Margaret L. Brandeau

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Research Interests

Health Policy Analysis Cost-Effectiveness Analysis Public Health Preparedness Planning Management Science Applications

Education

1985	Doctor of Philosophy, Engineering-Economic Systems, Stanford University
1978	Master of Science, Operations Research, MIT
1977	Bachelor of Science, Mathematics, MIT
Employment	

2021- present	Coleman F. Fung Professor in the School of Engineering Professor of Health Policy (by Courtesy) Stanford University
2010 - 2021	Coleman F. Fung Professor in the School of Engineering Professor of Medicine (by Courtesy) Faculty Fellow, Center for Primary Care and Outcomes Research Stanford University
1997-2010	Professor of Management Science and Engineering Professor of Medicine (by Courtesy) Faculty Fellow, Center for Primary Care and Outcomes Research Stanford University
1992-97	Associate Professor, Department of Industrial Engineering and Engineering Management, Stanford University
1985-92	Assistant Professor, Department of Industrial Engineering and Engineering Management, Stanford University
1981-85	Research Assistant, Stanford University Medical Center, Office of Analysis and Planning
1978-80	Research Associate, Public Systems Evaluation, Inc., Cambridge, MA
1977-78	Operations Research Consultant, Arthur D. Little, Inc., Cambridge, MA

Honors and Awards

CEA (Cost-Effectiveness Analysis) Registry Paper of the Year Award, Center for the Evaluation of Value and Risk in Health, Tufts University, 2022

Stanford Medicine Integrated Strategic Plan Star Award (awarded to Systems Utilization Research for Stanford Medicine Team), 2020

Distinguished Visitor Award, University of Auckland, New Zealand, 2019

William Pierskalla Best Paper Award, INFORMS (Institute for Operations Research and Management Science) Health Applications Society, 2017

Honorary Professor, Universidad Nacional de Ingeniería (National Engineering University), Peru, 2016

Omega Rho Distinguished Lecture on Operations Research and Management Science, INFORMS, 2015

Omega Rho Honor Society for Operations Research and Management Science, Inducted 2015

2015 Philip McCord Morse Lectureship Award, INFORMS

2015 Award for the Advancement of Women in Operations Research and the Management Sciences, INFORMS

Wasserstrom Family Distinguished Lecturer, Northwestern University, 2012

21st Annual E. Leonard Arnoff Memorial Lecture on the Practice of Management Science, University of Cincinnati, 2012

Fellow, INFORMS, Elected 2009

Graduate Teaching Award, Stanford Department of Management Science and Engineering, 2008-2009

President's Award (recognizing important contributions to the welfare of society), INFORMS, 2008

Award for Excellence in Application of Pharmacoeconomics and Health Outcomes Research, International Society for Pharmacoeconomics and Outcomes Research (ISPOR), 2008

William Pierskalla Best Paper Award, INFORMS Health Applications Section, 2001

Annual Outstanding Paper Award, Society for Computer Simulation, Conference on Simulation in the Medical Sciences, 1996

Presidential Young Investigator Award, National Science Foundation, 1988-1993

Faculty Service Award, Stanford Department of Industrial Engineering and Engineering Management, 1988-1989

Eugene L. Grant Faculty Teaching Award, Stanford School of Engineering, 1990-1991

Patent

"System and Method for Optimum Operation Assignments in Printed Circuit Board Manufacturing." Co-Inventors: Corey A. Billington and Margaret L. Brandeau. Patent Number 5,258,915. Awarded 1993.

Funded Research Projects

"Making Better Decisions: Policy Modeling for AIDS and Drug Abuse," National Institute on Drug Abuse (NIDA), \$8,000,000, 2019-2029 (Co-Investigator), Grant # R37-DA15612-16

"Making Better Decisions: Policy Modeling for AIDS and Drug Abuse – COVID-19 Supplement," National Institute on Drug Abuse (NIDA), \$792,000, 2020-2022 (Co- Investigator), Administrative Supplement to Grant # R37-DA15612-16

"Transitions Clinic Network: Post Incarceration Addiction Treatment, Healthcare, and Social Support (TCN PATHS) Study," National Institute on Drug Abuse (NIDA), \$76,000, 2020-2023 (Principal Investigator), Subaward from Grant # 1UG1DA050072-01

