



**TELFER**

# Thesis Competition

March 2022

**T**ELFER  
**G**RADUATE  
**R**ESearch  
**P**ROGRAMS  
**S**TUDENT  
**A**SSOCIATION





# Agenda

- 9:00- 9:05** Welcome and Opening Remarks from the Dean: Dr. Stephane Brutus
- 9:05- 9:10** Message from Vice Dean (Research): Dr. Shantanu Dutta
- 9:10- 9:15** Message from TGRPSA

## Student Presentations Begin

- 9:16-9:26** Sandra Blais-Amyot
- 9:27-9:37** Danielle Cruise
- 9:38-9:48** Julia Dobrowolski
- 9:49-9:59** Mary Cathryn Espadero
- 10:00-10:10** Perla Habchi

## Virtual Refreshment Break (10 minutes)

- 10:21-10:31** Scarlett Kelly
- 10:32-10:42** Yanhong Li
- 10:43-10:53** Amirhossein Moosavi
- 10:54-11:04** Brynn O'Dwyer
- 11:05-11:15** Lucie Péléja

## Virtual Refreshment Break (5 minutes)

- 11:21-11:31** Daniel Quintal-Curcic
- 11:32-11:42** Katherine-Marie Robinson
- 11:43-11:53** Andrew Scarffe
- 11:54-12:04** Rachel Thelen
- 12:05-12:15** Javid Zare

## Closing Remarks



# Event Moderators

## Shirin Biglari

Shirin is a first-year Ph.D. student in Management, specializing in the field of Entrepreneurship. She holds an M.Sc. in Industrial Engineering with honors from Amirkabir University of Technology, Iran. Prior to joining the Ph.D. Program at Telfer School of Management, she gained hands-on experience in the entrepreneurship ecosystem and cooperated with several technology-based startups in her capacity as a market research analyst at an Innovation and Technology Management Co. in Iran. She has previously authored and co-authored papers in the Journals of Futures, Cleaner Production, Sustainable Production and Consumption, and Environmental Science and Pollution Research. Currently, her research interests include corporate entrepreneurship, digital entrepreneurship, and the role of disruptive technologies in entrepreneurship. She hopes that her Ph.D. journey ultimately leads to contributions to both theory and practice in the field of entrepreneurship.



## Niki Khorasanizadeh

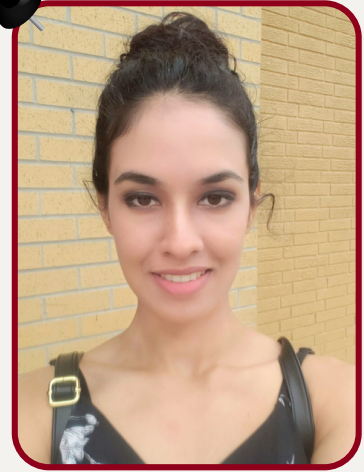
Niki is a third-year Ph.D. student in management, specializing in the field of Entrepreneurship and Innovation. She holds a master's degree in Environmental Engineering, and an undergraduate degree in Chemical Engineering from Sharif University of Technology. She initially joined the program out of her burning interest for sustainability, aiming to broaden her knowledge on core management theories to better understand the interplay between entrepreneurship and sustainability. Currently, her research agenda is concerned with the cognitive and emotional aspects of experiencing poverty and its implications for the entrepreneurial process. She wants to understand how individuals manage to escape poverty by entrepreneurship through a cognition lens. Her research on entrepreneurial resilience in the context of the COVID-19 pandemic was presented at the 2021 Babson College Entrepreneurship Research Conference (BCERC). In this study, the responses of affected businesses were investigated to understand what makes some entrepreneurs more likely to recover and renew as a response to such major disruptions.

Niki has a passion for problem-based/impact-driven research on entrepreneurship, and she is eager to learn more about the processes and practices that drive social impact. She is hoping to integrate her different interests in the course of her research career.



## Aurin Shaila Nursat

Aurin is a PhD candidate with a concentration in Finance working under the supervision of Dr. Miwako Nitani and Dr. Shantanu Dutta. Her research focuses on the impact of corporate social responsibility (CSR) and corporate governance on firm value and idiosyncratic risks. She also intends to explore the behavioral aspects of stock market reactions to various social and environmental events. Aurin received a M.Sc. degree with a concentration in Finance from Telfer School of Management in 2021. Her M.Sc. thesis has been nominated for Master's Thesis Prize. She also holds an MBA degree with a major in Finance and a Bachelor of Business Administration degree from Institute of Business Administration, University of Dhaka (Bangladesh). Aurin has been a teaching assistant for several finance and accounting courses including third-year undergraduate Corporate Finance and Fixed Income Investments courses, and second-year undergraduate Financial Management and Managerial Accounting courses. She has also been a research assistant on SSHRC Insight-grant funded research program that studies the link between financing availability and subsequent growth of small or medium-sized enterprises (SME). Prior to joining the Ph.D. program, Aurin has worked in various Finance and Accounting positions, including Finance and Admin Manager, at different companies in Canada and Bangladesh.



## Q&A Moderator

### Parag Puri

Parag Puri is specialising in environmental sustainability with the Institute of Environment, University of Ottawa. His primary area of research is sustainability strategy and innovation management with major interest in agri-food sector and climate change. In his master's thesis, he studies the adoption of water innovation and its role in bringing a sustainability related shift within the Canadian food system using a construal theory approach.

Additionally, he has Bachelor of Technology (B.Tech.) from Delhi Technological University, one of India's premier engineering institutions. His technological background and a developing world experience help him nurture a scientific and analytical mindset with an ability to produce creative solutions.



# Judges

## Wenxia Ge

### Associate Professor of accounting

Wenxia Ge is an associate professor of accounting at the Telfer School of Management. She is Associate Editor of both the Asian Review of Accounting and the Asia-Pacific Journal of Accounting & Economics and a member of the editorial boards of Advances in Accounting and the Journal of International Accounting, Auditing and Taxation. Her research has been published in journals such as Auditing: A Journal of Practice & Theory, Journal of Accounting and Public Policy, Journal of Business Finance & Accounting, Journal of Business Research, Journal of Corporate Finance, Journal of Empirical Finance, and Journal of International Business Studies.



