
CURRICULUM VITAE

BESTE KUCUKYAZICI

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Kingston, Ontario 48864

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Google Scholar Page: <https://scholar.google.com/citations?user=1e1-w3MAAAAJ&hl=en&oi=ao>

RESEARCH INTERESTS

Context: Data-driven practice-focused research with a particular emphasis on healthcare analytics and socially responsible supply chains.

Methodology: Data Analytics, Stochastic modeling, Dynamic programming, Simulation, Econometric Modeling, Machine Learning.

ACADEMIC & PROFESSIONAL EXPERIENCE

- * Associate Professor, Smith School of Business, Queen's University, 2023- Present
Lead, Healthcare Analytics Initiative, Smith School of Business

Leading the creation of a new research endeavor, the Healthcare Analytics Initiative, under the Analytics Ecosystem of Smith Business School. Major responsibilities include establishing research connections and collaborations within Queen's and beyond; leading major grant applications; designing new courses and capstone projects for Master of Management in Analytics, Master of Management in Artificial Intelligence, and MBA programs, introduction of international conference and webinar series.

- * Adjunct Assistant Professor, Smith School of Business, Queen's University, 2022- 2023
Lead, Healthcare Analytics Initiative, Smith School of Business
- * Assistant Professor, Department of Accounting & Information Systems, Eli Broad College of Business, Michigan State University, 2019-2022
- * MD-MBA Program Director, *McGill University*, 2016 – 2019
Co-Chair (Management), Working group for the design and launch of graduate certificate program on healthcare management (jointly with McGill's Faculty of Medicine). (<https://www.mcgill.ca/desautels/programs/gchm>)
- * Faculty Fellow, Marcel Desautels Institute for Integrated Mgmt., *McGill University*, 2013-2015
- * Assistant Professor, Operations Management, *McGill University*, 2012 – 2019.¹
- * Research Associate, *St. Mary's Hospital Research Center*, 2012- 2019

¹ On prenatal medical leave from November 2014 to August 2015 and maternity leave from August 2015 to August 2016.

- * Research Affiliate, Center for Transportation and Logistics, *The Massachusetts Institute of Technology (MIT)*, 2009 – 2019
- * Professor of Supply Chain Management, *MIT-Zaragoza International Logistics Program*, 2009 – 2012
- * Visiting Scholar, Decision, Risk and Operations Division, *Columbia Business School*, 2008-2009

EDUCATIONAL BACKGROUND

- * Ph.D. in *Operations Management*, 2010
McGill University
- * *CIHR Health Informatics PhD/Postdoc Strategic Training Program*, 2007
McGill University

REFEREED JOURNAL PAPERS

- [J1] Abitbol J., Kucukyazici B., Brin S., Lau S., Salvador S., Ramanakumar A.V., Kessous R., Kogan L., Fletcher J.D., Pare-Miron v., Liu G., Gotlieb W.H. Impact of Robotic Surgery for Ovarian Cancer on In-Hospital and Post-Discharge Patient Trajectories and Resource Use Intensity *Journal of Robotic Surgery*, 2023, 17(2):537-547.
- [J2] Ardestani-Jaafari A. and Kucukyazici B. Improving Patient Transfer Protocols for Regional Stroke Networks. *Management Science*, 2022, 68(9): Pages 6355-7064
- [J3] Fainman E.Z. and Kucukyazici B. Design of Financial Incentives and Payment Schemes in Healthcare Systems. *Socio-Economic Planning Sciences*; 2020, 72(12), 100901
- [J4] Kucukyazici B., Zhang Y., Ardestani-Jaafari A and Song L. Incorporating Patient Preferences in the Design and Operation of Cancer Screening Facility Networks. *European Journal of Operational Research*, 2020, 287(2): 616-632.
- [J5] Abitbol J., Munir A., How J., Lau S., Salvador S., Kogan L., Kessous R., Breitner L., Frank R., Kucukyazici B., Gotlieb W.H. The Shifting Trends Towards a Robotic-Assisted Surgical Interface: Clinical and Financial Implications. *Health Policy and Technology*, 2020, 9(2): 157-165.
- [J6] Zhu C., Kucukyazici B. and Maizi Y. Designing Observation Units for Heart Failure Patients: Capacity and Patient Flow Considerations. *Service Science*, 2019, 12(1): 8-25.
- [J7] Chen W., Kucukyazici B. and Saenz M.J. Redesign of Extended Producer Responsibility and Its Impact on the OEM's Recovery Strategies. *International Journal of Production Economics*, 2019, 218: 228-244
- [J8] Abitbol J., Gotlieb W., Zeng X., Ramanakumar A.V., Kessous R., Kogan L., Pare-Miron V., Rombaldi M., Salvador S., Kucukyazici B., Brin S., How J., Lau S. Incorporating robotic surgery into the management of ovarian cancer after neoadjuvant chemotherapy. *International Journal of Gynecological Cancer*, 2019, 29: 1341-1347.
Lead Article chosen by the Editor
- [J9] Samiedaluie S., Kucukyazici B., Verter V. and Zhang D. Managing Patient Admissions in a Neurology Ward, *Operations Research*, 2017, 65(3): 635–656.

