the idea that women could help each other face the disease by inviting breast cancer survivors from the U.S. to take part in seminars with Ukrainian breast cancer patients and medical personnel, and by supporting a visit to meet breast cancer survivors in Poland.

Inspired by this interaction, Ukrainian cancer survivors organized support groups across the country, named the Amazonki, after the mythological female warriors who would cut off one breast in order to better use their bow and arrow.

In October 2001, the Amazonki received a permit for a "March for Life and Hope." Breast cancer survivors, family members, and healthcare providers marched down Khreshchatyk Street, the main street in Kyiv. There were pink balloons, a marching band, and presentations at the city center—raising awareness for breast cancer and celebrating cancer survivors.



A painting by Sergey Savchenko, an abstract painter and member of the underground Odesa nonconformist movement.

A public demonstration by a non-governmental organization would have been unheard of prior to the fall of the Soviet Union, and such permits were still very difficult to obtain at the time. As the patient advocates told me, "We need to do this for our daughters."

The rapidity by which the patient support, survivorship, and the advocacy movement developed was astounding. While in 1997 no breast support groups (or even the concept of patient support systems) existed in Ukraine, by 2001 Amazonki breast cancer survivor groups had been formed across the country.

This experience cemented the concept for me that patients are critical partners in improving cancer outcomes globally, and that peer-to-peer support and patient advocacy must be considered key

components of a comprehensive cancer control plan.

Developing friendships and a love for Ukrainian culture

It was during the "off hours" portions of my time spent during site visits for the Breast Cancer Assistance Program when my love for Ukraine and its people blossomed.

I found that Ukrainians are warm, generous, and hospitable—ready to offer their last piece of bread or their warmest sweater, even when they themselves are hungry or cold. They strongly value friendship, comradery, and family.

Food is an important part of Ukrainian culture. We had wonderful feasts with Ukrainian dishes, including my favorites, tasty vareniki (dumplings) and traditional stuffed cabbage rolls called golubtsi. At breakfast, I always looked forward to a special Ukrainian poppy seed roll (makivnyk).

At one memorable meal in Lviv, at the home of a colleague's very distant relatives, I very much miscalculated how much more was to come after filling up after the 3rd or 4th course (they must have been cooking for a week!).

Each meal always involved toast after toast after toast, and the toasts got longer as the night went on. I learned that the third toast is dedicated to the ladies. And, as a good guest, I also learned my own toast to contribute (in Russian, but now I need to re-learn in Ukrainian).

The oncologists and PATH staff regularly arranged special tours and events, exposing me to the richness of Ukrainian culture and history. I was treated to a play at the Odesa Opera Theater—a comedy about family life that somehow, despite being in Ukrainian, transcended

the language barrier and was totally understandable and enjoyable.

I was invited to concerts with Ukrainian folk music and dancing. I attended a soccer (football) game, wildly rooting with my friends for Kyiv Dynamo (I still have my blue and yellow Dynamo scarf!).

I was invited to visit the studio of a prominent artist in Odesa, Sergey Savchenko. He was an abstract painter and member of the underground Odesa nonconformist movement whose artists refused to conform to socialist realism, the officially approved art in the Soviet Union. The non-conformists staged illegal “apartment exhibitions” of their works and risked being arrested.

I admired one painting in his gallery in particular, and he presented it to me as a gift, despite my insistence on purchasing the painting. I had to be instructed by my accompanying Ukrainian friends that it would be an insult to continue to insist on paying him. It hangs in a prominent place in my dining room.

Over time, I became increasingly comfortable exploring Ukraine on my own. I learned the letters of the Cyrillic alphabet and began sounding out the words on building signs. I learned key words so that I could barter at the markets and craft stalls. I became comfortable jogging near my hotel once I could read the street signs and knew when to turn to head back (no iPhones or GPS back then!).

Restaurants and tourism were not common in the late 1990s, but that was changing. I’m embarrassed to report that the first restaurant I ventured into on my own in Kyiv was a McDonald’s that opened in 1997 (the first in the country, and a big deal at the time).

I learned that if I said “Big Mac Menu” at the register, I got food! It was fun to see how much excitement the Ukrainians had for the arrival of American fast food

in Kyiv, and mostly what it meant with respect to opening back up to the West.

With several entrepreneurs venturing into the hospitality industry and restaurants popping up in the cities, I quickly learned how to read key items on a menu so I could branch out beyond hamburgers.

Some of my first words were *pyvo* (beer) and *khliv* (bread). Maybe not a whole lot more nutritious than McDonald’s, but at least more authentically Ukrainian!

I loved to walk along the craft stalls on the Adriyivskyy descent, a windy steep road connecting the upper city of old Kyiv with the Podil (lower city). Stalls were full of traditional Ukrainian embroidery, wood carvings, and lots of old Soviet medals that I was warned were illegal and could result in an arrest at customs!