## Ramzi Fathallah

### Assistant Professor of Entrepreneurship and Family Business

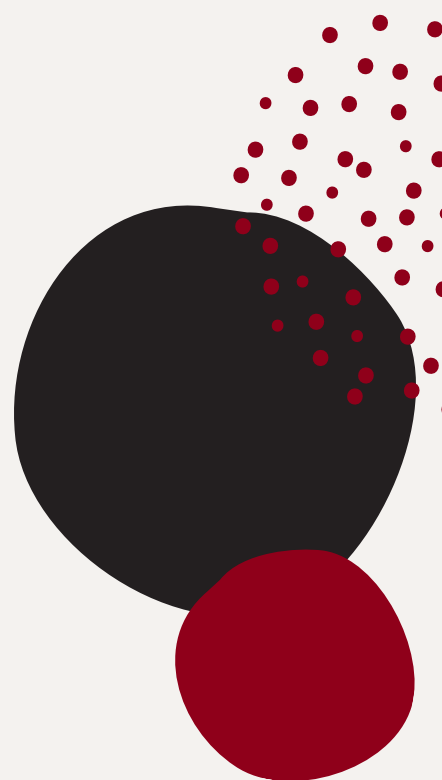
Ramzi is an Assistant Professor of Entrepreneurship and Family Business at Telfer School of Management. He holds a Master's degree in Management from the London School of Economics & Political Science (LSE) in the UK and a Ph.D. in Entrepreneurship from Ivey Business School in Canada. His research interest lies at the intersections of entrepreneurship, family business and international business. His work has been funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) and the Ford Foundation.



## Argiro Kliamenakis

### Assistant Professor of Marketing

Argiro Kliamenakis is an Assistant Professor of Marketing at the Telfer School of Management at the University of Ottawa. She received her PhD in Marketing from the John Molson School of Business at Concordia University. She also holds an MSc in Marketing from the same university. Argiro's primary area of research aims at finding ways to reduce the negative effects of consumption on consumer well-being, society, and the environment. More specifically, her research interests focus on better understanding how consumers can be encouraged to make more socially responsible consumption decisions, identifying ways to encourage socially responsible marketing practice, and helping consumers make better decisions for their well-being. Argiro has published in Psychology & Marketing and has presented at various international marketing conferences, including Association for Consumer Research (ACR) and Society for Consumer Psychology (SCP).



# Judges

## Antoine Sauré

### Business Analytics and Information System

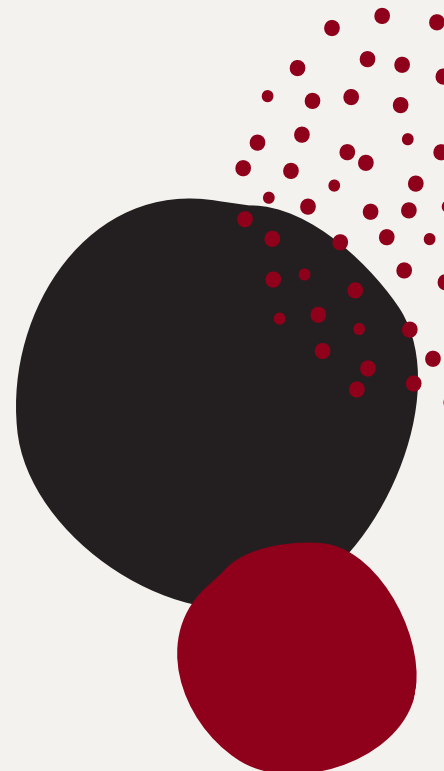
Antoine Sauré is an Assistant Professor at the Telfer School of Management at the University of Ottawa. His research interests include stochastic modelling, dynamic optimization, and decision-making under uncertainty. He has more than twelve years of experience developing and applying advanced analytics techniques to large-scale problems in several industries. He has worked on the development of numerous planning and scheduling systems aimed to provide timely access to quality care.



## Charlotte Karam

### Ian Telfer Professorship in Inclusive Human Resource Systems and Associate Professor

Charlotte Karam, PhD is an associate professor at the Telfer School of Management, where she holds the Ian Telfer Professorship in Inclusive Human Resource Systems. She is also an Adjunct Professor at the Olayan School of Business, American University of Beirut, where she was the founding director and continues to lead regional projects based in the Center of Inclusive Business and Leadership (CIBL). Charlotte's work as a scholar-activist contributes to overlapping conversations in HR, business ethics, public policy, and feminist praxis. She and her team led the development of The KIP Index and The SAWI Project focused on women-inclusive HR systems across the MENA region. She is the Area Editor of Feminisms and Business Ethics at the Journal of Business Ethics, and her publications appear in the International J. of Management Reviews, J. of World Business, J. of Business Ethics, Business Ethics Quarterly, Business & Society, and others.



# Telfer Graduate Research Programs Student Association



**Sandra Blais-Amyot**  
President



**Aurin Shaila Nusrat**  
VP Finance



**Shirin Biglari**  
VP Academic



**Amirhossein Moosavi**  
GSAED Representative



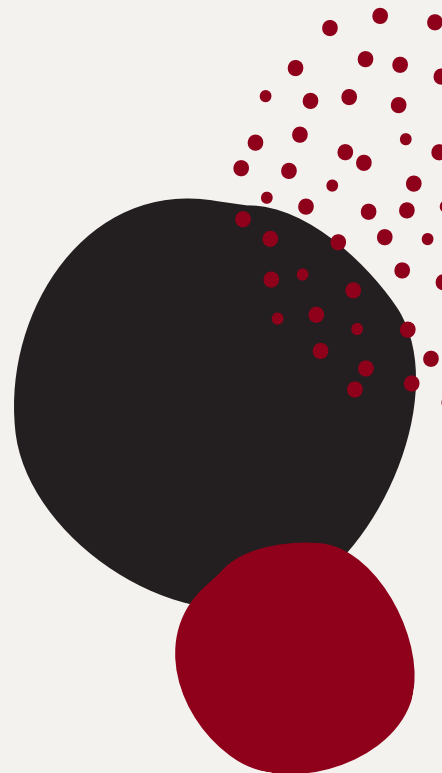
**Niki Khorasanizadeh**  
PhD Representative



