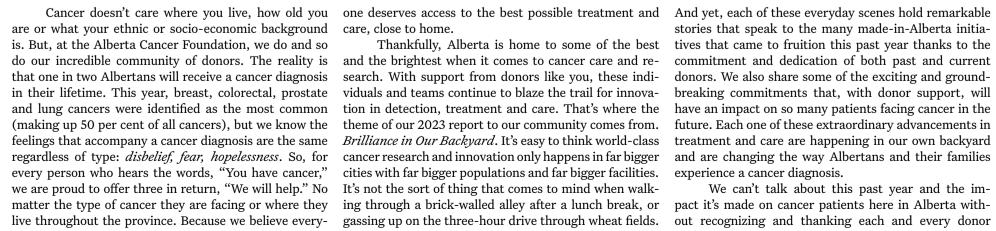


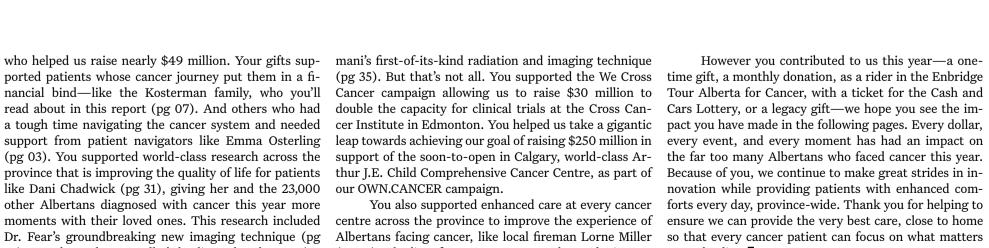
Foreword

Wendy Beauchesne, CEO and Dr. Chris Eagle, Board Chair



stories that speak to the many made-in-Alberta initia-Thankfully, Alberta is home to some of the best tives that came to fruition this past year thanks to the donors. We also share some of the exciting and groundfuture. Each one of these extraordinary advancements in

We can't talk about this past year and the im-



21), Dr. Chu and Dr. Sandhu's leading-edge therapy (pg (pg 13). The list of support goes on and on. The impact most: healing. 25), Dr. Weis' innovative procedures (pg 31), and Dr. Usis immeasurable. And it's all thanks to you.

However you contributed to us this year—a onenovation while providing patients with enhanced com-You also supported enhanced care at every cancer forts every day, province-wide. Thank you for helping to



CALGARY, AB

REPORT TO OUR COMMUNITY 2023 2 ALBERTA CANCER FOUNDATION FOREWORD



isolation

A feeling of isolation can take on many forms. It can be geographic, cultural or emotional. When a cancer diagnosis enters the picture, it can have a compounding effect. The Patient Navigation Program exists to help. Funded by Alberta Cancer Foundation donors, this program employs registered nurses, or navigators, with specialized training in cancer care to provide patients across the province with a "where to from here".

IMPROVING PATIENT EXPERIENCE

PATIENT NAVIGATION PROGRAM

with Emma Osterling

Replacing

with community

O3 ALBERTA CANCER FOUNDATION IMPROVING PATIENT EXPERIENCE PATIENT EXPERIENCE

Albertans who hear the words, "You have cancer," finding the right support to help them through their Navigation Program exists to help.

Funded by Alberta Cancer Foundation donors, the Patient Navigation Program employs registered nurses—navigators—with specialized training in cancer care to advocate for and provide guidance to patients and their families facing cancer. The program promotes equality and accessibility in healthcare, focusing on people-centred support for three specific populations of people in Alberta living with cancer: 1.) people living in rural areas, 2.) adolescents and young adults (aged 17-39) and 3.) Indigenous Peoples.

Since its inception, this program has helped over 40,000 Albertans navigate their cancer journey. Much like traditional navigation, different patients have different levels of guidance and assistance from the program. While some will need the assistance equivalent of a street sign, others need more of a map, and some will need more GPS level, which is where navigators the patient experience. like Emma come in.

Navigators in the province, provides a beacon of hope for members of the Indigenous community who suddenly find themselves navigating the unknown of the health-care system, and all the logistical challenges supportive team is so important." that can come with it.

to a huge healthcare centre and not know where you're going or what to expect. Even the more basic things like where to park can be overwhelming."

Furthermore, over the last few decades, cancer rates in Indigenous Peoples have increased rapidly, with patients typically being diagnosed in the later stages (stages III and IV). Due to barriers to screening ing the next steps together.

A cancer diagnosis is overwhelming. For many programs, long distances between home and cancer centres, and a lack of culturally-appropriate care and understanding, Indigenous patients are more likely to cancer journey can make all the difference. The Patient experience reduced quality of life and poorer outcomes.

That is where navigators like Emma can help. And, as Emma points out, part of doing her job effectively is to be aware of how a cancer journey fits into the other aspects of a patient's life, and how to understand their needs both within and outside the

"You need to be genuine and respectful and compassionate. That relational aspect of nursing is really important in the Indigenous Cancer Patient Navigation Program. People's healing journey has a lot to do with the other aspects of their lives, and people can't heal if they have unmet needs. It's just a fact."

The navigators know they won't always have the answers, but they know exactly where to source them. They also lean on each other for support, sounding boards, and shared learning—a true example of Alberta's close-knit system and how it all works to improve

"I could not do my role without my other two Emma Osterling, one of three Indigenous Patient navigators. Everybody has different strengths, so it's just amazing to be able to consult with them and to coordinate and just touch base with them to ask, 'what would you do in this situation?' To be able to have that

As a program shaped around the needs of Alber-"It can be really overwhelming and scary to come tans and funded through the generosity of donors like you, the Patient Navigation Program is really all about Albertans helping Albertans. No matter where they live, the type of cancer they are facing or the barriers to care they may be experiencing. Instead, the isolation that often comes with a cancer diagnosis can be replaced by community, support and empathy, navigat-

While some need a street sign, others need a map.



PATIENT NAVIGATION PROGRAM 06 05 ALBERTA CANCER FOUNDATION IMPROVING PATIENT EXPERIENCE **REPORT TO OUR COMMUNITY 2023**

02

IMPROVING PATIENT EXPERIENCE

PATIENT FINANCIAL ASSISTANCE PROGRAM

with Diedra and Michael Kosterman

The drive from Duchess to Calgary is a shade under two hours, and Diedra Kosterman made it countless times to support her husband, Michael, as he received treatment for leukemia at the Tom Baker Cancer Centre.





road warrior—she was moonlighting as a roadie as well. In her trunk, a special request from her husband Michael all of his recording equipment, so he could set up a makeshift recording studio in his hospital room. In the midst of a punishing stem cell transplant and full body radiation treatment to destroy remaining cancer cells, Michael still summoned the energy to hatch a plan. A few weeks later he would release, "Always Keep On Fighting", perhaps the only song by a cancer patient to be recorded, mixed, and mastered in a hospital room. Diedra not only helped make the recording possible, she provided the backing vo-

The energy to 'Always Keep On Fighting' is a lot to ask at times. But, with help from the Alberta Cancer Foundation's Patient Financial Assistance Program, Michael and Diedra were able to focus on healing rather than try- modations for appointments and medications not covered

This time, she was more than a supportive wife and ing to make ends meet. Like other Albertans accessing the by insurance. Patients can also use some of those funds program, the cost of treatment, appointments, driving, accommodations, and missing work can pile even more stress and hardship on top of the physical and emotional strain of cancer treatment. Especially for those with low income, no employee health insurance, or living in remote areas.

> The Patient Financial Assistance Program provided financial and emotional support to hundreds of families, like the Kostermans, in 135 communities across the province last year alone. This support would not have been posdonors, truly capturing the compassion and power of Albertans helping Albertans.

support eligible patients like the Kostermans, addressing facing cancer, thanks to a love of music and the decepnot only the direct costs of care, such as travel and accomtively gentle acoustics of a hospital recovery room.

