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Curriculum Vitae

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Education

Ph.D., Administrative Sciences, Yale University, 1974.
M. Phil., Administrative Sciences, Yale University, 1973
B.A., Mathematics and Economics (with Honors), Roosevelt University, 1971.

Professional Experience

University of Pittsburgh
Joseph M. Katz Graduate School of Business
1993- Professor of Business Administration
1979-1993 Associate Professor of Business Administration
1974-1979 Assistant Professor of Business Administration

Research

Manuscripts Currently Under Revision

Harris, Shannon L.; May, Jerrold H.; and Vargas, Luis G., "Online Overbooking Strategies in Outpatient Specialty Clinics with No-Shows and Advance Cancellations."

Turgeman, Lior; Zigler, Christina K.; May, Jerrold H.; Moore, Johnson; and Sava, Magda Gabriela, "A Machine Learning Approach to Analyzing A Knowledge-Based Clinical Model for Predicting Major Diagnosis Categories (MDC)."

Xia, Feihong; Chatterjee, Rabikar; and May, Jerrold H., "Capturing Cross-Product Category and Intertemporal Decision Patterns from Large Consumer Shopping Datasets."

Cao, Yinyin; Pil, Frits; May, Jerrold H., and Kirwin, Donal, "Disability and Wages: The Effect of Occupational Demands."

Myaskovsky, Larissa; Gruskowski, Ashley K.; Kennedy, Michael W.; Drobek, Emily R.; Hubert, Terrence L.; Monte, Robert J.; May, Jerrold H.; Turgeman, Lior; Tjader, Youxu Cai; Milicevic, Aleksandra Sasha; Sapnas, Katherine G.; and Sgro, Gaetan, “Reducing readmissions through improving care transitions (RRTICT): Using a tailored approach to improve post-discharge outcomes,” under review at Health Services Research.

Manuscripts Currently Under Review

Sava, Magda G.; Vargas, Luis G.; May, Jerrold H.; and Dolan, James G, “An analysis of the sensitivity and stability of patients' preferences can lead to more appropriate medical decisions,” under review at the Annals of Operations Research.

Turgeman, Lior; May, Jerrold H.; Milicevic, Aleksandra Sasha; Tjader, Youxu Cai; Vargas Dominic L.; Gruskowski, Ashley K.; Myaskovsky, Larissa; Hubert, Terrence L.; Sgro, Gaetan; and Monte, Robert J., “A machine learning approach for the prediction of hospital readmission at the time of admission,” under review at Medical Decision Making (second round).

Pringle, Janice L.; Milićević, Aleksandra Sasha; Fawcett, Jaime A.; May, Jerrold H.; Kearney, Shannon M.; Tjader, Youxu C.; Vargas, Dominic L.; Vargas, Luis G.; Radack, John P.; and Alaigh, Poonam L., “MyVA Access: An Evaluation of Changes in Access for a System-wide Program Implemented in the Veterans Health Administration,” under review at the American Journal of Medical Quality.

Papers in Refereed Journals

Ramasubbu, Narayan, Shang, Jennifer, May, Jerrold H., Tjader, Youxu, and Vargas, Luis G., “IT Outsourcing and Firm Performance: An Empirical Analysis of the Impact of Modularity.” Manufacturing and Service Operations Management (M&SOM), in press.

Sava, Magda G.; Vargas, Luis G.; May, Jerrold H.; and Dolan, James G, “A Personalized Approach of Patient–Health Care Provider Communication Regarding Colorectal Cancer Screening Options,” Medical Decision Making, in press (published online 2018-04-03).

Goffman, Rachel M.; Harris, Shannon L.; May, Jerrold H.; Milicevic, Aleksandra Sasha; Monte, Robert J.; Myaskovsky, Larissa; Rodriguez, Keri L.; Tjader, Youxu C.; and Vargas, Dominic L., “Modeling Patient No-show History and Predicting Future Outpatient Appointment Behavior in the Veterans Health Administration.” Military Medicine 182 (2017) 1708-1714.

Glowacka, Karolina; May, Jerrold; Goffman, Rachel; May, Elizabeth; Milicevic,

Aleksandra Sasha; Rodriguez, Keri; Tjader, Youxu; Vargas, Dominic; and Vargas, Luis G., "On Prioritizing On-Time Arrivals in an Outpatient Clinic," IIE Transactions on Healthcare Systems Engineering 7 (2017) 93-106.