My favorite souvenirs were the *pysanky*, intricately patterned Ukrainian Easter eggs made using an ancient wax batik method. I had my favorite *pysanky* artist who I tried to visit on each trip to Kyiv. *Pysanky* and other symbols of faith had been banned during the Soviet era in an attempt to eliminate all religion, but Ukrainians secretly continued to make

the eggs in their homes, and the tradition survived.

I have a large colorful bowl of *pysanky*, the result of many visits to my favorite artist’s stall, on display in my living room.

Visits to the churches and monasteries of Kyiv, with their golden domes and bell towers, taught me much about the history of Ukraine. St. Sofia Cathedral, a UNESCO World Heritage Site with beautiful mosaics and frescoes, was built during the reign of Yaroslav the Wise in the 11th century.

The beautiful Bell Tower at St. Sophia is one of my favorite landmarks in Kyiv. While it was able to survive the Soviet era (when many religious buildings were destroyed), I am fearful about it surviving the current invasion.

The gorgeous Cathedral of St. Michael’s Golden-Domed Monastery, overlooking the Dnieper River, was demolished by the Soviets in the 1930s, but later rebuilt after Ukrainian independence.

The Kyiv Pechersk Lavra (Monastery of the Caves) founded in 1051, another UNESCO site, is an amazing complex. On one visit I was asked by a monk to



PATH breast screening project, Chernigiv, 1998.



Gralow (center) with Odesa chemotherapists Rosh Doan, Natalya Martsynkovskaya, and trainees. PATH Project, 1998.

cover my hair before descending to visit the catacombs. I was ready to comply, having come equipped with a scarf.

My host, a Ukrainian doctor, objected—telling the monk that by forcing such rules on visitors and the people of Ukraine and by blocking access to Ukrainian history, he was in the same class as the previous oppressors—including the Soviets, not to mention Peter I and the Nazis.

There was a mysterious fire during Peter I's reign, and the Soviets had confiscated relics from the Lavra, converted the monastery into a museum complex emphasizing anti-religious propaganda, and removed all the bells from the bell towers. Wow—such a history, it was amazing that the monastery was still standing. (I wore the scarf anyway).

Understanding the atrocities of Ukraine's past has helped me understand the resilience I see today in my Ukrainian friends and colleagues, and their fierce national pride and determination to hold on to freedom and independence at all costs.

I visited the Memorial in Commemoration of Famines' Victims, dedicated to the victims of the Holodomor (the Great Famine), Stalin's failed experiment to push the grain quotas of the collective farmers that resulted in the loss of millions of lives due to starvation.

I visited the Ukraine World War II Museum, and Babi Yar, a ravine where many Jews and locals were killed during World War II. I visited the Ukrainian National Chernobyl Museum on several occasions, trying to understand the horror of the lies and coverup of 1986 Chernobyl disaster and its consequences.

I've returned to Ukraine many times since the conclusion of our original breast cancer project, connecting with PATH friends, oncology colleagues, and providing encouragement to breast cancer patients and survivors.

I visited Kyiv in 2015, not long after the violent events of the Maidan Revolution of 2014 that culminated in the ousting of the Russian-backed president, followed by Russian military intervention and the annexation of Crimea by Russia.

I spent some time in Maidan Nezalezhnosti (Independence Square) in the heart of Kyiv, which was lined with makeshift memorials, flowers, and photos of the anti-government, pro-democracy protesters killed in the revolution.

I met with a group of patient advocates for a somewhat somber meal, noting a change in their morale level, a depression about the turn things had taken in their country, the increase in poverty and corruption and unease. Ukrainians are tough and resilient, but there was a profound sadness from the direction things were taking.

In the eyes of my Ukrainian friends, the Maidan Revolution in 2014 and the annexation of Crimea marks the beginning of the current war with Russia. Ukraine is an ancient nation and at the same time also a very young country, celebrating just 30 years of independence from the Soviet Union in 2021.

For centuries, Ukraine has been invaded and pillaged and divided among its neighbors. And despite all that, Ukrainians have retained a strong sense of national identity and pride.

Supporting powerful Ukrainian breast cancer advocates

My experience with the Breast Cancer Assistance Project led me to initiate a series of Eastern Europe/Central Asia Breast Cancer Advocacy Summits, bringing together leaders of breast cancer patient advocacy and support groups to share the lessons learned and create regional dialogue.

I would later name this project the Women's Empowerment Cancer Advocacy Network (WE CAN), with cervical cancer added to the mission given its high incidence and mortality rates in many of these countries.



