

# YOUR IMPACT

DAN Women & Babies Program



FALL 2020

**Every one of us  
Envisions a future.  
It might start as a wish. A hope.  
That things will be better tomorrow.  
That something extraordinary will come.  
That one day we might triumph  
Over the obstacles in our way.**

**And then it happens.  
The extraordinary arrives.  
A breakthrough that changes everything.  
Visionaries who help us make  
What seemed impossible yesterday  
Only a matter of time.**

**Every one of us  
Envisions a future  
And thanks to your generosity  
The future is here.**

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*Our thanks  
to you*



“ It is because of your generous support that we are saving and changing lives.”

- Dr. Arthur Zaltz, Chief,  
DAN Women & Babies Program

## A MESSAGE FROM DR. ARTHUR ZALTZ

The past year at Sunnybrook’s DAN Women & Babies Program has been especially challenging, yet rewarding as we adapted to the COVID-19 pandemic while continuing to expand the boundaries of what is possible in caring for women and their newborns.

As you’ll read in this report, my team has worked tremendously hard to adapt to the pandemic while preserving the compassionate care for which we are known. We’ve advanced virtual care within our clinics, and adjusted our visitation policies while maintaining as much parental presence as possible.

And I’m exceptionally proud to report that we’ve taken a provincial lead in the management of the virus as it relates to pregnant women and their babies. You’ll read about how Dr. Jon Barrett has been appointed chair of a provincial task group, the Maternal-Neonatal COVID-19 Task Force. Additionally, Dr. Leslie Po has developed a COVID-19 emergency protocol that has since been shared with other hospitals through the Southern Ontario Obstetrical Network.

I’d also like to congratulate Dr. Patricia Lee, who was awarded an Alternative Funding Plan Innovation Fund grant this spring to evaluate risks to health care workers in the operating room caring for COVID-19 positive patients at the time of obstetrical delivery or urgent surgery. Dr. Lee’s findings will help us learn more about the virus and how best to protect our health-care workers on the front lines.

I’m pleased to share that our research team has also made headway on a number of exciting projects in spite of the crisis. This report will highlight groundbreaking research, such as the work of Dr. Anne Berndl and Dr. Nir Melamed. Dr. Berndl is shedding light on the experiences of women with disabilities before, during and after pregnancy; and Dr. Melamed’s broad scope of work included the development of a breakthrough non-invasive test for preeclampsia.

As Esther Aina learned, this kind of leading-edge, personalized care can make all the difference (you can read her story on page 10 of this report.)

We simply couldn’t do it without you. It is because of your generous support that we are saving and changing lives, easing fear and uncertainty, and giving hope to families when they need it most. On behalf of my clinical and research teams, our patients and their families, thank you for your generous support.

With gratitude,

**Dr. Arthur Zaltz, BSc., MD, FRCSC**  
Chief, DAN Women & Babies Program

Every day, the dynamic team of clinicians and researchers in Sunnybrook's DAN Women & Babies Program are empowered by the generosity of donors to make groundbreaking discoveries and deliver leading-edge care. With your support, we are inventing the future for women and families at Sunnybrook and beyond.



**4,101**  
births in  
2019-20

**27%**  
of births  
high-risk in  
2019-20

**80**  
micropreemies  
(babies born  
weighing less  
than 1.6 lbs)  
in 2019-20

“  
I always dreamed of becoming  
a mom. Thanks to Dr. Michelle,  
my dream has been fulfilled.”

*- Esther Aina, pictured with her husband  
Oluwajinmi and their children, Jason and Tiara.  
With the help of Sunnybrook's Dr. Michelle Hladunewich,  
Esther fulfilled her lifelong dream of motherhood.*



## IMPROVING CARE FOR INFANTS AND MOTHERS ON THE FRONT LINES OF THE PANDEMIC

Dr. Jon Barrett, Waks Family Chair in Maternal Fetal Medicine Research, appointed provincial leader in the management of COVID-19



The past several months have been nothing short of remarkable for Dr. Jon Barrett, Sunnybrook's Waks Family Chair in Maternal Fetal Medicine Research.