Turgeman, Lior; May, Jerrold H.; and Sciuli, Roberta L., "Insights From A Machine Learning Model For Predicting The Hospital Length of Stay (LOS) At The Time Of Admission," Expert Systems With Applications 78 (2017) 376-385.

Turgeman, Lior, and May, Jerrold H., "A Mixed-Ensemble Model For Hospital Readmission." Artificial Intelligence in Medicine, 72 (2016) 72-82.

Nenova, Zlatana D. and May, Jerrold H., "Determining an optimal hierarchical forecasting model based on the characteristics of the data set," Journal of Operations Management 44 (2016) 62-68.

Harris, Shannon L, May, Jerrold H., and Vargas, Luis G., "Predictive Analytics Model For Healthcare Planning and Scheduling," European Journal of Operational Research 253:1 (2016) 121-131.

Davies, Michael L., Goffman, Rachel M., May, Jerrold H., Monte, Robert J., Rodriguez, Keri L. Rodriguez, Tjader, Youxu C., and Vargas, Dominic L., "Large-Scale No-Show Patterns and Distributions for Clinic Operational Research," Healthcare 4 (2016) 1-12.

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Penmetsa, Nabita, Gal-Or, Esther, and May, Jerrold H., "Dynamic Pricing of New Services in Subscription Markets," Production and Operations Management 24:6 (2015) 896-916.

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May, Jerrold H., Shang, Jennifer, Tjader, Youxu Cai, and Vargas, Luis G., "A New Methodology for Sensitivity and Stability Analysis of Analytic Network Models," European Journal of Operational Research 224:1 (2013) 180-188.

Roumani, Yazan F., May, Jerrold H., Strum, David P., and Vargas, Luis G., "Classifying

Highly Imbalanced ICU Data,” Health Care Management Science 16:2 (2013), 119-128.

May, Jerrold H., Spangler, William E., Strum, David P., and Vargas, Luis G., “The Surgical Scheduling Problem: Current Research and Future Opportunities,” Production and Operations Management 20:3 (2011) 392-405.

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Martínez-Rodríguez, Ana M., May, Jerrold H., and Vargas, Luis G., “An Optimization-based Approach for the Design of Bayesian Networks,” Mathematical and Computer Modelling 48 (2008) 1265-1278.

Abreu, Claudio F., May, Jerrold H., Spangler, William E., and Vargas, Luis G., "Conflict Identification and Reconciliation in a Collaborative Manufacturing Scheduling Task," International Journal of Information Technology & Decision Making 7 (2008) 147-174.

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Systems, 21, 1997, 309-322.

Strum, David P., Vargas, Luis G., and May, Jerrold H., "Design of RCSS: Resource Coordination System for Surgical Services Using Distributed Communications," Journal of the American Medical Informatics Association, 4, 1997, 125-135.

Sinha, Atish P. and May, Jerrold H., "Providing Design Assistance: A Case-Based Approach," Information Systems Research, 7, 1996, 363-387.

May, Jerrold H. and Vargas, Luis G., "SIMPSON: An Intelligent Assistant for Short-term Manufacturing Scheduling," European Journal of Operational Research, 88, 1996, 269-286.

Raghunathan, Srinivasan, Krishnan, Ramayya, and May, Jerrold H., "On Using Belief Maintenance Systems to Assist Mathematical Modeling," IEEE Transactions on Systems, Man, and Cybernetics, 25, 1995, 287-303.

Raghunathan, Srinivasan, Krishnan, Ramayya, and May, Jerrold H., "MODFORM: A Knowledge-based Tool to Support the Modeling Process," Information Systems Research, 4, 1993, 331-358.

May, Jerrold H., Spangler, William E., Chen, Sean, and Donohue, Sharon L., "A Hybrid System Improves Claims Auditing at Blue Cross," Interfaces, 23, 1993, 67-80.

Cohen, Robert M., and May, Jerrold H., "An Application-Based Agenda for Incorporating OR into an AI Design Environment for Facility Design," European Journal of Operational Research, 63, 1992, 254-270.

Spangler, William E., and May, Jerrold H., "Success and Failure in Cooperative Expert Systems Development: A Tale of Two Projects," Journal of Systems and Software, 19, 1992, 131-140.

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Cohen, Robert M, May, Jerrold H., and Pople, Harry E. Jr., "An Intelligent Workstation for Electrocenter Design," IEEE Transactions on System, Man, and Cybernetics, 17, 1987, 240-249.

