Jónas Oddur Jónasson

Massachusetts Institute of Technology

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Academic appointments

MIT SLOAN SCHOOL OF MANAGEMENT
2016 – Present   Assistant Professor of Operations Management
                   - Affiliated with the Operations Research Center
                   - Affiliated with the MIT Sloan Health Systems Initiative
2018 – 2021   Class of 1943 Career Development Assistant Professor

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.*
2012   M.Res Management Science and Operations.

UNIVERSITY OF CAMBRIDGE
2010   M.Phil Management Science and Operations.
       Thesis: *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.
       Thesis: *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. *Vaccine Supply Chains in Resource-Limited Settings: Mitigating the Impact of Rainy Season Disruptions.*
   Kim De Boeck, Catherine Decouttere, Jónas Oddur Jónasson, and Nico Vandaele.
   European Journal of Operational Research. Forthcoming.

2. *Improving TB Treatment Adherence Support: The Case for Targeted Behavioral Interventions.*
   Justin Boutilier, Jónas Oddur Jónasson, and Erez Yoeli.
   Manufacturing & Service Operations Management. Forthcoming.
        - Finalist. 2021 INFORMS Pierskalla Award for Best Paper in Healthcare Management Science.

3. *An Unstructured Supplementary Service Data System for Daily Tracking of Patient Samples and Diagnostic Results in a Diagnostic Network in Malawi: System Development and Field Trial.*
   Daniel Killian, Emma Gibson, Mphatso Kachule, Kara Palamountain, Joseph Bitilinyu Bangoh, Sarang Deo, and Jónas Oddur Jónasson (joint last author with S. Deo).
   Journal of Medical Internet Research (2021), 23(7):e26582.

4. *The Variance Learning Curve.*
   Hessam Bavafa and Jónas Oddur Jónasson.
   Management Science (2021), 67(5):3104-3116.
   - Finalist. 2021 MSOM Service Management Special Interest Group Best Paper Award.

5. *Learning from Many: Partner Exposure and Team Familiarity in Fluid Teams.*
   Zeynep Akşin, Sarang Deo, Jónas Oddur Jónasson, and Kamalini Ramdas.
   Management Science (2021), 67(2):854-874.
   - Non-technical op-ed: "Learning From Many" *Psychology Today.* Feb 3, 2020.

6. *Recovering from Critical Incidents: Evidence from Paramedic Performance.*
   Hessam Bavafa and Jónas Oddur Jónasson.
   Manufacturing & Service Operations Management (2021), 23(4):914-932.
   - Non-technical op-ed: "Emotional States Matter in Service Operations Settings" *Psychology Today.* Nov 12, 2019.

7. *Improving HIV early infant diagnosis supply chains in sub-Saharan Africa: Models and application to Mozambique.*
   Jónas Oddur Jónasson, Sarang Deo and Jérémie Gallien.
   Operations Research (2017), 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

8. *Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily Route Optimization.*
   Sarang Deo, Emma Gibson, Jónas Oddur Jónasson, Mphatso Kachule, and Kara Palamountain.
   Under major revision for ***Manufacturing & Service Operations Management***.
   - First prize. 2021 M&SOM Practice-Based Research 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 (Emma Gibson). 2020 INFORMS Doing Good with Good OR student paper competition.

9. *The Distributional Impact of Fatigue on Performance.*
   Hessam Bavafa and Jónas Oddur Jónasson.
   Under major revision for ***Management Science***.

10. *Preventing Opioid Overdose: From Prediction to Operationalization.*
    Jónas Oddur Jónasson, Neal Kaw, Deeksha Sinha, Nikos Trichakis, Anyi Chen, Joseph Conte, Ashley Restaino, and Salvatore Volpe.
    Under major revision for ***Manufacturing & Service Operations Management***.

11. *Robust Combination Testing: Methods and Application to COVID-19 Detection.*
    Sanjay Jain, Jónas Oddur Jónasson, Jean Pauphilet, and Kamalini Ramdas.
    Under major revision for ***Management Science***.

12. *A New Combination Testing Methodology Identifies Accurate and Economical Testing Strategies.*
Sanjay Jain, Jónas Oddur Jónasson (joint first author with S. Jain), Jean Pauphilet, 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.