Gralow with Amazonki, a breast cancer survivor group

The first summit, attended by representatives from nine former Soviet countries (including Ukraine), was held in Vilnius, Lithuania, in 2003. The Lithuanians surprised the group by unveiling a “Pink Ribbon Van” that was entirely donated (including gas and oil, educational pamphlets, and a driver), decorated with the Nedelsk logo and a big pink ribbon, and designed to travel the countryside with a health care provider promoting women’s wellness.

The attendees, not too far removed from their Soviet days, were simply shocked that something like this could be done entirely through donations and without the government’s involvement. Philanthropy and volunteerism were foreign concepts to most, and a spark was lit.

The success of the first conference led to a second summit in 2005 in Kyiv, and another “March for Life and Hope.” The summits continued biennially, rotating between host countries throughout the region. In 2007, a summit was held in Minsk, Belarus in partnership with the support of the U.S. Embassy (they deemed this a democracy-promoting event, justifying their support).

Because the Belarussians couldn’t get a permit for a public march, the U.S. ambassador, Karen Stewart, led the delegates on a walk from the conference hotel to our dinner venue through a public park. Most delegates were wearing pink scarves or jackets, and the size of the group caught the attention of many in the park who stopped to ask what we

were doing, then wanting to know more about breast cancer. A small act of civil disobedience for a good cause.

At the 2013 WE CAN Summit in Tbilisi, Georgia, we were honored to have U.S. Ambassador Richard Norland at the opening ceremony, who in his official remarks told us that our conference was doing more to promote peace in the region than any effort he had seen.

We were able to unite patient advocates from warring countries—including Russia, Ukraine, Georgia, Armenia, and Azerbaijan—against a common cause: cancer. The cancer diagnosis connecting these women proved to be a far stronger bond than the politics of their countries.

WE CAN returned to Ukraine in 2017, giving me a chance to reflect on how far the patient advocacy movement had evolved since my first trip there 20 years earlier. The advocates were increasingly willing to publicly acknowledge their fight with breast cancer, they were playing important roles in furthering public education, and they were influencing public policy in their countries.

They were contributing to sustainable improvements in breast and cervical cancer prevention, diagnosis, treatment, palliative care, and survivorship. It was wonderful to see the tremendous progress made by these patient advocates, and also somewhat sobering to recognize the challenges that remain for all of us.

Reaching out during the present crisis

When I learned of the impending Russian invasion, I reached out to friends in the U.S. and Ukraine, asking if they and their families were safe, and what I could do to support them. I've gotten updates from several—one holed up in a parking garage whenever the gunshots and blasts come close, another whose safety plan is to hide in her apartment's basement.

Just prior to the invasion, when the Russian troops were lining up on the border, one of my colleagues told me, "My family in Kyiv doesn't want to talk about war—they want to talk about family. Ukraine has been invaded by so many over the years and no one has ever succeeded in crushing our people. We are resilient, we will survive."

This morning, I heard a cancer surgeon in Lviv, a colleague I originally met during the Breast Cancer Assistance Project, describe how western parts of Ukraine are receiving a huge influx of patients from the east. How cancer

surgeries were initially put on hold, but have now at least tentatively resumed. How many can't get to the clinic due to public transportation issues and checkpoints. He described a spirit of shock, a lack of information, and profound uncertainty about what tomorrow will bring.

Another colleague with family in Ukraine replied, "The best way to help/support us is to spread the word about this terrible invasion. The world needs to know that our children are dying and Russia is sending their children to fight and die without cause... a mother's tears are the same despite which side of the border they are on."

This helped me put things in perspective—most humans want peace, not war.

“

Understanding the atrocities of Ukraine's past has helped me understand the resilience I see today in my Ukrainian friends and colleagues, and their fierce national pride and determination to hold on to freedom and independence at all costs.

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GUEST EDITORIAL

Nuclear issues and the Russian invasion of Ukraine—an update



By Robert Peter Gale, MD, PhD, DSc(hc), FACP, FRCP, FRSPI(hon), FRSM, LHD, DPS

*Visiting professor of haematology,
Centre for Haematology Research,
Department of Immunology and Inflammation,
Imperial College London*

In last week's issue of *The Cancer Letter*, I discussed potential nuclear dangers resulting from Russia's invasion of Ukraine (*The Cancer Letter*, Feb. 25, 2022). Unfortunately, several events I predicted might happen have occurred.

First, some background on how we got to this point.

Ukraine became an independent nation in 1991. At that time, it was the world's third largest nuclear power, after Russia and the U.S. Soon thereafter, Ukraine decided to denuclearize.

There were several reasons for this, which included the high cost of maintaining nuclear weapons capabilities. Plus, the operational codes to launch were in Moscow, not Kyiv, and it was unclear whether Ukrainian engineers

could unravel these codes. There was also worldwide fear of these weapons falling into the hands of rogue states or terrorists.