**Parag Puri**  
MSc Management  
Representative

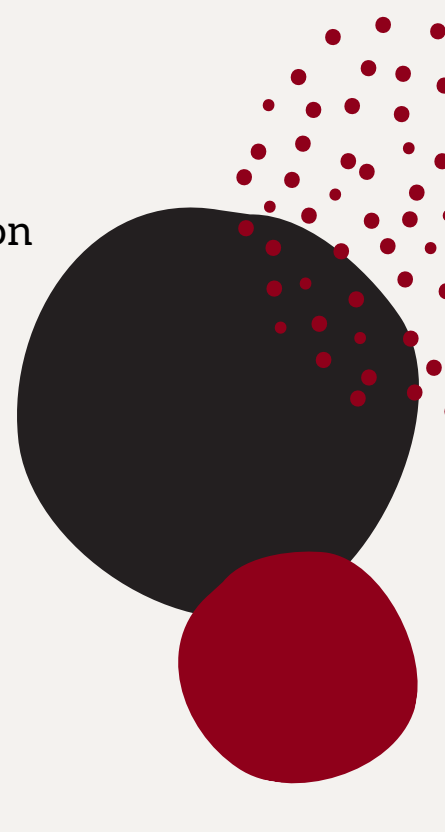


**Rachel Thelen**  
MSc Health Systems  
Representative





# Student Presenters

- 01** Sandra Blais-Amyot
  - 02** Danielle Cruise
  - 03** Julia Dobrowolski
  - 04** Mary Cathryn Espadero
  - 05** Perla Habchi
  - 06** Scarlett Kelly
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  - 12** Katherine-Marie Robinson
  - 13** Andrew Scarffe
  - 14** Rachel Thelen
  - 15** Javid Zare
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# SANDRA BLAIS-AMYOT

Sandra is a second-year Master of Science student in the Health Systems program at the Telfer School of Management. Under the supervision of Dr. Onur Ozturk, she is studying operation research problems applied to healthcare.

Sandra completed her undergraduate studies in Industrial Engineering at Polytechnique Montréal in 2019. She went to work in France as a project management officer for a year in the aerospace industry. After seeing the impact of COVID-19 on the health sector, she wanted to help and contribute to improving healthcare systems. She then began a graduate study in health systems to develop the necessary knowledge to apply her expertise to this area.

Throughout the summer of 2021, Sandra completed an internship at The Ottawa Hospital. There, she contributed to a team that used advanced analytics techniques to improve the scheduling templates in one of the hospital units. Her research interests focus on optimization problems such as home health care routing and scheduling problems and hospital scheduling problems.

Since the beginning of her graduate studies, Sandra has also been involved in the Telfer Graduate Research Programs Student Association. Outside of these activities, Sandra likes being active outdoors. In summer, she enjoys hiking and biking while skating and snowboarding in winter.

## ABSTRACT

### **Addressing Uncertainties in Home Health Care Routing and Scheduling Problems**

The Home Health Care (HHC) industry provides nursing and general hygiene care for people in a situation of dependency at their homes. HHC offers many benefits: it frees beds in hospitals and reduces overall care costs since patients are treated at home and do not require 24/7 attention from a medical team.

For the efficient management of HHC services, it is important to have an optimized routing and scheduling for mobile caregivers while considering the various constraints of the problem (e.g. patients' treatment durations, patients' time-windows, caregivers' skill sets, traffic, etc.). In addition, some constraints affect the original caregivers' schedule by delaying/accelerating some visits during the day. Therefore, it is essential to update the schedule and routing of visits in the case of uncertainties due to delays or opportunities to deliver services earlier.

We approach the HHC problem from a mathematical optimization perspective. We aim to solve a mixed-integer linear programming problem fast and efficiently. Considering time uncertainties related to heavy traffic, longer visits, etc., we will integrate our solution methods in a re-optimization model capable of updating the current schedule that is no more optimal due to unexpected events. This research's expected outcome is a software incorporating an optimization mechanism that finds a route helping HHC services serve all patients planned during their workday while respecting all time and care constraints and minimizing costs, despite time disturbance to their schedules. Hospitals will also benefit since patients can be treated at home instead of using scarce medical resources. We also expect this thesis to fill the gap in academia by combining the literature on HHC routing and scheduling problems and re-scheduling techniques to solve the optimization problem. Finally, the model could enable applications to the transport industry and logistics sectors since they face similar challenges.

# DANIELLE CRUISE



Danielle Cruise is a second-year student in the MSc. HS program, supervised by Dr. Mirou Jaana. Previously she completed a Bachelor of Public Health degree from the University of Waterloo.

Over the summer, Danielle completed an internship at Perley Health, where she assessed changes in long-term care resident quality of life before and during the pandemic. Her master's thesis explores the role of management in the adoption of technology in long-term care homes.

Danielle is committed to making a difference in the lives of older adults living in long-term care. She also works as a research and teaching assistant at the University of Ottawa.

## ABSTRACT

### **Role of Management in Health IT Adoption in Long-Term Care Homes: An Exploratory Study of Key Factors Affecting Health IT Decision-Making**

Canada has an aging population. With increased life expectancy of older adults, the risk of developing chronic disease has also increased. Therefore, the demand for long-term care (LTC) is expected to increase. Health information technology (HIT) provides opportunities to support staff, residents, and their families. Yet, LTC homes lag significantly behind other areas in healthcare in relation to the adoption of HIT.

This research aims to explore the factors that managers consider in their decision to adopt technology in their respective LTC homes. Therefore, the research question is: "What are the factors that affect the decision-making of managers related to the adoption of HIT solutions in LTC homes?"

An exploratory Delphi method will be used to survey a panel of 20-25 experts who are decision-makers in their respective LTC homes in Ontario. The Delphi method is an exploratory approach that uses a panel of experts to answer multiple iterations of questionnaires and feedback from participants to obtain consensus on a particular topic. In this research, three survey rounds will be used (brainstorming, narrowing down, and ranking). Participants will first be asked to identify the most important factors that inform their decision-making. Then, they will narrow down and rank the list, and a final coefficient of agreement will be calculated based on their rankings.

The Delphi survey will provide an authoritative list of factors that influence managers' decisions in LTC homes related to the adoption of HIT. The findings will be helpful from the LTC managers' perspective as they can be used as a benchmark of key factors to consider in their decision to adopt HIT solutions.

The results of this thesis may help inform future policies aimed at advancing the use of technology to support the care provided to older adults in LTC.



# JULIA DOBROWOLSKI

Julia Dobrowolski is currently completing her M.Sc. in Health Systems with the Telfer School of Management under the supervision of Dr. Sanni Yaya and Dr. Samia Chreim. Her thesis topic focuses on exploring key stressors, unique challenges, coping mechanisms and desires for support among obstetrical nurses working throughout COVID-19. Julia's research aims to gain insight into how healthcare organizations can better support and meet the needs of obstetrical nurses working during major disease outbreaks. Besides working on her own research, Julia has also taken on roles as both a research and teaching assistant with Telfer.

Prior to starting her master's, Julia graduated from the University of Ottawa in 2020 with a B.Sc. in Biopharmaceutical Science. It was there during her final years where she discovered her desire to learn more about the inner workings of the Canadian healthcare system.