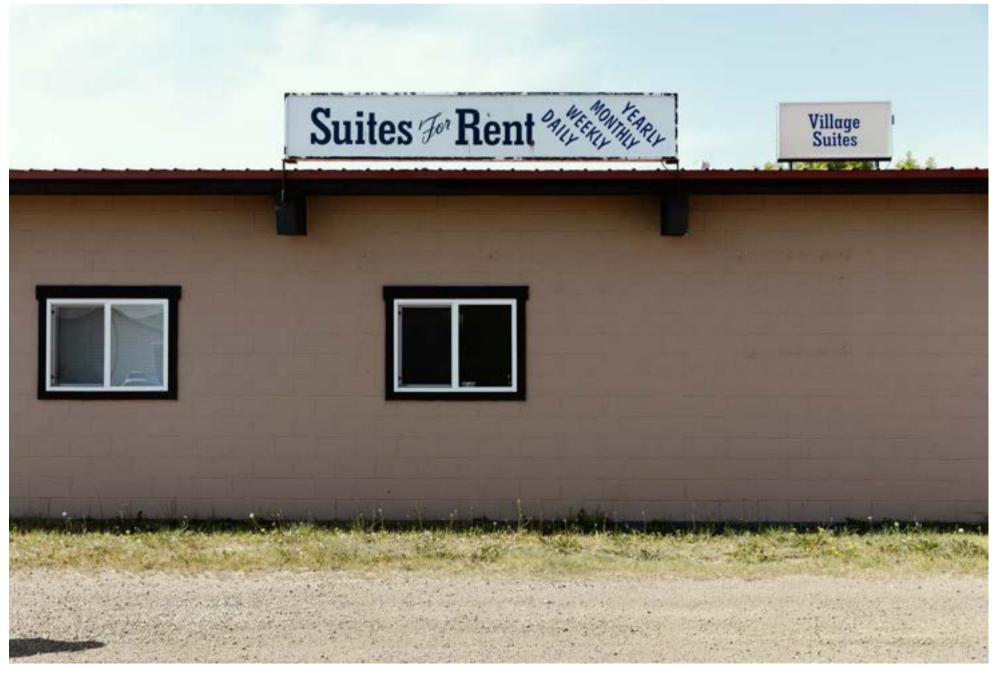
toward other indirect expenses such as groceries or utility bills. This financial relief can be a lifesaver as it allows patients to focus on healing.

As Michael shares, "The difference that donors make is lifesaving. The money that we got from the Patient Financial Assistance Program meant that we could eat. It meant that Deidra could travel to visit me in the hospital. It made all of the difference. So, I thank them from the bottom of my heart for their donations. Once sible without the generosity of Alberta Cancer Foundation we are back on our feet, we definitely want to be contrib-

But perhaps lost on Michael is the contribution he's The Patient Financial Assistance Program is able to already made—a rallying anthem for other Albertans

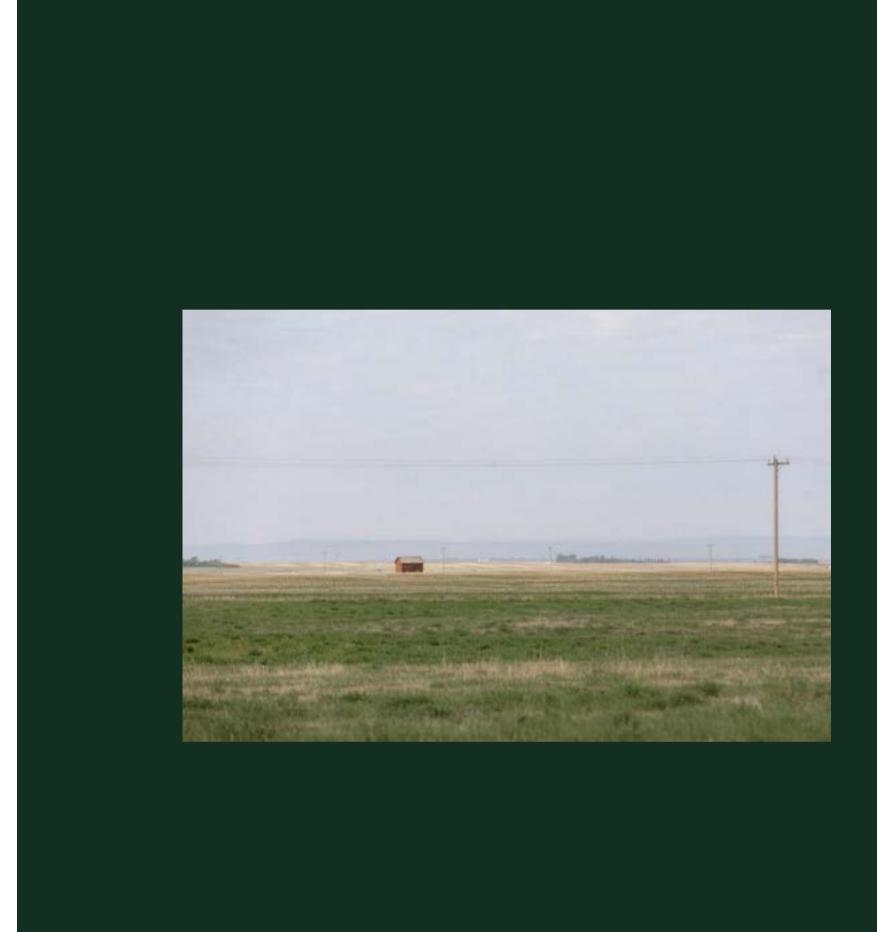
"The money that we got from the Patient Financial Assistance Program meant that we could eat.

It meant that Deidra could travel to visit me in the hospital. It made all of the difference."



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03

ALBERTA'S CANCER CENTRES

CARE, CLOSE TO HOME

with Lorne Miller

Nobody stands alone

If you were to spot Lorne Miller waiting outside his kids' elementary school, you'd think he was just another dutiful parent. If you looked a bit closer, you would see that the simple act of waiting is something else entirely for him. Lorne knows better than most that nothing in life is promised—not tomorrow, not the ability to walk, and not the chance to hug your kids at the end of the school day.

13 ALBERTA CANCER FOUNDATION ALBERTA'S CANCER CENTRES CARE, CLOSE TO HOME 14

"Everyone that works at the Tom Baker Cancer Centre —the nurses and medical staff that looked after me— I can't thank them enough. There is immense value in the work they do every day for patients like me. I'm so very grateful and thankful for what they did for me."

In 2021, Lorne went to emergency care for minor abdominal pain. It was 24 hours later when he was told there was a tumour the size of a volleyball in his abdomen, and he was scheduled for emergency surgery. When he woke up, his tumour was gone, but so was the ability to move his legs.

What unfolded was sleepless nights, choked-back tears, and the despair that comes from facing a cancer journey. In the darkness of that journey, something else found Lorne—hope. He hoped for recovery. He hoped for the chance to make more happy memories with his family. And he hoped for the best oncologists, surgeons, and nurses—and because he calls Alberta home, he

Thanks to the compassionate care he received at the Tom Baker Cancer Centre, he regained the use of his legs, recovered from surgery, and celebrated one year of being cancer free. Then the unthinkable happened. Yet again he heard the words, "You have cancer." This time, the procedure would be different. More invasive. They would open up his abdominal cavity and pour chemotherapy into his body, flooding his organs in an attempt to destroy any remaining cancer cells.

The second time around, Lorne knew the toll gery would take. He spent the months leading up to it preparing his mind and body. Recovery took many months, many hospitals, and many faces—doctors, nurses, administrative staff, and navigators. It was a team of heroes supporting a fellow hero. Lorne is a firefighter, so he knows what it is to dedicate your life to protecting the lives of others. But if you ask him, he doesn't see it that way.

"I don't think I'm the hero, I consider the actual heroes to be the people around me that got me here."



