



Lee Kong Chian
School of
Business

Operations Management Summer Camp 2026

Date: Friday, 14 August 2026

Venue: Singapore Management University
Lee Kong Chian School of Business
Level 2, Seminar Room (SR) 2.1

Programme	
8.30am - 8.45am	Registration (outside SR 2.1)
8.45am - 9.00am	Opening address by Professor Kapil TULI , Deputy Dean (Research) of Lee Kong Chian School of Business, Singapore Management University
9.00am - 9.45am	Paper 1: When Prediction Undermines Calibration - How Excessive Risk Adjustment Drives Up Health Insurance Premiums Presenter: Zhaowei SHE , Singapore Management University
9.45am - 10.00am	Discussant: Lauren Xiaoyuan LU , Dartmouth College
10.00am - 10.30am	Morning Break @ Catering area 2A, near SR 2.8, Level 2
10.30am - 11.15am	Paper 2: Serving an Aging Society: Targeted or Universal Subsidies? Presenter: Guiyun FENG , Singapore Management University
11.15am - 11.30am	Discussant: Sarang DEO , Indian School of Business
11.30am - 12.15pm	Paper 3: Dynamic Routing under Delayed Individual Information and Long-term Impact Presenter: Xiaoquan GAO , Singapore Management University
12.15pm - 12.30pm	Discussant: Shuangchi HE , National University of Singapore
12.30pm - 1.30pm	Lunch @ Catering area 2A/2B, near SR 2.8, Level 2

Programme	
1.30pm – 2.15pm	Paper 4: Solar Kit Design and Household Impact: Experimental Evidence from Ghana and Implications for Donor Organizations Presenter: Bhavani Shanker UPPARI , Singapore Management University
2.15pm – 2.30pm	Discussant: Javad NASIRY , McGill University
2.30pm – 3.15pm	Paper 5: The Power of Many: A Novel Aggregator Business Model for Vehicle-to-Grid Services Presenter: Yangfang (Helen) Zhou , Singapore Management University
3.15pm – 3.30pm	Discussant: Safak YUCEL , Georgetown University
3.30pm - 4.00pm	Afternoon Break @ Catering area 2A, near SR 2.8, Level 2
4.00pm - 4.45pm	Paper 6: Competition in Pricing Algorithms: Stability, Exploration, and Supracompetitive Outcomes Presenter: Meichun LIN , Singapore Management University
4.45pm - 5.00pm	Discussant: Jussi KEPPO , National University of Singapore
5.00pm - 5.15pm	Concluding Remarks End of OM Summer Camp

Discussants' Profiles (in order of presentation):



[Lauren Xiaoyuan LU](#)

Norman W. Martin 1925 Professor of Business Administration
Tuck School of Business, Dartmouth College

Lauren Xiaoyuan Lu is Norman W. Martin 1925 Professor of Business Administration at the Tuck School of Business at Dartmouth. Her research explores digital operations—how data, analytics, and AI enable innovative operating models and improve performance in healthcare, retail, and supply chain systems. She has published research articles in leading academic journals in the fields of operations, management science, and healthcare. She is currently a Department Editor for *Manufacturing & Service Operations Management*, an Associate Editor for both *Management Science* and *Operations Research*, and a Senior Editor for *Production & Operations Management*. She is the past President of the Supply Chain Management College of the POMS society and the past Chair of the Supply Chain Management Special Interest Group of the MSOM society.



[Sarang DEO](#)

Professor, Operations Management
Executive Director – Max Institute of Healthcare Management (MIHM)
Indian School of Business

Sarang Deo is a Professor of Operations Management at the Indian School of Business (ISB) and also serves as the Executive Director of the ISB's Max Institute of Healthcare Management.

Sarang's research focuses on healthcare delivery systems, examining how operational decisions influence population-level health outcomes. His work spans a wide range of healthcare contexts, including influenza vaccine supply chains and ambulance diversion in the United States, HIV early infant diagnosis networks in sub-Saharan Africa, and formal and informal pathways for tuberculosis (TB) diagnosis and treatment in India. His recent research has focused on designing and evaluating healthcare delivery models, with a particular emphasis on digital health and the integration of artificial intelligence into healthcare systems.

He regularly collaborates with leading global health organisations like the Gates Foundation, the Clinton Health Access Initiative (CHAI), and PATH. He currently serves on the World Health Organization's Strategic and Technical Advisory Group for Tuberculosis (STAG-TB) and the Working Group for Non-Technical Evaluation under the WHO Global Initiative on AI for Health (GI-AI4H).