To start: the initiative he formed with the help of the Waks Chair, the Southern Ontario Obstetrical Network (SOON), has been utilized by the province of Ontario to help coordinate obstetrical care during

the COVID-19 crisis. The network of 18 hospitals, providing care to almost 60 per cent of Ontario births, has become one of Canada's leading obstetric networks carrying out projects to improve quality of care.

"The ability of SOON to mobilize and improve quality of care has been seen extensively during the COVID-19 pandemic," says Dr. Barrett. "We have become a major leader in the establishment of standards and protocols for patients across the province."

Dr. Barrett has also accepted a position as chair of a provincial task group - the Maternal-Neonatal COVID-19 Task Force - to make recommendations for the management of COVID-19 as it relates to pregnant mothers and their babies.

"My ability now to influence obstetrical care across the province of Ontario is in no small measure due to the support I have received from the Chair," says Dr. Barrett.

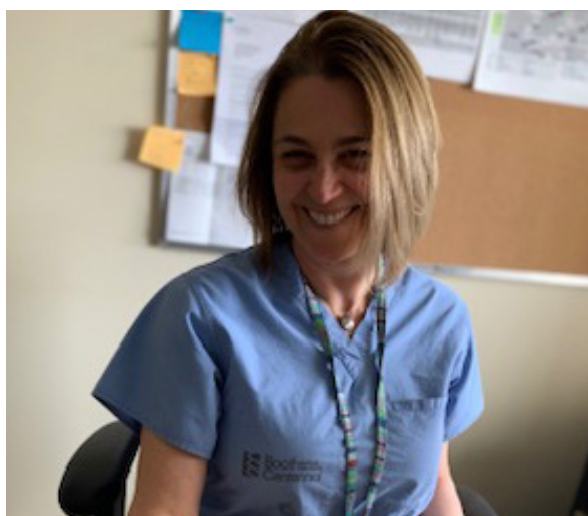
Dr. Barrett is also the co-principal investigator of two large research projects that are collecting data both nationally and provincially on the outcomes of pregnant women with COVID-19 and their babies. Both studies are in collaboration with the Better Outcomes Registry & Network (BORN), which is collecting the valuable data to be analyzed.

While COVID-19 has informed much of their recent work, Dr. Barrett and his team have also made headway on a number of other studies.

One such project is the launch of the Confidential Enquiry for Maternal Morbidity across SOON.

“We will use the BORN database to develop a true picture of why mothers get sick within the SOON network,” says Dr. Barrett. “From there, we will institute a confidential enquiry within the network to develop a report of avoidable factors.” Confidential enquiries seek to improve health care by collecting evidence on aspects of care, identifying any shortfalls and disseminating recommendations based on these findings.

Under Dr. Barrett’s leadership, a number of young researchers are also spearheading leading-edge studies, including Dr. Stefania Ronzoni and Dr. Amir Aviram (featured below).



### **A new test to detect infection**

After joining the DAN Women & Babies Research Program in 2018, Dr. Stefania Ronzoni is already making waves with her groundbreaking development of a non-invasive test to identify a life-threatening infection. The presence of infection in the amniotic sac is one of the main recognized causes of preterm birth. In Canada, preterm birth accounts for 8 per cent of all births but is responsible for 75 per cent of neonatal deaths and 80 per cent of all severe childhood illness. Early detection and treatment has the potential to drastically improve outcomes. Dr. Ronzoni is conducting research to develop a blood test for pregnant women that identifies infection via the biomarkers endotoxin and cytokines. The study’s preliminary data from 20 patients with preterm prelabour rupture of the membranes has shown that these biomarkers are indeed very promising.

