

Sandeep Rath

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Education

- 2011–2016 PhD, Management, UCLA Anderson School of Management
- 2001–2006 Dual Degree, Indian Institute of Technology, Kharagpur
- M.Tech. in Instrumentation Engineering
 - B.Tech. in Electrical Engineering
 - Minor in Electronics and Telecommunication Engineering

Professional Experience

Academic Positions

- 2025–present Assistant Professor, ISB, Hyderabad
- 2016–2025 Assistant Professor, Kenan-Flagler Business School, UNC Chapel Hill
- 2010–2011 Research Associate, ISB, Hyderabad

Other Positions

- 2007–2010 Manufacturing Engineer, Schlumberger Ltd., Pune, Houston, and Paris
- 2006–2007 Assistant Manager, ITC Ltd., Chennai

Publications

Peer-Reviewed Articles in Operations Research & Management Journals

7. **Rath, S.**, Swaminathan, J.M., Coleman C., Collaborative Care for Mental and Physical Health (*Accepted at Production & Operations Management*)
6. **Rath, S.** Rajaram K., Hudson, M.E., Mahajan A. (2025) Multi-location, Dynamic Staff Planning for a Healthcare System: Methodology and Application (*Accepted at Operations Research*)
 - Media Coverage: A Major Medical Center Gets a Cheaper, Fairer Way to Assign Doctors *UCLA Anderson Review*, 2025

5. Celik, U., **Rath, S.**, Kesavan, S., & Staats, B. R. (2024). Frontiers in operations: does physician's choice of when to perform EHR tasks influence total EHR workload? *MS&OM* 26(4), 1190-1210
4. Deshpande V., Mundru N., **Rath, S.**, Knowles M., Rowe D., Wood B.C. (2024). Data-Driven Surgical Tray Optimization to Improve Operating Room Efficiency *Operations Research* 72(5), 1874-1892
 - Finalist, INFORMS Innovative Application in Analytics Award, 2022
 - Selected for POMS College of Healthcare Operations Management Research-in-Practice Showcase Presentation, 2022
 - Media Coverage: Collaborating to Cut Hospital Costs, *UNC Kenan-Flagler News*, 2022, Surgeons diagnose a problem and find a business solution, *UNC Kenan-Flagler News*, 2022
3. **Rath, S.**, & Rajaram, K. (2022). Staff Planning for Hospitals with Implicit Cost Estimation and Stochastic Optimization. *Production and Operations Management*, 31(3), 1271-1289.
 - Media Coverage: A Scheduling Tool that Considers Employee Preferences *UCLA Anderson Review* (Nov 2021)
2. **Rath, S.**, Rajaram, K., & Mahajan, A. (2017). Integrated Anesthesiologist and Room Scheduling for Surgeries: Methodology and Application. *Operations Research*, 65(6), 1460-1478
1. Deo, S., Rajaram, K., **Rath, S.**, Karmarkar, U. S., & Goetz, M. B. (2015). Planning for HIV Screening, Testing, and Care at the Veterans Health Administration. *Operations Research*, 63(2), 287-304

Articles Under Review/Revision

Celik U., **Rath, S.**, Staats B., Reducing Appointment Delays: The Impact of Standardized EHR Usage on Physician Timeliness (*Major Revision M&SOM*)

Work in Progress

Rath, S., Lim M., Data-Driven Surgical Block Auto-Release Planning (*Data collection complete, analysis in progress*)

Peer-Reviewed Articles in Medical Journals

Wood, B.C., Konchan, S., Gay, S., **Rath, S.**, Deshpande, V. and Knowles, M., (2021). Data analysis of plastic surgery instrument trays yields significant cost savings and efficiency gains. *Annals of Plastic Surgery*, 86(6S), pp.S635-S639.

Knowles, M., Gay, S.S., Konchan, S.K., Mendes, R., **Rath, S.**, Deshpande, V., Farber, M.A. and Wood, B.C., (2021). Data analysis of vascular surgery instrument trays yielded large cost and efficiency savings. *Journal of Vascular Surgery*, 73(6), pp.2144-2153.

Book Chapters and Magazine Articles

Barrett, J. J., Deshpande, V., Knowles, M., **Rath, S.**, Rowe, D., & Wood, B. C. (2025). A Data-Driven Approach to Optimize Surgical Instrument Trays. *Foundations and Trends in Technology, Information and Operations Management*, 19(2–3), 201-228

Rajaram, K., & **Rath, S.** (2017). Managing the Operating Room Suite at UCLA Ronald Reagan Medical Center. *Impact*, 3(2), 31-35

Teaching Record

Indian School of Business

Post-Graduate Program (PGP)

MSDW: Managing Services in the Digital World *scheduled*, 2025

OPMG: Operations Management, 2025

PADM: Prescriptive Analytics for Business Decision Making, 2024

Advanced Management Program in Healthcare (AMPH)

Process Excellence in Healthcare Organizations *scheduled*, 2026

Advanced Management Program in Operations and Supply Chain (AMPOS)