- [J10] Ibrahim R., Kucukyazici B., Verter V., Gendreau M. and Blostein M. Designing Individualized Treatment: An Application to Anticoagulation Therapy, *Production and Operations Management*, 2016, 25(5): 902-918.
Selected as one of the 8 papers to be presented in Healthcare Operations Management SIG Meeting of MSOM Annual Conference, Fontainebleau, 2013.
- [J11] Chen W., Kucukyazici B., Verter V. and Saenz M.J. Supply Chain Design for Unlocking the Value of Remanufacturing Under Uncertainty, *European Journal of Operational Research*, 2015, 247(3): 804-819
Selected as one of the 8 papers to be presented in Sustainable Operations SIG Meeting of MSOM Annual Conference, Seattle, 2014
- [J12] Kucukyazici B., Verter V. and Mayo N. An Analytical Framework for Designing Community-Based Care Delivery Processes for Chronic Diseases. *Production Operations Management*, 2011, 20(3): 474-488
- [J13] Kucukyazici B., Verter V., Nadeau L. and Mayo N. Improving Post-Stroke Health Outcomes: Can Facilitated Care Help? *Health Policy*, 2009, 93: 180-187
- [J14] Kucukyazici B., Ozdamar L. and Pokharel, S. Developing concurrent investment plans for power generation and transmission. *European Journal of Operational Research*, 2005, 166(2): 449-468
- [J15] Verter V., Kucukyazici B. and Mayo N. On the Significance of Reducing the Need for Stroke Patients to Visit the Emergency Department. *Clinical and Investigative Medicine Journal*, 2005, 23(6): 371-375
- [J16] Ozdamar L., Ekinci E., and Kucukyazici B. Emergency Logistics Planning in Natural Disasters. *Annals of Operations Research*, 2004, 129: 217-245

PAPERS IN REVIEW/UNDER REVISION

- [Js1] Hosseinpour P., Kucukyazici B. and Verter V. Nurse Workload Balancing Using Real-Time Location Data
- [Js2] Hejazian, H., Kucukyazici B., Nasiry J., Verter V., and Frank D. The Impact of Hospital and Patient Characteristics on Psychiatry Readmissions
- [Js3] Zhu C., Kucukyazici B. and Wu T. On Reducing the Medically Unnecessary Cesarean Deliveries: The Design of Payment Models for Maternity Care

WORKING PAPERS

- [W1] Designing Specialist Response Policies in Emergency Departments; with Zhu C. and Sun Z.
- [W2] Jalali Z., Kucukyazici B. and Gumus M. The Spillover Effect of Boarding Congestion on Emergency Departments
- [W3] Design of Stroke Network for Rural Areas: Optimal Integration of Tele-Stroke; with A. Ardestani-Jaafari and P. Hosseinpour
- [W4] Higher the Workload Higher the Resource Use? The Impact of Physician Workload on Referral, Imaging and Test Requests in Emergency Departments; with E. Belzei and R. Mah.

- [W5] Managing Regional Hospital Resources Amid Pandemics for Improving Health Outcomes; with A. Nair, A. Georghiou, B. Naderi and V. Verter.

REFEREED BOOK CHAPTERS

- [B1] Kucukyazici B. and V. Verter, Managing Community-based Care for Chronic Diseases: The Quantitative Approach, In G.S. Zaric (Ed.), *Operations Research and Health Care Policy*, Springer Publishers, New York, 2013: 71-90.
- [B2] Konrad R., Kucukyazici B. and Lawley M. Using Patient Flows to Examine Hospital Operations. *Management Engineering for Effective Healthcare Delivery: Principles and Applications*; edited by Alexander Kolker and Pierce Story, IGI Global, 2011: 402-417.
- [B3] Kucukyazici B., Keshavjee K., Bosomworth J., Copen J., Lai J. Best Practices for Implementing Electronic Health Records and Information Systems. *The Human and Social Side of Health Information Systems*, edited by Dr. Andre W. Kushniruk and Prof. Elizabeth Borycki, Idea Group Publishing, PA; 2008; pp. 120-138.

WORK-IN-PROGRESS PAPERS²

- [WIP1] Design of Inter-hospital Transfer Policies for Regional Stroke Networks
- [WIP2] Developing machine learning models for predicting emergency department re-admissions
- [WIP3] Identification of patient pathways in emergency departments and hospitals
- [WIP4] Designing Optimal Therapy for Stroke Prevention from Atrial Fibrillation.

REFEREED CONFERENCE PROCEEDINGS

- [CP1] Maizi, Y., Zhu, C. and Kucukyazici, B., 2018, March. Policy Evaluation of a Potential Observation Unit (OU) for Acute Decompensated Heart Failure (ADHF) Patients. *International Journal of Qualitative Methods*, 17(1): 31
- [CP2] Chen W., Kucukyazici B., Verter V and Saenz M.J. The Impact of Uncertainty on Recovery Strategies: A Realistic Case Study, *Manufacturing & Service Operations Management Annual Conference*, France, 2013
- [CP3] Kucukyazici B., Chen W. and Verter V. The Impact of Uncertainty on Closed-Loop Supply Chains. *Proceedings of 5th International Workshop on Freight Transportation and Logistics ODYSSEUS*, 2012
- [CP4] Kucukyazici B., Green G. and Verter V. Improving Stroke Outcomes through Operational Policies. *MSOM Annual Conference*, Haifa, 2010.
(Selected as one of the 6 out of 33 papers to be presented in the Healthcare Operations Management Special Interest Group Meeting of Manufacturing & Service Operations Management)
- [CP5] Kucukyazici B., Verter V., and Blostein M. Clinical Decision Making from Prevention of Stroke from Atrial Fibrillation. *Proceedings of 32nd Annual Meeting of the Society for Medical Decision Making*, Toronto, 2010.
(Selected for oral presentation where the acceptance rate is around 15%)

² The titles of the papers are tentative.

