

Giving Lives Back

Revving the Innovation Engine

Imagine this.

- A computer that teaches itself how to identify potentially dangerous situations in a hospital unit and notifies a member of the staff.
- A machine that dispenses the right dose of medication at the right time of day, reminding the patient visually and with sound.
- An 'intelligent' hospital bed that helps patients get moving safely and reduces the physical stress on staff.
- A machine that 'prints' prosthetic covers matched to the personality of the wearer.
- A video screen that uses videos, music and sound effects to enable patients on an exercise bicycle to cycle 'through' familiar surroundings.

These are some of the many innovation projects currently under way at West Park. Says Jan Walker, Chief Information Officer and Vice President of Strategy and Innovation, "We're always looking for new, more effective and efficient ways to do things. Sometimes that involves technology; sometimes it's just thinking about care differently."

In recent years, the hospital has built relationships with organizations such as MaRs Discovery District, Ontario Centres of Excellence, and the Centre for Aging and Brain Health Innovation. There are currently six funded projects under way to help innovators develop or test new ideas. Tim Pauley, Manager of Research and Evaluation, says the hospital offers innovators the opportunity to develop solutions that work in the healthcare setting and address real-world problems. "That can't happen in a lab," he says. "It's important that front-line staff are continually engaged throughout field-testing to ensure new ideas and technologies translate well."

Frontline staff members are imbedded in each innovation team, helping to build a culture of innovation throughout the hospital. Walker says staff members are now coming forward with their own ideas for incorporating new technologies into care. Recently, for example, West Park invested in virtual reality equipment. "Now our staff is off and running, exploring how to use it to make care better," she says.

Walker says West Park's new hospital will inspire and support new technologies and approaches to care. "When it comes to innovation, I see no end in sight."



Amputee patient Jamoi Anderson and biomedical technologist Clara Phillips examine the fit of a new custom prosthetic cover (prototype shown in foreground) for his prosthetic that is being 3D printed at West Park. Story on page 3.

WINTER 2019

in this issue

Message from the CEO

A conversation with
Dr. Roger Goldstein

New 3D Printer

Donor event previews
new hospital

Foundation Events

MESSAGE FROM THE CEO



Joanne Cole
Chief Executive Officer
West Park Foundation

Innovation.

It's a word that means different things to different people. To me, it's the process of taking new ideas, knowledge and technologies, and turning them into meaningful change.

Innovation and its twin sister, clinical research, are central to the culture of West Park. As you'll read here, many clinicians and scientists are engaged in looking for better ways to help our patients get their lives back. New ideas and perspectives are explored. Partnerships are welcomed. Novel products and technologies are tested. Minds are open to distant horizons.

Innovation will be embodied in our beautiful building, which will incorporate state-of-the-art technologies, spaces to foster exploration and collaboration, and new ways of bringing nature into therapy.

This intellectual striving is important to our patients, residents and families. Because all research and innovation at West Park is focused on making care better, patients benefit directly from the latest advances. As donors, you play a critical role in supporting and inspiring innovation. Thank you for everything you do.

A Conversation with Dr. Roger Goldstein Chair, West Park's Research and Education Council

Q: *What kind of research is done at West Park and why is it important?*

A: The clinical research we do is tied to what West Park is all about – assisting patients with limitations to their mobility to increase exercise capacity, improve their quality of life and reduce anxiety around their condition. The cross-cutting themes behind the majority of the research are to promote mobility and community re-integration. Within this framework the three major themes are: respiratory rehabilitation, amputee rehabilitation, and spasticity treatment. Most of what we do is focused on improving care in these three areas.

Q: *How does West Park support research?*

A: One of the most important ways is by funding research champions. Meaningful contributions require considerable time and energy, and this usually means funding to support skilled and experienced scientists, who work with the clinical teams to identify questions to improve patient outcomes. The scientist also has a major role in study protocols, design, data collection and funding applications. The hospital, through the Foundation, also helps find donors and granting agencies interested in supporting clinical research.

Q: *What are some of the major projects West Park researchers are working on?*

A: In the respiratory area, one of the most exciting projects is the new approach to exercise using single leg training. We've discovered (and published) that if we train one leg at a time, we can increase a greater training load and thereby achieve greater levels of overall fitness than by conventional two-legged training. We are now exploring the use of an exoskeleton to promote mobility in patients with

lung conditions. This program is led by two senior scientists, myself and Dr. Dina Brooks. The group is also interested in understanding the sedentary behavior of patients with lung disease as well as new approaches to enhance exercise adherence such as music, balance training and dance.



The amputee research program welcomed Dr. Crystal MacKay, an established health services researcher with a clinical background in physical therapy who joined as a Scientist in September. The position was funded by a generous donor through the West Park Foundation. A major emphasis is the growing interest in outcomes of health and quality of life following an amputation. The team is developing survey information to include patient interviews and health administrative data, in order to inform the treating team on the perspectives of people living with limb loss.

The spasticity area continues to be strong in clinical care, teaching and research. It is known for its cross-country educational collaborations to bring the latest developments to the clinical community. Dr. Chetan Phadke, our Spasticity Scientist, has been working closely with Drs. Chris Boulias and Farooq Ismail to expand spasticity research in the use of botulinum toxin to treat a variety of neuro-muscular conditions. In addition, their research in the treatment of patients with spasticity who also require blood thinners is helping to shape practice around the world through a Canadian Spasticity Collaboration.

Here's your chance to play with the pros!

Basketball enthusiasts will hit the courts once again on March 29–30 in the Tournament of Stars presented by Raymond James.