No matter where you call home, everyone facing a cancer diagnosis wants a team of heroes beside them. Fortunately, for anyone lucky enough to call Alberta home, they are going to find it. And thanks to support from donors like you, there have been and continue to be remarkable investments in cancer care across our province, ensuring the heroes who dedicate their lives to treating cancer are able to offer world-class care to Albertans facing cancer. Last year alone, that included 63,000 patients cared for at cancer centres across Alberta.

As the official fundraising partner for every Alberta Health Services cancer centre across the province, including the Cross Cancer Institute in Edmonton, the Tom Baker Cancer Centre (and soon to open Arthur J.E. Child Comprehensive Cancer Centre) in Calgary, and the 15 other cancer centres in communities across the province, the Alberta Cancer Foundation is honoured to announce

donors came together to raise more than \$30 million for cancer centres across the province to improve the experithe We Cross Cancer campaign in support of world-class discoveries and innovative research at the Cross Cancer Institute. Thanks to this support, the capacity for clinical trials will double at the Cross Cancer Institute. This means more world-class discoveries, more innovative research, and more made-in-Alberta solutions to cancer.

Albertans also answered our call to OWN.CANCER once and for all, an ambitious fundraising effort alongside the University of Calgary and Alberta Health Services, actively raising \$250 million in support of cancer care and research at the Arthur J.E. Child Comprehensive Cancer Centre. When it opens its doors in 2024, the Arthur Child will be Canada's largest comprehensive cancer centre, consolidating diagnosis, treatment, and recovery under one roof for patients like Lorne.

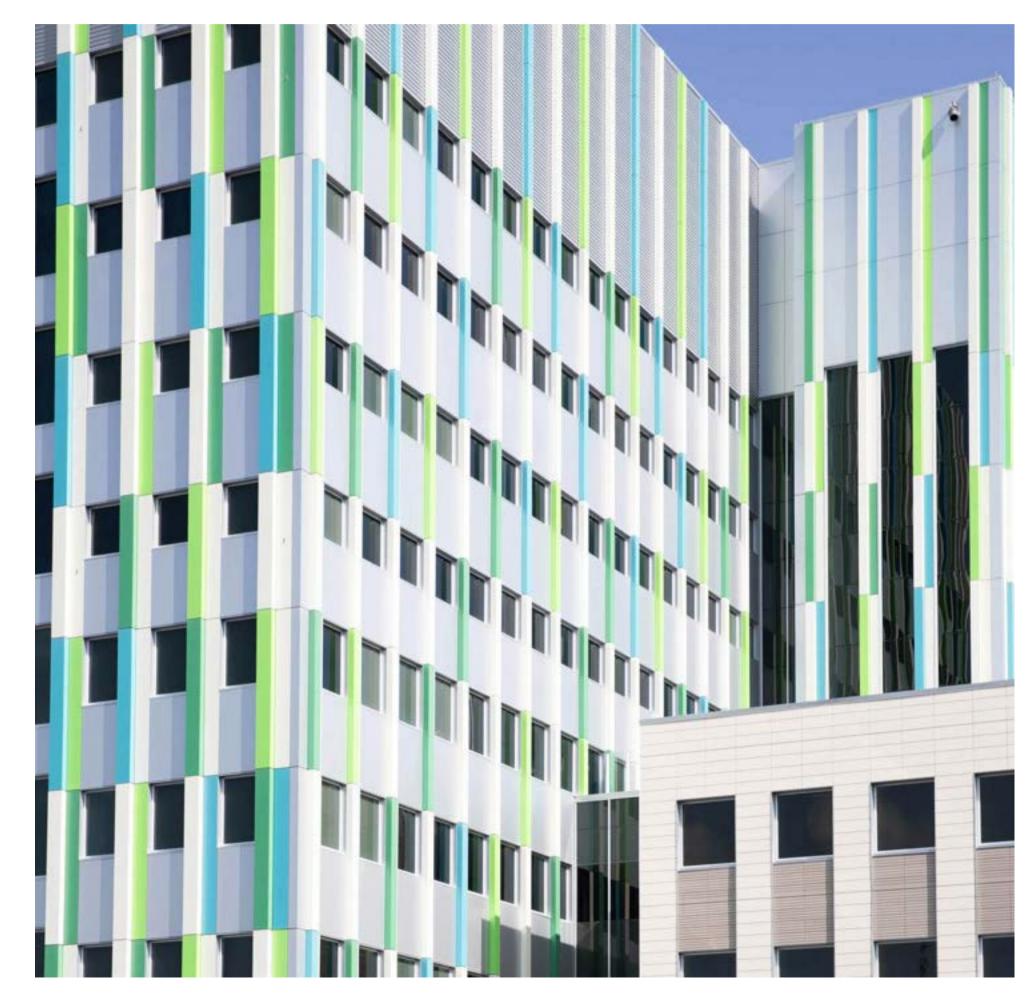
Last but not least, thanks to support from donors a record-breaking year of funds raised in support of our in all communities across the province, another \$1 million

ence of Albertans facing cancer in their own communities.

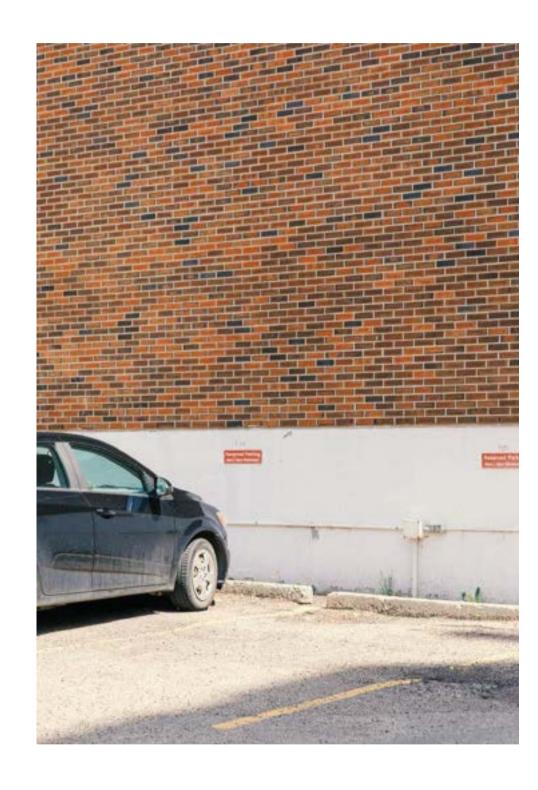
Because of continual support from donors across the province, we have attracted the best of the best to Alberta—the doctors, the nurses, the researchers, the administrative staff. These heroes were there to help Lorne and the 23,000 other Albertans who were diagnosed with cancer last year.

For Lorne, their work has been life-saving. It has been almost a year since Lorne's most recent surgery and his scans continue to come back clear. He is back at school pick-up, living life to the fullest and enjoying every moment with his family while continuing to thank his heroes along the way.

"Everyone that works at the Tom Baker Cancer Centre—the nurses and medical staff that looked after me—I can't thank them enough. There is immense value in the work they do every day for patients like me. I'm local cancer centres. For instance, over the past year, our was disbursed in support of the 15 rural and community so very grateful and thankful for what they did for me."