- [CP6] Khananian A., Kucukyazici B. and Verter V. Dealing with unscheduled patients in an outpatient clinic: a simulation modeling approach. *McGill Journal of Medicine*, 2008, 11(1).
- [CP7] Keshavjee K., Bosomworth J., Copen J., Kucukyazici B., Lai J., Lilani R., Holbrook AM. How to Successfully Implement an EMR in Small Clinics using Best Practices from a Systematic Review. *Proceedings of Information Technology and Communications in Health (ITCH)*; 2007: 328-338
- [CP8] Keshavjee K., Bosomworth J., Copen J., Kucukyazici B., Lai J., Lilani R., and Holbrook AM. Development of a Multi-Theoretical Electronic Medical Record Implementation Framework. *E-Health Conference*, Quebec City, 2007
- [CP9] Keshavjee K., Bosomworth J., Copen J., Kucukyazici B., Lai J., Lilani R., Holbrook AM. EMR Implementation Best Practices: A Systematic Review. *American Medical Informatics Association (AMIA) Symposium Proceedings*, 2006: 982.
- [CP10] Keshavjee K., Bosomworth J., Copen J., Kucukyazici B., Lai J., Lilani R., and Holbrook AM. Implementation of Electronic Medical Records in Small Family Physician Practices. *CHPSTP Workshop*, Calgary, 2006
- [CP11] Keshavjee K., Bosomworth J., Copen J., Kucukyazici B., Lai J., Lilani R., Holbrook AM. Best Practices in EMR Implementation: A Systematic Review. *The Eleventh International Symposium on Health Information Management Research (iSHIMR)*; 2006: 233-246
- [CP12] Kucukyazici, B., Verter V., Nadeau L. and Mayo N. A Scenario-Based Approach to the Improvement of Healthcare Delivery to Stroke Patients in the Community. *Proceedings of Operational Research Applied to Health Services (ORAH) Annual Conference*, 2005: 253-264.

EXTERNAL & INTERNAL GRANTS

- [G1] Ontario Ministry of Health First Movers' Fund
Project Title: Investigating the impact of COVID-19 on pre-existing mental health patients using explainable machine learning approaches.
Role: Co-applicant
Length: March 2023 – Feb. 2024
Total Amount: \$204,058 (as part of a \$800,000 project portfolio led by Amber Simpson).
- [G2] Smith School of Business Internal Research Funds Competition, Queen's University
Project Title: Conference Support Fund for Inaugural Smith Business School Conference on Healthcare Analytics
Role: Principal Investigator
Length: 2022
Total Amount: \$15,432
- [G3] Eli Broad College of Business, MSU, Summer Research Award
Project Title: Data-Driven Optimization Modeling for Multi-factor Nurse-Patient Assignment
Role: Principal Investigator
Length: 2021
Total Amount: \$16,000
- [G4] Eli Broad College of Business, MSU, Summer Research Award

- Project Title:* Emergency Medical Services Protocols for Regionalized Systems of Care: On the Trade-Off Between Transportation and Boarding Times
Role: Principal Investigator
Length: 2020
Total Amount: \$19,000
- [G5] Fonds de Recherche du Quebec- Sante (FRSQ), Operating Grant on Emergency Services Issues and Continuum of Care.
Project Title: Looking beyond the walls of the emergency departments for the delays in the emergency departments: modeling associations with the hospital and post-acute care and exploring the promising interventions
Role: Principal Investigator
Length: 2016-2019
Total Amount: \$269,479
- [G6] Rossy Cancer Network
Project Title: Improving the trajectory of care for ovarian cancer patients, with focus on institutional resource use and patient-centered well-being
Role: Co-Investigator (PI: Dr. Walter Gotlieb)
Length: 2015-2016
Total Amount: \$10,000
- [G7] Fonds Québécois de la Recherche sur la Société et la Culture (FQRSC) New Researcher Grant
Project Title: Connecting Sustainability to Profitability: Design of Integrated Closed-loop Supply Chains
Role: Principal Investigator.
Length: 2014 – 2017.
Total Amount: \$39,600
- [G8] Canadian Institute of Health Research (CIHR), SPOR Networks
Project Title: The Québec Knowledge-1 Network: A learning community for primary and integrated care
Role: Co-investigator (Co-PIs: Jeannie Haggerty and Antoine Groulx)
Length: 2014-2015.
Total Amount: \$150,000
- [G9] Marcel Desautels Institute of Integrated Management Fellowship, McGill University,
 In the category of “Research”
Project Title: A Regional/Provincial Approach for Understanding and Tackling ED Crowding
Role: Principal Investigator
Length: 2014 – 2016.
Total Amount: One course release and \$4,650
- [G10] St. Mary’s Research Center, New Investigator’s Research Award
Project Title: Operations Research Applications to Improve Healthcare Operations
Role: Principal (Sole) Investigator.
Length: 2012 – 2015.
Total Amount: \$75,000
- [G11] Start-up Grant, Desautels Faculty of Management, McGill University
Role: Principal Investigator.

Length: 2012 – 2015.

Total Amount: \$60,000

[G12] McGill University, Paper Presentation Grant

Role: Principal Investigator

Length: 2012

Total Amount: \$1,500

[G13] Social Sciences and Humanities Research Council (SSHRC), Travel Grant

Role: Principal Investigator.

Length: 2008

Total Amount: \$2,000

[G14] McGill University, The Alma Mater Student Travel Grant

Role: Principal Investigator.

