In the infinite game of healthcare, the goal should be to evolve and adapt so that the game can continue. As providers of this service, we must strive to change—or hold firm—as the circumstances dictate.

People are now living longer and are being diagnosed with more complex issues, yet the technology to treat and care for our healthcare users, although available, has not found its way to the users. From deciphering the genome to the arrival of new digital innovators and the digitization of almost everything in our day-to-day lives, it’s clear that new ways of living, working, playing, and connecting are here to stay. So why not new ways of managing and improving our health? If we don’t embrace the arrival of digital, we risk healthcare being left behind in this revolution, missing a massive opportunity to transform ourselves in the process.

For this reason, as CEO, I’m determined to ensure we can find better ways of providing personalized care—at the right time and place—to those who need it. This mission was the prime motivation for creating OROT, our Connected Health Innovation Hub. Over the last three years, OROT has helped our organization leap forward towards the future where user-centric technology is assisting clinicians to provide more and better care with improved results to patients who are empowered to take charge of their health.

There’s still a lot of work to be done, and we don’t yet have all of the answers. But here’s one statement I can make with complete confidence: true to its name, which signifies illumination in Hebrew, we look to OROT to cast a light down the right path.

Lawrence Rosenberg, MD, CM, MSc, PhD, MEng, FRCSC, FACS, FCAHS
Président-Directeur général | President & CEO
As I reflect upon OROT’s endeavors throughout 2023, I am filled with immense pride and gratitude for the collective spirit that defines our dynamic community. This year has been a testament to resilience, ingenuity, agility, continuous learning, innovation, and unwavering commitment to our mission.

Our shared dedication to pushing the boundaries of what is possible in healthcare and social services has yielded remarkable accomplishments. From groundbreaking co-development initiatives, backed by user research and design and futures foresight specialists for the first time in healthcare setting, to pioneering solutions that enhance the well-being of our citizens, every achievement is a testament to the passion and expertise that define OROT.

Throughout this report, we will explore the transformative impact of our initiatives, the strides we have taken in fulfilling our mandate, and the positive influence we continue to exert on the landscape of healthcare innovation. Our collaborative efforts have not only shaped the narrative of OROT but have set the stage for even greater advancements in the future.

I invite you to celebrate with us our collective successes, learn from the challenges, and envision a future where OROT’s influence extends far beyond our immediate community, making a lasting and positive impact on healthcare and social services worldwide.

Here’s to another year of achievements and growth, and a future filled with limitless possibilities.

Danina Kapetanovic, MSc
Chief Innovation Officer | Innovatrice-en-chef
Head of OROT | Dirigeante d’OROT
As one of the first initiatives of its kind in a healthcare setting in Quebec, OROT has been strengthening the CIUSSS West Central Montreal's culture of innovation, helping the institution re-imagine the future of care, while revolutionizing the way medical and healthcare technologies are developed.

Under OROT's supervision, healthcare professionals meet with users and private-sector entrepreneurs to closely examine particular needs or problems, and then develop practical solutions that often involve digital technology. Together, they co-develop prototypes, accelerate the commercialization of products and, ultimately, integrate new items or practices into daily activities at the appropriate CIUSSS sites.

Despite only being in existence for three years, OROT has come a long way since it took the spotlight in 2020 as the Connected Health Incubator of CIUSSS West-Central Montreal. OROT's rapid expansion and demonstrable impact has been recognized having been nominated as a finalist for the prestigious Prix Galien Award 2023. in category, "Best Incubators, Accelerators and Equity,"

This nomination acknowledges the role OROT plays in guiding the next wave of innovators to advance digital health innovation. It also emboldens us to keep going in pursuit of a future where care is provided at the right time to the right patient with most optimal outcome.
Research and best practice demonstrate that the diffusion of innovation begins with knowledge. OROT’s Community of Practice and Interest in Innovation (COPII) is a venue for CIUSS West Central Montreal created with this purpose in mind.

The COPII expanded this year to include a Teams group where members can keep the conversation flowing following the monthly webinars. This new platform also allows members to access the COPII Sharepoint more easily, where they can watch recordings of previous sessions and read and share insightful articles addressing a multitude of innovation topics in healthcare.

