# Jónas Oddur Jónasson

Massachusetts Institute of Technology

mitmgmtfaculty.mit.edu/joj/

**☎** 617 715 5109 ⊠ joj@mit.edu

# Academic appointments

MIT SLOAN SCHOOL OF MANAGEMENT

Class of 1943 Career Development Professor 2018 - Present

2016 - Present Assistant Professor of Operations Management

### Research interests

Operations Management, Healthcare Delivery Operations, Health Policy, Health Analytics.

Non-Profit Operations, Global Health, Social Determinants of Health.

Operational Team Productivity, Ambulance Operations.

# Education

London Business School

2016 PhD Management Science and Operations.

Thesis: Data-driven Models of Healthcare Delivery Operations.

M.Res Management Science and Operations.

University of Cambridge

M.Phil Management Science and Operations.

Dissertation: An analysis of the effect of non-uniform conversion rates on Sponsored Search Auctions.

LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

2009 M.Sc. Operational Research, with distinction.

Dissertation: An examination of the usefulness of reformulating Integer Programs as Flow Problems.

University of Iceland

2008 B.Sc. Industrial Engineering, first class grade.

University of Miami

2007 Exchange studies in Industrial Engineering.

## Research

#### Journal publications (in reverse chronological order)

- 1. Improving TB Treatment Adherence Support: The Case for Targeted Behavioral Interventions. With Justin Boutilier and Erez Yoeli. Forthcoming. Manufacturing & Service Operations Management.
- 2. Design and Implementation of a USSD System for Daily Tracking of Blood Samples and Diagnostic Results in a Diagnostic Network in Malawi: System Development and Field Trial. With\* Daniel Killian, Emma Gibson, Mphatso Kachule, Kara Palamountain, Joseph Bitilinyu Bangoh, and Sarang Deo. Forthcoming. Journal of Medical Internet Research (JMIR).
  - \* Joint last author with S. Deo.
- 3. The Variance Learning Curve. With Hessam Bavafa. Forthcoming. Management Science.
- 4. Learning from Many: Partner Exposure and Team Familiarity in Fluid Teams. With Zeynep Aksin, Sarang Deo, and Kamalini Ramdas (2021). Management Science, 67(2):854-874.
  - Non-technical op-ed: "Learning From Many" Psychology Today. Feb 3, 2020.
- 5. Recovering from Critical Incidents: Evidence from Paramedic Performance. With Hessam Bayafa. Forthcoming. Manufacturing & Service Operations Management.
  - Non-technical op-ed: "Emotional States Matter in Service Operations Settings" Psychology Today. Nov 12, 2019.
- 6. Improving HIV early infant diagnosis supply chains in sub-Saharan Africa: Models and application to Mozambique, with Sarang Deo and Jérémie Gallien (2017). Operations Research, 65(6):1479-1493.
  - Finalist. 2019 MSOM Responsible Research competition.
  - First prize. 2014 MSOM student paper competition.

- Abstract published in *Manufacturing & Service Operations Management*, 17(2): 262-264.
- Non-technical op-ed: "We found ways to shorten the turnaround time for diagnosing babies with HIV". *The Conversation*. Jan 17, 2018.

### Working papers

- 7. Vaccine Supply Chains in Resource-Limited Settings: Mitigating the Impact of Rainy Season Disruptions. With Kim De Boeck, Catherine Decouttere, and Nico Vandaele. Minor revision at European Journal of Operations Research.
- 8. Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily Route Optimization. With Sarang Deo, Emma Gibson, Mphatso Kachule, and Kara Palamountain. Major revision at Manufacturing & Service Operations Management.
  - First prize (Emma Gibson). 2020 INFORMS Doing Good with Good OR student paper competition.
  - Second prize. 2021 Best Paper Competition of the College of Healthcare Operations Management (CHOM) of the Production and Operations Management Society (POMS).
  - First prize. 2021 M&SOM Practice-Based Research Competition.
- 9. A New Combination Testing Methodology Identifies Accurate and Economical Testing Strategies. With\* Sanjay Jain, Barnaby Flower, Maya Moshe, Gianluca Fontana, Sutharsan Satkunarajah, Richard Tedder, Myra McClure, Hutan Ashrafian, Paul Elliott, Wendy S Barclay, Christina Atchison, Helen Ward, Graham Cooke, Ara Darzi, and Kamalini Ramdas. Under revision.
  - \* Joint first author with S. Jain.
- 10. The Distributional Impact of Fatigue on Performance. With Hessam Bavafa. Under revision following reject and resubmit from *Management Science*.
- 11. Preventing Opioid Overdose: From Prediction to Operationalization. With Neal Kaw, Deeksha Sinha, Nikos Trichakis, Anyi Chen, Joseph Conte, Ashley Restaino, and Salvatore Volpe. Submitted.

#### In progress

- 12. Robust Combination Testing: Methods and Application to COVID-19 Detection. With Sanjay Jain, Jean Pauphilet, and Kamalini Ramdas.
- 13. Deployment Guidelines for Community Health Workers in Sub-Saharan Africa. With Carri Chan, Sarang Deo, and Jérémie Gallien.