"COVID-19 Testing and Prevention in Correctional Settings," National Institutes of Health RADx Award, \$3,630,000, 2020-2022 (Investigator), Grant # 3UG1DA050072-02S3

"Cost-Effectiveness of Interventions to Reduce Morbidity from Opioid Dependency," Department of Veterans Affairs, \$1,098,000, 2018-2021 (Co-Investigator)

"Developing Capacity to Assess Health Interventions and Poverty Reduction," Stanford Institute for Innovation in Developing Economies, \$525,000, 2014-2019 (Investigator)

"Making Better Decisions: Policy Modeling for AIDS and Drug Abuse," National Institute on Drug Abuse (NIDA), \$3,942,000, 2013-2019 (Co-Principal Investigator), Grant # R01-DA15612-11

"Making Better Decisions: Policy Modeling for AIDS and Drug Abuse," National Institute on Drug Abuse (NIDA), \$3,278,000, 2007-2013 (Co-Principal Investigator), Grant # R01-DA15612-06

"Comparative Effectiveness of Antiretroviral Therapy for HIV in Patients with Co-Morbidities," NIH Challenge Grant, National Institute of Allergy and Infectious Diseases (NIAID), \$994,608, 2009-2012 (Investigator), Grant # RC1-AI086927

"Translating Research into the Jade Ribbon Campaign for Perinatal Hepatitis B Prevention," Department of Health and Human Services, Centers for Disease Control and Prevention, \$1,342,352, 2007-2010 (Co-Principal Investigator), Grant # R18-PS000830

"Making Better Decisions: Policy Modeling for AIDS and Drug Abuse," National Institute on Drug Abuse (NIDA), \$2,913,000, 2002-2007 (Co-Principal Investigator), Grant # R01-DA15612

"Drug Abuse and HIV Infection in Russia: Evaluation of Prevention Programs," National Institute on Drug Abuse, \$120,945, 2004-2005 (Co-Principal Investigator), Administrative Supplement to Grant # R01-DA15612

"Global HIV Prevention and Treatment: Planning for the Future," Gates Foundation Policy Research Network, \$18,000 (Co-Principal Investigator), 2005

"Blueprint for Evaluation of India AIDS Initiative," Gates Foundation Policy Research Network, \$18,000 (Co-Principal Investigator), 2004

"Public-Health Impact and Cost Effectiveness of HIV Interventions," National Institute on Drug Abuse (NIDA), \$837,783, 1996-2002 (Principal Investigator), Grant # R01-DA09531

"Quantitative Models for Optimal Provision of Goods and Services," National Science Foundation (Presidential Young Investigator Award), \$196,000, 1988-1993 (Principal Investigator)

"Women, Adolescents and HIV: Cost-Benefit Analysis of Interventions," State of California Universitywide Task Force on AIDS, \$43,750, 1993-1994 (Co-Principal Investigator)

"Policy Analysis of HIV Screening and Intervention," State of California Universitywide Task Force on AIDS, \$194,203, 1990-1992 (Principal Investigator)

"Decision Making on Mass Screening for AIDS," State of California Universitywide Task Force on AIDS, \$156,250, 1988-1990 (Co-Principal Investigator)

"Analysis of Heuristics in Manufacturing," Stanford Institute for Manufacturing and Automation, \$25,876, 1985-1986 (Principal Investigator)

Selected Professional Activities

Policy Committees:

Member, International Advisory Committee, Instituto Sistemas Complejos de Ingeniería (Institute for Complex Engineering Systems, Santiago, Chile), 2023-present

Member, Office of AIDS Research Advisory Council, National Institutes of Health, 2018-2023

Member, Stanford-Lancet Commission on the North American Opioid Crisis, 2020-2021

Member, National Academies of Sciences, Engineering, and Medicine Committee on Equitable Allocation of Vaccine for the Novel Coronavirus, 2020

Member, Board of Scientific Counselors, a Federal Advisory Committee to the Office of Public Health Preparedness and Response of the Centers for Disease Control and Prevention, 2012-2019

Member, Institute of Medicine Standing Committee for the Centers for Disease Control and Prevention Division of the Strategic National Stockpile, 2015-2017

Member, Board of Scientific Counselors/National Biodefense Science Board Working Group for the Strategic National Stockpile (SNS) Review 20/20, 2012-2013

