Massachusetts Institute of Technology

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## Academic appointments

MIT SLOAN SCHOOL OF MANAGEMENT

Class of 1943 Career Development Professor 2018 - Present

2016 - PresentAssistant 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.
- 2012M.Res Management Science and Operations.

UNIVERSITY OF CAMBRIDGE

2010 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

M.Sc. Operational Research, with distinction. 2009

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** papers

#### Journal publications

- 1. The Variance Learning Curve. With Hessam Bavafa. Forthcoming. Management Science.
- 2. Learning from Many: Partner Exposure and Team Familiarity in Fluid Teams. With Zeynep Aksin, Sarang Deo, and Kamalini Ramdas. Forthcoming. Management Science. - Non-technical op-ed: "Learning From Many" Psychology Today. Feb 3, 2020.
- 3. 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.
- 4. 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

5. Vaccine Supply Chains in Resource-Limited Settings: Mitigating the Impact of Rainy Season Disruptions. With Kim De Boeck, Catherine Decouttere, and Nico Vandaele. Under revision.

- 6. Targeting Outreach to Increase Patient Engagement on Treatment Adherence Support Platforms. With Justin Boutilier and Erez Yoeli.
- 7. Deployment Guidelines for Community Health Workers in Sub-Saharan Africa. With Carri Chan, Sarang Deo, and Jérémie Gallien.

#### In progress

8. Motorcycle Routing for Public Health: Optimal Dynamic Sample Transportation in Diagnostic Networks. With Sarang Deo, Emma Gibson, Mphatso Kachule, and Kara Palamountain.

## Awards and honors

2019	MSOM Meritorious Service Award.
2019	Finalist. MSOM Responsible Research competition.
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

- 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.
- 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	Healthcare Lab: Introduction to Healthcare Delivery (MBA Elective)
2017 - 2019	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

Ankita Singth (LGO)	2020-Present
Levi DeLuke (LGO)	2020-Present
Daniel Killian (ORC SM)	2019-Present
Neal Kaw (ORC PhD)	2019-Present (joint with Nikos Trichakis)
Denton Xiang He (LGO)	2019-Present (joint with Hermano Igo Krebs)
Emma Gibson (ORC PhD)	2018-Present
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, EJOR, JOM, Sustainability.
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), POMS SCM College
	Best Student Paper Competition (2020).
Co-organizer:	INFORMS Healthcare 2019, Trans-Atlantic Doctoral Conference 2012.
Member:	INFORMS, MSOM, HAS.

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