Kimeldorf, George, May, Jerrold H., and Sampson, Allan R., "Concordant and Discordant Monotone Correlations and their Evaluation by Nonlinear Optimization," in: S. H. Zanakis and J. S. Rustagi, Eds., TIMS Studies in the Management Sciences: Optimization in Statistics, North-Holland, Amsterdam, 1982, 117-130.

May, Jerrold H., and Smith, Robert L., "Random Polytopes: Their Definition, Generation, and Aggregate Properties," Mathematical Programming, 24, 1982, 39-54.

May, Jerrold H., "Linearly Constrained Pseudo-Newton Method," Naval Research Logistics Quarterly, 29, 1982, 429-442.

May, Jerrold H., "Solving Nonlinear Programs Without Using Analytic Derivatives," Operations Research, 27 (1979), 457-484.

May, Jerrold H., and Dutta, Biplab K., "On Solving Cesario's Interesting Test Problem," Operations Research, 25 (1977), 893-894.

Papers in Refereed Non-Journal Volumes

Harris, Shannon L., and May, Jerrold H., "A Predictive Model for Advance Appointment Cancellations," Proceedings of 2014 INFORMS Workshop on Data Mining and Analytics (DMA 2014), San Francisco, CA, 8 November 2014.

Harris, Shannon L., and May, Jerrold H., "No-Show Behavior and its Influence on Appointment Scheduling," Proceedings of the 8th INFORMS Workshop on Data Mining and Health Informatics (DM-HI 2013), Minneapolis, MN, 5 October 2013.

Stanciu, Alia, Vargas, Luis G., and May, Jerrold H., "A revenue management approach for managing operating room capacity" Proceedings of the 2010 Winter Simulation Conference, WSC 2010, Baltimore, Maryland, USA, 5-8 December 2010, 2444-2454.

Vargas, Luis G., May, Jerrold H., Spangler, William E., Stanciu, Alia, and Strum, David P., "Concepts of Operating Room Efficiency," Chapter 19 in: Jerry Stonemetz and Keith Ruskin, editors, Anesthesia Informatics, Springer, 2008, 361-392.

Gal-Or, Mordechai, May, Jerrold H., and Spangler, William E., "Using Decision Tree Models and Diversity Measures in the Selection of Ensemble Classification Models", in: Nikunj C. Oza, Robi Polikar, Josef Kittler, et al., editors, Multiple Classifier Systems: 6th International Workshop, MCS 2005, Seaside, CA, USA, June 13-15, 2005. Proceedings, Lecture Notes in Computer Science, Volume 3541 / 2005, Springer-Verlag, 186-195.

Spangler, William E., May, Jerrold H., Strum, David P., and Vargas, Luis G., "Identifying and modeling relationships between diagnostic and procedure codes," Proceedings of the Fourth Americas Conference on Information Systems, Baltimore, MD, August, 1998, 220-222.

May, Jerrold H. and Vargas, Luis G., "Modeling Experience Using Multivariate Statistics," in: S. G. Nash and A. Sofer, The Impact of Emerging Technologies on Computer Science and Operations Research, Boston: Kluwer Academic Publishers, 1995, 175-194.

De', Rahul, and May, Jerrold H., "Empirical Estimation of Operational Planning Horizons," in: W. T. Scherer and D. E. Brown, editors, Proceedings of the ORSA/TIMS

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May, Jerrold H., and Vargas, Luis G., "Statistically Based Expectations," in: Proceedings, SIGMAN Workshop on Knowledge-Based Production Planning, Scheduling, and Control, AAAI-92, San Jose, CA, July 1992, 74-77.

May, Jerrold H., Vargas, Luis G., Slotnick, Susan A., Morton, Thomas E., and Pentico, David W., "MULTEX: A Multiple Expert/DSS System for Shop Floor Scheduling - One Year Later" Northeast DSI 1992 Proceedings, Boston, MA, April, 1992, 356-358.

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Kott, Alexander S., Hwang, Charles C., and May, Jerrold H., "How TED Invents Cycles: Case Studies," in: R. A. Bajura, C. H. Marston, and G. Tsatsaronis, Eds., Analysis and Design of Energy Systems: Computer-Aided Engineering, ASME, Fairfield, NJ, 1989, 63-70.

May, Jerrold H., and Sampson, Allan R., "Merging Dissimilar Categorical Judgments," in: S. Dasgupta and J. K. Ghosh, eds., Proceedings of the International Conference on Advances in Multivariate Statistical Methods, Calcutta: Indian Statistical Institute, 1988, 235-259.