Member, Institute of Medicine Committee on Prepositioned Medical Countermeasures, 2011

Member, Institute of Medicine Committee on the Prevention and Control of Viral Hepatitis Infections in the United States, 2008-2009

Member, Ad Hoc Peer Review Workgroup, Centers for Disease Control and Prevention, Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER), Division of the Strategic National Stockpile, 2009

Journal Editorships:

Editorial Board Member, Health Care Management Science, 1997-2019

Area Editor, Operations Research (OR Practice), 1993-99

Associate Editor, *IIE Transactions Focused Issue on Scheduling and Logistics* (Multi-Disciplinary and Cross-Functional Studies), 1993-97

Editor, Interfaces, Special Issue on AIDS, 1998

Co-Editor, Transportation Science, Focused Issue on the Transportation/Manufacturing Interface, 1996

Associate Editor, Management Science (Public Programs and Processes), 1991-94

Associate Editor, *Operations Research* (OR Practice; Distribution, Transportation, and Logistics), 1991-94

Professional Society Positions:

Member, Search Committee, Service Science Editor-in-Chief, 2023

Advisory Board Member, INFORMS Healthcare Conference 2023

Diversity, Equity and Inclusion Ambassador, INFORMS, 2020-2022

Member, Search Committee, Health Care Management Science Editor-in-Chief, 2019

Co-Chair, Pierskalla Prize Committee, INFORMS, 2018

Chair, Philip McCord Morse Lectureship Award Committee, INFORMS, 2017-2019

Elected Member, INFORMS Fellows Selection Committee, 2018

Member, INFORMS Nominating Committee, 1996, 2016-2017

Member, Pierskalla Prize Committee, INFORMS, 2009, 2012

Member, INFORMS Strategic Planning Committee, 2004-2005

Member, Review Committee, INFORMS Junior Faculty Interest Group Best Paper Competition, 2005-2006

Member, INFORMS Prize Committee on Teaching of OR/MS, 2005

Chair, Best Dissertation Prize Committee, INFORMS Section on Location Analysis, 1999

Member, Journal of Manufacturing and Service Operations Management Review Committee, 1999

Member, Transportation Science Review Committee, 1998

Member, INFORMS Publication Committee, 1997-2000

Co-Chair, Management Science Editor-in-Chief Search Committee, 1996

Director, INFORMS (Institute for Operations Research and the Management Sciences), 1995

Council Member, ORSA (Operations Research Society of America), 1993-94

Chair, ORSA Publicity Committee, 1990-94

Member, ORSA/TIMS Public Information Committee, 1992-94

Member, OR/MS Today Editorial Policy Advisory Board, 1993-94

Vice Chair, TIMS (The Institute for Management Sciences) College on Location Analysis, 1991-93

Member, Best Dissertation Prize Committee, TIMS College on Location Analysis, 1990

Courses Taught (Stanford University)

E 63 – Engineering Applications in Medicine (Sophomore Seminar)

EES 105 - Mathematical Methods of Systems Analysis

- IE 180 Industrial Engineering Senior Project
- IE 260 Analysis of Production and Operating Systems
- IE 263 Service Operations Management
- IE 360 Doctoral Research Seminar in Production
- IE 363 Advanced Models for Service Systems
- IE 363 Advanced Models for Logistics Planning
- IE 366 Optimization Models in Manufacturing Systems

MS&E 108 - Senior Project

- MS&E 169/269 Quality Assurance and Control
- MS&E 190 Introduction to Methods and Models in Strategy and Policy Analysis
- MS&E 263 Healthcare Operations Management

MS&E 292 – Health Policy Modeling

MS&E 390 - Doctoral Seminar in Health Systems Modeling

MS&E 490 - Health Operations and Policy: Thought Leaders Seminar

OSPCPTWN 56 - HIV Policy Issues and Models

Doctoral Dissertations Supervised

Jann C. Cook. A Dynamic Bin Replacement/Packing Problem. Operations Research Department, Stanford University, 1989.

Michael G. Genetti. An End Item Inventory System with Joint Failures. Department of Industrial Engineering and Engineering Management, Stanford University, 1991.