Length: 2007

Total Amount: \$2,000

INVITED SEMINARS

- [I1] Consortium of 16 schools – in the disciplines of operations management (OM), decision sciences and information systems- Virtual Seminar Series, 2021
- [I2] Michigan State University, Department of Accounting and Information Systems, 2019, 2021
- [I3] Michigan State University, Department of Supply Chain Management, 2019
- [I4] McMaster University, DeGroot School of Business, May 2016
- [I5] Concordia University, Industrial and Mechanical Engineering, November 2016
- [I6] Sabanci University, School of Business, Istanbul, Turkey, December 2015
- [I7] University of Calgary, School of Business, Calgary, Alberta, September 2014
- [I8] Bilkent University, Department of Industrial Engineering, Ankara Turkey, 2013
- [I9] University of Toronto, Rotman School of Business, Toronto, Ontario, 2012
- [I10] University of Waterloo, Department of Management Science, Waterloo, Ontario 2012
- [I11] St. Mary's Hospital, Montreal, Quebec, 2012
- [I12] McGill University, Desautels Faculty of Management, Montreal, Quebec, 2012
- [I13] Institute of Aragon Health Science, Zaragoza, Spain, 2010
- [I14] HEC Montreal, Montreal, Quebec, 2009
- [I15] IE Business School, Madrid, Spain, 2009
- [I16] Boston College, Carroll School of Management, Boston, Massachusetts, 2009
- [I17] MIT-Zaragoza, Zaragoza, Spain, 2009
- [I18] ESSEC Business School, Cergy-Pontoise, France, 2009
- [I19] University of Florida, Industrial Engineering Department, Gainesville, Florida, 2009
- [I20] University of Arkansas, Industrial Engineering Department, Fayetteville, Arkansas, 2009
- [I21] Sabanci University, Industrial Engineering Department, Istanbul, Turkey, 2009

[I22] University of Iowa, Mechanical and Industrial Engineering Department, Iowa City, Iowa, 2008

INVITED TUTORIALS

- [T1] How to Develop and Use Micro-Simulations for Design of the Public Health Interventions, *Institute of Health and Social Policy*, McGill University, Montreal, 2012
- [T2] Optimization of the Design and Delivery of Chronic Care through Operations Research, *NSERC CREATE Program on Health Care Operations Management and Information System Summer Academy*, Toronto, 2012
- [T3] The Role of Operations Research through the Journey of Chronic Care, *Ph.D. Workshop at Annual Meeting of Operational Research Applied to Health Services (ORAHS)*, Toronto, 2008

AWARDS, FELLOWSHIPS AND RECOGNITIONS

- * Co-Supervised the dissertation that was awarded the Doctoral Research Scholarship, Fonds de recherche du Québec - Société et culture (FRQSC), 2020
- * Supervised the dissertation that was awarded the Doctoral Research Scholarship, Fonds de recherche du Québec - Société et culture (FRQSC), 2016
- * Faculty Fellow of Integrated Management (Healthcare); Marcel Desautels Institute for Integrated Mgmt., *McGill University*, 2013-2015
- * Principle's Dissertation Award, *McGill University*, 2007
- * Silver Poster Award, National Poster Competition, *Canadian Institute of Health Research (CIHR)*, 2007
- * Honorable Mention, *INFORMS Bonder Scholarship for Applied Operations Research in Health Services*, 2007
- * Canadian Delegate, EURO Summer Institute XXIII: OR in Healthcare, 2005, selected and nominated by *Canadian Operations Research Society*
- * Graduate Student Conference Support Award, *Canadian Operations Research Society*, 2005
- * Entrance Fellowship, Desautels Faculty of Management *McGill University*, 2004-2005
- * Top graduation and Dean's honor list, Graduate School, *Yeditepe University*, 2002
- * Graduate Studies Scholarship, *Yeditepe University*, 2000-2002
- * Dean's honor list, *Marmara University*, Engineering Faculty, 1996-2000

PH.D. LEVEL SUPERVISION

- * Zahra Jalali, Ph.D. student, Operations Management, Desautels Faculty of Management
Sole supervision, 2018-2019; Co-supervision: 2019- 2020
Awarded Doctoral Research Scholarship, Fonds de recherche du Québec - Société et culture (FRQSC) (Funded: 2020 – 2021)
- * Cheng Zhu, Ph.D. student, Operations Management, Desautels Faculty of Management.
Sole supervision, 2012-2017

Awarded Doctoral Research Scholarship, Fonds de recherche du Québec - Société et culture (FRQSC)
(Funded: 2016 – 2017)

Thesis Title: Three Essays on Data-Driven Models in Health Care Operations Management

Current position: Assistant Professor, Texas State University

- * Wenyi Chen, Ph.D. student, Logistics and Supply Chain Management, MIT-Zaragoza International Logistics Program. Primary supervisor, 2010-2015
Thesis Title: Making Sustainability Profitable: The Impact of Closed-loop Supply Chain Design and Regularity Schemes on Stakeholders.
Current position: Head of Logistics Sustainability, Tata Steel Europe.

POSTDOCTORAL LEVEL SUPERVISION

- * Amir Ardestani-Jaafari, Postdoctoral Fellow, Operations Management, Desautels Faculty of Management
Sole supervision, 2016-2019
Current Position: Assistant Professor, University of British Columbia
- * Sanket Bhat, Postdoctoral Fellow, Operations Management, Desautels Faculty of Management
Sole supervision, 2014-2015
Current Position: Senior Logistics Analyst, GE Global Research

PH.D. ORAL DEFENSE COMMITTEE MEMBERSHIPS

- * Internal Member, Ghazaleh Agil, Information Systems, 2019
- * Internal Member, Michael Klein, Operations Management, 2017
- * Internal Member, Manaf Zargoush, Operations Management, 2016
- * Pro-dean, Daina Crafa, Montreal Neurological Institute, 2017
- * Pro-dean, S. Mirkhalaf Valashani, Department Mechanical Engineering, 2013
- * Pro-dean, Rina Zelman, Department of Biomedical Engineering, 2012