Outside of academia, Julia volunteers with various healthcare organizations and enjoys spending time with family and her recent potcake rescue from St.Lucia.

## ABSTRACT

### **Occupational Stressors and Coping Mechanisms among Obstetrical Nursing Staff throughout the COVID-19 Pandemic**

As a result of heightened occupational stress throughout the COVID-19 pandemic, nurses in hospitals are experiencing high rates of depression, anxiety, and burnout. However, nurses in obstetrical departments have had unique challenges and have experienced specific sources of stress that remain unclear. The objective of this research is to identify key stressors, unique challenges, coping mechanisms and needs for support among obstetrical nurses working during the COVID-19 pandemic. The study uses a qualitative approach based on interviews. Nurses from labour and delivery departments are being invited to participate in semi-structured interviews to share their experiences and perceived stressors of working throughout COVID-19. Interview questions also address coping strategies they use to mitigate stress and resources the hospital can provide. Interviews are audio-recorded, transcribed verbatim and coded using NVivo. Data analysis is based on an inductive thematic approach.

Preliminary results suggest key stressors for obstetrical nurses working during COVID-19 to be staffing issues, ability to provide proper patient care, having to reinforce and update families on COVID-19 hospital policies, fear of virus transmission, and patients' lying about COVID-19 symptoms. Additionally, participants expressed concern over the COVID-19 vaccination status of patients' support persons. Most common coping strategies appear to be relying on family members and colleagues for support, in addition to utilizing personal hobbies to decompress. Furthermore, attempting to modify work-life balance was common among participants, either through reducing work hours or a career change. Participants identified low retention and staff appreciation as key problem areas needing to be addressed by the hospitals.

The findings of this study will help inform hospital management on the development and implementation of organizational interventions to mitigate potential psychological distress among those working in maternal care during major disease outbreaks.



# CATHRYN ESPADERO

Cathryn Espadero is an MSc Health Systems candidate at the University of Ottawa. She works under the co-supervision of Dr. Lysanne Lessard and Dr. Amy Hsu to conduct research on the evaluation of learning health systems. Currently, she serves as a Research Assistant II at the Bruyere Research Institute to support the evaluation of a mortality risk prediction tool in long-term care homes.

Her interest in evaluation stems from her younger years volunteering in non-government organizations (NGOs), when she began questioning whether these programs were indeed supporting their beneficiaries or creating long-term negative consequences. These experiences motivated her to pursue her bachelor's degrees in Development Studies and Social Sciences at the Ateneo de Manila University. She also completed an advanced diploma in Program Evaluation at the New York University School of Professional Studies. Since then, Cathryn has supported evaluation system development in international and Philippine NGOs, working in health, governance, and community development sectors. Cathryn's experience conducting health program evaluation in Kenya inspired her to further study navigating health systems and their complex interactions. Through her graduate program, she aims to build her expertise in system evaluation to support health institutions in improving health outcomes and system efficiency.

## ABSTRACT

### **Towards a Framework for the Evaluation of Learning Health Systems**

Studies suggest that it takes an average of 17 years to translate clinical research into routine clinical practice, resulting in the underuse of effective clinical treatments and overuse of unhelpful treatments. The proposed antidote to this problem is the development of Learning Health Systems (LHS). LHSs align science, informatics, incentives, and culture to facilitate rapid, iterative learning within and among health institutions. Believing that it will improve healthcare and reduce costs, several institutions in the US, Canada, and more have adopted this model, while Sweden and Netherlands are adopting national LHSs. However, there is scarce LHS evaluation research that helps understand if implemented LHSs indeed improve health outcomes and health system efficiency to justify its increased adoption.

One commonly cited challenge in evaluating LHSs is the limited understanding of what outcomes and processes to evaluate, given the variation of LHS implementations across scale and focus. Although conceptual frameworks and implementation reports suggest metrics for evaluation, these have not been organized into a framework that comprehensively measures different dimensions of an LHS. These may include the policy, scientific, social, technological, and ethical dimensions, and learning cycle processes. This thesis will respond to this gap by developing an evaluation framework informed by literature and LHS experts. First, a scoping review will be employed investigating literature on (a) what LHS dimensions are evaluated and (b) what metrics are used to evaluate LHSs in theory and practice. The scoping review analysis will be used to develop the initial framework. Next, the framework will undergo two cycles of feedback and refinement with LHS academics and practitioners via Exploratory Focus Groups. Feedback on the final framework's usability and acceptability will then be obtained using Confirmatory Focus Groups. This study contributes a practical tool for evaluating LHSs and improving knowledge on LHS impact.

# PERLA HABCHI



Perla is a second-year student at the MSc management (Innovation) program at the Telfer School of Management and is co-supervised by prof. Catherine Elliott and prof. Darlene Himick. Perla is exploring the intersection between innovation and internal audit through her studies. She intends to accomplish this goal by aiming to create a framework that is intended to be used for auditing innovation programs in the public sector.

Perla completed her bachelor's degree in Finance at the Telfer School of Management in 2019 and has worked in the public sector as an internal auditor. Her interest in pursuing a graduate degree was sparked in her second year of her undergraduate degree and was later intensified as she saw a gap in auditing methodology that could be filled with further investigation. Perla is interested in all facets of internal audit, innovation, and how governments have been contributing to national innovation.

## ABSTRACT

### **Public Sector Audits: The Role of the Canadian Federal Government in the National Innovation System**

Innovation auditing has been a topic in both empirical and theoretical research (Frishammar et al., 2019). The literature on innovation audit is brief and is a sub-set of the management literature. The existing frameworks fall short in creating an audit framework that does not act as a self-assessment tool but follows auditing standards and takes into consideration the transformation of innovation to “servitized” innovative offerings. The purpose of my Master's thesis research is to provide an updated innovation audit framework that will take into consideration the openness and “servitization” of innovation within an innovation system. The framework addresses the opportunity of identifying internal controls within the role of governments in an innovation system. As my core contribution to the literature, I provide a framework that can guide audit managers in leading an informed innovation audit methodology in their organizations.

The study was organized as a conceptual study that seeks to produce a conceptual framework for auditing public sector organizations as actors within innovation systems (McGregor, 2018). Therefore, the main purpose of my thesis is to map two distinct concepts and associate them to a phenomenon. The two concepts in question are innovation systems and internal audit. As a result, a robust conceptual framework is established (McGregor, 2018). To determine the connection between the two concepts, the internal controls that are relied upon in internal audits would be determined within an innovation system. In particular, the role of government within the system should reveal several internal controls which serve as overall audit objectives. The proposed research will make an empirical contribution to both the audit and innovation literatures by answering the following research questions:

- 1. What are the mechanisms through which federal governments contribute to an innovation system?*
- 2. What internal controls and criteria can be used to audit innovation systems in the Canadian federal government?*

The resulting contribution is a framework that identifies internal controls that are attributed to the role of governments in innovations systems with associated audit criteria.