### **Better care for patients with infertility**

A new addition to the team, Dr. Amir Aviram is focused on helping patients who achieved pregnancy through fertility treatments. “These patients have a lot of specific underlying conditions that are sometimes partially addressed during fertility treatments but are often not adequately addressed once they are pregnant,” says Dr. Aviram. Under the guidance of Dr. Barrett, he is working on establishing a specialized clinic for patients experiencing infertility and will soon launch a study collecting provincial data from BORN and the Institute for Clinical Evaluative Sciences (ICES) to explore the long-term outcomes of babies born via IVF. “We can see, for example, if things that happened at pre-implantation had an effect,” explains Dr. Aviram. “I want to follow the circle of life and discover a lot of interesting things that might affect how we provide care.”



Marilyn Hyndman leading donors on a tour of the NICU.

## Meet Marilyn Hyndman

Many visitors to Sunnybrook's Newton Glassman Charitable Foundation Neonatal Intensive Care Unit (NICU) are familiar with the warm presence of patient care manager Marilyn Hyndman. She sees herself as the "visitor," however: "I don't feel like parents are the visitors, we are the visitors in their child's life." For the past 38 years, Marilyn has been an integral part of the family-centred care provided in the NICU - one of just three high-risk neonatal nurseries serving the Central East region of Ontario. The past several months have brought new challenges as the team adapted to the COVID-19 pandemic, working diligently to employ safety measures while still maintaining 24-hour parental presence. "This is uncharted territory," says Marilyn. "We are doing our best to balance parental presence with safety."

Marilyn's passion for her job and her team is palpable. "It's incredible to watch parents take their baby home, knowing that we have done our best to give them the best start possible," she says. "The team inspires me every day with their dedication to families and their support of each other. What more can you ask of the people you work with?"

## SUNNYBROOK DONATES 32 INCUBATORS TO ZIMBABWE

Thirty two incubators from Sunnybrook's Newton Glassman Charitable Foundation Neonatal Intensive Care Unit (NICU) took an exciting journey after being donated to Thrive Project Zimbabwe, a Canadian non-profit that aims to reduce infant and maternal mortality in the African nation.

As one of the busiest caregivers of women experiencing high-risk pregnancies and premature babies in North America, Sunnybrook's NICU was grateful to receive a donation of highly specialized incubators from donors as part of the Champions of Change project (see page 9). But instead of sending the unit's original incubators to a landfill, the NICU team came together to donate the life-saving equipment to hospitals in Zimbabwe that often lack basic medical supplies. At times, a single incubator may be used for three babies at once.

Volunteers came together for a "packing party" (pictured below) to build crates for shipping and to pack additional donated materials such as medical supplies and baby clothes.





“These incredible technologies are saving the lives of the youngest and tiniest patients, thanks to you.”

- Dr. Eugene Ng, Head of Neonatology, Medical Director of Sunnybrook's Newton Glassman Charitable Foundation NICU



A young girl tours Sunnybrook's NICU during the Champions of Change event. For the tiniest micropreemies whose lungs are still developing, we have new incubators used at resuscitation that assist the team to support these fragile infants. These incubators keep them warm while allowing the team to support and care for respiratory distress, a leading cause of death in preterm infants.

## GIVING TINY NEWBORNS THE BEST CHANCE AT LIFE

### Generous donor support purchases state-of-the-art incubators

Sunnybrook is one of the busiest caregivers of women experiencing high-risk pregnancies and premature babies in North America.

But we can only deliver life-saving care with the right tools. This is what inspired a group of 11 young philanthropists, all part of the Sunnybrook Next Generation volunteer group, to each pledge \$25,000 for the purchase of new highly specialized incubators in the DAN Women & Babies Program.

Led by co-chairs Chris Partridge and Melanie Dowhaniuk, their gifts were generously matched by the Nanji family as part of the Champions of Change program, which raised more than \$500,000 in total.

“We were interested in supporting priorities with an immediate impact,” says Dowhaniuk.