Prior to joining ISB, Professor Deo was an Assistant Professor at the Kellogg School of Management. He holds a PhD from the UCLA Anderson School of Management, an MBA from the Indian Institute of Management Ahmedabad, and a BTech from the Indian Institute of Technology Bombay. Before entering academia, he worked as a management consultant with Accenture.



[Shuangchi HE](#)

Associate Professor

Deputy Head (Research)

Department of Industrial Systems Engineering and Management, National University of Singapore

He Shuangchi is an Associate Professor in the Department of Industrial Systems Engineering and Management at the National University of Singapore, where he also serves as Deputy Head (Research). He is an affiliated faculty member of the Institute of Operations Research and Analytics. He received his Ph.D. in Operations Research from the Georgia Institute of Technology and B.E. and M.S. degrees in Electronic Engineering from Tsinghua University. His research centres on stochastic modeling, analysis, and control, with applications in service, healthcare, and transportation systems. His work has appeared in journals such as Operations Research, Management Science, Mathematics of Operations Research, and The Annals of Applied Probability. He is an Associate Editor of Operations Research, and his honours include the College Teaching Excellence Award at NUS and third place in the INFORMS Junior Faculty Interest Group Paper Competition.



[Javad NASIRY](#)

Professor, Operations Management

Desautels Faculty of Management, McGill University

Javad Nasiry is a professor of Operations Management at McGill's Desautels Faculty of Management where he joined in 2019. He teaches courses on statistics, decision analytics, and operations management at the undergraduate and graduate levels including the MBA and MMA (Master of Management in Analytics) programs.

His main research interests are in **behavioral operations, supply chain management, sustainability, retail operations, operations-marketing interface, and empirical operations-finance interface**. His work in behavioral operations elaborates on whether and how psychological phenomena such as reference effects may affect aggregate variables (e.g., market demand) and their implications on firms' operational policies especially in pricing, inventory, and assortment. He employs both analytical and experimental research methods to explore the related research questions. His research in sustainable operations focuses on the environmental consequences of new business models in apparel, renewable energy, and agriculture industries. From August 2022 to December 2025, Javad was the director of Sustainable Growth Initiative (SGI) which is a cross-faculty initiative to mobilize the talent and expertise within McGill University to help businesses move towards more socially and environmentally sustainable business models.

Prior to joining McGill, he was an associate professor of operations management in the School of Business and Management at the Hong Kong University of Science and Technology (HKUST) where he joined in

2010. He taught courses on operations management and pricing and revenue management at the undergraduate and graduate levels including the MBA program.



Safak YUCEL

Associate Professor and Associate Director at the Business Sustainability Initiative
McDonough School of Business, Georgetown University

Safak Yucel is an associate professor of Operations Management (with tenure) at the McDonough School of Business, Georgetown University. Prof. Yucel is also the associate director of the Business of Sustainability Initiative. His main research interests are in sustainable operations, with a focus on renewable energy. He is also interested in the economic and environmental implications of new business models. Prof. Yucel's research has appeared in leading journals, including Management Science and Manufacturing and Service Operations Management. He has worked at the National Renewable Energy Laboratory of the U.S. Department of Energy, prior to receiving his Ph.D. in Operations Management from Duke University's Fuqua School of Business.



Jussi KEPPPO

Provost's Chair Professor and Head of Department of Analytics & Operations
Research Director at Institute of Operations Research and Analytics
NUS Business School, National University of Singapore

Professor Keppo teaches risk management and analytics courses, and directs analytics executive education programmes at the National University of Singapore (NUS) Business School. He is also the Head of the Department of Analytics & Operations (DAO) at NUS Business School and Research Director of the Institute of Operations Research and Analytics (IORA) at NUS. Previously, he taught at the University of Michigan.

He has several publications in top-tier journals such as the Journal of Economic Theory, Review of Economic Studies, Management Science, Operations Research, and Journal of Business on topics such as investment analysis, banking regulation, learning, and strategic incentives. His research has been featured also in numerous business and popular publications, including the Wall Street Journal and Fortune.

Professor Keppo's research has been supported by several Asian, European, and US agencies such as the National Science Foundation. He serves on the editorial boards of Management Science, Operations Research, and Journal of Risk. He has consulted several startups, Fortune 100 companies, and financial institutions.