Tsung-Chyan Lai. Worst Case Analysis of Heuristics. Department of Industrial Engineering and Engineering Management, Stanford University, 1991.

M. Eric Johnson. Analytic Models for Design and Analysis of Automated Guided Vehicle Systems. Department of Industrial Engineering and Engineering Management, Stanford University, 1991.

Thomas A. Grossman. Optimal Resource Allocation in a User-Optimizing Environment. Department of Industrial Engineering and Engineering Management, Stanford University, 1993.

Mark S. Hillier. Models for Manufacturing System Design: Optimal Operation Assignment and Product Grouping. Department of Industrial Engineering and Engineering Management, Stanford University, 1993.

Ulrich W. Thonemann. Stochastic Models for Design and Control of Automated Material Handling Systems. Department of Industrial Engineering and Engineering Management, Stanford University, 1994.

Erik Toomre. Scheduling, Pricing and Due Dates in a Dynamic Job Shop. Department of Industrial Engineering and Engineering Management, Stanford University, 1994.

Anke Richter. Optimal Resource Allocation for Epidemic Control in Multiple Independent Populations. Operations Research Department, Stanford University, 1996.

Christina M. Friedrich. Optimal Investment in HIV Prevention Programs. Department of Engineering-Economic Systems and Operations Research, Stanford University, 1999.

Gregory S. Zaric. Resource Allocation for Epidemic Control Over Short Time Horizons. Department of Industrial Engineering and Engineering Management, Stanford University, 2000.

Sitki Timucin. Optimal Commonality and Postponement Strategies for Effective Supply Chain Management. Department of Industrial Engineering and Engineering Management, Stanford University, 2000.

Ram S. Duriseti. Making High Quality Clinical Decisions: Influence Diagrams in Cost-Effectiveness Analysis. Department of Management Science and Engineering, Stanford University, 2007.

Elisa F. Long. Economic Analysis of Preventive and Therapeutic HIV Interventions. Department of Management Science and Engineering, Stanford University, 2008.

Benjamin Armbruster. Contact Tracing to Control Endemic Infectious Disease: Models and Insights. Department of Management Science and Engineering, Stanford University, 2008.

David W. Hutton. Global Hepatitis B Prevention and Treatment: Models and Insights. Department of Management Science and Engineering, Stanford University, 2010.

Eva A. Enns. Network Models and Infectious Disease Control: Analysis and Insights. Electrical Engineering Department, Stanford University, 2012.

Jessica H. McCoy. Overcoming the Last Mile of Health and Humanitarian Supply Chains: Models and Insights. Department of Management Science and Engineering, Stanford University, 2012.

Jessie L. Juusola. Economic Analysis of HIV Prevention and Treatment Portfolios. Department of Management Science and Engineering, Stanford University, 2012.

Sabina S. Alistar. Resource Allocation for Infectious Disease Control. Department of Management Science and Engineering, Stanford University, 2012.

Yihan Guan. Data-Driven Methods in Modeling Healthcare Risks: Insights and Applications in Drug Surveillance and Breast Cancer Incidence Prediction. Department of Management Science and Engineering, Stanford University, 2012 (Co-advisor).

Lauren E. Cipriano. Optimal Information Collection for Dynamic Health Care Policy. Department of Management Science and Engineering, Stanford University, 2013 (Co-advisor).

Shan Liu. Optimizing Patient Treatment Decisions in an Era of Rapid Technological Advances: Models and Insights. Department of Management Science and Engineering, Stanford University, 2013 (Co-advisor).

Diana M. Negoescu. Managing Uncertainty in Sequential Medical Decision Making. Department of Management Science and Engineering, Stanford University, 2014.

Sze-Chuan Suen. Control of Drug-Sensitive and Drug-Resistant Tuberculosis in Resource-Constrained Settings. Department of Management Science and Engineering, Stanford University, 2016 (Co-advisor).

Sung Eun Choi. Data-Driven Methods in Modeling Healthcare Decisions: Insights and Applications in Cardiovascular Disease Prevention and Control. Department of Management Science and Engineering, Stanford University, 2018.

Allison L. Pitt. Modeling Differential Effects of Health Interventions Across a Heterogeneous Population. Department of Management Science and Engineering, Stanford University, 2018.

Cora L. Bernard. From Compartments to Networks: Model Complexity and Infectious Disease Policy. Department of Management Science and Engineering, Stanford University, 2018.