The 2023 COPII webinars saw topics across immersive health, generative AI, robotics in healthcare, explainable AI, and open innovation. To further inspire innovative programs led by our colleagues, the COPII also acts as a place to showcase innovative programs happening across the CIUSSS.

In 2024, we are looking forward to continuously growing our audience and are planning a program with the aim of making cutting edge innovation and technology easy to understand and apply for all our colleagues across the CIUSSS.
Collaboration and co-creation are a part of the DNA at OROT, because we know that innovation will only be successful when solutions are used and adopted.

This past year we have led a range of projects that have deeply involved key stakeholders across the CIUSSS to ensure that new solutions, services, and technologies align with their current needs and future visions of improved care.

We have done this by utilizing a range of methods across our toolkit that promote human-centricity at all stages of the design process. In each case, bringing together stakeholders from both our CIUSSS and private partners has allowed us to benefit from involving diverse perspectives, aligning on a shared goal and vision, and increasing the odds of successful innovation adoption.

**A FEW EXAMPLES**

**IVADO Labs: Improving supply chain efficiency with AI**
Partnering with IVADO Labs for their AI expertise, and the Direction de la logistique et de l’approvisionnement, we ran ethnographic research and workshops with over 15 stakeholders to map out the complexity, needs, and areas within logistics where AI can bring value. In early 2024, we plan to continue design workshops so that IVADO can design and pilot an AI tool that will make Logistics at the CIUSSS more accurate, cost-effective, efficient, and proactive.

**Braver: Accelerating therapy transfer for better patient outcomes**
Working with the Direction de la réadaptation et des services multidisciplinaires (DRSM), the Lethbridge-MacKay Center (LMC), and private partner Braver, we ran ethnographic research and workshops with therapists and parents to determine how the Braver app can be integrated in order to accelerate the process of therapy transfer to improve patient outcomes. Thanks to the results of this co-creation effort, the LMC will pilot the application with 30 families in early 2024.
How do we build healthcare systems that are future-proof? Strategic foresight methods help us consider how trends shaping healthcare will affect the way that services must adapt in order to be resilient to and thrive in change. This year, we facilitated two major cross-functional workshops to lead CIUSSS CCOMTL directorates through the process of future backcasting, equipping them to anticipate and get excited about leading healthcare transformation.

**The Future of Primary Care: Health readiness for the next generation**
Partnering with the Direction des services intégrés de la première ligne (DISPL) and Deloitte Health Futurist Zayna Khayat, we brought together over 30 representatives to reimagine and align on a vision for the ideal future of primary care services and facilities. We emerged with scenarios and prototypes that evoke a future where care is personalized, embedded within the community, patient-centric, intuitive, proactive, and where health professionals are empowered to adequately address the population’s needs. In 2024, we will continue collaborating with DISPL to advance these visions into strategic innovation projects for both services and physical space that can be acted on over the next 3-5 years and beyond.

**Smart & Immersive Library: The evolution of research, training, and the employee experience**
Collaborating with the Direction des affaires académiques et éthique de la recherche, we designed and facilitated a workshop that involved 20 people across 8 CIUSSS directorates to imagine how immersive technologies might bring value to their needs and missions. After brainstorming and developing prototypes, we emerged with a range of scenarios where immersive technologies could be used to improve staff engagement and retention, grow practitioner empathy and soft skills, and make training standardized and more efficient, among others. In 2024, we plan to take these findings and prioritize directorate pilot programs for the Smart and Immersive Library.
08 TECHNOLOGY CO-DEVELOPMENT AND INTEGRATION

MORE THAN 30 PROJECTS UNDER DEVELOPMENT IN THESE AREAS:

- Virtual care and point of care: acute care, chronic care, mental health, and rehabilitation
- Long-term care
- Dementia prevention
- Precision medicine
- Optimisation of workflows and operations