MASTERS AND PH.D. COMMITTEE MEMBERSHIPS

- * Ph.D. Research Committee, Faculty of Medicine, McGill University
Katya Loban, supervised by Prof. Jeannie Haggerty, *Family Medicine*, 2014-2018
- * PhD. Comprehensive Exam- Methodology Requirement, Desautels Faculty of Management, McGill University
Hossein Hejarfian, *Operations Management*, 2019
Zahra Jalali, *Operations Management*, 2019
Aysun Mutlu, *Operations Management*, 2019
Fan E, *Operations Management*, 2017
Elcin Ergin, *Operations Management*, 2015
Thang Doan, *Operations Management*, 2015
- * Ph.D. Phase II Committee, Desautels Faculty of Management, McGill University
Ali Cetin Suyabatmaz, *Operations Management*, 2013- 2016

Feyza Guliz Sahinyazan, *Operations Management*, 2013- 2016

Martin Cousineau, *Operations Management*, 2013- 2016

Saied Samiedaluie, *Operations Management*, 2010- 2014

- * PhD. Comprehensive Exam (Supply Chain Management and Logistics, Methodology Requirement):
Wenyi Chen, MIT-Zaragoza International Logistics Program, 2011
Gerardo Paloya, MIT-Zaragoza international Logistics Program, 2011

MASTER LEVEL SUPERVISION

* **Michigan State University**

Research Projects

- Farooqui Numar, “Machine Learning Models to Predictive Emergency Department Readmission Risks”, MBA, Fall 2021
- Hsu Yun Hung, “Predictive Models to Estimate Hospitalizations Following an Emergency Department Visits, Master's in Data Science and Business Analytics, Fall 2021.
- Shruti Chugh, “Risk-Classification of Suicides During and After Covid-19 Based on Text Mining”, Master's in Data Science and Business Analytics, Fall 2021.
- Prudhvi Bellamkonda, “Design of a Clustering Algorithm for Emergency Department Patients, Master's in Data Science and Business Analytics, Fall 2020.
- Yiding Ma, “Design of a Forecasting Model Using Machine Learning Techniques to Estimate Hospitalizations Following Covid-19 Exposure, Master’s in Mathematics and Statistics, Spring and Summer 2020.

* **McGill University, Sole Supervision**

Research Papers and Independent Studies

- Tawfeeq Altherwi, International Masters for Health Leadership, Final Paper, Fall 2018&Winter2019
- Saikat Roy, MBA, MGCR 610- Research Paper - 6 credits, Fall 2017 &Winter 2018
- Rishil Gandhi, MBA, MGCR 610- Independent Study - 3 credits, Fall 2017
- Jason Freder, MD-MBA, INDS 123 Research Paper, McGill’s School of Medicine, Summer 2014
- Ryan Hartley, MD-MBA, MGCR 610- Research Paper- 6 credits, Winter & Summer 2014
- Warren Sateren, MBA, MGCR 610- Research Paper - 3 credits, Winter 2013

Healthcare Management Capstone Projects

- Shawn Errunza, “Business and Technology Innovation for Healthcare: The Role of Artificial Intelligence in Healthcare Services, Winter 2019.
- Brianne Wartman, “Supervised Consumption Sites: A Clinical and Business Perspective on This Harm Reduction Strategy in Canada, Winter 2019
- Nisha Gupta, “The organizational impact of the underrepresentation of women in medical leadership positions and methods proposed to address the gender gap”, Winter 2019.

- Joseph Kam, “Assessment of cost-effectiveness strategies to reduce surgical wait times in Canada”, Winter 2019.
- Colins Oghor, “Creating a Financially Sustainable External Quality Assurance Program to Improve Accuracy of Tuberculosis Diagnosis in India’s Private Health Sector”, Winter 2018.
- Ryan Hartley, “Quality Improvement Initiatives in Family Medicine Clinics”, Winter 2018.
- Daniel Perets, “Diabetic Retinopathy: Finding the Ideal Screening Intervention for Urban Communities”, Winter 2018.
- Jason Freder, “The Effects of Lifestyle Intervention on Patient’s with Impaired Fasting Glucose; a Review on the Benefits and Cost Effectiveness of Prescribing Exercise, and How Canadian Companies are Promoting Healthy Living”, Winter 2017.
- Sam Wasserman, “The Fracture Clinic at Brantford General Hospital”, Winter 2016

Reading Courses

- Ashwini Srinivas, M.Sc. in Dentistry, DENT 681 Readings in Health Services Research, Fall 2018
- Joydeep Arneja, M.Sc. in Dentistry, DENT 681 Readings in Health Services Research, Fall 2017

Practicums, Internships and Fellowships

- Ishata Arora, MBA, MDIIM Student Fellowship, “Analysis of Patient Flows in a Surgical Unit at CHUM”, Winter 2019
- Natasha Bakesh, MBA, BUSA 651- Practicum- 6 credits, Summer & Fall 2014
- Ryan Hartley, MD-MBA, BUSA 650 Summer Internship, St. Mary’s Hospital, Summer 2014
- Collins Oghor, MD-MBA, BUSA 650 Summer Internship, Red Cross Canada, Summer 2014
- Jason Freder, MD-MBA, BUSA 650 Summer Internship, Montreal Chest Institute, Summer 2013

* **MIT-Zaragoza International Logistics Program, Master Thesis Supervision**

- Hugo Castro, sole supervision, 2011-2012
- Yunan He, co-supervised with Prof. David Gonzalez, 2011-2012
- Susan Hanson, co-supervised with Prof. David Gonzalez, 2011-2012
- Jinrong Wei, sole supervision, 2010-2011
- Katharina Weber, co-supervised with Prof. Cagri Gurbuz, 2010-2011
- Noelle Thomas, co-supervised with Prof. Cagri Gurbuz, 2010-2011
- Sumeet Uday, co-supervised with Prof. Cagri Gurbuz, 2010-2011
- Roberto Martinez, co-supervised with Prof. Cagri Gurbuz, 2010-2011