Abstracts (in order of presentation)

Presenter: [Zhaowei SHE](#)

Title

When Prediction Undermines Calibration - How Excessive Risk Adjustment Drives Up Health Insurance Premiums

Abstract

Risk adjustment is a key design feature of the Affordable Care Act (ACA) Marketplace. By redistributing funds across plans based on enrollees' predicted healthcare costs, risk adjustment is intended to mitigate adverse selection and thus stabilize premiums. Existing designs often focus on improving the risk adjustment model's predictive ability to separate high-cost from low-cost enrollees. We show, however, that this approach can introduce a competing distortion, i.e., miscalibration, whereby plans are systematically underpaid for low-risk enrollees and overpaid for high-risk enrollees. In this paper, we first develop a theoretical framework that formalizes the trade-off between prediction and calibration in risk adjustment design. This framework shows how gains in predictive fit can amplify payment distortions across enrollee subgroups, thereby affecting plan pricing incentives. We then provide empirical evidence from the ACA Marketplace using an instrumented difference-in-differences design that exploits cross-market variation induced by the 2017 expansion of risk adjusters. The results reveal a "more is less" paradox: more predictive risk adjustment models can increase the dispersion of risk adjustment transfers, thereby raising market-average premiums. Specifically, we estimate that every one-dollar standard deviation increase in transfer dispersion raises average premiums by approximately 0.8%. To resolve this design tension, we propose a calibration-aware two-stage risk adjustment method that balances predictive accuracy and calibration. Counterfactual simulations show that by simultaneously compressing excessive transfer dispersion while preserving plan-level predictive accuracy, our proposed approach can reduce market-average premiums by 6.49%.

Presenter: [Guiyun FENG](#)

Title

Serving an Aging Society: Targeted or Universal Subsidies?

Abstract

As populations age, ensuring seniors' access to affordable and high-quality meals has become an important public-service challenge. We study how a government should allocate a limited meal-subsidy budget in a community food center: should public funds be targeted only to seniors, or should they be extended to all age groups? We develop a Stackelberg model in which the government chooses a senior discount and a per-meal subsidy, while a profit-maximizing operator chooses the posted price and meal quality. Consumers decide whether to participate, with young consumers having higher outside options than seniors. We compare a targeted subsidy, paid only for senior meals, with a universal subsidy, paid for all meals served. The two schemes operate through distinct mechanisms. Targeted subsidies concentrate public funds on the protected group and are effective at sustaining senior-focused service. Universal subsidies, by contrast, reward broader market coverage and can induce higher quality because attracting young consumers requires meeting their higher outside option. A key insight is that even when the policymaker values only senior surplus, it may be optimal to subsidize all age groups: young-consumer participation disciplines the

operator's price-quality choice and can improve seniors' welfare. However, when quality provision is costly, targeted subsidies can dominate by preserving a senior-focused program.

Presenter: [Xiaoquan GAO](#)

Title

Dynamic Routing under Delayed Individual Information and Long-term Impact

Abstract

In many service systems, routing decisions must be made before detailed individual-level information becomes available. Delays caused by clinical evaluations or risk assessments create a tension between committing early with imperfect information and adjusting decisions later, especially when routing has persistent effects on congestion. We develop a dynamic routing framework that captures both delayed information and long-term downstream impact. As a benchmark, we show that without information delay, the optimal policy has an exact two-step structure: advance planning based on system-level information, followed by individual assignment through a priority rule. Motivated by this structure, we develop a tractable, structure-preserving policy for delayed-information settings using a fluid approximation of the future value function. We characterize when adjustment is necessary and bound its optimal magnitude. When the value of individual-level information is small relative to adjustment costs and long-term congestion effects, revising advance plans is unnecessary and the two-step policy is asymptotically optimal. Otherwise, adjustment is beneficial but remains explicitly bounded. These results reveal a three-way tradeoff among information value, adjustment cost, and the persistence of routing impact. A jail diversion case study calibrated with ten years of operational data supports the theory and shows that flexibility can be harmful: adjustment policies that ignore long-term congestion may destabilize the system and underperform a simple no-adjustment policy.