In return for denuclearization, Ukraine received imprecisely defined security assurances (not guarantees) from the U.S., U.K., and Russia encoded in the Budapest Memorandum. Disputes were to be adjudicated by the UN Security Council, where Russia has veto authority, which they exercised last week.

So much for assurances. This was no doubt duly noted by nuclear states, such as Israel, North Korea, and countries with nuclear aspirations, such as Iran.

It's interesting to consider whether Russia would have invaded a nuclear-armed Ukraine. Impossible to know—but it is

likely this would have given the Kremlin pause. Even one *deliverable* nuclear weapon is a potent disincentive.

Back to Ukraine. Last Thursday, Feb. 24, Russian troops captured the decommissioned Chernobyl power facility complex in Pripjat. It is uncertain why they took control. The most likely explanation is that it's on the path from Belarus to Kyiv.

Some sources report increased background radiation levels in the 30-kilometer Chernobyl exclusion zone. If this is true, the greatest danger is to Russian troops and not Ukrainian civilians. This danger seems small, but it refreshed Ukrainians' memory of the accident, which is associated in many people's minds with the collapse of the Soviet Union.

As I discussed last week, Ukraine has 15 other nuclear power reactors from which it gets about 50% of its electricity. Also, it has many nuclear fuel waste storage facilities. These facilities are tempting targets for Russian military strategists.

It is possible or even likely that these persons may not fully realize the implications of such targeting. Six water-water energetic reactors (VVER 1000) are sited at the Zaporizhzhya nuclear power facility, which Russian troops took control of Monday. Two reactors are temporarily shut down, but the remaining four are online.

There are reports of normal operations, but it is obviously tempting from a military perspective to shut these reactors down and deprive the civilian population of electricity hoping to expedite a surrender. However, an unplanned shutdown of a nuclear reactor is not simple or without risks, certainly not in the fog of war. Another concern is whether a large number of nuclear operators might flee Ukraine with their families, leaving the reactor complexes understaffed.

Last week, I also discussed several ways a nuclear power facility can be damaged in a conventional war. Although nuclear power facilities generate electricity, they need to be connected to the electrical grid as a safety precaution. Disconnection from the Japan electricity grid was partially responsible for the Fukushima Daichi accident. Nuclear power facilities also need a constant water supply to cool the nuclear fuel.

One can easily imagine disruption of a major water pipeline causing a meltdown. We need to add to these unpleasant scenarios a cyberattack, which could, intentionally or not, knock out operations of a nuclear power facility, resulting in dispersion of radioactive materials over a wide area—perhaps a substantial part of the land mass of

Ukraine. Think of the Stuxnet attack on Iran nuclear centrifuges, presumably by Israel and the U.S.

That's not all. There were reports Monday, Feb. 28 of a missile attacks on a nuclear waste storage facility near Kyiv, and an attack on an electrical generating facility supplying power to a nuclear waste storage facility near Kharkiv. So far, the International Atomic Energy Agency, a body of the UN, reports no widespread radiation leak—but this may be just good luck.

On Thursday night, a building at the Zaporizhzhya nuclear power facility was set alight by a missile attack, and subsequently, Russian forces took control of the facility. The fire was quickly extinguished and Ukraine authorities and the International Atomic Energy Agency report no radiation leak.

However, as I discussed last week, this event at Europe's largest nuclear power facility shows the dangers of a conventional war in a nuclear age. Whether Russia will allow the facility to continue operating or shut it down to deprive the civilian population of electricity is unclear.

The process of taking Zaporizhzhya offline requires technical expertise and is not without challenges and risks. The world is standing by. There is an emergency meeting at the UN Security Council Saturday on this issue.

Even if there is no plan to attack Ukraine's nuclear power or nuclear waste storage facilities, artillery and missiles are flying everywhere, sometimes with seemingly unintended consequences, such as hitting a civilian residential tower in Kyiv Sunday, Feb. 27. As we unfortunately learned in Iraq and Afghanistan, "precision targeting" is a relative term.

What might one or more of these events mean to Ukraine?



“

Let's hope none of the scenarios I discuss happen—but it's always best to be prepared. The public and politicians know little about nuclear issues or radiation and often turn to physicians for explanations and advice.

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At one extreme, consider several Chernobyl-like accidents with large numbers of soldiers and civilians with acute radiation syndrome on both sides of the conflict. Large populations might have to be evacuated, with potential long-term consequences such as increased leukaemias and other cancers. And then there are profound economic, social, and psychological consequences. There are no real winners of a war in the nuclear age.

The latest and most alarming development is Mr. Putin's order to upgrade Russia's nuclear weapons to a special mode of combat duty. This does not correspond to any known nuclear alert level, and seems more a warning to the U.S. and NATO. However, as we know from the Cuban missile crisis, things can quickly spiral out of control.