ONGOING PROJECTS

- **Braver**
  - Co-development and iterative testing of the rehabilitation therapy transfer solution
- **Nosotech**
  - Co-development and iterative testing of an AI algorithm for alerts of hand hygiene compliance rates
- **Gravity Rehabilitation**
  - Co-development and iterative testing of a tool to help with training and use of motorised wheelchairs
- **IVADO Labs**
  - Co-development and iterative testing of an AI algorithm and tool to estimate and optimise supply and distribution of items in care units
- **Greybox**
  - Co-development and iterative testing of the chronic disease and multi-condition patient engagement and management system
- **Novartis**
  - Multi phase project aiming to create AI mechanism for detection of patients at risk for developing cardio-vascular diseases in order to optimise treatment and improve outcomes
- **Gray**
  - Implementation of the oncology care optimisation solution
- **Vitrai**
  - Deployment and testing of an AI solution in support of regional 811 service
09 FINANCIAL RESULTS

Although an integral part of CIUSSS West-Central Montreal, OROT is an entirely self-funded initiative. Its main sources of income are from federal, provincial and municipal grants, as well as from our service offer, which is a for-fee service offered by OROT.

VALUE OF CONTRACTS SIGNED FOR OROT’S SERVICES

$282,438

GRANTS RECEIVED SUPPORTING OROT OPERATIONS

$37,500

ITMT

$375,000

MEDTEQ/MEIE/MSSS (REIS)
Our work is interdisciplinary by nature and would be impossible without our collaborators. From clinicians to administrative staff, external experts and government partners, we thank them for wanting to work with us to improve healthcare.

This year, we would like to spotlight our bright research partners, who are crucial in the validation and evaluation processes, as well as some of our administrative and clinical champions who selflessly continue and mobilise teams and resources in order to move innovation initiatives forward:

- **Dr. Yves Longtin and Phil Troy, Ph.D.,** – hand hygiene compliance project with Nosotech
- **Emily Lecker** - therapy transfer project with Braver and motorised wheelchair training simulation game
- **Sara Ahmed, Ph.D.,** – impact and value evaluation of the therapy transfer project with Braver
- **Audrey Benarosh, Helene Maher, Anouk Azuelos and Amal Onkoud** - AI engine for optimization of CIUSSS’ purchasing mechanism.
- **Dr. Jonathan Afilalo** – cardiology risk project with Novartis
- **Karine Le Page and Jacques Laporte** - financing, integration and deployment of Gray platform for optimization of scheduling in oncology clinic.

Special thanks to our external partner, **Zayna Khayat, Ph.D.,** health futurist with Deloitte Canada, who graciously donated her time and expertise to facilitate our first Primary Care of the Future workshop.
11 PUBLIC ENGAGEMENT

- Interview for the Podcast: “MonCarnet.com”
- Interview for the Montrealer
- Co-organised and participated as panelist in Digital Health Canada Montreal Breakfast
- Member of Axelys’ Advisory Board on Scientific Entrepreneurship
- Engagement with the REIS network
- Engagement with the Réseau de répondants en innovation
- Participation in:
  - DTX Europe
  - Effervescence 2023
  - ACFAS 2023
  - Galien Innovation Forum 2023
- Galien Prix Panelist: “Role of Incubator in healthcare innovation”.
- Feature in Quebec Innovation book
- Member of the jury: NEXT French Healthcare startup competition
- Business expedition to Paris healthcare innovation ecosystem organized by NEXT French Healthcare and Business France.
- Deep Tech Canada 2023 Keynote Speech: "The future of care is "Care Everywhere"
- Collaborated on “Sociotechnical Framework to Assess Patient-Facing eHealth Tools” published in NPJ Digital Medicine
- Featured in the white paper” “De l’idée à la réalité : Comment mettre en place une cellule d’innovation à l’hôpital” by COSI, Belgium
We would like to thank the clinical and administrative teams for their commitment to innovation despite the challenges.

Our heartfelt thanks to Quebec companies for their trust and collaboration; and to Le ministère de l’Économie, de l’Innovation et de l’Énergie, le Ministère de la Santé et des Services sociaux, MEDTEQ+, and Institute TransMedTech for their financial support allowing the smooth functioning of OROT.

Special thanks to our founding partner, the Jewish General Hospital Foundation, for their continued support.