

Vishal Ahuja

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Academic Employment	SOUTHERN METHODIST UNIVERSITY, DALLAS TX ASSISTANT PROFESSOR, COX SCHOOL OF BUSINESS ASSISTANT PROFESSOR (BY COURTESY), COMPUTER SCIENCE AND ENGINEERING	Aug 2014-present Aug 2016-present
	UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER, DALLAS TX ADJUNCT ASSISTANT PROFESSOR OF CLINICAL SCIENCES	Sep 2015-present
	THE UNIVERSITY OF CHICAGO, CHICAGO IL National Institute on Aging (NIA) Postdoctoral Fellow	Sep 2013-Jul 2014
	THE UNIVERSITY OF CHICAGO, BOOTH SCHOOL OF BUSINESS, CHICAGO IL PhD, Business Administration (Operations Management) • <i>Thesis: Determining Optimal Treatments for Patients: Clinical Trials and Beyond</i> MBA	2013 2013
Education	UNIVERSITY OF TORONTO, TORONTO, ONTARIO M.A.Sc., Chemical Engineering and Applied Chemistry	2001
	PANJAB UNIVERSITY, CHANDIGARH, INDIA B.E. (<i>Honors</i>), Chemical Engineering	1997
Academic Affiliations	<ul style="list-style-type: none">• The Center for Global Health Impact, Southern Methodist University• The Center for Translational and Policy Research of Chronic Diseases, University of Chicago	
Research Interests	<i>Application:</i> Healthcare policy (primary), Energy policy <i>Methods:</i> Data Analytics; Optimization; Bayesian Statistics; Econometrics	
Publications	Ahuja, V. and J. R. Birge. "Response-Adaptive Designs for Clinical Trials: Simultaneous Learning from Multiple Patients." <i>European Journal of Operational Research</i> . 248 (2016) 619–633. <ul style="list-style-type: none">• Winner, <i>INFORMS Pierskalla Award for the Best Paper in Healthcare, 2012</i>• Semifinalist, <i>INFORMS Innovation in Analytics Award, 2012</i>• Finalist, <i>Lee Lusted Prize, Society for Medical Decision Making (SMDM), 2012</i>	
	Ahuja, V and C.-H. Chou "Novel Therapeutics for Diabetes: Uptake, Usage Trends, and Comparative Effectiveness." <i>Current Diabetes Reports</i> . ¹ 2016, 16 (6), 1-10	
	Ahuja, V., M.-W. Sohn, J. R. Birge, C. Syverson, E. Budiman-Mak, N. Emanuele, J. M. Cooper, and E. S. Huang. "Geographic Variation in Rosiglitazone use Surrounding FDA Warnings in the Department of Veterans Affairs." <i>J Manag Care Spec Pharm</i> . ² 2015;21(12):1214-34.	
Working Papers /Under review	Ahuja, V., J. R. Birge, E. S. Huang, M.-W. Sohn, and C. Syverson. "Quality Management using Data Analytics: An Application to Pharmaceutical Regulation." 2016. <i>Working Paper</i> . <ul style="list-style-type: none">• Finalist, <i>POMS College of Healthcare Operations Management Best Paper Competition, 2016</i>	

¹ 2014 Impact Factor= 3.080

² 2014 Impact Factor= 2.713

Ahuja, V. and B. R. Staats. "Continuity in Gatekeepers: Quantifying the Impact of Care Fragmentation." 2017. *Under Review*.

Ahuja, V. and J. R. Birge. "Approximation methods for Markov Decision Processes with Application to Clinical Trial Design." 2017. *Under Review*.

Iveniuk J., L. Waite, V. Ahuja, C.-H. Chou and E. S. Huang. "Relationship quality and diabetes in older couples." 2017. *Under Review*.

Bountali, O., S. Cetinkya, and V. Ahuja. "Managing Congestion due to Compassionate Dialysis: Accept, Reject, Divert?" 2017. *Working Paper*.

Research in Progress

Ahuja, V., M. E. Bowen, and M. Hahsler. "An analytics-driven approach to developing (individualized) optimal screening guidelines for diabetes patients."

Ahuja, V. and R.C. Savaskan-Ebert. "A Model of Interplay between Regulations, Speed, and Quality in New Drug Development."

Ahuja, V. and H. Balasubramanian. "Scheduling physician capacity under uncertainty about patient needs."