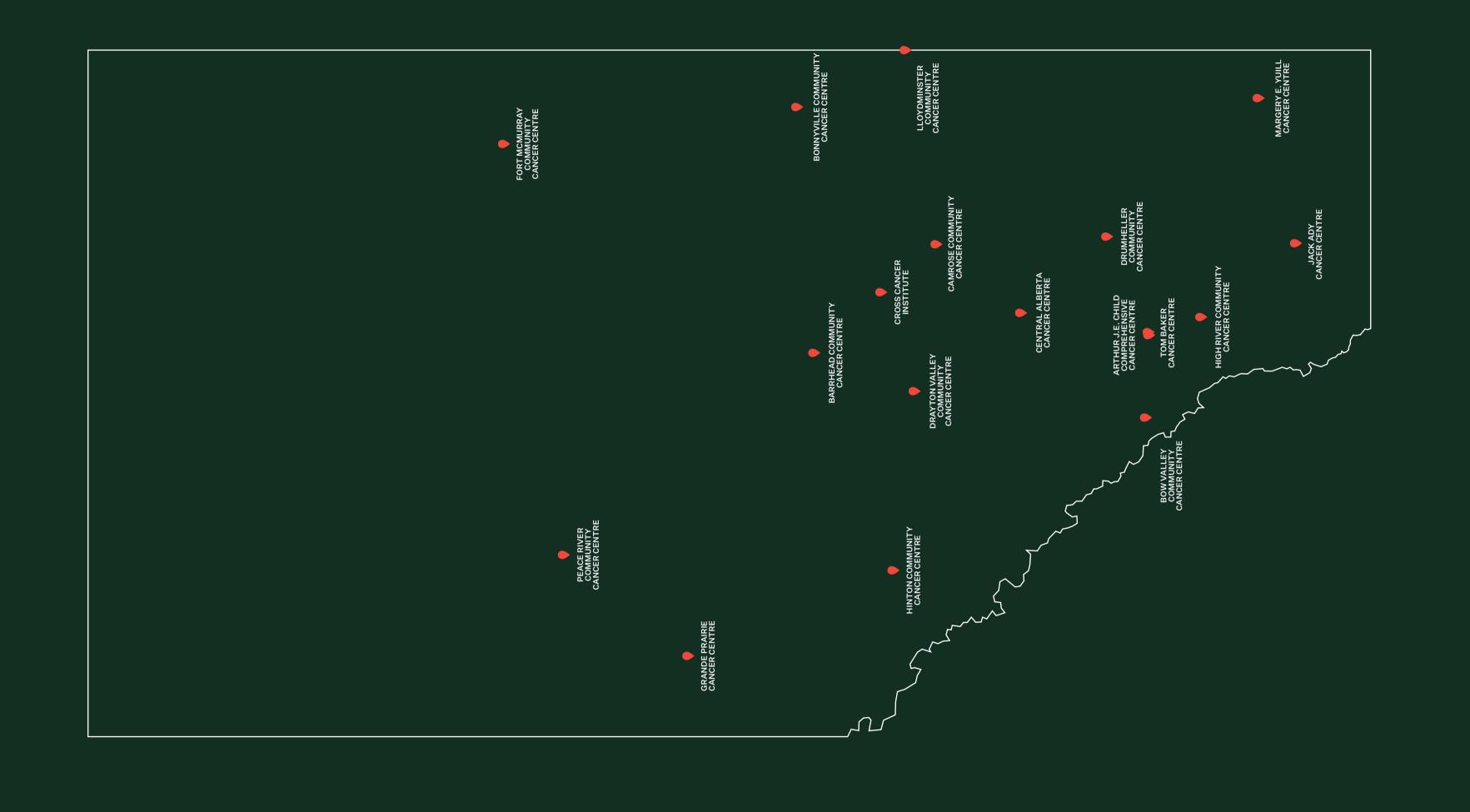


15 ALBERTA CANCER FOUNDATION ALBERTA'S CANCER CENTRES **REPORT TO OUR COMMUNITY 2023** CARE, CLOSE TO HOME 62,937 patients visited the cancer centres in Alberta 727,567 times last year



17 ALBERTA CANCER FOUNDATION ALBERTA'S CANCER CENTRES

he power of proximity



19 ALBERTA CANCER FOUNDATION GROUNDBREAKING RESEARCH CARE, CLOSE TO HOME 20

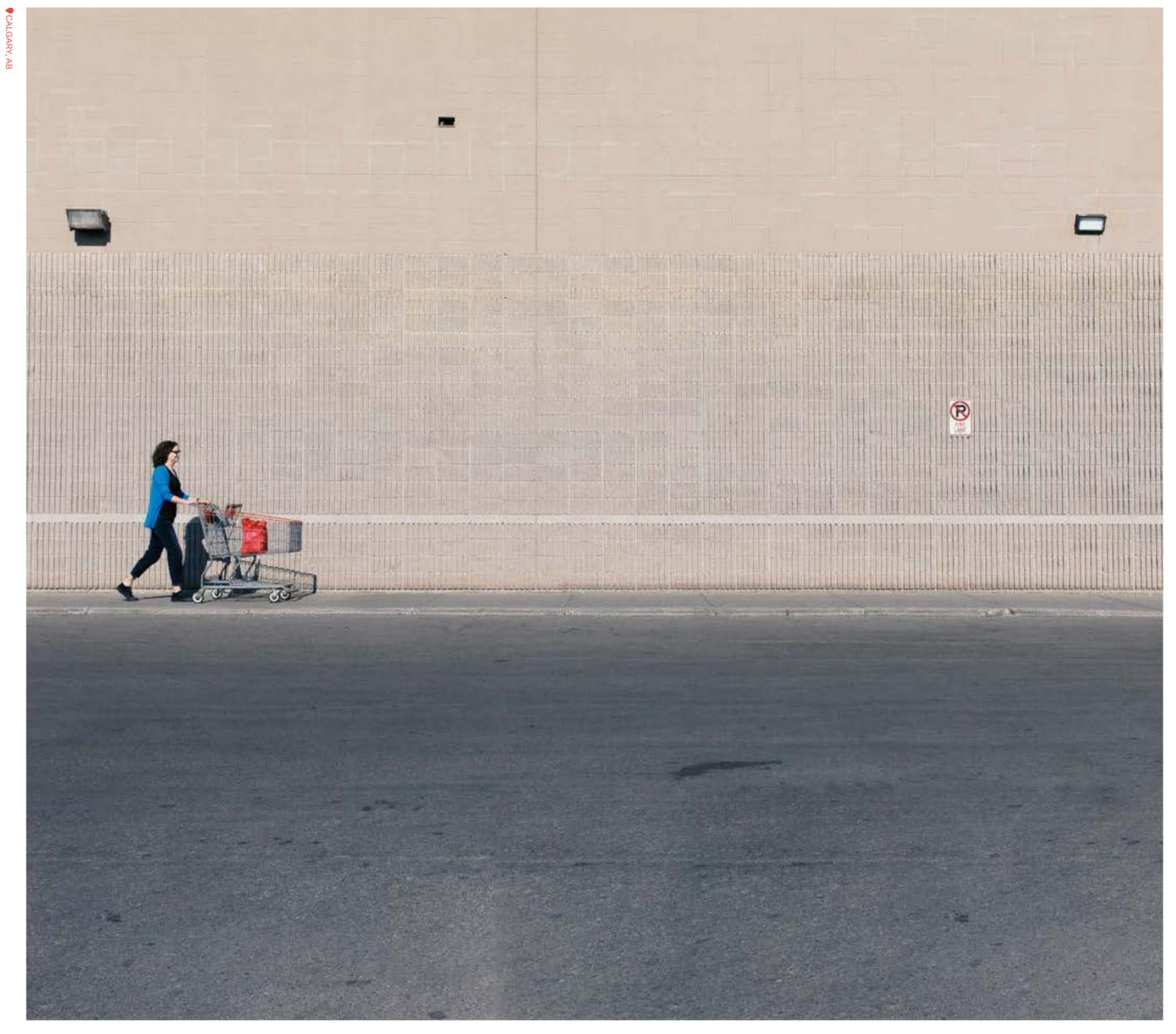
04

GROUNDBREAKING RESEARCH

MICROWAVE IMAGING TRANSMISSION SYSTEM

with Dr. Elise Fear

No one watching Dr. Elise Fear push a shopping cart across the parking lot of a big box retailer thinks they are watching an act of brilliance.
But as she makes her way to her car with those wheels rattling against the asphalt, she is completing one small leg of a life-saving mission that started almost three decades ago.



came intrigued by the process of imaging cancer. Traditional mammogram technology involved small amounts of radiation, which limited the number of images that could be taken to reduce radiation exposure for patients. Typically, only two photographs were taken, before and after chemotherapy, providing little insight into how the paical trials on 50 volunteers without breast cancer. Their search lab." tient's cancer was responding to treatment.

used to capture images without radiation, meaning phy- 25 patients diagnosed with breast cancer. This imaging sicians could determine if the chemotherapy was effective earlier in the treatment course. That hypothesis is one treatment, offering physicians and patients real-time data checkout line. Yet, it is precisely these seemingly ordinary she's brought with her to work every single day for the to observe the treatment's responsiveness. past 25 years. It's an idea she held onto during her husband's journey with cancer. It's an idea that has inspired also informing other areas of study for her team, including in Alberta. Dr. Fears' team as she led them through the task of scien-cardiac monitoring, hydration sensing, and other industific discovery. And it's the idea that has beckoned Dr. Fear trial applications. So much of this progress has been made to the hardware store on many weekday afternoons in the possible through the generous support of Alberta Cancer design and development of several prototypes.