Rui Fu. Modeling of Infectious Disease: Mathematical Frameworks and Policy Evaluation. Department of Management Science and Engineering, Stanford University, 2019.

Christopher F. Weyant. Improving Healthcare Decisions through Data-driven Methods and Models: Analysis of Policies for Personalized Medicine, Stanford University, 2020.

Huaiyang Zhong. Decision Making for Disease Treatment: Operations Research and Data AnalyticModeling. Department of Management Science and Engineering, Stanford University, 2020.W. Alton Russell. Models to Inform the Safe Collection and Transfusion of Donated Blood. Department of Management Science and Engineering, Stanford University, 2021.

Michael W. Fairley. Data-Driven Analytics for Clinical Decision Making, Healthcare Operations Management and Public Health Policy, Department of Management Science and Engineering, Stanford University, 2021.

Anneke L. Claypool. Assessing Communicable Disease Interventions in the Presence of Externalities. Department of Management Science and Engineering, Stanford University, 2021.

Giovanni S.P. Malloy. Mathematical and Decision Analytic Modeling of Interventions to Mitigate Infectious Diseases from Endemic to Pandemic. Department of Management Science and Engineering, Stanford University, 2022.

Isabelle J. Rao. Optimal Response to Epidemics: Models to Inform Policy. Department of Management Science and Engineering, Stanford University, 2023.

Engineer's Theses Supervised

Carol H. Sox. Decision Making on Mass Screening for HIV: A Policy Analysis. Department of Industrial Engineering and Engineering Management, Stanford University, 1990.

Publications

Books

- 1. Kaplan EH and ML Brandeau, Eds. *Modeling the AIDS Epidemic: Planning, Policy and Prediction.* Raven Press, New York, NY, 1994.
- 2. Brandeau ML, Sainfort F, and WP Pierskalla, Eds. *Operations Research and Health Care: A Handbook of Methods and Applications*. Kluwer Academic Publishers, Norwell, MA, 2004.

Reports

1. Colton KW, Brandeau ML, and JM Tien. A National Assessment of Police Command, Control, and Communications Systems. National Institute of Justice, Washington, DC, 1983.

- 2. Bravata DM, McDonald K, Owens DK, Wilhelm E, Brandeau ML, Zaric GS, Holty JEC, Liu H, and V Sundaram. *Regionalization of Bioterrorism Preparedness and Response (Evidence Report/Technology Assessment)*. Agency for Healthcare Research and Quality, Rockville, MD, 2003.
- 3. Institute of Medicine Committee on the Prevention and Control of Viral Hepatitis Infections. *Hepatitis and Liver Cancer: A National Strategy for Prevention and Control of Hepatitis B and C*. National Academies Press, Washington, DC, 2010.
- 4. Institute of Medicine Committee on Prepositioned Medical Countermeasures. *Prepositioning Antibiotics for Anthrax*. National Academies Press, Washington, DC, 2011.
- 5. Bayoumi AM, Strike C, Jairam J, et al. *Report of the Toronto and Ottawa Supervised Consumption Assessment Study, 2012.* University of Toronto, Toronto, Canada, 2012.
- 6. National Biodefense Science Board/Board of Scientific Counselors Strategic National Stockpile 2020 Joint Working Group. *Anticipated Responsibilities of the Strategic National Stockpile (SNS) in the Year 2020 An Examination with Recommendations*. Washington, DC, 2013.
- 7. National Academies of Sciences, Engineering and Medicine Committee on Framework for Equitable Allocation of Vaccine for the Novel Coronavirus. *Framework for Equitable Allocation of COVID-19 Vaccine*. Washington, DC, 2020.