UNDERGRADUATE SUPERVISION

- * Mei Grudson, MDIIM Student Fellowships, “Analysis of Patient Flows in a Surgical Unit at CHUM”, Winter 2019.
- * Jordana Cohen, BUSA 400- Research Paper- 3 credits, Sole supervision, Fall 2013

TEACHING EXPERIENCE

- * Introduction to Mathematical Analysis, undergraduate level core course, Smith School of Business
- * Business Analytics, MBA core course, Smith School of Business
- * Information Systems and Strategy, MBA core course, Michigan State University
- * Manufacturing and Service Operations Management, undergraduate level core course for supply chain management concentration, Michigan State University
- * Business Analytics, MBA elective course, Michigan State University
- * Healthcare Analytics, core course, M.Sc. in Healthcare Management, Michigan State University
- * Guest lecturer on analytics/AI/machine learning, Logistics Emerging Thought Seminar, PhD course, Michigan State University
- * Operations Management, BCom core course, McGill University
- * Operations and Supply Chain Analytics, BCom and MBA elective course, McGill University
- * Healthcare Systems, MBA elective course, McGill University.
- * Economic Evaluation for Healthcare, International Masters for Health Leadership Program, McGill University.
- * Business Statistics, Graduate level core course, MIT-Zaragoza International Logistics Program.
- * Analytical Models, Graduate level core course, MIT-Zaragoza International Logistics Program.

COURSE DEVELOPMENT

- * Re-design of Information Systems and Strategy course, which integrates information systems and business analytics, featuring case studies, lectures, in-class simulation games, guest speakers and in-class mini-case analysis through data analytics tools, Michigan State University
- * Design of Business Analytics course featuring case studies, lectures, in-class simulation game, guest speakers and in-class problem analysis, Michigan State University
- * Re-design of Manufacturing and Service Operations Management course featuring case studies, lectures, in-class simulation games, guest speakers and in-class problem analysis, Michigan State University
- * Re-design of MGCR 472 Operations Management course featuring case studies, lectures, in-class games, guest speakers and in-class problem analysis, McGill University
- * Re-design of BUSA 698 Healthcare Systems course featuring case studies, lectures, guest speakers, in-class debates and term papers, McGill University

INSTITUTIONAL SERVICES

Michigan State University

- * **Department Level:**

Supply Chain Council Undergraduate Case Competition, Faculty Judge, Oct 2021

Supply Chain Council Case Competition, Faculty Judge, Jan 2021

Member, Globalization Task Force, Department of Supply Chain Management, 2020–2021.

McGill University

* **University Level:**

Guest Speaker, Info Session on “How to be Successful for Fonds Québécois de la Recherche sur la Société et la Culture (FQRSC)’s Start Up Program for New Research Professors”, organized by Office of Sponsored Research (OSR), August 2014

* **Faculty Level:**

Director, McGill MD-MBA Program, 2016-2019

Member, Specialized Master Programs Committee, 2018-2019

Member, MBA Program Committee, 2017-2018

Member, Advisory Board, Marcel Desautels Institute of Integrated Management, 2017-2018

Member, Ph.D. Committee, 2013-2015, 2016-2017, 2018-2019

Member, Management Science Research Centre Steering Committee, 2013-2014

* **Area Level**

PhD Program Coordinator, Operations Management Area: coordination of all PhD admissions, preparing and conducting the common comprehensive exam- methodology requirement, assignment of teaching and teaching assistantship positions

Supply Chain Council Case Competition, Faculty Judge, 2021, MSU

* **Public Outreach:**

Co-discussant with Susan Devore, CEO of Premier Inc. on “Redefining Health Care: Transformation of Health Systems for 21st Century”, The Integrated Management Symposium Series

PROFESSIONAL SERVICES

[INFORMS: Institute for Operations Research and the Management Sciences, POMS: Production & Operations Management Society, CORS: Canadian Operational Research Society; NSERC: National Science and Engineering Research Council; ORAHS: EURO Working Group on Operational Research Applied to Health Services]

Editorial Board Membership, Operations Research for Health Care Journal, 2015- present

Conference Chair

Inaugural Healthcare Analytics Conference, Queen’s University, 2023

Smith’s Workshop on Healthcare Management, Smith Business School, Queen’s University
2023

11th International Closed-Loop Supply Chain Workshop, Zaragoza, 2012

Operations Research in Public Health Workshop, McGill University, 2007 (co-chair)

Graduate Student Workshop on Healthcare Operations, McGill University, 2006 (co-chair)

Cluster Chair of International Conferences

Chair of Big Data Analytics Cluster, Decision Science Institute Annual Conference, San Francisco, 2020

Co-Chair of Health Care Cluster, POMS Annual Meeting, Chicago, 2012

Co-Chair of Health Care Cluster, ALIO INFORMS Joint International Conference, Buenos Aires, Argentina, 2010

Program Chair

INFORMS Conference on Healthcare, 2011, Montreal

Referee for National Granting Agencies

Social Sciences and Humanities Research Council of Canada (SSHRC) Insight Grants, Canada, 2016
The Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery Grant, Canada, 2012, 2013, 2017

Interdisciplinary Capacity Enhancement Awards by Health Research Board, Ireland; 2012, 2013

Health Services Research Grant by Ministry of Health, Singapore, 2011

Committee Chair

INFORMS Health Applications Society, Bonder Scholarship Committee, 2013, 2014

POMS College of Healthcare Operations Management, Best Paper Competition, 2011

Judge

INFORMS Health Applications Society, Best Student Paper Award Committee, 2015, 2017, 2019