These trips were more than just about getting paint enable Dr. Fear's work. samples or looking at roof racks. Instead, these trips were

has dedicated her professional life to creating—the Microwave Imaging Transmission System (MITS). This revolutionary system is the world's first breast imaging device treatments for as many patients as possible. that is completely radiation-free.

next step is to support oncologists at the Tom Baker Can-Dr. Fear's opinion was that microwaves could be cer Centre, utilizing MITS to conduct breast imaging for overtly remarkable about moving through the aisles of a will take place before, after, and most importantly, during There's nothing apparently brilliant about standing in a

Foundation donors, who have contributed \$1.5 million to

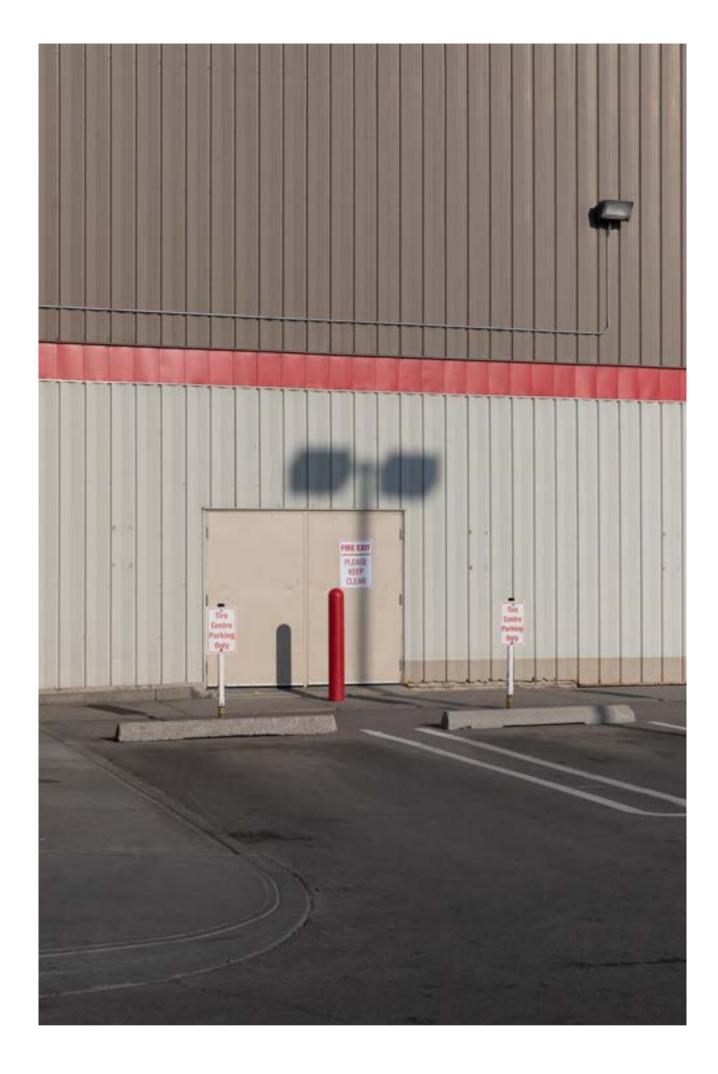
For Dr. Fear, it's critical that her team's breakdriven by a purposeful quest to acquire various compo- throughs extend beyond the confines of the lab. To achieve nents, some simple and others intricate, each contributing this, she co-founded Wave View Imaging, a company that

In 1998, when Dr. Fear was a Ph.D. student, she be- a level of brilliance to the groundbreaking technology she will make MITS technology accessible to cancer patients across North America—a venture that aims to provide early detection of cancer and observe the effectiveness of

> "I feel a great responsibility to make sure what Dr. Fear and her team are currently conducting clin- we're doing in the research lab doesn't just stay in the re-

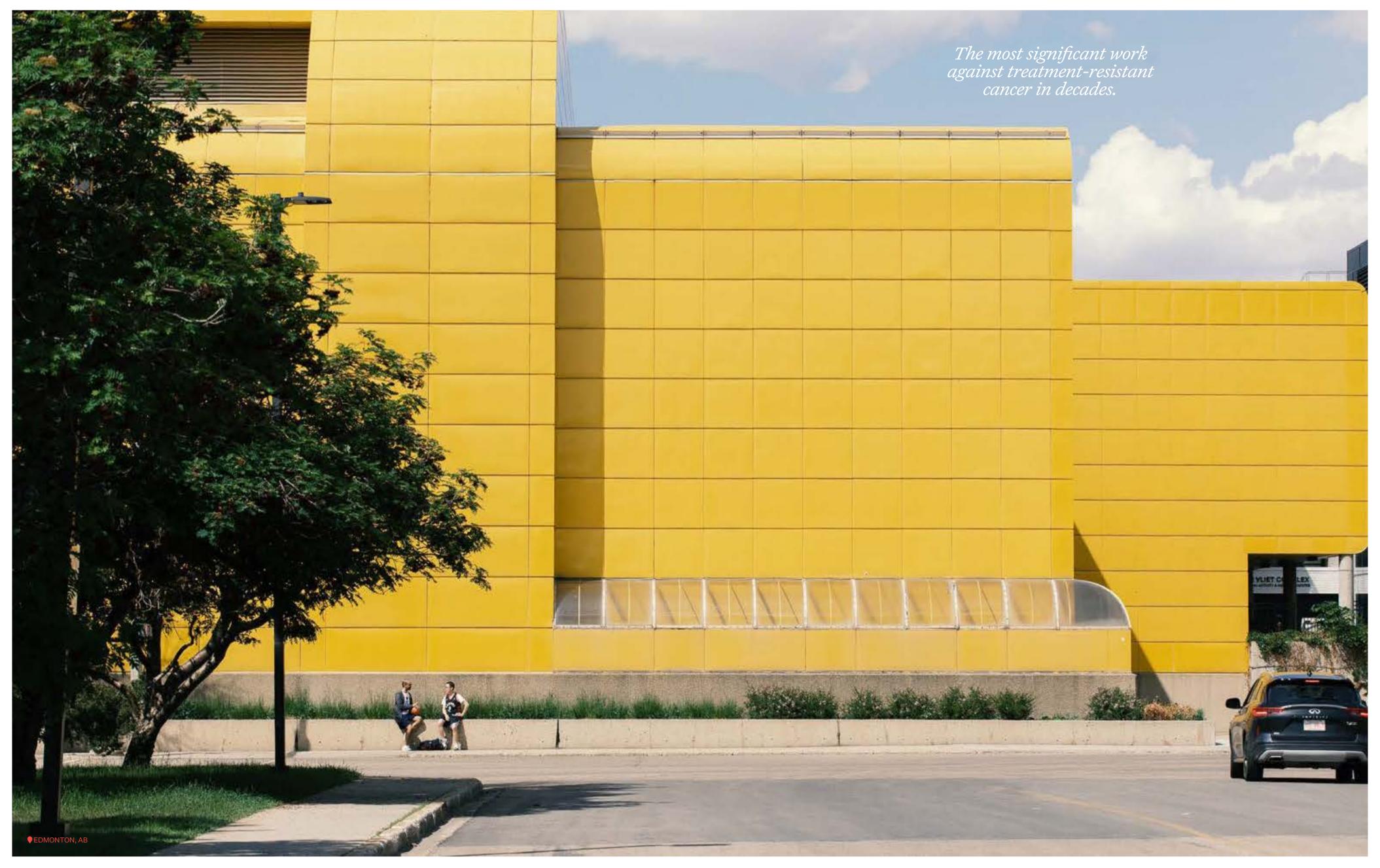
> Heroism isn't always obvious. There is nothing hardware store or loading items into the trunk of a car. people that are driving innovation by developing technol-Beyond breast cancer, her pioneering research is ogy that will forever change the landscape of cancer care

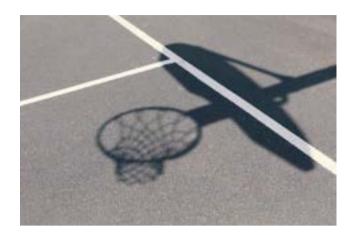




"I feel a great responsibility to make sure what we're doing in the research lab doesn't just stay in the research lab."