Putin and his associates are being strongly sanctioned by the U.S., EU, and a wide range of other countries including Japan, Australia, and Singapore, and even previously neutral Switzerland. The result is likely to be a fortress Russia mentality with its attendant risks of escalation.

Antonio Gutierrez, UN secretary general, noted Monday, Feb. 28: "Nothing can justify the use of nuclear weapons. We face what could easily become Europe's worst humanitarian and refugee crisis in decades, with the numbers of refugees and internally displaced multiplying by the minute."

Let's hope none of the scenarios I discuss happen—but it's always best to be prepared. The public and politicians know little about nuclear issues or radiation and often turn to physicians for explanations and advice. Readers of *The Cancer Letter* should take an active role in educating the public and policymakers to the dangers of attacking a country with nuclear facilities.

Benjamin Franklin famously advised fire-threatened Philadelphians in 1736: "An ounce of prevention is worth a pound of cure."

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Gale's editorials about Chernobyl are available [here](#). His retrospective on Fukushima is available [here](#).

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GUEST EDITORIAL

Ukraine invasion: How the cancer community can help



By Wafik S. El-Deiry, MD, PhD, FACP

American Cancer Society Research Professor;

Director, Cancer Center at Brown University;

Director, Joint Program in Cancer Biology, Brown University and Lifespan Cancer Institute;

Attending physician, hematology/oncology,

LCI, Menco Family University Professor, Brown University;

Associate dean, Oncologic Sciences, Warren Alpert Medical School, Brown University

It was awe-inspiring to see how quickly the world's science came together to address the COVID-19 pandemic—and much was learned. Academic institutions, big pharma, government, and foundations stepped up to do everything possible in an unprecedented way. Two years later, the results are evident as life is returning to normal.

The invasion of Ukraine, similarly, is a challenge for the world's science to respond to the human tragedy in a coordinated and timely manner.

There is a window of opportunity to help—there's no time to waste. It is not too early to do something positive. This includes connecting scientists and clinicians in Ukraine as well as Russia to

support those who wish to leave or are otherwise endangered. Our research labs stand to benefit from the brilliance of colleagues with diverse perspectives and points of view.

In the clinic, there are opportunities for available allied health professionals as they await a safe return to their country. With severe nursing shortages in the U.S., such impact could be felt in numerous hospitals now working at reduced capacity.

Funding from the government, including NCI and CDC, professional societies, ACS, etc., should support coordination. Institutions tend to move slowly, but it is clear that the end users can't wait, and the scientists willing to help are ready to

do so. It would certainly help if the visa programs facilitated quick admission and employment.

Consider the speed with which the scientific community has already responded to the Ukraine challenge:

Russian troops started crossing the Ukraine border on Feb. 24.

By the morning of Feb. 26 in the Western hemisphere, over 100 scientific research labs from throughout the world, including many in the United States, had offered to help Ukrainian researchers, and the list has kept growing. I added our lab at Brown University to the list that day, hoping that we could help in some way. I was delighted to see other colleagues

from Brown, and the Legorreta Cancer Center, including Jeff Bailey, MD, PhD, Alexandra Deaconescu, PhD, and Tom Bartnikas, MD, PhD, also sign up.

By Feb. 27, the list grew to over 300, and by the morning of March 2, over 500 labs had offered to host and support colleagues affected by the Russian invasion of Ukraine. A number of these are academic cancer research labs. As awareness increases, many leading labs are offering to help, and other research opportunities are opening up in industry.

By March 2, the number of refugees was estimated at 660,000 and rising rapidly as the horrible, visible destruction throughout Ukraine continued. And, sadly, by March 3, the first major Ukrainian city, the Black Sea port of Kherson, had fallen. The refugee count had exceeded one million according to the UN and was estimated to eventually reach four million.

A grim picture of death and destruction is emerging for what is quickly happening in Ukraine's cities as they fall to barbaric military rule.

Suggested immediate actions include:

- Emergency funds need to be urgently allocated within the U.S., specifically to support the relocation and employment of refugees who have already left Ukraine and are ready now to contribute to research and clinical care in the U.S.
- Cooperation for safe passage, travel, and housing for those who wish to leave Ukraine as well as those who have left and wish to come to the U.S. They will urgently need living expenses, stipends, and permission to work.
- Connections can be made to the refugees and working



Wafik S. El-Deiry, MD, PhD, FACP
@weldeiry



Connect cancer scientists & clinicians to opportunities
@ChrisMelzer_NYC @Refugees @TheCancerLetter
@NCIDirector @AmerCancerCEO @jrgralow
@AACR_CEO @OncoAlert

368,000 Ukrainians flee to European countries,
including some that previously spurned refugees

[washingtonpost.com/world/2022/02/...](https://www.washingtonpost.com/world/2022/02/...)