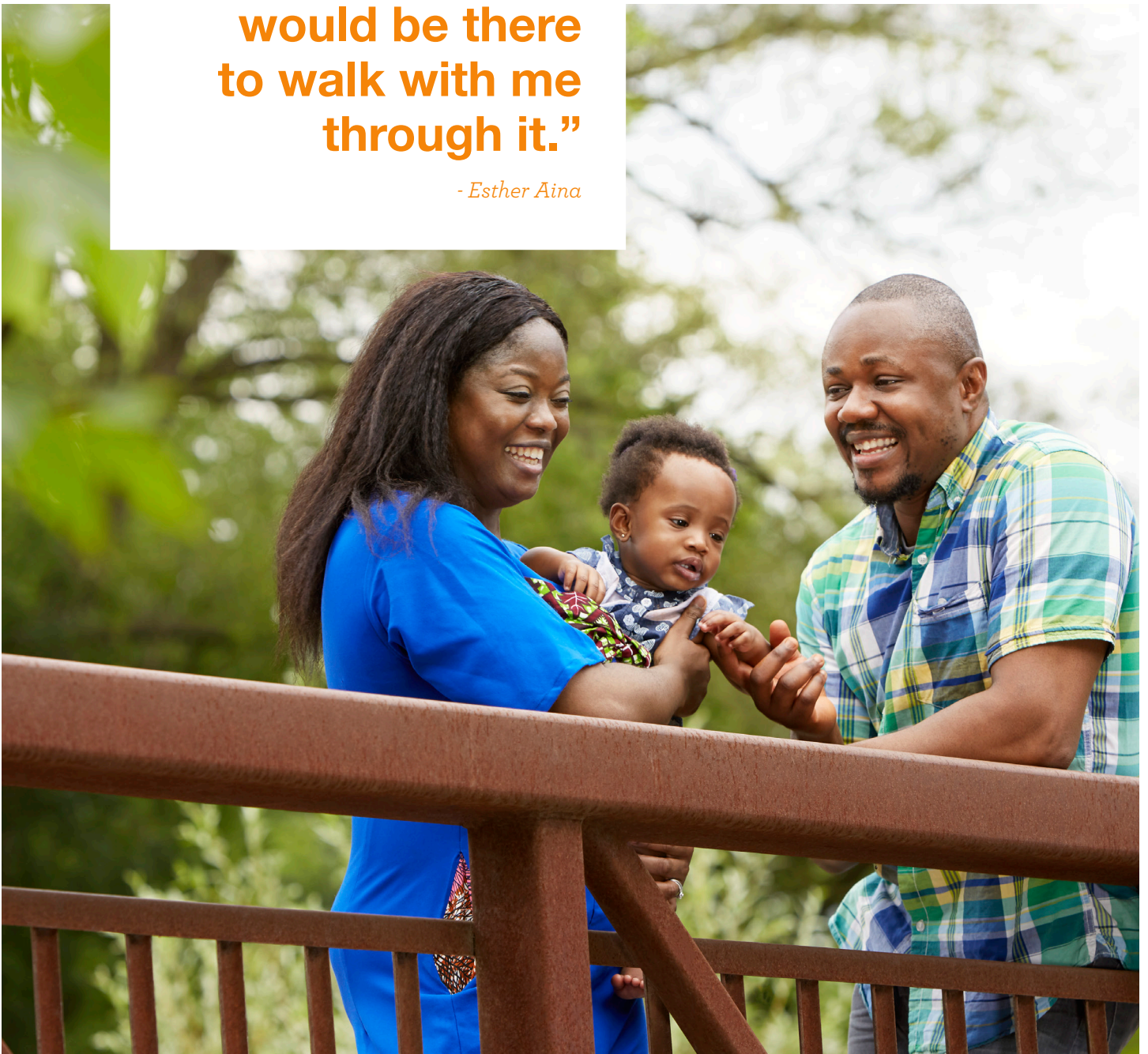
“We wanted to invest in next-generation technologies that will play a vital role in patient care.”

Fifty new incubators were unveiled at a special celebration on October 16, 2019 and are now in use in the Newton Glassman Charitable Foundation NICU.

The sophisticated units offer the warm, stable temperature and quiet environment premature babies need to gain weight, reduce the risk of infection and promote brain growth and development.