# SCARLETT KELLY



Scarlett is a first-year PhD student in Digital Transformation and Innovation. Her current research focuses on finding the missing factors that contribute to the success of change initiatives regarding technology adoption and usage. She will conduct her research from interdisciplinary lenses and with holistic thinking.

Obtained two Masters degrees, Master of Public Administration (MPA) and Master of Library and Information Studies (MLIS), Scarlett's research interest includes IT/IM project management, data management, government-business relations, and health policy. Scarlett also has a Certificate in University Teaching and Learning from Dalhousie University.

As an active researcher, Scarlett has presented in prestigious conferences, including the 51st Hawaii International Conference on System Sciences (HICSS) and the 5th annual Canadian Association of Programs in Public Administration (CAPPA) Conference. To date, Scarlett has published eight research papers and one book.

Scarlett has won numerous awards, such as the 2017 Irving and Jeanne Glovin Award for her paper Stereotypes in the Age of Diversity: Re-examine the Relations between Natural Identity and Social Identity. The 2017 Mitacs Globalink Research Award enabled Scarlett to become the Principal Investigator for her research in information creation behaviour in Rennes, France. Currently, Scarlett holds University of Ottawa Admission Scholarship and Engineering Merit Scholarship.

## ABSTRACT

### **Change Management and Technology – Why Don't Projects Succeed?**

Change management regarding technology is an area with a long history of research and exploration. Yet technology-related change initiatives often fail. A review of literature in technology-related change management shows over-cluttered and over-specialized frameworks and theories, various views of the role of technology, and a serious lack of holistic thinking and interdisciplinary research that brings together different factors - technology, change, human, organization, and management.

The purpose of this study is to promote success in technology-related change management by finding the missing factors relating to technology adoption and usage. To answer the main research question, "what are the missing factors in technology adoption and usage that enhance the success of technology-related change management implementation," this research will adopt a case study research method using grounded theory to collect data from a medium-large sized business and add technology factors to change management.

Taking an interdisciplinary and holistic approach, this research will deliver a renewed change management strategy that enhances success in managing technology-induced changes in businesses. Through merging theories from management and social science, collecting data from a real-life business setting, and presenting a big picture of technology-business-human, the findings from this research will be applicable, practical, and value-adding for business and contribute to change success regarding technology in the digital age.

# YANHONG LI



Yanhong is a PhD candidate in Management under the supervision of Dr. Laurent Lapierre, in the Organizational Behaviour and Human Resources specialization. Her research focuses on courage in the workplace, work-family interface, and employee well-being.

She obtained her MSc in Management in 2017 and her Honours B.A. with specialization in Psychology and minor in Statistics in 2015 from the University of Ottawa. Under the supervision of Dr. Laurent Lapierre, her master's thesis focused on factors that contribute to individuals' work-family enrichment using meta-analyses. Yanhong continuously looks for research opportunities within and outside of her field of study. She is currently working on several projects to identify problems related to, raise awareness of, and advocate for diversity, inclusion, equity, and employee well-being.

Yanhong's doctoral thesis studies workplace moral heroes – individuals who stand up for what they believe in despite perceived risks. She spends almost all her free time on fiber- or fabric-related crafts, fulfilling her houseplant-obsessions, and training her cats using behavioural theories she learned from her Psychology degree.

Yanhong Li holds the Lilian and Swee Chua Goh Doctoral Scholarship (the first admission scholarship created by donors for PhD candidates at the Telfer School of Management) and the Telfer PhD Engagement Award. She was a recipient of the Ontario Graduate Scholarship and currently holds the Joseph-Armand Bombardier Canada Graduate Scholarships Program Doctoral Scholarships (CGS-D) by the Social Sciences and Humanities Research Council (SSHRC).

## ABSTRACT

### **When the “Hero” is a “She” – Examining Outcomes of Workplace Courage as a Function of Gender**

Formally, an act of courage is one that is willing, involves substantial danger, difficulty, or risk to the actor, and primarily motivated to bring about a noble good or morally worthy purpose (Rate, 2010). Facing an unpredictable future filled with challenges with varying levels of risks, fears, and moral decisions, modern organizations rely on their members' abilities to call on courage if needed. Despite research documenting the organizational benefits of courageous employees, engaging in courageous acts can also be risky for the actors. Employees can face backlash when their courageous acts are perceived as disrupting the status quo (Simola, 2018). There is still much to learn about how coworkers and supervisors perceive and reward employees' courageous acts in the workplace (Detert & Bruno, 2017). My dissertation seeks to advance the field by investigating this gap from both an episodic and dispositional lens. For my presentation, I will concentrate on the first set of studies in my dissertation. This set of studies will rely on experimental designs to examine the influence of observers' perception of courageous acts on work- and social-related outcomes for the actor as a function of gender. Specifically, drawing upon social role theory (Carli & Eagly, 1999; Eagly et al., 2012) and system-justification theory (Jost & Banaji, 1994), I hypothesize that men benefit from acting courageously at work while women suffer work- and social-related backlashes when displaying identical courageous acts. In addition to advancing the workplace courage literature, the findings will also contribute to the understanding of the social relational processes of gender beliefs – an important step toward changing the gender systems and reducing gender inequality.

# AMIRHOSSEIN MOOSAVI



Amirhossein is a PhD candidate at Telfer School of Management, specializing in Health Systems. He works under the supervision of Dr. Onur Ozturk and Dr. Jonathan Patrick.

Amirhossein is graduated from Azad University with a MSc in Industrial Engineering. During his Master's thesis, he applied Advanced Analytics techniques to investigate the operating room planning and scheduling problem, which was awarded the title of the best thesis of the university. Also, for his PhD thesis, he is studying planning and scheduling problems in the residential care and medical day care sectors.

Amirhossein has published articles in various international journals including, Computers & Industrial Engineering, Transportation Letters, Journal of Industrial and Management Optimization, and European Journal of Industrial Engineering. During his PhD program, he was awarded the International Ontario Graduate Scholarship twice.

Amirhossein has extensive experience of over three years in research assistantship, where he studied various problems in Supply Chain Management. He has also worked as a teaching assistant for around ten courses. Currently, he is a part-time professor at Telfer School of Management. As a part of his volunteer activities, Amirhossein serves the Graduate Student association at Telfer School of Management as the Board Director.