23 ALBERTA CANCER FOUNDATION REPORT TO OUR COMMUNITY 2023 MICROWAVE IMAGINE TRANSMISSION SYSTEM 24 GROUNDBREAKING RESEARCH





Sometimes important relationships have atypical beginnings. Like a casual pickup basketball game, a broken finger, and two doctors whose paths would intertwine and quietly lead to an effortless working relationship. One that would lead to incredible advances in CAR T-cell therapy, and placing Alberta as an innovation leader.



GROUNDBREAKING RESEARCH

CAR T-CELL THERAPY

with Dr. Michael Chu and Dr. Irwin Sandhu

Looking at these two doctors now, and their harmonious working relationship, you wouldn't think that Dr. Irwin Sandhu had broken Dr. Michael Chu's middle finger during a pickup basketball game back in high school. Clearly, they were able to get past it with no hard feelings, and now they're a shining example of two brilfor patients through chimeric antigen receptor (CAR) the cancer again."

to fail in some shape or form. And usually, that means in decades. the cancer is allowed to regrow because the immune sys-

reader" onto their T-cells. That's where Dr. Chu offers up you to get all this academic credit for it." a great analogy:

"The T-cells are like the Navy SEALs of their new system. But now, instead of being just the Navy, they're ing goes, "teamwork made the dream work," CAR T-cell SEAL Team Six, who are able to recognize and see the liant minds working together right here in Alberta to tumour and they're more adaptable to turn on and remake strides that are saving lives and changing outlooks cruit the other new system cells to get back in and kill

Thanks to these friends, Alberta is setting the pace sisted of surgery, radiation, and/or chemotherapy. These T-cells can adapt and grow alongside a patient's disease, for CAR T-cell therapy advances. It's a new tool in the therapies traditionally had a 70-80 per cent success rate only a single infusion is often required. This substantial treatment toolbox—a groundbreaking way of reutilizing for survival, but there are too many patients for whom improvement in the patient experience sets it apart from the immune system. One of the problems with cancer treatment fails. In short, CAR T-cell therapy may hold any other treatment. development is that a patient's own immune system has the key to significant progress for hard-to-treat cancers

immune system, similar to putting a brand new "barcode" support you 100 per cent of the way, but really, I want

Upon the coaxing of his friend Dr. Sandhu, Dr. Chu made the decision to return to Alberta, and as the savtherapy has emerged as the latest chapter in the fight against cancer, offering numerous advantages over traditional treatments. With a prolonged lifespan, these cells circulate within the body for years, preventing cancer Before innovations like this, cancer treatment con-metastasis and minimizing the risk of relapse. As CAR

Immunotherapy remains the fastest-growing field in oncology, with over 25 FDA-approved immune treat-"So around 2017 to 2018, we learned the fact that ments now available for more than 15 different cancer tem no longer recognizes that as a problem. So the way they had these machines that could make these CAR T's indications. The success of this program is indebted to to overcome that with CAR T-cells is to reprogram their themselves and I told Michael [Chu], 'you know, I will a significant legacy gift that enabled the Alberta Can-

The success of this program is indebted to a significant legacy gift that enabled the Alberta Cancer Foundation to fully fund the CAR T-cell trial right in our own backyard.

27 ALBERTA CANCER FOUNDATION REPORT TO OUR COMMUNITY 2023 GROUNDBREAKING RESEARCH CAR T-CELL THERAPY 28 cer Foundation to fully fund the CAR T-cell trial right trials, Dr. Chu offered up a recent anecdote from a trial in our own backyard. Furthermore, the continuous suppatient that hints at the hope it could give for evasive and port from donors and government funding has solidified hard-to-treat cancers. Alberta's position as an innovative leader in the field of immunotherapy.

has been streamlined, resulting in significant time sav- aspect of this and why we do it." ings. Dr. Sandhu's enthusiasm is apparent as he discusses the potential and future of cellular therapy.

my name is on there, but the fact that we have an equal flicted in an otherwise perfect friendship. number of Calgary physicians as well as Edmonton physicians on there, this is a truly provincial thing."

While it's still relatively early days in the treatment

"He went from a situation where he was literally making plans for his own funeral and making his fare-Dr. Sandhu highlights Dr. Chu's remarkable contri- wells and goodbyes to family, to now looking at the posbutions to enhancing the affordability and accessibility of sibility of having a 50/50 shot... You know, he actually this treatment, particularly in comparison to the United just reached out to us earlier this week with photos of his States. Through his efforts, the production of CAR T-cells very first grandbaby. It kind of crystallizes the human

It's an incredible shared vision and case study of ongoing teamwork that goes back to a high school bas-"Our big victory was last December when we re-ketball court. Dr. Chu is proud to point out that he still corded the phase one trial results. This is Michael [Chu]'s likes to greet his friend Dr. Sandhu with the raised middle trial, but the source of pride that I have on that is not that finger sometimes, a playful reminder of the injury he in-





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Clear

sight

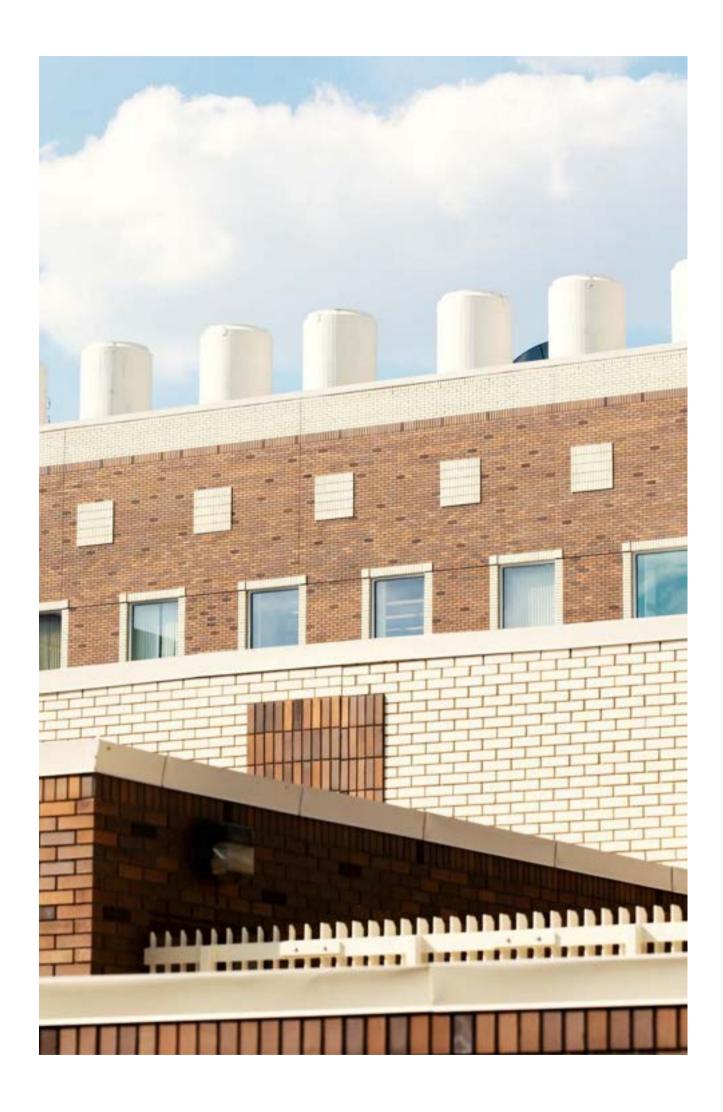
the

path ahead

GROUNDBREAKING RESEARCH

OCULAR BRACHYTHERAPY

with Dr. Ezekiel Weis and Dani Chadwick



Weaving through the many bike trails of Calgary and the Rockies, you can start to understand the connection Dr. Ezekiel Weis has with this province. Whether biking, hiking, or paddleboarding, he shares that passion for outdoor adventure with family. That love of Alberta also ties into his work in ocular brachytherapy, a precise new procedure for cancers of the eye that Dr. Weis has brought back to Alberta, honed and refined, making us a world leader in the specialized procedure.