**“It was intense,  
but Dr. Michelle  
told me, no  
matter what, she  
would be there  
to walk with me  
through it.”**

*- Esther Aina*



## ESTHER'S DREAM HAS BEEN FULFILLED

With Sunnybrook's help, Esther overcame significant challenges to become a mother

"I always dreamed of being a mom," says Esther, who had been married just a year when she was diagnosed with both lupus and stage-four chronic kidney disease. Suddenly, her lifelong dream of parenthood came to an abrupt halt.

Late-stage and end-stage kidney disease — when a patient's kidneys are barely functioning or not working at all — can significantly affect fertility, and those who do conceive face significant risks, such as preeclampsia and preterm birth.

Four years after her diagnosis, Esther was overjoyed to discover that she was eight weeks pregnant. She was quickly referred to Dr. Michelle Hladunewich, physician-in-chief at Sunnybrook and founder of the hospital's Pregnancy and Kidney Disease Clinic.

Dr. Michelle, as she is fondly referred to by many of her patients, is well-known for managing some of medicine's most difficult pregnancies, including helping hundreds of women with chronic kidney disease conceive and deliver babies. "When I met Dr. Michelle, her compassion was off the charts," says Esther. "But she didn't sugarcoat anything. She told me the risks to my kidneys and that I would likely give

birth prematurely. That transparency helped me to trust and gave me the courage to move forward."

Pregnant women with kidney disease require close medical supervision. "It was intense but Dr. Michelle told me, no matter what, she would be there to walk with me through it," says Esther, who was carefully monitored with frequent blood work and blood pressure checks. Dr. Hladunewich's vigilance is resulting in impressive outcomes.

At 26 weeks, Esther's son Jason was born by emergency C-section. "I remember arriving for my check-up that day and not feeling sick," says Esther. "But my blood pressure and blood work results showed otherwise."

Dr. Hladunewich and her team stood by Esther's side as she recovered and coped with her son's preterm birth. "They saw me through that process and gave me so much care, support and compassion," says Esther. Today, Jason is a happy four-year-old — and now he's a big brother to 8-month-old Tiara, a daughter Esther welcomed with the support of Dr. Hladunewich.

"I always dreamed of being a mom," says Esther. "Thanks to Dr. Michelle, my dream has been fulfilled."



Dr. Nir Melamed, Waugh Family Chair in Twins Research.

## **PRACTICE-CHANGING RESEARCH TO IMPROVE THE OUTCOMES OF TWINS AND THEIR MOTHERS**

Waugh Family Chair in Twins Research makes significant discoveries over the past year

An exceptional \$1-million gift from the Waugh Family Foundation in 2018 established the Waugh Family Chair in Twins Research and elevated Sunnybrook's capacity to address an urgent need: research to improve both the

short- and long-term health of twin infants and their mothers.

Twin pregnancies are roughly five times more likely to be complicated by preterm birth, preeclampsia, fetal growth restriction and other complications, compared with single-baby pregnancies.

In just two short years, the research conducted by chairholder Dr. Nir Melamed at Sunnybrook's Twins Research Centre is making significant headway to increase our understanding of how and why these complications occur in twin pregnancies, and to develop treatment and care plans to improve outcomes.

### **Preventing pre-term birth**

We reported to you last year about Dr. Melamed's study in collaboration with Sunnybrook radiologist Dr. Phyllis Glanc to determine whether the angle of the cervix can also indicate if a woman is at risk of early delivery. The pair have since published a paper in the *Ultrasound in Obstetrics and Gynecology Journal* confirming that the angle of the cervix is a valuable tool to help identify women at risk of pre-term birth.

Another study is currently underway exploring how optimal weight gain during pregnancy with twins could significantly decrease the risk of pre-term birth. In a previous study from our clinic, we have shown that more than half of all women pregnant with twins gain either too little or too much weight.

### **Uncovering the long-term impacts of preeclampsia**

Although it has been well-established that women who have a singleton pregnancy complicated by preeclampsia are at increased risk of future cardiovascular disease, Dr. Melamed and his team have hypothesized that because the mechanisms underlying the development of preeclampsia differ from

those involved in singletons, the long-term outcomes might differ too.