### Awards and honors

(\* denotes honors or awards received by students)

2021	First prize. 2021 M&SOM Practice-Based Research Competition. For Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily Route Optimization.
2021	NEC Corporation Fund for Research in Computers and Communications grant. Awarded by the MIT Research Support Committee.
2021	Second prize. 2021 Best Paper Competition of the College of Healthcare Operations Management (CHOM) of the Production and Operations Management Society (POMS). For Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily Route Optimization.
2020	M&SOM Meritorious Service Award.
2020*	First prize. INFORMS Doing Good With Good OR student paper competition (Emma Gibson).
	For Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily
	Route Optimization.
2019	M&SOM Meritorious Service Award.
2019	Finalist. MSOM Responsible Research competition. For Improving HIV early infant diagnosis
	supply chains in sub-Saharan Africa: Models and application to Mozambique.
2017	Grand Challenges Exploration award from the Bill and Melinda Gates Foundation.
2015	Bonder Scholar Research Grant.
2015	Deloitte Institute of Innovation and Entrepreneurship (DIIE) PhD Stipend Award.
2014	First prize. INFORMS Manufacturing & Service Operations Management (MSOM) student paper
	competition. For Improving HIV early infant diagnosis supply chains in sub-Saharan Africa:
	Models and application to Mozambique.
2014	Seth Bonder Scholarship for Applied Operations Research in Health Services.

2014 ICEIDA (Icelandic International Development Agency) Doctoral Scholarship.

2010-2014 London Business School PhD Programme Financial Award. 2009-2010 Overseas student bursary. Cambridge Overseas Trust.

Travel grants: Health Systems Optimization Workshop (Chicago, 2014), Health & Humanitarian Logistics

Conference (Hamburg 2012).

# Invited conference and seminar presentations

2021 UT Austin—McCombs School of Business; Koç University; MIT—Health Systems Initiative.

2020 Rotman Roundtable on Data Analytics in Healthcare (Toronto).

2019 University of Maryland—Robert H. Smith Business School; University of Chicago—Booth Business School. INFORMS Healthcare 2019 (MIT). INFORMS Annual Meeting (Seattle).

2018 Icahn School of Medicine — Arnhold Institute for Global Health; Riders for Health, Malawi; MSOM Annual Conference (UT Dallas); Emory University—IS&OM Workshop of Empirical Research; INFORMS Annual Meeting (Phoenix); Georgia Institute of Technology—ISyE; Malawi Ministry of Health — Diagnostics sub-committee.

2017 Reykjavík University; Riders for Health, Malawi; INFORMS Annual Meeting (Houston); MIT — ORC.

2016 MIT — Health Systems Innovation initiative; INFORMS Annual Meeting (Nashville);
Deloitte Institute for Innovation and Entrepreneurship Research Symposium (Ditchley house);
Workshop on Empirical Research in Operations Management (Wharton); London Ambulance Service;
INFORMS International Meeting (Hawaii); UNC — Kenan-Flagler Business School; MIT — Sloan School of
Management; INSEAD Business School; Harvard — Chan School of Public Health; IU — Kelley School of
Business; UVA — Darden School of Business; CMU — Tepper School of Business; UCLA — Anderson
School of Management; UCSD — Rady School of Management; McGill — Desautels Faculty of Management;
Oxford — Saïd Business School.

2015 INFORMS Annual Meeting (Philadelphia); IESE Business School.

2014 Health Systems Optimization Workshop (Northwestern); INFORMS Annual Meeting (San Francisco).

2013 Trans-Atlantic Doctoral Conference (LBS); INFORMS Healthcare (Chicago); EURO-INFORMS Joint International Meeting (Rome); MSOM Annual Conference (INSEAD).

2012 Health & Humanitarian Logistics Conference (Poster) (Hamburg); MSOM Annual Conference (Columbia).

# Teaching

MIT
2019-2021 Healthcare Lab: Introduction to Healthcare Delivery (MBA Elective)
2017-2021 Introduction to Operations Management (MBA)

LBS (TA)
2014-2015 Operations Management (Executive MBA—London and Dubai)
2011-2014 Innovating Business Models, Products, & Services (MBA Elective)

### Students

Kenny Groszman (LGO) 2021-Present (joint with Rama Ramakrishnan)

Christopher Cubra (LGO) 2021-Present (joint with Daniel Frey)

Rebecca Reubenstein (ORC SM) 2021-Present

Ankita Singth (LGO) 2020-2021 (joint with Ellen Roche) Levi DeLuke (LGO) 2020-2021 (joint with Ellen Roche)

Daniel Killian (ORC SM) 2019-2021

Neal Kaw (ORC SM) 2019-2021 (joint with Nikos Trichakis)

Emma Gibson (ORC PhD) 2018-Present

Denton Xiang He (LGO) 2019-2020 (joint with Hermano Igo Krebs)
Merin Thomas (LGO) 2018-2019 (joint with David Simchi-Levi)
Benjamin Awuondo (LGO) 2017-2018 (joint with Stanley B. Gershwin)

Atikha Rizwan (SDM) 2017-2018

Tim Scully (ORC SM) 2016-2017 (joint with Nikos Trichakis)

# Professional activities

Ad-hoc reviewer: Management Science, Operations Research, Manufacturing & Service Operations

Management, Production and Operations Management, European Journal of Operations Research, Journal of Operations Management, Service Science,

Sustainability, Philosophical Transactions A.

Competition reviewer: Pierskalla award (2016, 2017, 2019), MIT ORC best paper competition (2017, 2018),

POMS Healthcare Best Paper Competition (2017, 2020), INFORMS Public Sector Operations Research Best Paper Competition (2017, 2018, 2019, 2020), POMS SCM College Best Student Paper Competition (2020), MSOM Student Paper Competition

(2021).

Committee member: Seth Bonder Scholarship for Applied Operations Research in Health Services (Chair).

Co-organizer: INFORMS Healthcare 2019 (Program Chair), Trans-Atlantic Doctoral Conference 2012.

Member: INFORMS, MSOM, HAS.

Last updated: July 13, 2021