Amirhossein's research interests are focused on applications of Advanced Analytics in Healthcare and Supply Chain Management.

He is also interested in developing optimization algorithms, such as metaheuristics, heuristics and Bender's decomposition methods for large-scale problems.

## ABSTRACT

### **Appointment Scheduling in a Medical Day Care Unit**

**Objectives and/or research question:** The Medical Day Care Unit (MDCU) at the Ottawa Hospital performs a wide variety of treatments across three different campuses. As of July 13th, 2021, around 1,500 patients are on the waiting lists of this unit and often suffer from long waiting times. This study aims to develop an efficient decision support tool for outpatient appointment scheduling and answer the following research question: How can appointment scheduling in the MDCU at the Ottawa Hospital be enhanced to optimize the performance metrics?

**Methods and/or theoretical foundation:** I design an approximate dynamic programming algorithm (a quantitative method) to address decisions associated with the scheduling of patients. In this project, two main input variables are the availability of staff and treatments' service duration. The main performance metrics would also include under-utilization of resources and patients' waiting time, which will be assessed by a single-group pre-post quasi-experimental design (comparing metrics before and after the implementation).

**Results and/or theoretical contribution:** The main contributions of this study are threefold. Apparently, my research is the first effort to investigate a distributed outpatient scheduling problem. Second, I let the treatments' service duration has three components (derived from the MDCU), each component with unique requirements. I believe this is the first time that service duration is investigated under this setting in the literature. Third, for the first time, I design an approximate dynamic programming algorithm capable of dealing with multi-objective Pareto optimization problems.

**Conclusions:** My research helps this MDCU to (i) simplify appointment scheduling processes, (ii) increase value by reducing manual scheduling processes, which can save many person-hours spent each day developing the schedule, (iii) eliminate human biases, errors and inefficiencies, (iv) consider different uncertainties while making decisions and faceless disruptions, (v) enhance performance metrics, increase transparency, and maintain equity among all stakeholders, and (vi) increase the number of patients served within a month/year.



# BRYNN O'DWYER



Brynn is currently completing her MSc in Health Systems at the Telfer School of Management at the University of Ottawa, under the supervision of Dr. Mirou Jaana. Prior to starting her MSc, Brynn completed her undergraduate degree in Health Promotion from Laurentian University. Her thesis topic focuses on exploring the use of a digital tool used for contact tracing during the COVID-19 pandemic at the Children's Hospital for Eastern Ontario (CHEO).

## ABSTRACT

### **Understanding the effectiveness of digital contact tracing during the COVID-19 pandemic**

The COVID-19 pandemic has initiated society to rapidly uptake the use of digital technology. Specifically, healthcare systems have adopted and advanced the use of technology to address the surfacing challenges of the COVID-19 pandemic. To face the increasing numbers of widespread COVID-19 transmissions, digital tools have been developed to augment the process of contact tracing. However, there is currently limited literature on the usage of outbreak response tools, particularly, digitalized contract tracing among staff members in hospitals.

**Objectives.** The Children Hospital of Eastern Ontario (CHEO) is among the first organizations to have adopted digital contact tracing during the COVID-19 pandemic. This thesis project aims to gain further insight into the effectiveness of a digital tool used for contact tracing detection and management. I will seek to answer the following question:

1. What are the healthcare workers' perceptions and experiences regarding the effectiveness of the COVID-19 digital contact tracing tool?

**Methods.** This research will first use a qualitative approach. Key themes identified by the qualitative findings will then be triangulated with secondary data obtained in the digital contact tracing tool.

1. Part 1: Interview healthcare workers on their experience of the digital contact tracing tool. I will conduct semi-structured interviews with CHEO healthcare workers to gain insight into the perceived benefits, challenges, self-efficiency, and future recommendations of the digital contact tracing tool.
2. Part 2: Analyze secondary data collected in digital contact tracing tool. To triangulate the qualitative findings, key themes identified will be further analyzed in the secondary data provided by the digital tool to compare patterns and address any data discrepancies. Thus, expanding the overall depth of the qualitative findings and providing a more thorough description of the usage of the COVID-19 digital contact tracing tool.

**Results/Conclusion.** This research presents policy, practice, and research contributions in the area of contact tracing and technology. At the policy level, the findings on the effectiveness of digital contact tracing through digital tools may inform future policies aiming at reducing staff exposure as well as programs or infrastructures for health worker screening or surveillance. The results may also present contributions at the healthcare environment level. At the research level, the results may be used to inform future studies on the effectiveness of this approach in a hospital context.

# LUCIE PÉLÉJA



Lucie Péléja is an MSc in Health Systems candidate at the Telfer School of Management, University of Ottawa, under the co-supervision of Dr. Agnes Grudniewicz (Telfer School of Management) and Dr. Tracey O'Sullivan (Interdisciplinary School of Health Sciences).

She has previously completed a BSc in Psychology with highest honours at the University of Ottawa. During this time, she was awarded the 2020–2021 Best Honours Thesis in Psychology by the School of Psychology at the same university and the Certificate of Academic Excellence by the Canadian Psychological Association for her undergraduate honour's thesis. Over the course of her undergraduate degree, Lucie gained research experience in different fields, including psychology, advanced biology, neuroimmunology, and stress research. She has published in peer-reviewed journals an article and conference abstract on cognitive psychology and a conference abstract on advanced biology. She has also contributed to other manuscripts in neuroimmunology and epidemiology. For her master's thesis, Lucie uses qualitative designs to study public trust in the healthcare system throughout the COVID-19 pandemic.

During the past five years, Lucie has been employed in various administrative positions with Innovation, Science, and Economic Development Canada (ISED), Service Ontario, and Cantley Municipal Elections. She has also tutored a class on perception in psychology at a French college, La Cité Collégiale. Lucie is currently working as a Junior Editor for the Canada Communicable Disease Report (CCDR) at the Public Health Agency of Canada (PHAC) and as a proctor for several Telfer classes at the University of Ottawa.

## ABSTRACT

### **A Social Media Analysis of Canadians' Trust in Government Throughout the COVID-19 Pandemic**

**Context:** Trust in government is an integral part of disease control. However, stress generated by the worldwide pandemic—and conflicting social media information—led to the popularization of various conspiracy theories and distrust in government. Thus, a considerable minority of Canadians remain unconvinced of the vaccines' efficacy and the necessity of following public health guidelines for the prevention of COVID-19. Examination of trust in governments can provide insight into the perspectives of Canadians who remain resolute in their false beliefs; this is necessary to devise recommendations to rebuild public trust through pandemic recovery.