"As a very proud Albertan, where patients couldn't get this life-threatening disease treated close to home, it was kind of a hard pill to swallow as a young person who grew up here. Seeing people having their eyes removed unnecessarily was even harder to deal with."

Dr. Weis is no stranger to travelling to where his work takes him. His educational journey has taken him to prestigious institutions such as Harvard, and many cities including Amsterdam, Philadelphia, Vancouver, and Ottawa, before returning to Alberta, where he has made it his home with his family. This decision was also prompted by what he describes as a "very generous" grant from Alberta Cancer Foundation to start the Brachytherapy Research Centre of Excellence, a province-wide initiative dedicated to accelerating innovation while elevating care and improving outcomes for Albertans. As a result, those diagnosed with ocular melanoma had a much more optimistic conversation surrounding their diagnosis.

on the other side of that conversation. The mother of two had just had her world turned upside down with the diagnosis of cancerous melanoma. But she was soon given some hopeful news that might not have been available years earlier.

"Dr. Weis let me know that the odds of recurrence are the same if I had my eye removed, which was what the traditional treatment was, or if I had this brachytherapy, which he was recommending, and he had brought to Alberta just a few years before that."

Dr. Weis and his team took it from there, and in March 2017, Dani received a groundbreaking treatment known as ocular brachytherapy—a procedure that previously had to be done in Ontario—at the Cross Cancer Institute in Edmonton. Dani's treatment involved having gram to improve treatment options for patients facing a radioactive plaque, a rice-sized seed that emitted radiation, affixed to the outside of her eye on top of her can-

cer, effectively shrinking the tumour. A few days later, Dani had the plaque removed.

Brachytherapy has transformed the landscape of cancer treatment for both medical professionals and patients facing cancer. By precisely targeting tumours with radiation, the risk of exposing or damaging surrounding healthy tissue is significantly reduced. Additionally, brachytherapy offers the advantages of convenience and cost-effectiveness, requiring only a few treatment sessions and sparing patients from frequent trips to the cancer centre.

For Dani, this life-saving procedure not only preserved her vision but also granted her a profound moment in time. She welcomed her third child into the world, and her newborn had the extraordinary opportunity to gaze up into her mother's eyes while Dani looked back at her baby with love and adoration. An indescribable moment made possible by the expertise and dedica-In December of 2016, Dani Chadwick found herself tion of Dr. Weis and his exceptional team.

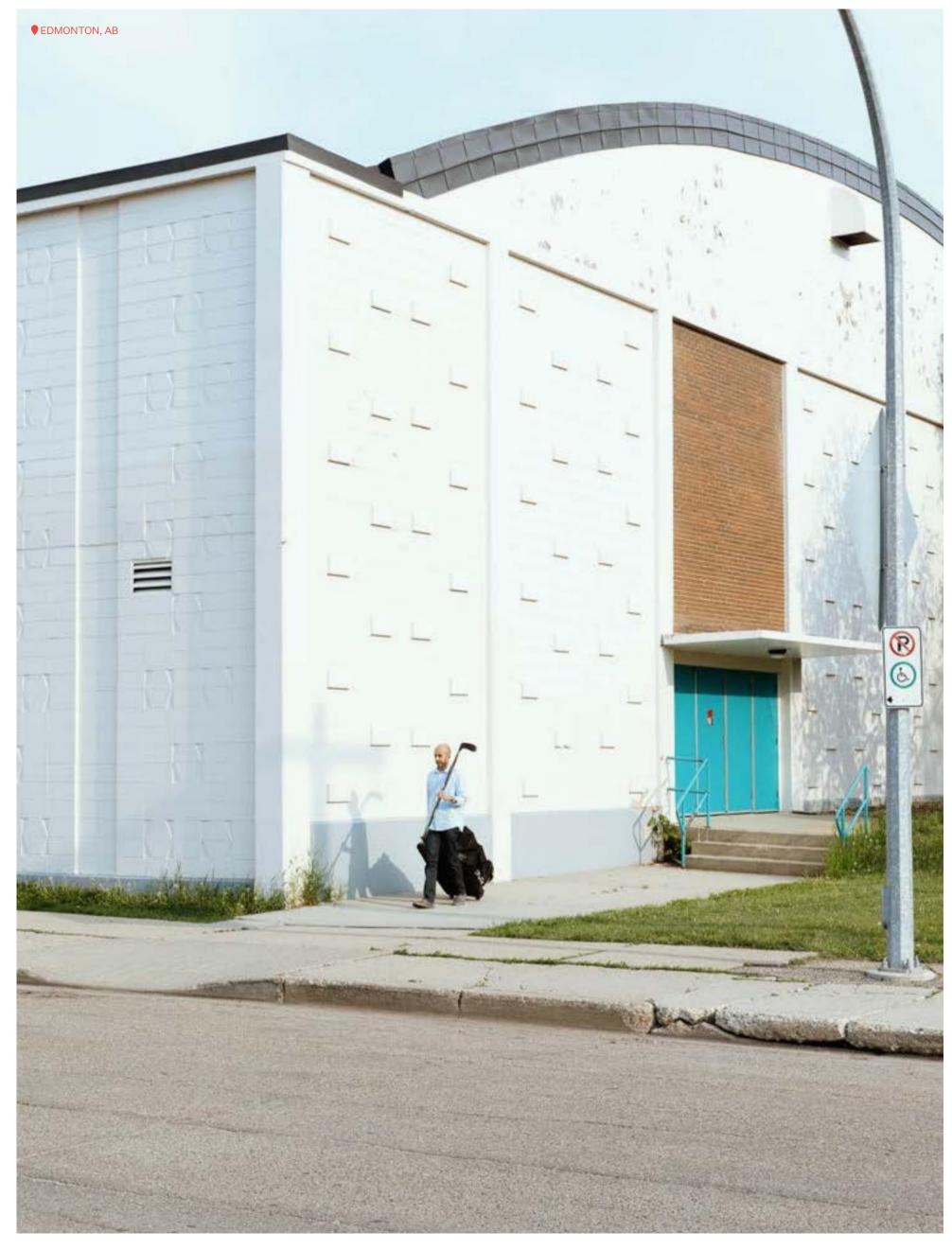
> Dr. Weis, and the many people involved in the program in Calgary and Edmonton, can take great pride in their failure rate being the pace-setter for the world at under one per cent. Not only that, but the range of cancers they are treating continues to expand.

> "We now treat large and very large tumours, as well as tumours surrounding the optic nerve which are considered untreatable by many centres without removing the eye, and our [failures] with those nucleation rates are still under one per cent."

The experienced and ambitious team represents some of the brightest minds in the country, with a strong focus on training the next generation of brachytherapy specialists. Dr. Weis hopes to continue building the procancer in the future.

"We now treat large and very large tumours, as well as tumours surrounding the optic nerve which are considered untreatable by many centers without removing the eye, and our [failures] with those nucleation rates are still under one per cent."