With this in mind, they undertook a groundbreaking study to unearth the potentially different outcomes between these two populations.

Their findings, which are now under review by the prestigious *BJOG: An International Journal of Obstetrics & Gynaecology*, determined that women who experienced preeclampsia in a twin pregnancy are indeed less likely to develop cardiovascular disease in the future than those who experienced preeclampsia in a singleton pregnancy. This is a reassurance to countless women that their future cardiovascular health is not at an increased risk.

### Gestational diabetes and twins

Dr. Melamed is currently overseeing two ongoing population-based studies in collaboration with the Institute for Clinical Evaluative Sciences (ICES) to improve gestational diabetes screening in twin pregnancies.

The first study is examining the current criteria that we use to diagnose gestational diabetes in singleton pregnancies to determine if it applies to twins or if a twins-specific criteria for diagnosis is possible. The team is collecting gestational diabetes screening data from across Ontario and initial findings point to the possibility that the medical community is over-diagnosing diabetes in twin pregnancies.

The second study underway is a meta-analysis to summarize existing literature regarding the accuracy of the screening process for gestational diabetes in twin pregnancies.

### Understanding fetal growth restriction

Up to 25 per cent of twin pregnancies are affected by intrauterine growth restriction (IUGR), a condition in which one or both twins does not grow well.

Dr. Melamed is exploring this condition by analyzing the levels of oxygen in the umbilical cords of singleton versus twin babies to determine if twins are more compromised in terms of blood flow from

the placenta. Findings from this study could help diagnose growth restriction in twin pregnancies.

Similarly, a large-scale study with ICES is aiming to determine the long-term outcomes of IUGR in twins compared with singletons.

### Determining the optimal mode of delivery

A previous international randomized controlled study led by Dr. Barrett provided key evidence to the medical community that vaginal delivery is safe for women with twins. However, this evidence was limited to women at 32 weeks gestation and beyond, and an ongoing debate continued about whether caesarian sections are safer for twins born earlier in gestation.

To address these questions, Dr. Melamed and his team collaborated with the Canadian Neonatal Network and found no increased risk of complications when extremely preterm twins are delivered vaginally.

However, the study also found that vaginal delivery was associated with 30 per cent of deliveries resulting in urgent caesarean section for the second twin. Dr. Melamed believes that this should be taken into account when counseling parents regarding their delivery.

These practice-changing findings have recently been accepted to the *American Journal in Obstetrics and Gynecology* and will soon be published.





Dr. Anne Berndt (right) is shedding light on the experiences of women with disabilities before, during and after pregnancy.

# TAKING A PERSON-CENTRED APPROACH

## Accessible Care Pregnancy Clinic conducting world-first research

As director of Sunnybrook's Accessible Care Pregnancy Clinic, Dr. Anne Berndl is used to being a trailblazer. The clinic, the first of its kind in North America, was launched in 2017 to provide seamless and holistic care throughout pregnancy planning, pregnancy, labour and the postpartum period for women with physical disabilities.

Dr. Berndl is also spearheading world-first research to rectify the fact that previous studies have "lumped all disabilities into one group" even though women require different kinds of care depending on their disability and any underlying conditions. In 2017, Dr. Berndl launched an ambitious series of individual studies to examine the reproductive and pregnancy experiences and outcomes of women with spina bifida, cerebral palsy, myasthenia gravis, dwarfism and spinal cord injury. Each person-centred study is connecting with women from around the world through in-depth surveys and interviews. Importantly, Dr. Berndl and her team connected with

advocacy groups for each condition in advance for their feedback. Significant progress has since been made. For example, "The little people reproductive health and pregnancy study" was recently published in the *Journal of Obstetrics and Gynaecology Canada* and is the largest study of its kind to date. The study found increased risks for women in the antenatal, delivery and postpartum time period, including 19.4 per cent of women experiencing respiratory complications and 27.8 per cent of babies born prematurely. Meanwhile, data collection is now complete and being analyzed for the spina bifida and myasthenia gravis studies, while research for the spinal cord injury and cerebral palsy studies remains underway. "The thing that overwhelms me is how many women want to participate," says Dr. Berndl. "When you're looking at groups where there has historically been dehumanization and stigmatization, there's a real need for a person-centred approach. We're working together with those communities so that we can provide care that will truly benefit them."