Management of Service Organizations *scheduled*, 2025

UNC Chapel Hill, Kenan-Flagler Business School

Undergraduate Program

BUSI 403: Operations Management, *Spring 2017-2025*

–Average Instructor Rating: 4.69/5

BUSI 532H: Healthcare and Service Operations Management, *Spring 2018-2025*

–Average Instructor Rating: 4.75/5

PhD Thesis Committees

Umit Celik, Kenan-Flagler Business School, UNC, 2025

Anand Bhatia, Kenan-Flagler Business School, UNC, 2022

Conference and Seminar Presentations

Peer-Reviewed Conference Presentations

Data-Driven Surgical Tray Optimization to Improve Operating Room Efficiency

POMS CHOM Research-in-Practice Showcase Presentation, 2022

Collaborative Care for Mental and Physical Health

Manufacturing & Service Operations Management Conference, 2022

Manufacturing & Service Operations Management Conference, 2021

Staff Planning for Hospitals with Cost Estimation and Optimization

Manufacturing & Service Operations Management Conference, 2019

Manufacturing & Service Operations Management Conference, 2018

Invited Conference Presentations

Data-Driven Approach to the Surgical Block Release Decision

INFORMS Annual Meeting (Atlanta, *scheduled*, 2025), POMS Annual Meeting (Atlanta 2025), INFORMS Annual Meeting (Seattle 2024), INFORMS Annual Meeting (Phoenix 2023)

Multilocation, Dynamic Staff Planning for a Healthcare System: Methodology and Application

INFORMS Annual Meeting (Atlanta, 2025, *scheduled*, presented by co-author),

POMS Annual Meeting (Orlando 2023)

Data-driven Workforce Planning For Healthcare Organizations

INFORMS Annual Meeting (Indianapolis 2022)

Data-Driven Surgical Tray Optimization to Improve Operating Room Efficiency

POMS Annual Meeting (Online, 2022)

Appointment Scheduling with Off-line Discretionary Work

POMS Annual Conference (Online, 2022), INFORMS Annual Meeting (Anaheim 2021)

Collaborative Care for Mental and Physical Health

POMS Annual Conference (Online, 2022), POMS Annual Conference (Online, 2021), INFORMS Annual Meeting (Seattle, 2019), INFORMS Healthcare (Boston, 2019), INFORMS Annual Meeting (Phoenix 2018)

Staff Planning For Anesthesiologists

INFORMS Annual Meeting, Phoenix 2018 (presented by co-author)

INFORMS Annual Meeting (Seattle, 2019), INFORMS Healthcare (Boston, 2019), INFORMS Annual Meeting (Houston, 2017), INFORMS Annual Meeting (Nashville, 2016)

Integrated Staff and Room Scheduling for Surgeries

INFORMS Healthcare (Rotterdam, 2017), INFORMS Annual Meeting (Nashville, 2016),
INFORMS Annual Meeting (Philadelphia, 2015), INFORMS Healthcare, (Nashville, 2015)

Planning for HIV Screening, Testing, and Care

INFORMS Annual Meeting, San Francisco, 2014

Other Invited Academic Presentations

Indian School of Business, Hyderabad, 2024

University of Kansas School of Business, 2024

Workshop in Management Science, San Pedro de Atacama, Chile, 2023

Carlson School of Management, University of Minnesota, 2023

Johns Hopkins Carey Business School (2023)

Robert H. Smith School of Business, University of Maryland, 2023

UNC Kenan-Flagler Center for the Business of Health Faculty Research Share Session, 2023

Midwest Healthcare Workshop, Geis College of Business, UIUC, 2023

Department of Statistics and Operations Research, UNC, 2023

Sloan School of Management, MIT, 2023

Carroll School of Management, Boston College, 2023

NC State Doing Good with OM/OR Workshop, 2022

Kelley School of Business, Indiana University, Consortium Friday Seminar Series (online),
2021

UNC Business of Healthcare Convocation, Chapel Hill, 2019

Kenan-Flagler Business School, University of North Carolina, Chapel-Hill, 2015

Communication, Networks and Systems Seminar, University of Southern California, 2015

Southern California OR/OM Day, Los Angeles, 2015

DOTM Colloquium Series, UCLA Anderson, 2015

Honors

Bullard Faculty Research Impact Award, 2024 (co-winner with Vinayak Deshpande)

Nominated for Weatherspoon Undergraduate Teaching Award, 2023

POMS CHOM Research-in-Practice Showcase Presentation, 2022

Finalist, INFORMS Innovative Application in Analytics Award, 2022

UCLA Dissertation Year Fellowship, 2015–2016

UCLA Anderson Doctoral Fellowship, 2011–2015

Fellowship for Post Graduate Studies, Government of India, 2005–2006

National Talent Search Examination Scholarship, Government of India, 1999–2005

Professional Service

To the Discipline

Reviewer

California Management Review, IISE Transactions, Management Science, Manufacturing & Service Operations Management, Naval Research Logistics, Operations Research, Production and Operations Management

Judge

INFORMS Health Application Society Best Student Paper Competition, 2023, 2025

INFORMS Public Sector OR Best Paper Competition, 2022

MSOM Conference Healthcare SIG, 2021, 2022, 2023, 2024, 2025

Pierskalla Best Paper Award, 2020, 2025

POMS College of Healthcare Operations Management, Best Paper Competition, 2017, 2020, 2021, 2022, 2023

Conference Track Chair

POMS Annual Meeting 2023

Conference Session Chair

POMS Annual Meeting 2025, 2026

INFORMS Annual Meeting 2015, 2017, 2018, 2019, 2021, 2023

INFORMS Healthcare Conference 2015, 2019, 2023

Other Service

Organizing Committee Member, UNC Healthcare Operations Workshop, 2019

Operations Area Faculty Seminar Series (UNC), Chair, 2017-2019

Organizing Committee Member, Manufacturing & Service Operations Management Conference, 2017