In progress

13. *Deployment Guidelines for Community Health Workers in Sub-Saharan Africa.*
Carri Chan, Sarang Deo, Jónas Oddur Jónasson and Jérémie Gallien.

14. *Coordinating Health and Social Services: Effects of Allowing Non-Medical Services in Medicare Advantage Programs.*
Woonam Hwang, Jónas Oddur Jónasson, and Heikki Peura.

15. *Can digital adherence technologies close inequity in tuberculosis treatment outcomes? Evidence from secondary analyses of data from a randomized controlled trial.*
Justin J. Boutilier, Erez Yoeli, Jon Rathauser, Ramnath Subbaraman, Jónas Oddur Jónasson.

Awards and honors
(* denotes honors or awards received by students)

2021	Finalist. MSOM Service Management SIG Best Paper Award. For *The Variance Learning Curve.*
2021	Finalist. INFORMS William Pierskalla Award for Best Paper in Healthcare Management Science. For *Improving TB Treatment Adherence Support: The Case for Targeted Behavioral Interventions.*
2021	Finalist. INFORMS Sanjay and Panna Mehrotra Research Excellence Award.
2021	First prize. M&SOM Practice-Based Research Competition. For *Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily Route Optimization.*
2021	Second prize. 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 (awarded to Emma Gibson). For *Redesigning Sample Transportation in Malawi Through Improved Data Sharing and Daily Route Optimization.*
2019	M&SOM Meritorious Service Award.
2019	Finalist. M&SOM Responsible Research competition. For *Improving HIV early infant diagnosis supply chains in sub-Saharan Africa: Models and application to Mozambique.*
2014	First prize. M&SOM student paper competition. For *Improving HIV early infant diagnosis supply chains in sub-Saharan Africa: Models and application to Mozambique.*
2014	INFORMS Seth Bonder Scholarship for Applied Operations Research in Health Services.

Research grants

2022	MIT – Takeda Program research grant (\$ 600,000, with Vivek Farias).
2021	NEC Corporation Fund for Research in Computers and Communications grant. Awarded by the MIT Research Support Committee (\$ 75,000).
2017	*Grand Challenges Exploration* award from the Bill and Melinda Gates Foundation (\$ 100,000).
2015	Bonder Scholar Research Grant (\$ 4,000).
2015	Deloitte Institute of Innovation and Entrepreneurship (DIIE) PhD Stipend.
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

2022	UC Berkeley—Haas School of Business; Yale School of Management; Dartmouth—Tuck School of Business.
2021	UT Austin—McCombs School of Business; Koç University; MIT—Health Systems Initiative; University of Pennsylvania—The Wharton School.
2020	Rotman Roundtable on Data Analytics in Healthcare (Toronto).
2019	University of Maryland—Robert H. Smith Business School; University of Chicago—Booth School of Business. 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 (Hamburg); MSOM Annual Conference (Columbia).

Teaching

MIT

2021	Introduction to Operations Management, MBA (Evaluation score: 4.6/5)
2021	Healthcare Lab: Introduction to Healthcare Delivery, MBA Elective (Evaluation score: 4.5/5)
2020	Introduction to Operations Management, MBA (Evaluation score: 4.6/5)
2020	Healthcare Lab: Introduction to Healthcare Delivery, MBA Elective (Evaluation score: 4.5/5)
2019	Introduction to Operations Management, MBA (Evaluation score: 4.2/5)
2019	Healthcare Lab: Introduction to Healthcare Delivery, MBA Elective (Evaluation score: 4.0/5)
2018	Introduction to Operations Management, MBA (Evaluation scores: 3.9, 4.1, & 4.5/5)
2017	Introduction to Operations Management, MBA (Evaluation scores: 4.5 & 4.2/5)

LBS (TA)

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

Student supervision

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, Human Resource Management.
Competition reviewer:	INFORMS Pierskalla Best Paper 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:	INFORMS Seth Bonder Scholarship for Applied Operations Research in Health Services (Chair).
Co-organizer:	MSOM Healthcare SIG Workshop 2022 (Co-Chair), INFORMS Healthcare Conference 2019 (Program Chair), Trans-Atlantic Doctoral Conference 2012.
Member:	INFORMS, MSOM, HAS.

Last updated: March 16, 2022