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Other Publications

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Conference Presentations, Last 12 Months

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Vargas, Dominic L.; Pellathy, Tiffany P.; Bandi, Archana; Tjader, Youxu C.; May, Jerrold H.; Milicevic, Aleksandra S.; and Hubert, Terrence L., “Data-Based Tools for Tracking and Predicting the Quality of Glycemic Control in Diabetic Patients.” 2018 INFORMS Business Analytics Conference, Baltimore, MD, April 2018 (poster).

Vargas, Dominic L.; Pellathy, Tiffany P.; Bandi, Archana; Tjader, Youxu C.; May, Jerrold H.; Milicevic, Aleksandra S.; and Hubert, Terrence L., “Data-Based Tools for Tracking and Predicting the Quality of Glycemic Control in Diabetic Patients.” 3rd Integrative Conference on Technology, Social Media, and Behavioral Health, Pittsburgh, PA, November 2017.

Harris, Shannon L.; May, Jerrold H.; and Vargas, Luis G., “Overbooking Rules in Outpatient Clinics when Considering No-shows and Cancellations.” INFORMS Annual Meeting, Houston, TX, October 2017.

Sava, Magda G.; Vargas, Luis G.; May, Jerrold H.; and Dolan, James G., “Does a Shared-decision Making Model for Colorectal Cancer Screening Lead to Better Medical Outcomes? ” INFORMS Annual Meeting, Houston, TX, October 2017.

Sava, Magda G.; Vargas, Luis G.; May, Jerrold H.; and Dolan, James G., “Can Analytics Help Improve the Implementation of Preventive Care Programs?” INFORMS Annual Meeting, Houston, TX, October 2017.

Sava, Magda G.; Vargas, Luis G.; May, Jerrold H.; and Dolan, James G., “On Using Sensitivity and Stability Analysis to Optimize Patient-centered Medical Decision Making.” INFORMS Healthcare – 2017, Rotterdam, July 2017.

Nenova, Zlatana D.; May, Jerrold H.; and Vargas, Luis G., “Optimal Appointment Policy Selection for Chronic Kidney Disease Patients.” INFORMS Healthcare – 2017, Rotterdam, July 2017.

Doctoral Student Dissertations

Chaired:

William D. Campbell (1980)
Jose Arreola-Contreras (1986)

Krishnakumar Srinivasan (1990)
 S. Raghunathan (1990)
 John Cierniakoski (1991)
 Bonnie Morris (1992)
 Sean Chen (1993)
 Antiprasad Sinha (1993)
 Dolphy Abraham (1993)
 Rahul De' (1993)
 Gary Gilbert (1993)
 Terry Huston (1993)
 Sidney Snitkin (1996)
 Mordechai Gal-Or (1995)
 Daeyeon Joh (1996)
 Claudio Abreu (1996)
 Jose Cruz (1997)
 Nabita Penmetsa (2014)
 Shannon L. Harris (2016)

Major Supervision:

Tom Altman (Computer Science, 1984)
 Deborah Lukman (Industrial Engineering, 1986)
 Alexander Kott (Mechanical Engineering, 1989)
 Magda Gabriela Sava (2016)

Grants and Contracts (Total = \$7,526,242)

Sponsor	Title	Investigators	Dates	Amount
Veterans Administration	MyVA Access Evaluation	May (\$147,143), Pringle (\$446,876)	10/1/2017 – 9/30/2018	\$594,019
Veterans Administration	Various	May (100%)	10/1/2017 – 9/30/2018	\$839,742
Veterans Administration	MyVA Access Evaluation	May (\$106,118), Pringle (\$143,919)	9/15/2016 – 12/15/2016	\$250,038
Veterans Administration	Various	May (100%)	10/1/2016 – 9/30/2017	\$734,944
Veterans Administration	Various	May (100%)	10/1/2015 – 9/30/2016	\$755,156
Veterans Administration	Various	May (100%)	10/1/2014 – 9/30/2015	\$1,094,866