## Spearheading staff wellness



During her 21-year tenure at Sunnybrook, OBGYN Dr. Janet Bodley is known for how much she cares for her patients - and for her peers. Dr. Bodley has pioneered physician wellness initiatives within the DAN Women & Babies Program and

across Sunnybrook, most recently bringing together a group of 20 physicians as "wellness leaders" from various departments to coordinate a hospital-wide wellness initiative.

Their first meeting was in the "to be determined stage," and then COVID-19 hit. Instead of postponing the initiative, Dr. Bodley knew that it was more important than ever to continue full-

steam ahead. Their weekly meetings included check-ins about challenges being faced and ideas to address them from across the hospital. For example, when the committee learned of mounting staff anxiety about potentially exposing their family members to the virus, they helped coordinate a hotel for staff to rest safely.

As faculty advisor for the University of Toronto Department of Obstetrics and Gynaecology's postgraduate wellness program, Dr. Bodley also organized a webinar that was offered across the university and the Southern Ontario Obstetrical Network (SOON), which focused on health-care workers' mental health during COVID-19.

Beyond the pandemic, Dr. Bodley envisions a permanent peer-led wellness program to ensure staff are taking care of themselves as well as patients. "Our goal is to create a formal peer support program that reaches out to peers and enables peers to connect with us for support," says Dr. Bodley.

**“My family and I were immensely happy that this level of technology was available when I needed it most.”**

*- Ann-Marie Williams, who safely delivered her son Dylan with the support of Sunnybrook’s new blood test.*



## TESTING TRIUMPH

Headaches and swelling during pregnancy could be fairly harmless — or the telltale signs of preeclampsia, a dangerous condition that can lead to fatal complications for mother and baby. With many of its nonspecific symptoms commonly experienced in healthy pregnancies, preeclampsia can be challenging to diagnose.

In February 2020, Sunnybrook made an important step forward when it became the first hospital in North America to use a new blood test in clinical care to diagnose preeclampsia in a pregnant woman with chronic kidney disease. By looking at the imbalance between proteins secreted by the placenta, the blood test can be used as a triage tool, separating patients who are very likely to have preeclampsia (or develop it within the week), from those at a lower risk.

Dr. Nir Melamed worked together with scientist and director of Sunnybrook’s Pregnancy and Kidney Disease Clinic, Dr. Michelle Hladunewich, to develop the test as part of a year-long Roche Diagnostics funded study. They have since witnessed the incredible value of the new test in patients, including one woman with severe kidney disease who went on to develop worsening hypertension during her pregnancy. “Because her test came back normal, it gave us some assurance that it was unlikely to be preeclampsia,” says Dr. Melamed. The patient, Ann-Marie Williams, was given blood pressure medication and induced at 37 weeks, — a full-term delivery. Her son Dylan was delivered quickly and safely in hospital. “My family and I were immensely happy that this level of technology was available when I needed it most for a quick turnaround time in diagnosing my illness,” says Ann-Marie.

Several other medical centres have contacted the team to learn from their experience. “The introduction of this blood test really puts Sunnybrook at the forefront of individualized medicine,” says Dr. Melamed.





Orange flight paramedics unload a stretcher from a helicopter.

## Rooftop helipad operational

After years of planning and anticipation, our rooftop helipad became fully operational in January 2020. It features an impressive platform measuring 75 feet by 75 feet, which stays free of ice and snow through heat-activating sensors, and has a covered walkway that protects patient and paramedics from the elements as they move to dedicated elevators.

Patients arrive at Sunnybrook by air ambulance from all over the province for urgent trauma care, burn care and high-risk maternal and newborn care. Last year, 19 obstetrical patients arrived at Sunnybrook by air for high-risk birthing and premature newborn critical care. While they arrived at a ground-level helipad that required coordination with a land ambulance to be transported into the hospital through the emergency department, our new rooftop helipad enables transportation directly from the platform to treatment areas within the hospital. The most critically ill and severely injured patients – who arrive from all over Ontario – have gained valuable minutes in getting to life-saving care.