**Objectives:** Explore Canadians' distrust in COVID-19 measures implemented by Canadian governments, and develop recommendations for future policies to rebuild public trust. This research aims to answer the following research questions: 1) Based on Canadians' social media comments, what key factors impacted trust in government public health measures during the COVID-19 pandemic? 2) What policy changes are needed to restore public trust in government?

**Methodology:** This study consists of a netnography. The corpus for this study will be collected using the social media sites Facebook and Twitter. Comments and replies on purposefully selected governmental COVID-19 related posts on these social media platforms will be collected using NVivo. A thematic analysis will be conducted across the collected social media data to identify patterns in the comments of people in Canada who expressed distrust in COVID-19 measures implemented by the government. The analysis will allow us to identify themes to base our recommendations on to improve public trust in the healthcare system.

**Contribution:** This research will directly contribute to social sciences literature on trust, specifically public trust in disaster settings. The findings will inform recommendations for policymakers to remediate the current distrust in the Canadian Government, especially in the public health system, and suggestions for future disaster response policies.



# DANIEL QUINTAL-CURCIC

Daniel James Quintal-Curcic is a Doctoral Candidate in Management specializing in Organizational Behaviour and Human Resources under the supervision of Dr. Laurent Lapierre. Daniel's research interests include mental health, leadership, and social support. Specifically, Daniel's research focuses on how managers/supervisors can best protect and promote their employees' mental health. Daniel has a passion for health and wellness, and outside of academia, he enjoys cooking plant-based recipes, meditating, pilates, and endurance training. Daniel also enjoys spending time with his mom and watching live drag performances.

## ABSTRACT

### **Developing the Construct of Mental-Health-Supportive Supervision (MHSS)**

Employees' experiences at work can influence their mental health. A 2012 report by the American Psychological Association indicates 70% of employees believe their job is one of the most significant sources of stress in their lives. Stress from work can contribute to poor mental health, where symptoms such as exhaustion, fatigue, reduced concentration, and withdrawal may negatively impact organizations. Supervisors (immediate managers) can play a pivotal role in protecting and enhancing employees' mental health by their demonstrations of social support. Supervisor-provided social support is the transaction of psychological and/or tangible resources between the supervisor and the employee. Empirical evidence indicates a positive relationship between social support and positive indicators of employee mental health (e.g., work engagement) and negative indicators (e.g., burnout). Although much is known about how supervisors can provide such support, no research to date has elucidated the type(s) of supervisor support that emphasize supportive actions that enable employees to experience the highest possible levels of mental health, which would potentially help to prevent employees from seriously struggling with their mental health. This research presents a conceptual framework of Mental-Health-Supportive Supervision (MHSS) that proposes why supervisors would engage in such supervision (determinants of support), why such supervision could be of value to employees' mental health (mediating mechanisms), and the circumstances in which this supervision would be most effective (moderators).

# KATHERINE- MARIE ROBINSON



Katherine-Marie Robinson is a second-year Master of Science student in the Digital Transformation and Innovation program in the Faculty of Engineering at the University of Ottawa. Under the supervision of Professor Jason Millar, she is researching the ethical issues that should be considered when designing and developing Ambient Assistive Living Technologies, especially those designed and developed for use in ageing in place settings.

Katherine-Marie completed her undergraduate studies in Biomedical Mechanical Engineering and Computing Technology at the University of Ottawa in 2020. In the fourth year of her undergraduate degree, she attended a presentation given by Professor Jason Millar in which he spoke about the intersection between engineering and ethics. This presentation sparked her interest in this field, and since then, she has been a member of the CRAiEDL lab, directed by Professor Millar. In the final year of her undergraduate degree, Katherine-Marie was selected to participate in the Undergraduate Research Opportunity Program (UROP) at uOttawa. During her time in this program, she evaluated how objectivity can be achieved in sentiment analysis models. Since joining the CRAiEDL lab, Katherine-Marie has had the opportunity to investigate the ethical considerations surrounding autonomous vehicles, healthcare devices, Artificial Intelligence and Machine Learning tools, models and algorithms, and social media platforms.

Outside of her research, Katherine-Marie loves being outdoors, especially in the mountains when in her hometown of Calgary, Alberta. She is also an avid runner, reader, and knitter and is always excited to take on a new challenge or experience.

## ABSTRACT

### **Ethics and the use of Ambient Assistive Living Technologies**

By 2030, it is predicted that over 23% (9.5 million) of Canadians will be 65 years of age or older. Assistive Technology (AT) is an emerging area of technology for assisting older adults. My research will examine a branch of AT known as Ambient Assistive Living (AAL) technology, which blends AT with computational components like Artificial Intelligence or Machine Learning to support ageing-in-place environments. While this technology can be designed to improve the lives of end-users and other stakeholders, there are ethical concerns regarding design and deployment.

The purpose of my research is to address these ethical concerns using a Participatory Design (PD) strategy with ageing-in-place stakeholders to design an Ethical Data Sheet (EDS) template. An EDS is used to inform stakeholders (end-users, family members, healthcare professionals, engineers, designers) of the ethical implications that must be considered in the development and use of these devices. This template will then influence the creation of EDSs for commercial AAL devices.

Participatory Design (PD) interviews and group workshops will be key to this research project. A PD strategy was chosen for this project as it allows for a diverse group of participants to interact with, understand, and ask ethical questions about devices being created for assisted living. Participants will be asked to imagine themselves interacting with AAL devices in hypothetical situations and asked to share their thoughts, feelings, and concerns regarding the ethical implications of using these devices.

This research aims to develop an EDS template that can be used by anyone who wants to investigate the ethical concerns that may arise with any related AAL device. While AAL technology has the potential to improve the quality of care for our older citizens, EDSs have the potential to address any ethical concerns with the use of these devices.



# ANDREW SCARFFE

Andrew (he/him) is a PhD Candidate in Management with a concentration in Health Systems at the Telfer School of Management and is supervised by Dr. Kevin Brand. Andrew's doctoral research is focused on how worldview influences risk informed decisions of the lay-public. Specifically, his research is focused on if a differentiation of regrets associated with different misclassification errors can help inform why people arrive at different decisions when faced with epistemic uncertainty. Andrew is the recipient of the Ontario Graduate Scholarship, Queen Elizabeth II Graduate Scholarship for Science and Technology, as well as the Mitacs Accelerate Entrepreneurship Scholarship. Prior to commencing doctoral studies, Andrew worked as Research Associate at the Ivey Business School at Western University at the Ivey International Centre for Health Innovation. Outside of Telfer, Andrew enjoys being active. He enjoys cycling in Gatineau Park and playing squash- you can find the best version of Andrew on the side of a ski hill when there is fresh powder.