Refereed Journal Articles

- 1. Brandeau ML and DSP Hopkins. A patient mix model for hospital financial planning. *Inquiry*, 1984, 21(1), 32-44.
- 2. Brandeau ML, Chiu SS, and R Batta. Locating the two-median of a tree network with continuous link demands. *Annals of Operations Research*, 1986, 6(7), 223-253.
- 3. Brandeau ML and DM Eddy. The workup of the asymptomatic patient with a positive fecal occult blood test. *Medical Decision Making*, 1987, 7(1), 32-46.
- 4. Brandeau ML, Hopkins DSP, and KW Melmon. An integrated budget model for medical school financial planning. *Operations Research*, 1987, 35(5), 684-703.
- 5. Brandeau ML and SS Chiu. Parametric facility location on a tree network with an Lp norm cost function. *Transportation Science*, 1988, 22(1), 59-69.
- 6. Brandeau ML and SS Chiu. Establishing continuity of certain optimal parametric facility location trajectories. *Transportation Science*, 1988, 22(3), 224-225.
- 7. Brandeau ML and SS Chiu. An overview of representative problems in location research. *Management Science*, 1989, 35(6), 645-674.
- 8. Brandeau ML and SS Chiu. Trajectory analysis of the stochastic queue median in a plane with rectilinear distances. *Transportation Science*, 1990, 24(3), 230-243.
- 9. Brandeau ML and SS Chiu. A unified family of single-server queuing location models. *Operations Research*, 1990, 38(6), 1034-1044.
- 10. Brandeau ML, Lee HL, Owens DK, Sox CH, and RM Wachter. Policy analysis of human immunodeficiency virus screening and intervention: An overview of modeling approaches. *AIDS and Public Policy Journal*, 1990, 5(3), 119-131.
- 11. Brandeau ML, Lee HL, Owens DK, Sox CH, and RM Wachter. A policy model of human immunodeficiency virus screening and intervention. *Interfaces*, 1991, 21(3), 5-25.

- 12. Brandeau ML and SS Chiu. Parametric analysis of optimal facility locations. *Networks*, 1991, 21(2), 223-243.
- 13. Brandeau ML and CA Billington. Design of manufacturing cells: Operation assignment in printed circuit board manufacturing. *Journal of Intelligent Manufacturing*, 1991, 2(2), 95-106.
- 14. Brandeau ML, Owens DK, Sox CH, and RM Wachter. Screening women of childbearing age for human immunodeficiency virus: A cost-benefit analysis. *Archives of Internal Medicine*, 1992, 152(11), 2229-2237.
- 15. Brandeau ML and SS Chiu. A center location problem with congestion. *Annals of Operations Research*, 1992, 40(1), 17-32.
- 16. Brandeau ML. Characterization of the stochastic queue median trajectory in a plane with generalized distances. *Operations Research*, 1992, 40(2), 331-341.
- 17. Brandeau ML, Owens DK, Sox CH, and RM Wachter. Screening women of childbearing age for human immunodeficiency virus: A model-based policy analysis. *Management Science*, 1993, 39(1), 72-92.
- 18. Johnson ME and ML Brandeau. An analytic model for design of a multivehicle automated guided vehicle system. *Management Science*, 1993, 39(12), 1477-1489.
- 19. Brandeau ML and SS Chiu. Sequential location and allocation: Worst case performance and statistical estimation. *Location Science*, 1993, 1(4), 289-298.
- 20. Brandeau ML and SS Chiu. Location of competing facilities in a user-optimizing environment with market externalities. *Transportation Science*, 1994, 28(2), 125-140.
- Kaplan EH and ML Brandeau. AIDS policy modeling by example. *AIDS*, 1994, 8(Suppl 1), S333-S340.
- 22. Johnson ME and ML Brandeau. An analytic model for design and analysis of single-vehicle asynchronous material handling systems. *Transportation Science*, 1994, 28(4), 337-353.
- 23. Lai TC, Brandeau ML, and SS Chiu. An approach for worst case analysis of heuristics: Analysis of a flexible 0-1 knapsack problem. *Journal of the Operations Research Society of Japan*, 1994, 37(3), 197-210.
- 24. Brandeau ML and SS Chiu. Facility location in a user-optimizing environment with market externalities: Analysis of customer equilibria and optimal public facility locations. *Location Science*, 1994, 2(3), 129-147.
- 25. Johnson ME and ML Brandeau. Designing multiple-load automated guided vehicle systems for delivering material from a central depot. *Transactions of the ASME: Journal of Engineering for Industry*, 1995, 117(1), 33-41.
- 26. Johnson ME and ML Brandeau. Stochastic modeling for automated material handling system design and control. *Transportation Science*, 1996, 30(4), 330-350.
- 27. Thonemann UW and ML Brandeau. Designing a single-vehicle automated guided vehicle system with multiple load capacity. *Transportation Science*, 1996, 30(4), 351-363.
- 28. Thonemann UW and ML Brandeau. Designing a zoned automated guided vehicle system with multiple vehicles and multiple load capacity. *Operations Research*, 1997, 45(6), 857-873.
- 29. Thonemann UW and ML Brandeau. Note: Optimal storage assignment policies for automated storage and retrieval systems with stochastic demands. *Management Science*, 1998, 44(1), 142-148.