Nourbakhsh, F., O. Boudali, S. Cetinkaya and V. Ahuja. "Improving Quality and Efficiency in the Delivery of Care to Uninsured Patients."

Proceedings / Other Publications

Ahuja, V., J. R. Birge J., and Ryan C. (2014). "Approximation Methods for Determining Optimal Allocations in Response Adaptive Clinical Trials." In *Proceedings of the 3rd International Conference on Operations Research and Enterprise Systems, Angers, Loire Valley, France, March 6-8, 2014, pages 460-465*.

Ahuja, V. and J. R. Birge. "Designing Fully Adaptive Clinical Trials." *Proceedings of the 7th INFORMS Workshop on Data Mining and Health Informatics (DM-HI 2012)* H. Yang, D. Zeng, O. E. Kundakcioglu, eds.

Ahuja, V., Z. Tan, K. M. Weishar, and D. W. Reeve. "Oxygen Delignification as Affected by Novel Transition Metal Catalysts." *Pulp & Paper Canada*, p. 40, 103:7 (2002).

Research Funding

PI (with Sila Cetinkya). "Improving Quality and Efficiency at Parkland Hospital: Addressing Congestion in the Delivery of Care to Uninsured Patients." Interdisciplinary Seed Funding, Lyle School of Engineering and Cox School of Business, SMU, \$20,000, 2016.

Doctoral Advising

- Farzad Kamalzadeh, Co-advisor (with Michael Hahsler), SMU, Lyle School of Engineering
- Farnaz Nourbakhsh, Co-advisor (with Sila Cetinkya), SMU, Lyle School of Engineering

Honors and Awards

Finalist, POMS College of Healthcare Operations Management Best Paper Award	2016
NIA Postdoctoral Fellowship, The University of Chicago	2013-14
Katherine Dusak Miller PhD Fellowship, The University of Chicago	2011-2013
Winner, INFORMS Pierskalla Award for the Best Paper in Healthcare	2012
Semifinalist, INFORMS Innovation in Analytics Award	2012
Finalist, Lee Lusted Prize, Society for Medical Decision Making (SMDM)	2012
Nominated to attend Future Academic Colloquium, INFORMS	2012
Invited to present at Healthcare SIG, MSOM, Columbia University, NYC	2012
Doctoral Fellowship, The University of Chicago Booth School of Business	2008-2012

Performance award for exceptional service to the executive MBA program	2011
Summer Research Award, The University of Chicago Booth School of Business	2009
<i>Power of You</i> Gold Award, Procter & Gamble	2007
Graduate Fellowship, University of Toronto	1999-2001

Invited Talks

Academic Institutions

- 2017: Singapore University of Technology and Design, University of Chicago (scheduled)
- 2014: UT Austin (McCombs), London Business School, University of Toronto (Rotman), University of North Carolina (Kenan-Flagler), Southern Methodist University, (Cox), Yale University (School of Management), University of Illinois at Urbana-Champaign (College of Business), McGill University (Desautels), INSEAD, University of Pennsylvania (Wharton)
- 2013: Cornell University (Johnson)
- 2011: University of Chicago (Booth)

Conferences

- 2017: Informs Computing Science Conference (Austin TX), POMS (Seattle, WA, Seattle)
- 2016: INFORMS (Nashville, TN), POMS (Orlando, FL), DSI (Austin TX)
- 2015: INFORMS (Philadelphia, PA), "Patient-Centric HealthCare Management" Conference at Indiana University, INFORMS Healthcare (Nashville, TN), POMS (Washington D.C.)
- 2014: ISB-POMS (Hyderabad, India), INFORMS (San Francisco, CA)
- 2013: INFORMS (Minneapolis, MN), MSOM (INSEAD, France), POMS (Denver, CO)
- 2012: SMDM Conference (Phoenix, AZ), INFORMS (Phoenix, AZ), MSOM (Columbia University, NY), Trans Atlantic Doctoral Conference (London Business School)
- 2011: Informs Healthcare (Montreal, Canada)
- 2010: INFORMS (Austin, TX)

Service / Professional Activities

Southern Methodist University

- Faculty Recruitment Committee, 2016-17
- Co-organizer, ITOM Department seminar series, 2015-17
- HIMSS-ITOM Scholarship Faculty Committee, 2014, 2016