POMS College of Healthcare Operations Management, Best Paper Award Committee, 2014, 2015

CORS Best Student Paper Award Committee, 2012

Councilor, INFORMS Healthcare Society Board, 2014-2016

Moderator, Round table Discussion, INFORMS Conference on Healthcare, 2013, Chicago

Vice President-Awards, POMS Health Care College, 2010-2011

Secretary and Editor, POMS Health Care College, 2009-2010

Editor and Member, POMS Health Care College Founding Board, 2008-2009

Member, POMS Chronicle Editorial Board, 2008-2009

Advisory Board Member, NSERC CREATE Program on Health Care Operations Management and Information Systems, 2009-2011

Scientific Committee Member and Referee, VIII. and IX. International Logistics & Supply Chain Congresses, 2010 and 2011

Referee

Operations Research, Production Operations Management, European Journal of Operations Research Society, Decision Sciences, IIE Transactions on Healthcare, Journal of Operations Research Society, IIE Transactions, Healthcare Management Science, Operations Research for Health Care, Socioeconomic Planning Sciences, Humanities & Social Sciences Communications, Journal of Simulation, Infor, Journal Flexible Manufacturing Systems

Session Organizer and Chair

INFORMS Health Care Conference, Cambridge MA, 2019
INFORMS Health Care Conference, Rotterdam, 2017
INFORMS Health Care Conference, Chicago, 2013
INFORMS Annual Conference, Phoenix Arizona, 2012
POMS Annual Conference, Chicago, 2011
POMS Annual Conference, Vancouver, 2010
Annual Conference of ORAHS 2008, Toronto
Annual Conference of CORS 2008, Quebec City
INFORM Annual Conference 2007, Seattle.
European Conference on Operational Research EURO XXII, 2007

INVITED CONFERENCE PRESENTATIONS

[INFORMS: Institute for Operations Research and the Management Sciences, MSOM: Manufacturing & Service Operations Management, POMS: Production & Operations Management Society, CORS: Canadian Operational Research Society, INTRIM: Integrated Risk Management; ORAHS: EURO Working Group on Operational Research Applied to Health Services].

- [P1] Nurse Workload Balancing Using Real-Time Location Data, with Hosseinpour P and Verter V. INFORMS Annual Conference, Phoenix AR, 2023 (scheduled).
- [P2] On Reducing Medically Unnecessary Procedures Through Analytics, with Zhu E. and Wu T. 6th Annual Research Roundtable: Data Analytics in Healthcare, Toronto, ON, 2023
- [P3] Managing Regional Hospital Resources Amid Pandemics for Improving Health Outcomes; with A. Nair, A. Georghiou and V. Verter. MSOM Annual Conference, Munich Germany, 2022
- [P4] The Spillover Effect of Boarding Congestion on Emergency Departments; with Jalali Z. and Gumus M. MSOM Annual Conference, Munich Germany, 2022
- [P5] On Reducing Medically Unnecessary Cesarean Deliveries: The Design of Outcome-based Payment-for-Performance Models for Maternity Care; with Zhu E. POMS Annual Conference, Online, 2022
- [P6] Weeping Hospitals: How Patient Complexity and Hospital Operational Characteristics Affects the Psychiatric Readmission Problem; with Hejazian H., Nasiry J., and Verter V. POMS Annual Conference, Online, 2022
- [P7] Design of Stroke Network for Rural Areas: Optimal Integration of Tele-Stroke; with Jaafari A. and Hoseinpour P. INFORMS Annual Conference, CA, 2021.
- [P8] The Effects of Boarding Patients on Treatment Time in Emergency Departments; with Jalali Z., and Gumus M. POMS Annual Conference, 2021.
- [P9] On Reducing Medically Unnecessary Cesarean Deliveries: The Optimal Delivery Modes of Patient Groups; with Zhu C. and Wu T. Annual Conference of Decision Science Institute, 2020.
- [P10] Design of Specialist Response Policies to Emergency Departments; INFORMS Healthcare Conference with Zhu C. and Mah R. Cambridge MA, 2019.
- [P11] Improving Patient Transfer Protocols for Regional Stroke Networks; with Jaafari A. POMS Annual Conference, Washington DC, 2019.
- [P12] Robust design of a stroke hospital network; with Jaafari A.
 - CORS Annual Meeting, Halifax, 2018.