- 30. Brandeau ML. AIDS policy modeling: A social role for operations research. *Ricerca Operativa*, 1998, 27(81-82), 5-33.
- 31. Kahn JG, Brandeau ML, and J Dunn-Mortimer. OR modeling and AIDS policy: From theory to practice. *Interfaces*, 1998, 28(3), 3-22.
- 32. Owens DK, Brandeau ML, and CH Sox. Effects of relapse to high-risk behavior on the costs and benefits of a voluntary program to screen women for HIV. *Interfaces*, 1998, 28(3), 52-74.
- 33. Hillier MS and ML Brandeau. Optimal component assignment and board grouping in printed circuit board manufacturing. *Operations Research*, 1998, 46(5), 675-689.
- 34. Zaric GS, Brandeau ML, Bayoumi AM, and DK Owens. The effects of protease inhibitors on the spread of HIV and the development of drug-resistant HIV strains: A simulation study. *Simulation*, 1998, 71(4), 262-275.
- 35. Johnson ME and ML Brandeau. Design of an automated shop floor material handling system with inventory considerations. *Operations Research*, 1999, 47(1), 65-80.
- Richter A, Brandeau ML, and DK Owens. An analysis of optimal resource allocation for prevention of infection with human immunodeficiency virus (HIV) in injection drug users and non-users. *Medical Decision Making*, 1999, 19(2), 167-179.
- 37. Thonemann UW and ML Brandeau. Optimal commonality in component design. *Operations Research*, 2000, 48(1), 1-19.
- 38. Zaric GS, Barnett PG, and ML Brandeau. HIV transmission and the cost-effectiveness of methadone maintenance. *American Journal of Public Health*, 2000, 90(7), 1100-1111.
- 39. Zaric GS, Brandeau ML, and PG Barnett. Methadone maintenance and HIV prevention: A costeffectiveness analysis. *Management Science*, 2000, 46(8), 1013-1031.
- 40. Zaric GS, Bayoumi AM, Brandeau ML, and DK Owens. The cost effectiveness of voluntary prenatal and routine newborn HIV screening in the United States. *Journal of AIDS and Human Retrovirology*, 2000, 25(5), 403-416.
- 41. Zaric GS and ML Brandeau. Resource allocation for epidemic control over short time horizons. *Mathematical Biosciences*, 2001, 171(1), 33-58.
- 42. Hillier MS and ML Brandeau. Cost minimization and workload balancing in printed circuit board assembly. *IIE Transactions*, 2001, 33(7), 547-557.
- 43. Rauner MS and ML Brandeau. AIDS policy modeling for the 21st century: An overview of key issues. *Health Care Management Science*, 2001, 4(3), 165-180.
- 44. Barnett PG, Zaric GS, and ML Brandeau. The cost-effectiveness of buprenorphine maintenance therapy for opiate addiction in the United States. *Addiction*, 2001, 96(9), 1267-1278.
- 45. Zaric GS and ML Brandeau. Optimal investment in a portfolio of HIV prevention programs. *Medical Decision Making*, 2001, 21(5), 391-408.
- 46. Grossman TA and ML Brandeau. Optimal pricing for service facilities with self-optimizing customers. *European Journal of Operational Research*, 2002, 141(1), 39-57.
- 47. Zaric GS and ML Brandeau. Dynamic resource allocation for epidemic control in multiple populations. *IMA Journal of Mathematics Applied to Medicine and Biology*, 2002, 19(4), 235-255.