Wafik S. El-Deiry, MD, PhD, FACP @weldeiry · Feb 26

There are well-over 100 labs that may be able to help Ukrainian Scientists. Here is a link to the google sheet of Labs Supporting Ukrainian Scientists:
docs.google.com/spreadsheets/d... @OncoAlert @weoncologists
@FrontOncology @eLife @Nature @AACR @TheCancerLetter @theNCI
@AmericanCancer

3:35 PM · Feb 27, 2022 · Twitter Web App

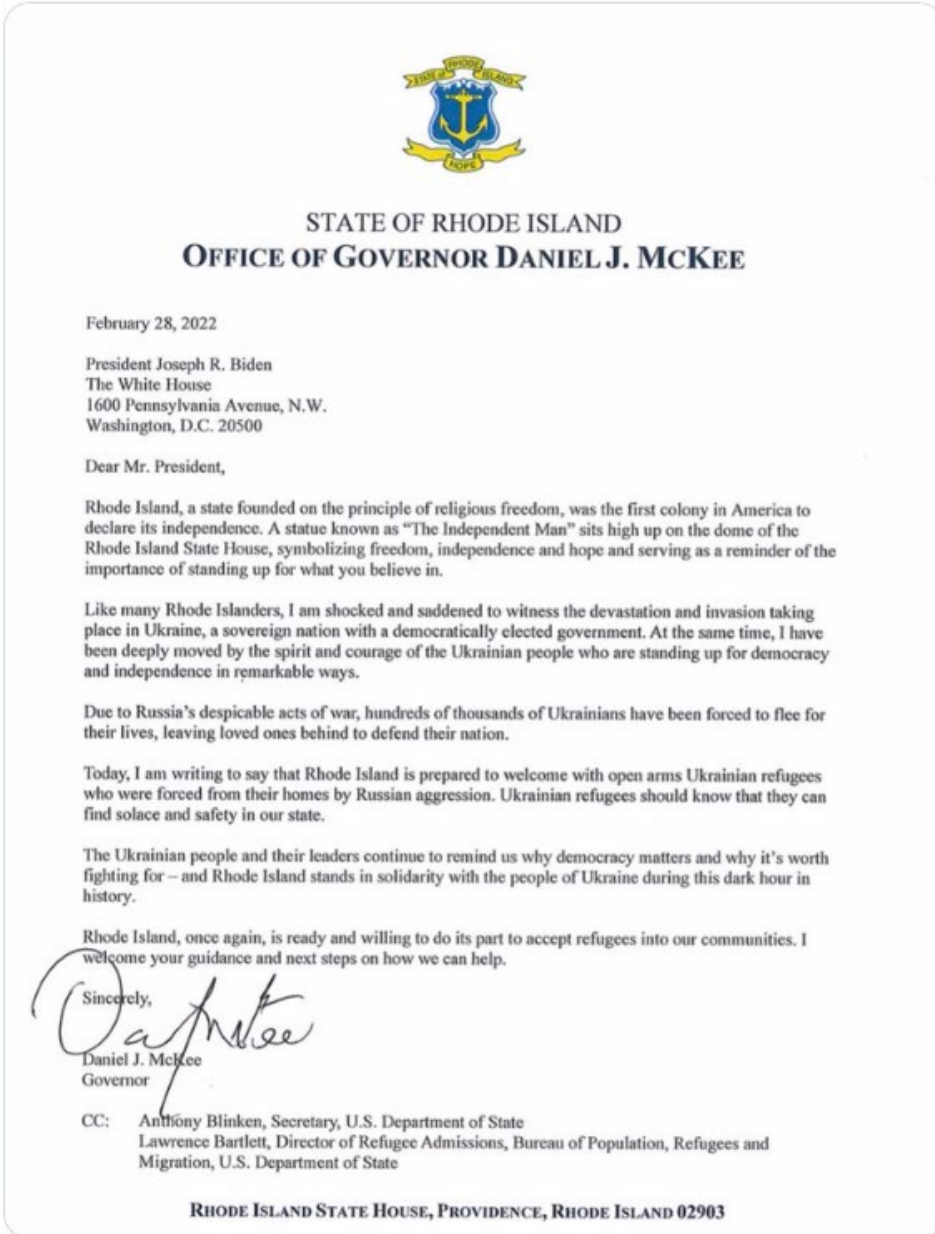
through the Red Cross, UN, and the U.S. government could facilitate communication.

