

# Join HOpeR: A Unique Graduate School in Healthcare Optimization

Are you a researcher or student passionate about healthcare systems and operational research? HOpeR (Healthcare Operational Research graduate school) invites you to an unparalleled educational experience that bridges academic knowledge, research and real-world applications.

## What is HOpeR?

HOpeR is the first graduate school in healthcare optimization in the Americas, co-created by researchers in Optimisation and Healthcare from Colombia and Canada. Over the course of the program, Graduate Students (Advance MSc and PhD), research fellows and professors from diverse fields collaborate in an interdisciplinary environment, exploring innovative solutions to complex challenges in healthcare systems. HOpeR's second edition will take place at Université du Québec à Montréal (UQAM) (Montreal, Canada) from May 26 to May 30, 2025.

#### Objective

HOpeR aims to provide **advanced training** in formulating models and developing solution approaches for healthcare problems using cutting-edge methodologies. It also seeks to foster impactful research in operational research, especially among young researchers and healthcare managers.

#### **Key Activities in HOpeR 2025**

To achieve these objectives, HOpeR 2025 will offer:

- Talks and workshops by experts on foundational and advanced topics in operational research, machine learning, and healthcare systems optimization.
- Implementation Challenges: Discussions on practical challenges and strategies to engage stakeholders throughout the research process.
- Hackathon Session: Collaborative event where participants come together to solve real-world challenges through creativity, teamwork, and innovative solutions.
- **#ThisIsMyResearch Session:** Short presentations by participants, where they'll receive feedback from experts, peers, and healthcare professionals on their current projects.
- **Serious Game:** Interactive activities to enhance learning and collaboration.
- **Dinner & Networking:** We will host a special networking evening designed to bring students, professors and practitioners together in an engaging environment. This event serves as a platform for networking, mentorship, and even recruitment, fostering valuable interactions between students, academics, and industry professionals in a relaxed and dynamic setting.



#### **Meet the Experts**

HOpeR 2025 will feature distinguished professors from leading universities, sharing their expertise and insights to guide participants in healthcare optimization. These renowned speakers bring a wealth of knowledge to the event:

Angel Ruiz	Université Laval, Canada	Optimization, Simulation, Supply Chain
Dionne Aleman	University of Toronto, Canada	Mathematical Optimization, Disaster Management, Resource Allocation
Peter Vanberkel	Dalhousie University, Canada	Patient Flow, Queuing Theory, Healthcare Delivery
Mariel Lavieri	University of Michigan, USA	Chronic Disease, Dynamic Programming, Personalized Care
Beste Kucukyazici	Queen's University, Canada	Markov Processes, Game Theory, Collaborative Healthcare

Take advantage of this unique opportunity to learn from and interact with these world-class experts in healthcare systems and operational research. Discover more about their backgrounds and expertise by visiting <a href="https://www.hoper-school.com">www.hoper-school.com</a>.

## A Look Back at HOpeR 2022

The inaugural HOpeR, hosted in Bogotá, Colombia, brought together over 30 participants, including 23 MSc and PhD students from various countries and seven healthcare managers. The event featured engaging discussions on critical topics such as hospital capacity planning, home healthcare operations, and machine learning methodologies. Highlights included a hackathon challenge and insightful participant research presentations, which promoted collaboration, knowledge sharing, and practical problem-solving.

For an in-depth look at the event, explore pages 43-44 of the IFORS Newsletter (March 2023): Read the full article.

## Why Participate?

- Collaborate with leading researchers and peers from around the globe.
- Build a network of professionals working at the intersection of operational research, analytics and healthcare.
- Present your work in a pitch session, with constructive feedback from speakers, participants, and healthcare professionals.
- Apply your expertise to pressing healthcare issues while advancing your knowledge in optimization and systems analysis.



## Who Should Apply?

Young researchers, post-doctoral fellows, qualified MSc and PhD students, and both academic and healthcare professionals are invited to participate.

## How to Apply

To participate in HOpeR 2025, students are required to submit the following:

- Curriculum Vitae (CV): Highlighting your academic and professional background.
- **Abstract (300 words)** *(optional)*: This abstract will serve as your entry for the **#ThislsMyResearch** session. If accepted, you will present your work during the session and receive valuable feedback from experts, peers, and healthcare professionals.

#### **Important Dates**

Abstract and CV submission deadline: February 28, 2025

Notification of acceptance: March 14, 2025

• Registration deadline: May 1, 2025

Registration Fees – Students and Researchers (Canadian and International)

Registration Options	Price (CAD)	
Full Event (5 days)	\$400	
Includes: Access to all conferences, workshops, Hackathon and Dinner & Networking	7.00	

#### Get Involved!

Encourage your students to apply or join us yourself for this transformative opportunity to innovate and impact healthcare.

For additional information and application details, please contact us at <a href="mailto:ortmann.janosch@uqam.ca">ortmann.janosch@uqam.ca</a> or visit <a href="mailto:https://www.hoper-school.com/">https://www.hoper-school.com/</a>.

Let's shape the future of healthcare together at HOpeR!