Veterans Administration	Various	May (100%)	10/1/2013 9/30/2014	-	\$931,426
Veterans Administration	Various	May (100%)	10/1/2012 9/30/2013	-	\$714,721
Veterans Administration	Various	May (100%)	10/1/2011 9/30/2012	-	\$737,352
Veterans Administration	Various	May (100%)	10/1/2010 9/30/2011	-	\$429,331
Veterans Administration	Various	May (100%)	5/1/2010 9/30/2010	-	\$55,650
U.S. Army Research Office	GGTS Expert Consult Manager	May (50%), Vargas (50%)	10/1/1999 9/30/2001	-	\$298,111
Telemedicine and Advance Technology Research Center, U.S. Army	Intelligent Electronic Mail Processor	May (50%), Vargas (50%)	7/1/1998 12/31/1998	-	\$81,508
Thermal Industries, Inc.	Predictive Modeling On Extrusion Line B	May (50%), Wendell (50%)	4/1/1997 7/31/1997	-	\$10,000
Thermal Industries, Inc.	Stellar Line Productivity Improvement	May (50%), Wendell (50%)	4/1/1996 7/31/1996	-	\$10,000
Thermal Industries, Inc.	Glass Cell Quality Initiative	May (50%), Wendell (50%)	4/1/1994 7/31/1994	-	\$10,000
Glaxo Pharmaceuticals	Same Day Surgical Service Simulation	May (50%), Vargas (50%)	4/1/1993 7/31/1993	-	\$10,000
Tippins, Inc.	Knowledge Based Engineering Design	May (100%)	1/1/1992 12/31/1992	-	\$12,000
Westinghouse Electric	MULTEX: A Multi-Expert Approach to Job Shop Scheduling - Phase II	May (50%), Vargas (50%)	1/1/1992 12/31/1992	-	\$30,000
Thermal Industries, Inc.	Real Time Sensor System for Extrusion Expert	May (50%), Wendell (50%)	4/1/1991 7/31/1991	-	\$10,000
Rockwell International	State Tax Liability Expert System	May (100%)	1/1/1991 12/31/1991	-	\$16,000
Westinghouse Electric	MULTEX: A Multi-Expert Approach to Job Shop Scheduling - Phase I	May (50%), Morton (25%), Kekre (25%)	1/1/1991 12/31/1991	-	\$60,000
Thermal Industries, Inc.	Bar Code Shipping Control System	May (50%), Wendell (50%)	4/1/1989 7/31/1989	-	\$10,000

Thermal Industries, Inc.	Expert Extrusion Diagnostician	May (50%), Wendell (50%)	4/1/1988 - 7/31/1988	\$10,000
Westinghouse Electric	Expert System for Electrocenter Design	May (50%), Pople (50%)	1/1/1988 - 12/31/1989	\$80,000
Digital Equipment Corp.	Knowledge Based Approach to the Design of Thermal Systems Using the Exergy Approach	May (50%), Hwang (50%)	1/1/1988 - 12/31/1988	\$51,000
Blue Cross of Western Pennsylvania	PlanTracker/NERSYS	May (100%)	9/1/1986 - 6/30/1992	\$221,173
Mellon Bank	Cognitive Model for Loan Evaluation	May (50%), Pople (50%)	1/1/1985 - 12/31/1985	\$40,000
National Science Foundation	Nonderivative Nonlinear Programming Algorithms	May (100%)	1/1/1976 - 12/31/1977	\$20,000

Professional Activities

American Association for Artificial Intelligence, member
 INFORMS, member

Awards

First Prize, ORSA Nicholson Student Paper Competition, 1974.
 E. F. Obert Outstanding Paper Award, ASME Winter Annual Meetings, 1987.
 Outstanding professor award, EMBA Flex-8, 1999.
 Katz Excellence in Research Award, 2015-2016.
 University of Pittsburgh Joseph M. Katz Graduate School of Business and College of Business Administration Research Impact Award, 2016.

Teaching

Doctoral: Current Topics in ODSAI, Data Mining, Optimization, Research Methodology in the Decision Sciences, Knowledge-Based Expert Systems, Structure and Interpretation of Computer Programs, Artificial Intelligence, Advanced Topics in AI, Linear and Large Scale Programming, Nonlinear Programming, Advanced Topics in Mathematical Programming.

Executive MBA: Statistical Analysis, Decision Technologies.

MBA level: Data Mining, Decision Technologies, Neural Networks, Computer Structures and Algorithms, Intelligent Management Systems, Introduction to Artificial Intelligence Programming, Probability and Statistical Analysis, Operations Management, Advanced Operations Management, Operations Research Seminar, Optimization, Applied Probability Models, Production Management.

Undergraduate: Probability and Statistics for Management, Management Science, and Operations Management.

2018-05-14