- Coordination to match those who wish to leave with those who would help the researchers and clinicians. While the list of over 500 labs is general, the effort in cancer could be more focused and organized at an early stage.
- The creation of a web portal could facilitate Ukrainians or Russians on the internet to directly see and express interest in opportunities. Upcoming national cancer meetings such as the annual AACR meeting in early April this year in New Orleans or others could also help with networking and communication or interviews among interested scientists. A "connectivity map" and AI are tools that come to mind.
- Those connected with Ukraine and Russia could help identify and communicate with those who would leave. It is clear there are many Ukrainians and Russians throughout the world who are connected in real time to colleagues and family members. More awareness of the opportunities to help can be communicated through social media and personal contacts, in the interest of speed and efficiency. The impact of social media as far as dissemination of information and connecting professionals should not be underestimated. Hashtags can be incredibly helpful.
- The resources and infrastructure to help are urgently needed. Attention to the scientific research and healthcare impact should be given a high priority as the humanitarian efforts are underway.



Governor Dan McKee ✓
@GovDanMcKee

Our message to Ukrainian refugees: You are welcome here.



5:39 AM · Mar 1, 2022 · Twitter for iPhone

- A united effort from professional societies, foundations, and NCI early on could help with university and hospital coordination. There are complexities and things that take time like visas and work permits.

As an example, Brown University is actively supporting students, faculty, and staff through various services and programs internally. These include student support services, faculty and

staff assistance programs, and scholar services.

Outwardly, Brown University’s President Christina Paxson informed the university community of existing resources that can help, including partner organizations such as the Scholars at Risk network and the New University in Exile Consortium, to provide a safe academic home for Ukrainian scholars. I am proud to be at such a university that is proactively addressing this current global crisis.



Funding from the government, including NCI and CDC, professional societies, ACS, etc., should support coordination. Institutions tend to move slowly, but it is clear that the end users can’t wait, and the scientists willing to help are ready to do so.



I was delighted to see that Governor Daniel McKee of Rhode Island wrote to President Biden on Feb. 28 to welcome Ukrainian refugees to a place of freedom and independence.

The solidarity and strong support in the U.S. for Ukraine against the blatant, deplorable, and unprovoked



Hillary McKibbin
@StartWithHills

This lucky girl got a bone marrow transplant for [#AplasticAnemia](#) today in a [#Ukraine](#) hospital basement by Dr. Oleksandr Lysytsia while Russian rockets fell outside. She's cured of her rare disorder. I hope she survives this war. [#StartWithHillary](#) 🇺🇦



9:18 PM · Feb 25, 2022 · Twitter for iPhone

Tanya Skrypets
@TSkrypets

Additionally, Also my colleagues from national Cancer Institute (Kiev) did auto SCT for lymphoma patient in a bombshell!!!! You cannot plan transplant based on a bombing timetable 🇷🇺 @TheEBMT @EHA_Hematology @ASH_hematology @StefanoLuminari @AnnaSureda @Mohty_EBMT



Natacha Bolaños @BolanoNat · Feb 27
This is truly inspiring! They need our support and a global response. @TheEBMT @TheEBMT_PAC @TSkrypets #Ukraine @IACIE_EBMT twitter.com/marklewismd/jst...

1:21 AM · Feb 27, 2022 · Twitter for iPhone

Tanya Skrypets
@TSkrypets

This is how works a Russian propaganda! @OncoAlert they mentioned you and told that European oncologists refused to treat Russian children! While you only stop collab... Here is a link, you can translate officially goodhouse.ru/obshchestvo/no... @KaterynaFloneI @knowyournodes

aggression was solidified in President Biden's March 1 State of the Union Address, along with a commitment of U.S. \$1 billion to help Ukraine. As these substantial resources and others are deployed, let's not forget Ukraine's scientists at all levels, bioengineers, physicians, and other healthcare professionals as the need keeps growing.

It has been very interesting to learn about Ukraine's advanced research and clinical oncology capabilities. Amazingly over the weekend, social media documented at least two bone marrow transplants performed in Kyiv while rockets were falling. It is sad that there



OncoAlert Network A

ситуация в Украине

Заявление о прекращении сотрудничества в области онкологии вызвало негодование у врачей.

Dear Network,
The statement standing in solidarity with Ukraine is being used in Russia as propaganda saying that OncoAlert, a very influential Western organisation is denying oncology treatments to children. A tactic no doubt to shift attention from Ukraine.



2/6

☰ Домашний Очаг

ОБЩЕСТВО / НОВОСТИ 01.03.2022, 11:45

Европейские онкологи отказались лечить российских детей из-за ситуации в Украине

Заявление о прекращении сотрудничества в области онкологии вызвало негодование у врачей. Здравоохранение всегда считалось вне политики.

12:04 AM · Mar 3, 2022 · Twitter for iPhone

is little regard for human life in the current invasion.

There is Russian propaganda claiming that powerful Western oncology groups such as the relatively young @OncoAlert network are refusing to perform bone marrow transplants on Russian children.