Presenter: [Bhavani Shanker UPPARI](#)

Title

Solar Kit Design and Household Impact: Experimental Evidence from Ghana and Implications for Donor Organizations

Abstract

One in ten people worldwide lack electricity and rely on costly, low-quality alternatives for lighting and phone charging. Off-grid solar products are widely promoted as a solution, yet evidence remains limited on the magnitude and persistence of their household impacts and on how those impacts vary with product design. Without such evidence, donors seeking to expand energy access have little basis for judging how scarce resources should be allocated across kits of different capacities—for example, whether higher-capacity kits justify their higher costs and lower reach. We address this gap through a field experiment involving around 1,000 unelectrified households in northern Ghana, randomly assigned either to a control group or to receive one of eight solar-lighting kits. The kits varied in brightness (130–800 lumens) and bulb count (one or three), capturing illumination quality and simultaneous spatial coverage. We tracked cash-flow, health, and education outcomes for a year using monthly surveys, school records, and automated usage logs.

Treated households displaced recurring expenditures on legacy energy sources while also purchasing USB-compatible devices that could be recharged using the solar kit, thereby expanding the services available from

it. The pooled estimates show that, relative to the control group, net monthly cash-flow relief reached 20\% of household earnings by the end of the study and that energy-linked acute health symptoms fell by about half; children studied 20 additional minutes per day, and grades increased by around 6 percentage points. Despite large differences in assigned capacity, cash-flow and health impacts differed little across treatment arms. This pattern is consistent with functional sufficiency and household adjustment: basic kits generated most of these benefits, while recipients of lower-capacity kits expanded complementary-device portfolios and used available capacity more intensively. Educational outcomes were more configuration-sensitive: brighter light appeared especially valuable when combined with multiple bulbs, which can keep a study location consistently illuminated. These findings suggest that lower-cost kits can deliver much of the cash-flow and health impact of higher-end systems, enabling donors to extend reach, whereas education-focused programs may benefit from preserving adequate brightness and spatial coverage.

Presenter: [Yangfang \(Helen\) Zhou](#)

Title

The Power of Many: A Novel Aggregator Business Model for Vehicle-to-Grid Services

Abstract

As millions of electric vehicles (EVs) come onto the road, the power of many small vehicle batteries can be harnessed through vehicle-to-grid (V2G) services, in which EVs discharge electricity from their batteries back to the grid. As the most critical concern for individual EV drivers to adopt V2G is the potential degradation of the vehicle battery, we propose a business model that caps the annual number of V2G services per vehicle (e.g., ten times per year), under which the degradation is negligible. We model the problem of an aggregator who recruits a pool of EV drivers for services using a two-stage model. In the first stage, the aggregator offers a menu of rewards as a function of annual V2G services up to the cap; in the second stage, we build a stochastic dynamic program to model the decision of the aggregator on the number of enrolled services to deploy in each period, considering the stochastic electricity demand. We analytically characterize the optimal reward menu and show that it may change in a non-monotonic fashion as the number of V2G services increases under both a fluid approximation model and an extended model. We further examine the performance of the optimal reward menu in a numerical study calibrated to real electricity demand data. We find that compared to the constant reward scheme, our proposed reward menu can increase the aggregator's profits by as much as 17% and reduce emissions by as much as 30%. (This paper is related to a pending patent.)

Presenter: [Meichun LIN](#)

Title

Competition in Pricing Algorithms: Stability, Exploration, and Supracompetitive Outcomes

Abstract

Antitrust regulators are increasingly concerned that firms employing advanced reinforcement learning techniques may “learn to collude”. But is complex artificial intelligence, such as Q-learning algorithms or pricing LLMs, necessary to sustain prices above the competitive level? This paper demonstrates that supracompetitive prices can emerge from the interaction of model misspecification and strategic complementarity, without any sophisticated AI or intent to collude. We investigate a dynamic setting where

firms employ a widely adopted form of a misspecified demand model that ignores competitive interactions. Using tools from Stochastic Approximation and Lyapunov Analysis, we analyze the global stability of this dynamic system. We derive a Stability Condition, which identifies a tension between the stabilizing force of demand learning and the destabilizing feedback loops induced by misspecification. We provide insights into how this tension may lead to supracompetitive prices that mimic collusion. Our analysis uncovers three distinct non-collusive mechanisms that drive prices above competitive levels: (i) correlated exploration or common market shocks mask signals related to competition, which cause the market to mimic collusive outcomes without explicit communication between the firms; (ii) a firm with an informational and timing advantage may strategically induce its competitor to underestimate price elasticity; (iii) when the stability condition is violated, due to high market coupling or insufficient price experimentation, destabilizing feedback loops drive the system toward outcomes where firms misperceive demand as inelastic.

~ Thank you ~