

# The Canadian Operational Research Society presents the Canadian Healthcare Optimization Workshop

Sunday, May 26, 2019 www.cors2019.ca/chow

#### **PROGRAM**

The Health Care Operational Research Special Interest Group (HCOR SIG) of the Canadian Operational Research Society (CORS) is pleased to offer the 3rd annual Canadian Healthcare Optimization Workshop.

This workshop promotes the research of young scholars and provides a forum for researchers with a common interest in healthcare optimization to share the latest advances with other researchers and practitioners in the field. The workshop also connects researchers with practitioners to discuss innovative solutions and best practices that help improve the effectiveness of the healthcare system.

#### KEYNOTE PRESENTATION:

#### "Top five challenges of modelling in healthcare"

Michael Carter Centre for Healthcare Engineering Mechanical and Industrial Engineering

The operations research problems in the healthcare industry are generally very similar to corresponding problems in any other sector. Hospitals have staffing issues, budget constraints, purchasing decisions, scheduling, planning, etc. The differences are subtle and often related to the culture. Over the years, I have encountered many challenges and I have been able to design approaches to deal with many of them. A few years ago, I was asked to pick the five top challenges. I can easily rattle off 30, but selecting five was itself a challenge. In this talk, I will outline my perception of the major hurdles, provide a few examples and discuss some strategies for overcoming them.

#### **PROGRAM**

8:00 AM – 8:20 AM	Registration and Networking
8:20 AM – 8:30 AM	Welcome
8:30 AM – 9:15 AM	Technical Session: Model Fitting in Generalized Inverse Linear Optimization:
	Applications in Radiation Therapy (Rafid Mahmood, University of Toronto)
9:15 – 10:00	Technical Session: New Decomposition Methods for Home Care Scheduling with
	Predefined Visits (Florian Grenouilleau, École Polytechnique de Montréal)
10:00 - 10:30	Health Break
10:30 – 11:15	Technical Session: Dynamic Multi-Assessment Scheduling for Patient-Centered
	Care Plans (Adam Diamant, York University)
11:15 – 12:00	Technical Session: Robust Direct Aperture Optimization for Radiation Therapy
	Treatment Planning (Danielle A. Ripsman, University of Waterloo)
12:00 - 13:00	Lunch
13:00 – 14:00	Keynote: Top five challenges of modelling in healthcare (Michael Cater,
	University of Toronto)
14:00 – 14:45	Technical Session: Scheduling of Physicians with Time-Varying
	<b>Productivity Levels in Emergency Departments</b> (Marco Bijvank, University of
	Calgary)
14:45 – 15:15	Health Break
15:15 – 16:00	Technical Session: The Trade Off between Forecast Accuracy and Spatiotemporal
	Resolution for EMS Call Volumes (Mostafa Rezaei, University of Alberta)
16:00 – 16:45	Technical Session: Resource Planning for Chemotherapy Service Delivery under
	Uncertain Patient Mix and Rising Volume (Sudipendra Nath Roy, Western
	University)
16:45 - 17:30	Roundtable Discussion
18:00 – 19:30	Reception

### REGISTER

# www.cors2019.ca/chow

\$100.00 until May 25th, 2019 / \$125.00 after May 26th, 2019

#### DATE & LOCATION

Sunday, May 26, 2019 - Delta Hotel Bessborough, Saskatoon, Saskatchewan

### FOR MORE INFORMATION

General Information: <a href="mailto:CHOW.CORS.2019@gmail.com">CHOW.CORS.2019@gmail.com</a>

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