## ABSTRACT

### **Average People, Complex Decisions and Risk Perception: How Worldview Influences Regret and the Standard of Proof in Decision-Making**

**Research Question(s):** Does an individual's worldview influence the weight they attribute to the regret of false positives and false negatives? Can this difference in regret, and associated standards of proof, explain the difference in risk perception and decision-making?

**Theoretical Foundation:** To answer our questions we draw on subjective utility theory, prospect theory and regret theory to inform our theoretical understanding of how people make decisions under uncertainty. We contend that the concept of a standard of proof can help inform our understanding of how people adjudicate and perceive different factual claims. Specifically, given that worldview has been found to influence the appraisal of evidence, individual-level worldviews may also influence standards of proof through a differential of regrets of false positives and false negatives. As a result of a different weighing of regrets, the differences in the standard of proof may explain why some individuals make different risk-informed decisions. Our proposed theory will be tested using an experimental research design with survey panels.

**Theoretical Contribution:** The risk perception literature only partially explains why subsets of the population make different risk-informed decisions when all subsets of the population are presented with the same evidence. We build on the body of literature that evidences how worldview influences the weight people ascribe to new evidence. Specifically, we contribute by recognizing the role for an implicit, individual level, standard of proof invocation in decision-making.

**Conclusion:** Our research seeks to understand how people make different risk-informed decisions. From an applied perspective, insight from our research can help explain why people choose/choose not to get the COVID-19 vaccine even when they are presented with the same evidence. Exploring risk perception through the lens of a standard of proof, provides insight into the risk communication strategies that are necessary to inform effective public policy campaigns.



# RACHEL THELEN

Rachel Thelen is a second-year Master's student in the Health Systems program, studying serious mental illness and primary care under supervision and mentorship from Dr. Agnes Grudniewicz. Rachel is a graduate Student Representative on the Mental Health and Wellness Advisory Committee for the University of Ottawa and is the Health Systems Representative of the Telfer Graduate Research Programs Student Association. She is a recipient of the Canadian Institutes of Health Research Award and the Mitacs Accelerate Scholarship. Rachel completed her undergraduate studies at the University of Ottawa in 2020, Majoring in Psychology. Rachel's current research explores primary care in Assertive Community Treatment (ACT) teams, a model of care that provides holistic care to clients with serious mental illness. She includes the lens of psychology, using Shared Mental Model Theory to identify successful teamwork among healthcare workers in ACT teams. Outside of uOttawa and Telfer, Rachel creates visual arts and practices yoga and meditation.

## ABSTRACT

### **Primary Care for Assertive Community Treatment Clients**

It is difficult for Canada's health system to support complex health profiles. People with serious mental illnesses (SMIs), such as schizophrenia, major depressive disorder, and bipolar disorder, experience barriers to accessing quality health care and experience high rates of avoidable morbidity and premature mortality. Assertive Community Treatment (ACT) is an evidence-based service delivery model that effectively supports the mental health of their clients, people with SMI. However, the provision of primary care to support their clients' physical health –before specialized or emergency intervention is required – is not well understood. Primary care can detect, manage, and treat physical health issues cost effectively. I am using a qualitative case study approach to explore in-depth five ACT teams in the Ottawa, Ontario region to discover how ACT teams provide primary care or collaborate with other clinicians to address clients' general physical health needs. I am using Shared Mental Model (SMM) theory to frame data collection and analysis. Mental models are psychological representations of how the world works in a specific domain and sharedness/similarity of mental models between group members is associated with successful teamwork. Using SMM theory, I can discover how ACT team members perceive and experience the provision of primary care to their clients, and how mental model sharedness within and between teams correlates with perceived success in meeting their clients' needs. Additionally, I am looking at the impact of COVID-19 on mental models. I am conducting semi-structured interviews with ACT team members and collecting pertinent documents. I will use thematic analysis on interview transcripts and documents. This thesis will extend SMM theory into the ACT literature and findings will provide insight on how care could be delivered to ACT clients, which will be relevant to Canadian ACT teams, health system collaborators, and a post-pandemic world.

# JAVID ZARE



Javid Zare is a 2nd-year student in the M.Sc. Management Program. His current research explores the importance of benefits and costs of university-industry research collaboration using a stochastic multi-criteria clustering approach. Javid graduated from the Sharif University of Technology with a B.Sc. in Chemical Engineering and Iran University of Science and Technology with an M.Sc. in Industrial Engineering. He published his first study research in the International Journal of Business Excellence.

Javid's research interests combine his mathematical background with recent topics in innovation; he is particularly interested in open innovation, innovative decision-making systems, innovation strategy, and marketing innovation. Outside of academia, Javid has had several years of professional experience as a marketing manager at two Iranian pioneer startups. He also holds workshops for students to improve their soft skills.

## ABSTRACT

**Exploring the nature of benefits and costs of open innovation for universities by using a stochastic multi-criteria clustering approach: the case of university-industry research collaboration**

Open innovation that Henry Chesbrough introduced in 2003 promotes the usage of the input of outsiders to strengthen internal innovation processes and the search for outside commercialization opportunities for what is developed internally. Open innovation has enabled both academics and practitioners to design innovation strategies based on the reality of our connected world.

Although the literature has identified and explored a variety of benefits and costs, to the best of our knowledge, no study has reviewed the benefits and costs of open innovation in terms of their importance for strategic performance. To conduct such a study, we need to take into account two main issues. First, the number of benefits and costs of open innovation are multifold; so, to have a comprehensive comparison, a large number of benefits and costs must be compared. Second, to have a fair comparison, benefits and costs must be compared in terms of different performance criteria, including financial and non-financial.

Concerning the issues above, we will face a complex process of exploring benefits and costs. In this regard, we use multiple criterion decision-making (MCDM) methods that have shown promising solutions to complex exploratory problems. In particular, we will present how using a stochastic multi-criteria clustering algorithm that is one of the recently introduced MCDM methods can bring promising results when it comes to exploring the strategic importance of benefits and costs of open innovation.

Since open innovation is a context-dependent issue, we need to explore the benefits and costs of open innovation in a specific context. On the other hand, there has been an increasing interest among open innovation scholars in the context of university-industry research collaboration. In this regard, we will explore the strategic importance of benefits and costs of university-industry research collaboration for universities. The research's findings enable researchers to analyze open innovation's related issues for universities more effectively and define their research projects on these issues in line with the priorities of universities.