Profession

- Cluster co-chair for "Health Operations Management" (approx. 15 sessions), Informs Healthcare Conference (Rotterdam), 2017
- Minitrack co-chair for "IT-Enabled Healthcare Coordination," HICSS 2017
- Session Chair, INFORMS (2015-), INFORMS Healthcare (2013-), POMS (2014, 2016-), INFORMS Computing Society Conference (2017)
- Panelist, Business Analytics Research, DSI (2016)
- Co-chair, INFORMS Pierskalla Award Competition (2013)

Ad-hoc Reviewer for:

- *OM/OR journals*: Operations Research, Management Science, M&SOM, POMS, European Journal of Operational Research, Annals of Operations Research, IIE Transactions, INFORMS Journal on Computing
- *Clinical journals*: Journal of Managed Care Pharmacy
- *Grants*: National Science Foundation (2015)

- Members of: INFORMS, POMS, DSI
- Licensed Professional Engineer in the province of Ontario, Canada (2005-present)

Media Mentions

Big Data: Using Data Analytics to Enhance Drug Safety, *Cox School of Business News Room*, September 2015.

Daily data: FDA drug safety alerts often go unheeded, *Capital Ideas*, Winter 2015 edition.

A Class Act, *India Today*, September 9, 2013 issue.

The Personal MBA, *Mail Today*, September 3, 2013.

New Research Could Lead To Shorter And Cheaper Drug Trials, *Press Release*, University of Chicago Booth School of Business, July 2013.

- *Press release picked up by several media outlets*

How Math Can Improve Drug Trials and Save Lives, *Capital Ideas*, Summer 2013 edition.

- *Featured in Chicago Booth Magazine, Fall 2013 edition*

Three Faculty Members Honored For Operations Research, *Chicago Booth Magazine*, Winter 2013 edition.

Teaching Experience

SOUTHERN METHODIST UNIVERSITY, COX SCHOOL OF BUSINESS, DALLAS TX

ITOM 6203: OPERATIONS MANAGEMENT (MBA CORE) 2014-

- *Rating (out of 7.0): 6.39, 5.40, 5.83, 6.49, 6.38, 6.40, 6.52*

ITOM 6224: MANAGING SERVICE OPERATIONS (MBA ELECTIVE) 2015-

- *Rating (out of 7.0): 6.67*

THE UNIVERSITY OF CHICAGO, BOOTH SCHOOL OF BUSINESS, CHICAGO IL

Teaching Assistant for Operations Management (core), MBA and Executive 2009-2012

- *Rating 4.7/5.0 (n ~ 90), Executive*

“Management Labs”, MBA elective 2008

UNIVERSITY OF TORONTO, TORONTO, ONTARIO

Teaching Assistant for several undergraduate engineering courses 1999-2001

Industry Experience

PROCTER & GAMBLE INC., TORONTO, ONTARIO

IT Project Manager 2005-2008

- Led the implementation of a \$1 MM financial reporting system that enabled customer sales teams worldwide to drive sustainable and profitable growth.
- Managed several key projects (\$100,000-\$1 MM) as a part of SAP ERP software upgrade.

ERCO WORLDWIDE, TORONTO, ONTARIO

Project Engineer 2002-2004

- Spearheaded the R&D of a novel air pollution technology for reducing harmful stack emissions from coal-fired plants
- Conducted feasibility studies, competitive technology review, design of experiments, and cost model design.

CELESTICA INC., TORONTO, ONTARIO

Associate Manufacturing Engineer 2001

- Single-handedly managed the production, quality and timely delivery of over \$2 million worth of electronic assemblies per week.

INDIAN INSTITUTE OF TECHNOLOGY & GE PLASTICS, NEW DELHI, INDIA

Research Associate 1997-1998

- Conducted R&D on the design of thermoformed products based on engineering plastics
- Launched a novel commercial polycarbonate signage product, at half the production cost.

Miscellaneous

Computing: Matlab, SAS, Stata, Ampl, CPLEX, SAP, Data Warehousing, MS Access

Citizenship: Canadian Citizen; US Permanent Resident

Languages: English (fluent), Hindi (native)

Volunteering: Mentoring Engineering students at University of Toronto (2015-), On leadership team of Asian Diversity Network at P&G (2007-08)

References

Available upon request