The 3rd annual celebrity basketball event in support of West Park will feature alumni from the Toronto Raptors and other NBA teams including Jerome 'Junk Yard Dog' Williams, Mo Peterson, Alvin Williams, Tracy Murray and Charlie Villanueva.

Team West Park, with former amputee patient Jamoi Anderson leading a team of physicians and staff, will compete against teams that include TD, Raymond James, Solutions With Impact, the Toronto Star, Fifth Third Bank, Dream and LBBW, and more.

The event gets underway the evening of the 29th with the Celebrity Draft Party, during which teams will have the

chance to draft their celebrity teammate and plan their game strategy. The more money a team raises, the higher they will place in the draft.

Tip-off is at the University of Toronto's Goldring Centre for High Performance Sport on Saturday, March 29 where the excitement will build from the moment the games get underway. The Tournament of Stars will be a family-friendly day of fun and excitement, with great food, a team photo takeaway and silent auction.

Visit westparktournamentofstars.ca to learn more about how you can participate in the Tournament of Stars and support West Park! Register a team, purchase game day tickets to cheer on your favourite team or donate to a team or individual player.

See you courtside!



Print This!

Ten years ago, Jamoi Anderson lost his leg after a serious viral infection. After his recovery, he was determined to continue his active life. He won a bronze medal in sitting volleyball at the Parapan Am Games in Toronto in 2015, and captains the West Park team at the Tournament of Stars basketball fundraiser each March.

This year, Anderson will hit the courts with a whole new look – a prosthetic cover designed by an artist to reflect his passion for the game, and 3D printed at West Park.

Biomedical technologist Clara Phillips explains that 3D printing is an additive manufacturing process, with the printer adding layer after layer of material to form a computer-designed three-dimensional object. It's ideal, she says, for creating low-volume customized pieces with complex shapes. At West Park, 3D printing has been used to make custom fixtures for patients in the Augmentative and Alternative Communication Clinic, and other items.

The prosthetic cover project is something new. Prosthetic covers typically echo the contours of a natural leg but are often printed with bold designs – more fashion statement than trompe d'oeil.

"Usually prosthetics look very mechanical, almost robotic," says Phillips. "Prosthetic covers help amputees embrace their prosthetics, feel good about the way they look, and also express themselves through the design."

Naturally Anderson's cover has a basketball theme, with sleek lines, dark colors, arched grooves, and even a dimple texture.

"From the beginning of this journey, my goal was to get back on the basketball court," says Anderson. "The cover represents the whole journey and the connection I have to basketball."

Prosthetic covers are only the beginning, Phillips says. "There's a lot of research going into larger printers

that can handle more durable and flexible materials," she says. "I see 3D printing having a real impact in the Prosthetics and Orthotics Service in the future."

DRIVE AWAY A WINNER!

EARLY BIRD DRAW - Feb 28, 2019
GRAND PRIZE DRAW - Mar 30, 2019



GET YOUR TICKETS AT
WESTPARKLOTTERY.CA

FOUNDATION EVENTS

UNCORK UNTAP UNWIND 2018

More than 300 people danced the night away to music by The Collective, enjoyed fabulous culinary creations by Food Dudes and soaked up amazing panoramic views of the Toronto skyline from the top floor of The Globe and Mail Centre on November 1st at UNCORK UNTAP UNWIND.

Thank you to everyone who joined us at the event. With your help, we raised \$230,000 in gross revenue! Special thanks to Event Chair Sue Armstrong and committee members Lisa Allain, Katherine Jones, Kim Marshall and Sunil Sharma for their hard work and dedication to making the event a success.

Mark your calendars for the next UNCORK UNTAP UNWIND on November 7, 2019 at the Globe and Mail Centre.



Joanne Cole, Sue Armstrong and Anne-Marie Malek at UNCORK 2018.

Thank you to our generous sponsors:

Visionary


**Champion
(Presenting
Sponsor)**



Builder
Enercare

Benefactors

*Medical
Pharmacies*

TD

Partners

Fasken Martineau

*West Park
Healthcare Centre*

An Insider's Look at the New West Park

More than 50 members of the West Park donor community were treated to an 'insider's look' at the new hospital at an event hosted by West Park Foundation on November 28.

Representatives from EllisDon Infrastructure Healthcare – the consortium chosen to design, build, finance and maintain the new facility – took the audience through plans for the hospital and grounds, and the evidence-based features that will improve the care experience for patients and families.

Following a decade of planning and consultation, in October West Park celebrated the launch of the construction phase of the development with a groundbreaking ceremony attended by the Premier and Infrastructure Minister as well as former and current patients, donors, volunteers, physicians and staff.

The new hospital, which will open its doors in 2023, will include 20% more beds and will double the space for outpatient clinics, helping West Park to meet the rising demand for its services. West Park Foundation has launched the ambitious \$80 million *Get Your Life Back Campaign* to support the capital costs of the new hospital.

If you are interested in learning more about the new West Park, please contact us at foundation@westpark.org and keep an eye out for news and invitations to other 'insider' events.



Foundation board member Paul Collings, Linda Tickins and Barb Collings review the model of the West Park development.



Charitable Business Number: 11929 5350 RR0001
www.westpark.org/foundation

 West Park Healthcare Centre Foundation
 @westparkfdn

82 Buttonwood Ave.
Toronto, ON M6M 2J5
tel 416.243.3698
fax 416.243.8947

PRIVACY STATEMENT – "West Park Healthcare Centre Foundation considers your privacy a priority. We do not rent, sell or trade your information. Your personal information will be used to provide you with information about how your gift is used and updates on West Park Healthcare Centre."