Note from Gil Morgan, MD, who leads the OncoAlert Network: it is clear that members of this network who are leaders in the oncology world could help with attracting oncologists as well. It should be noted that it is unbelievable for anyone to suggest that children with cancer would be denied life-saving bone marrow transplants based on their race, ethnicity, or country of birth.

Science is very strong in Ukraine. [Here](#) is a history of the General Assembly of the National Academy of Sciences of Ukraine.

Looking at cancer specifically, Ukraine has a National Cancer Institute, which was founded in 1920. Located in Kyiv, this institution is a full [member](#) of the Union for International Cancer Control. A major oncology [journal](#) in Ukraine is *ONCOLOGY: Scientific Practical Journal*.

In an interview published by WHO on Nov. 11, 2021, Sergii Sikachov, a Ukrainian oncologist, [described](#) Ukraine's challenges of building a modern cancer control system and the challenges presented by the COVID-19 pandemic.

"Cancer surgery is changing very quickly," Sikachov said. "If you know English, you have access to a lot of useful information. You can provide medical care that is in line with international standards in Ukraine, but we need an enabling environment to do so."

Ukraine has a complicated history with the Nobel Prize. For decades, Ukrainians were excluded from getting Nobel Prizes because Ukraine did not have statehood [status](#). These [individuals](#)

are listed under Ukraine and have won Nobel Prizes:

1. [Georges Charpak*](#), *born in then Poland, now Ukraine*, Physics, 1992
2. [Roald Hoffmann*](#), *born in then Poland (Second Polish Republic), now Ukraine*, Chemistry, 1981
3. [Selman A. Waksman](#), Physiology or Medicine, 1952
4. [Shmuel Yosef Agnon](#), Literature, 1966
5. [Svetlana Alexievich*](#), *born in Ukraine*, Literature, 2015
6. [Ilya Ilyich Mechnikov](#), Physiology or Medicine, 1908

Based on what I have seen, it would seem the president of Ukraine, Volodymyr Zelenskyy, is a strong candidate for the Nobel Peace Prize as well, given his stature, courage, and recent speeches and stand. There is much hope for the world when a leader tells their government they don't want their picture on their walls, but to put up their childrens' pictures and to think about them when they make their decisions.

““

Based on what I have seen, it would seem the president of Ukraine, Volodymyr Zelenskyy, is a strong candidate for the Nobel Peace Prize as well, given his stature, courage, and recent speeches and stand.

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GUEST EDITORIAL

Quarantining autocracy



Arthur L. Caplan, PhD

*Drs. William F. and Virginia Connolly Mitty Professor;
Founding head, Division of Medical Ethics,
NYU Grossman School of Medicine*

The images from Ukraine are beyond endurance. There is nothing to say about the ethics of this conflict. A fascist autocrat who leads a confederacy of kleptocrats decides to invade a neighboring state under a KGB-honed delusion that has been out of date since the 1990s so that his nation will be “stronger” by reattaching itself to a the blasted remains of a cultural treasure.

No one but a few admirers of the monomaniacal racist—Bannon, Trump, Carlson, Taylor-Greene, and their putrid ilk—has anything but contempt for his crackpot rationales for this *Anschluss*. Putin’s excuses vary from avenging terrorism against ethnic Russians, for which there is no evidence, to (I am not making this up) the “denazification” of Ukraine, a nation with a Jewish Ukrainian president, while intentionally bombing Ukraine’s sacred site of Nazi genocide, Babi Yar. In my lifetime, there has never been a more unjust, unwarranted, and demented invasion of another nation than what Putin has done to Ukraine.

The only moral question facing scientists and doctors is what they can do to support the freedom-loving people of Ukraine. Let me suggest a number of actions:

- Urge vaccines, masks, and medicines to battle infectious diseases be among the supplies sent to aid Ukraine and nations accepting refugees from there. COVID-19, measles, cholera, and even polio may add to Putin’s war and ravage Ukraine and its most vulnerable citizens.
- Give aid to surveil the health of refugees and those caring for them.
- Boycott all meetings with Russian sponsorship or participation or with Russian allies who will not try to bring the unjust invasion to an end.
- Ending all training for Russian students and faculty—of course, excluding those who are outside Russia as a result of exile or threat.

- No publication of any medical or scientific work from or by Russians.
- No sponsorship or participation in any research in or with Russia.
- Write to condemn the racist, false history Putin cites to justify the absorption of Ukraine into Russia and similar claims about other nearby nations.
- No meetings or retreats at locations run by Putin and his cronies.

These are tough, painful measures that may well impact innocent, peace-loving Russians. It is unfortunate but not unfair. We must be at war with Putin, and since this is a war of finance and isolation, science and medicine ought to play their part. Until he reverses course—or, better yet, resigns under pressure—the world, including the world of biomedicine, must make Russia a pariah. There is no pleasure in that, but there is justice.