33 ALBERTA CANCER FOUNDATION **REPORT TO OUR COMMUNITY 2023** GROUNDBREAKING RESEARCH OCULAR BRACHYTHERAPY 34



Impossible things aren't

To his teammates on the Edmonton Big Rigs beer league hockey team, he's not Dr. Usmani. He's Nawaid, the winger with the relentless forecheck and the crafty passes. A nice little escape from his other world, where he's part of a different team: the Cross Cancer Institute's Northern LIGHTS program, a dedicated group chasing breakthroughs in the exciting world of LINAC-MR.



with Dr. Nawaid Usmani

Much like an effective hockey player can combine different skills, LINAC-MR merges the imaging capabilities of MRI technology with the radiation treatment capabilities of a linear accelerator (LINAC) to accurately view and target tumours. Previously, these two machines were considered to be at odds with each other, but thanks to advances by medical physicist Dr. Gino Fallone and his research team over 15 years, they're proving to be compatible linemates. Thanks to their innovations, real-time imaging during radiation treatments is possible, allowing for shorter treatment time, and negating damage to healthy organs that surround the tumour.

That's already cause for optimism, but looking forward, things get even more promising. Though Dr. Usmani's background is in prostate cancer, he's already novative research to other types of cancers.

"It can treat any cancer that's treated with radiathe liver, the lungs, and other things that are also not als project led by Dr. Usmani and his team of researchers. seen well on a traditional CT scan."

Like current technologies, this machine can take the procedure. This means any tumour that is moving, can't right now."

such as liver tumours or lung tumours, can be treated with more accuracy and confidence.

With Alberta at the forefront of this groundbreaking innovation, the LINAC-MR entered the clinical trial phase in February 2023, with the primary objective of demonstrating the safety and efficacy of this innovative procedure.

"We've been using the LINAC-MR machine for the last three years now and the exciting thing is that this is made-in-Alberta technology, and we're the first in the world to show what's possible. Other groups have tried developing the LINAC-MR technology, but they haven't really optimized it to the degree that we have."

Thanks to Alberta Cancer Foundation donors, \$4 million was allocated to the development of the LINanticipating the widespread potential of applying this in- AC-MR. The start of the clinical trial represents an incredible and significant milestone in the work that Dr. cancer patients, but also for people that have cancers of the baton is passed to the Northern LIGHTS clinical tri-

phisticated and complicated treatments. And eventually, world... I see nothing but good coming out of all of this." images before and after treatments. However, what sets after about a year or so, we'll be able to start really maxit apart is its ability to produce live video imaging during imizing the technology to be able to treat sites that we

Following the initial year of clinical trials, an exciting phase awaits with the commencement of five additional clinical trials. These upcoming trials will be specifically tailored to patients with prostate, lung/liver, head and neck, breast, and various other types of cancer that stand to benefit from this remarkable procedure. With a combined participation of over 450 patients, the primary objectives of these trials include enhancing patient outcomes, expanding treatment capacity, and gaining fresh insights into the technology. By undertaking these ambitious endeavours, Alberta is poised to further strengthen its position as a trailblazer in this field.

With the trials now underway, Dr. Usmani proudly redirects the story to 84-year-old Marvin Bahry, the first patient to participate in the Northern LIGHTS clinical trial at the Cross Cancer Institute. "He's the model for a clinical trial patient... he was over the moon that he Fallone began. With the technology in place, the focus could help other people, and loved the opportunity to be tion. We think that its main benefit will be for prostate has shifted to optimizing the machine's capabilities, as involved." Likewise, Marvin embraced his role as one of the first to undergo this promising new treatment:

"Any good that comes out of it from me will benefit "The goal is to start getting more and more so- others and that's my little contribution to others in this

> Whether in a hockey locker room or at the Cross Cancer Institute, Dr. Usmani leads with passion and determination, always striving for the next big win.
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ALBERTA CANCER FOUNDATION REPORT TO OUR COMMUNITY 2023 GROUNDBREAKING RESEARCH



Dr. Chris Eagle, Board Chair

than it is now, and when it comes to innovation in cancer early detection of late-stage cancers with donor support, detection, treatment and care in Alberta, we know this is including the addition of a new PET-CT machine at the true. We have seen so much progress in just a short time, Arthur Child. This machine will have a vital impact on and there is much more to come, thanks to the support thousands of patients, resulting in faster and more accuwe have from our community.

This time last year, we had reached an incredible \$90 million in donations to OWN.CANCER—a \$250 to be done before we can reach our \$250 million goal and million campaign supporting the Arthur J.E. Child Com- achieve the full potential of the Arthur Child. We can't prehensive Cancer Centre in Calgary. We are pleased to do this alone. It will take a village. One that includes our share that this momentum has not stopped. We have donors and community coming together to help us OWN. blown past the halfway point of our fundraising goal CANCER once and for all. and celebrated the progress being made as the Arthur Child prepares to open to the public in 2024. For in- tre in Alberta, we are also continuing to find new ways families, researchers, healthcare professionals, donors, stance, in December, the centre reached a substantial to advance research in other areas across the province. and staff is truly inspiring. It doesn't matter where you completion milestone and the keys were given to Alberta Through the We Cross Cancer campaign, donors from live or the type of cancer you face—behind every patient Health Services to begin preparing the building for pa- across Alberta contributed \$5 million to support inno- stands a community committed to changing the outcome tients. We also saw the installation of two MR LINAC vative cancer research that will take place in Edmonton. of this devastating disease. This brilliance in our backmachines, which will be funded through donations to In April, we responded by announcing the launch of the yard is helping to ensure those facing cancer have access OWN.CANCER. There are currently only a handful of Game Changer Fund, a research competition in Edmonto to the best in detection and treatment, as close to home these machines operational in North America, and the ton, with the goal of answering big research questions as possible. Arthur Child will be the only centre in Canada to host that impact people facing cancer. We look forward to antwo of these machines, advancing radiation therapy for nouncing the recipients of this competition and sharing patients across Alberta. As we look at the year ahead, more about their work later this year.

They say the pace of change will never be slower we are also thrilled to be adding more opportunities for rate diagnoses for southern Albertans. Despite these exciting advancements, we know there is more that needs

And finally, this past year, the Alberta Cancer Foundation Board of Trustees approved future funding to bolster the mobile breast cancer screening program throughout Alberta. The invaluable support received from donors so far has played a pivotal role in bringing this life-saving screening program to thousands of people living in rural and Indigenous communities across the province. However, as the equipment ages, we must recognize the need to keep the program on the road.

As I reflect on this past year's progress, and envision the future, I am in awe of our province and the people in our community who have rallied behind every per-As the fundraising partner for every cancer cen- son facing a cancer diagnosis. The collective strength of

> To learn more about each of the stories in this report, visit albertacancer.ca/reports

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To view full audited financial statements please visit albertacancer.ca/reports

Marc Weil

2022-2023 **Financial Highlights**

CHARITABLE DISBURSEMENTS

Our purpose is to create more moments for Albertans facing cancer. Charitable disbursements demonstrate how donor support translates into improving cancer treatments and advancing research. Over the past year, the Alberta Cancer Foundation has been in the midst of two campaigns—OWN.CANCER and We Cross Cancer—with the goal of raising \$280 million in support of the Arthur J.E. Child Comprehensive Cancer Centre and the Cross Cancer Institute. Disbursements from these campaigns are anticipated to occur over the next 5 years.

Total Disbursements

\$26.96M*



FUNDRAISING REVENUE

Total Revenue \$48.80M**

\$43.69MDonations & Contributions

\$4.14M **Events and Initiatives**

COST TO RAISE A DOLLAR (CRD)

\$8.786.430 ÷ \$48.796.632 =

\$0.18/dollar

Direct Fundraising Costs Total Fundraising Revenue

\$0.97M

\$0.82Net Funds Raised

*Includes \$11.59M for the OWN.CANCER and We Cross Cancer campaigns 37 ALBERTA CANCER FOUNDATION REPORT TO OUR COMMUNITY 2023

**Includes net lottery proceeds

Certain information has been updated to align with the financial presentation of the current year