The \$13.5-million helipad project was funded almost entirely by our generous donor community.

## SUNNYBROOK DEVELOPS LEADING COVID-19 EMERGENCY PROCESSES

### Pre-COVID obstetrical emergency training proves especially timely

In February 2020, eight members of the DAN Women & Babies Program team travelled to Bristol, United Kingdom to undertake PRactical Obstetric Multi-Professional Training (PROMPT), a world-renowned simulation to better prepare for obstetrical emergencies.

Little did they know, the COVID-19 crisis would put their training to the test almost immediately upon their return.

PROMPT provides teams with the practical skills and tools they need to improve teamwork, communication and facilitate emergency simulation exercises themselves. The program has been widely adopted in Europe and the US, but is still relatively new to Canada.

While the Sunnybrook team had originally planned on implementing simulation exercises for the entire birthing unit through a carefully planned full-year program, they quickly pivoted to using the PROMPT toolkit to develop COVID-19 emergency processes. For example, OB-GYN Dr. Leslie Po created an algorithm – a decision flowchart – to manage a COVID-19 positive mother who needs to have an emergency c-section under general anaesthesia. This algorithm has since been shared with other hospitals through the Southern Ontario Obstetrical Network.

“When we left the course, we all felt enthusiastic and invigorated about what we were bringing back to our team,” says Dr. Po. “We just had no idea just how perfect the timing was.”



**“Donor support will enable me to access and analyze rich data – and bring along a junior investigator to learn the ropes. This type of research makes a significant impact on women with gynaecologic cancers.”**

*- Dr. Lilian Gien, gynaecological oncologist and researcher*

## **RESEARCH TO REVOLUTIONIZE CARE**

Latest Dr. Dorothy Borsook Memorial Award winner is improving gynaecological cancer care at Sunnybrook and beyond

As a gynaecological oncologist, Dr. Lilian Gien is making a profound impact on lives as she provides comprehensive care for women with cervical, ovarian, endometrial and vulvar cancers. “I’m there with the patient throughout her journey, which is very rewarding for me,” says Dr. Gien, who was awarded the donor-funded Dr. Dorothy Borsook Memorial Award this year to pursue her other passion: practice-changing research.

An adjunct scientist at the Institute for Clinical Evaluative Sciences (ICES), Dr. Gien works to improve the quality of care for women with gynecologic cancers across Ontario. Donor support from the Borsook Award will further this important research, including Dr. Gien’s current investigation of the outcomes of women with high risk endometrial cancer. While most women with endometrial cancer have a low-grade form with typically good outcomes, those with the rarer, more aggressive form of the disease are faced with a minimal chance of survival. Determined to help these women, Dr. Gien is investigating anonymous patient records across the province to evaluate the treatment they received and how it affected their outcome.

Next, Dr. Gien will study a rare type of ovarian cancer that often affects girls and women early in their lives, between childhood and age 35. Because this form of cancer, involving germ cell tumours, is relatively rare, a comprehensive study requires a particularly large data set. “The data can be quite rich if we’re able to combine experiences from across the province over long periods of time,” says Dr. Gien. “By combining this data together, we can figure out the best ways of treating these young women and girls.” Dr. Gien is also keen to see how this form of cancer and its treatment impacts survivors over the course of their lives. “Are they able to have children? Are they likely to develop another type of cancer? If we look at data from across the province over a number of years, we should be able to see long-term outcomes and, ultimately, find ways to improve them.”

# OUR THANKS TO YOU

Thanks to you, Dr. Arthur Zaltz and his team at Sunnybrook's DAN Women & Babies Program are pushing the boundaries of what is possible in research and care. Their discoveries and innovations are saving lives and turning what was once impossible into "I'm possible" for countless families.

We thank you for your generosity, friendship and continuing support.



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