- Optimization Days, Montreal, 2018.
- [P13] On Reducing Waiting Times for Consultations in Emergency Departments; with Zhu C. INFORMS Annual Conference, Houston, 2017.
- [P14] Designing Personalized Anticoagulant Therapy; with Ibrahim R., Verter V., Gendreau M., Blostein M. INFORMS Annual Conference, Houston, 2017.
- [P15] Design of Two-tiered Payment Models for Maternity Care; with Zhu C. INFORMS Annual Conference, Houston, 2017
- [P16] Design of a Robust Stroke Network: Personalized Patient Transportation Policies; with Jaafari A. INFORMS Annual Conference, Houston, 2017
- [P17] On Reducing Consultation Waiting Times in Emergency Departments; with Zhu C. INFORMS Healthcare Conference, Rotterdam, 2017
- [P18] Optimal Reimbursement Schemes for Maternity Care Safety and Quality; with Zhu C. INFORMS Annual Conference, Nashville, 2016
- [P19] Robust Design of a stroke hospital network; with Ardesti-Jaafari A. INFORMS Annual Conference, Nashville, 2016
- [P20] Design of Operational Policies to Reduce Boarding Time in Emergency Departments, with Zhu C. INFORMS Annual Conference, Nashville, 2016
- [P21] Design of Financial Incentives for Maternity Care Safety and Quality with Zhu C.
- POMS Annual Conference, Orlando, 2016
 - INFORMS Annual Conference, Philadelphia, 2015
- [P22] Optimal Admission/Discharge Criteria for Patients with Heart Failure in Observation Units; with Bhat S. and Mah R. INFORMS Annual Conference, Philadelphia, 2015
- [P23] Incorporating Client Preferences into Preventive Care Network Design; with Verter V., Song L. and Zhang Y.
- POMS Annual Conference, Orlando, 2016
 - INFORMS Conference on Healthcare, Montreal, Chicago, 2013
 - INFORMS Annual Conference, Minneapolis, 2013
- [P24] Design of Financial Incentives for Avoiding Unnecessary C-Sections; with Zhu C.
- CORS/INFORMS International Conference, Montreal, 2015
 - INFORMS Healthcare Conference, Nashville, Tennessee, 2015
- [P25] Investigating Admission/Discharge Criteria for Patients in Emergency Department Observation Units; with Bhat S. INFORMS Healthcare Conference, Nashville, Tennessee, 2015
- [P26] The redesign of extended producer responsibility and its impact on a producer's recovery strategies; Chen W. and Saenz M.J. 20th Conference of the International Federation of Operational Research Societies (IFORS), Barcelona Spain, 2014
- [P27] Supply Chain Design for Unlocking the Value of Remanufacturing Under Uncertainty; with Chen W., Verter V. and Saenz M.J. POMS International Conference, Hong Kong, 2014
- [P28] Designing Individualized Treatment: An Application to Anticoagulation Therapy; with Verter V., Ibrahim R., Gendaru M. and Blostein M. INFORMS Conference on Healthcare, Chicago 2013
- [P29] Managing Admission Policies to a Neuro- Ward; with Samiedaluie S., Verter V., and Zhang D.
- INFORMS Conference on Healthcare, Chicago 2013

- INFORMS Annual Conference, Phoenix, 2012
- [P30] Managing Admission Policies to a Neuro-Ward; with Samiedaluie S., Verter V., and Zhang D.
- The Seventh Conference on INTRIM in Operations and Global Supply Chains, Montreal, 2011 (poster)
 - INFORMS Conference on Healthcare, Montreal, 2011
- [P31] Facility Location for Product Recovery: The Impact of Uncertainty; with Chen W., Verter V. and Saenz M.J.
- INFORMS Annual Conference, Minneapolis, 2013
 - Mathematics of Operations and Logistics Conference, Spain, 2013
- [P32] Understanding Client Preference for Preventive Care; with Song L. INFORMS Annual Conference, Phoenix, 2012
- [P33] Design of Closed Loop Supply Chains under Uncertainty; with Chen W. and Verter V.
- INFORMS Annual Conference, Phoenix, 2012
 - 10th International Closed Loop Supply Chain Workshop, Montreal, 2010 (poster).
- [P34] Design and Operations of Stroke Units; with Green L. and Verter V.
- POMS Annual Conference, Vancouver, 2010
 - ALIO/INFORMS Conference, Buenos Aires, Argentina, 2010
- [P35] Designing Antithrombotic Therapy for Preventing Stroke from Atrial Fibrillation: Initialization of Therapy; Verter V. and Bloestein M.
- INFORMS Annual Conference, Washington DC, 2008
 - Annual Meeting of ORAHS, Toronto, 2008
 - Annual Conference of CORS, Quebec City, 2008
 - POMS Annual Conference, San Diego, 2008
- [P36] An Analytical Framework for Managing Community-Based Care Delivery Processes for Chronic Disease; with Verter V. and Mayo M.
- Department of Epidemiology and Biostatistics, McGill University, Montreal, 2008
 - INFORMS Annual Conference, Seattle, 2007
 - POMS Annual Conference, Dallas, 2007
- [P37] Dealing with Unscheduled Patients in an Outpatient Clinic: A Simulation Modeling Approach; with Kananyan A. and Verter V. Research Days in Medicine Faculty, McGill University, 2007
- [P38] A methodological framework to Model Community-Based Care Delivery Process for Chronic Diseases; with Verter V. and Mayo M. Graduate Student Workshop on Healthcare Operations, Montreal, 2006.
- [P39] On the Significance of Reducing the Need for Stroke Patients to Visit the Emergency Department; with Verter V. and Mayo M. Workshop for HealthCare Modeling, Vancouver, 2005.
- [P40] A Markov Modeling of the Care Delivery Process for Stroke Patients after Discharged from Hospital; with Verter V. and Mayo M. Optimization Days, Montreal, 2005.
- [P41] Best Practices in EMR Implementation: A Systematic Review; with Keshavjee K., Bosomworth J., Copen J., Lai J., Lilani R. American Medical Informatics Association (AMIA) Annual Symposium, Washington DC 2006

- [P42] A Scenario-Based Approach to the Improvement of Healthcare Delivery to Stroke Patients in the Community; with Verter V. and Mayo M. EURO Summer Institute XXIII: OR in Healthcare, Southampton, UK, 2005.
- [P43] Improving the care delivery process for stroke patients; with Verter V. and Mayo M. International Healthcare and Technology Management (HCTM) Ph.D. Workshop, Univ. of Vienna, Vienna, Austria, 2004.
- [P44] Optimization of Electrical Power Supply Network and Power Supply Investments in Turkey; with Ozdemir L. 23rd National Conference on Operational Research and Industrial Eng., Istanbul, Turkey, 2002.
- [P45] Developing concurrent investment plans for power generation and transmission; with Ozdemir L. 22nd National Conference on Operational Research and Industrial Eng., Ankara, Turkey, 2001.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES/ORGANIZATIONS

- * Institute for Operations Research and the Management Sciences (INFORMS)
- * Production and Operations Management Society (POMS)