- 48. Brandeau ML, Zaric GS, and A Richter. Resource allocation for control of infectious diseases in multiple independent populations: Beyond cost-effectiveness analysis. *Journal of Health Economics*, 2003, 22(4), 575-598.
- 49. Brandeau ML, Zaric GS, and V de Angelis. Improved allocation of HIV prevention resources: Using information about prevention program production functions. *Health Care Management Science*, 2005, 8(1), 19-28.
- 50. Brandeau ML. Modeling complex medical decision problems with the Archimedes model [Editorial]. *Annals of Internal Medicine*, 2005, 143(4), 303-304.
- 51. Duriseti RS, Shachter RD, and ML Brandeau. Value of quantitative D-dimer assays in identifying pulmonary embolism: Implications from a sequential decision model. *Academic Emergency Medicine*, 2006, 13(7), 755-766.
- 52. Bravata DM, Zaric GS, Holty JEC, Brandeau ML, Wilhelm ER, McDonald KM, and DK Owens. Reducing mortality from anthrax bioterrorism: Strategies for stockpiling and dispensing medical and pharmaceutical supplies. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 2006, 4(3), 244-262.
- Long EF, Brandeau ML, Galvin CM, Vinichenko T, Tole SP, Schwartz A, Sanders GD, and DK Owens. Effectiveness and cost-effectiveness of strategies to expand antiretroviral therapy in St. Petersburg, Russia. *AIDS*, 2006, 20(17), 2207-2215.
- 54. Zaric GS and ML Brandeau. A little planning goes a long way: Multi-level allocation of HIV prevention resources. *Medical Decision Making*, 2007, 27(1), 71-81.
- 55. Armbruster B and ML Brandeau. Optimal mix of screening and contact tracing for endemic diseases. *Mathematical Biosciences*, 2007, 209(2), 386-402.
- 56. Hutton DW, Tan D, So SK, and ML Brandeau. Cost effectiveness of screening and vaccinating Asian and Pacific Islander adults for hepatitis B. *Annals of Internal Medicine*, 2007, 14(7), 460-469.
- 57. Armbruster B and ML Brandeau. Contact tracing to control infectious disease: When enough is enough. *Health Care Management Science*, 2007, 10(4), 341-355.
- 58. Brandeau ML, Hutton DW, Owens DK, and DM Bravata. Planning the bioterrorism response supply chain: Learn and live. *American Journal of Disaster Medicine*, 2007, 2(5), 231-247.
- 59. Zaric GS, Bravata DM, Holty JEC, McDonald KM, Owens DK, and ML Brandeau. Modeling the logistics of response to anthrax bioterrorism. *Medical Decision Making*, 2008, 28(3), 332-350.
- 60. Zaric GS, Bayoumi AM, Brandeau ML, and DK Owens. The cost effectiveness of counseling strategies to improve adherence to highly active antiretroviral therapy among men who have sex with men. *Medical Decision Making*, 2008, 28(3), 359-376.
- 61. Brandeau ML, Zaric GS, Freiesleben J, Edwards FL, and DM Bravata. An ounce of prevention is worth a pound of cure: Improving communication to reduce mortality during bioterrorism responses. *American Journal of Disaster Medicine*, 2008, 3(2), 65-78.
- 62. Long EF, Vaidya N, and ML Brandeau. Controlling co-epidemics: Analysis of HIV and tuberculosis infection dynamics. *Operations Research*, 2008, 56(6), 1366-1381.
- 63. Brandeau ML and GS Zaric. Optimal investment in HIV prevention programs: More is not always better. *Health Care Management Science*, 2009, 12(1), 27-37.

- 64. Tole SP, Sanders GD, Bayoumi AM, Galvin CM, Vinichenko TN, Brandeau ML, and DK Owens. Cost-effectiveness of voluntary HIV screening in Russia. *International Journal of STD and AIDS*, 2009, 20(1), 46-51.
- 65. Brandeau ML, McCoy JH, Hupert NA, Holty JEC, and DM Bravata. Recommendations for modeling disaster responses in public health and medicine: A position paper of the Society for Medical Decision Making. *Medical Decision Making*, 2009, 29(4), 438-460.
- 66. Long EF, Brandeau ML, and DK Owens. Potential population health outcomes and expenditures of HIV vaccination strategies in the United States. *Vaccine*, 2009, 27(39), 5402-5410.
- 67. Armbruster B and ML Brandeau. Cost-effective control of chronic viral diseases: Finding the optimal level of screening and contact tracing. *Mathematical Biosciences*, 2010, 224(1), 35-42.
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