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CURRENT POSITION

Anheuser-Busch Professor Emeritus of Management Science, Professor Emeritus of Operations and Information Management and Health Care Systems, The Wharton School, University of Pennsylvania

PREVIOUS EMPLOYMENT

Anheuser-Busch Professor of Management Science, The Wharton School, University of Pennsylvania, 2007-2013

Daniel H. Silberberg Professor, The Wharton School, University of Pennsylvania, 1992-2007

Associate Professor and Professor, Decision Sciences Department and Operations and Information Management Department, The Wharton School, University of Pennsylvania, 1975-present

Associate Professor and Professor of Health Care Management, Health Care Management Department, The Wharton School, 1976-present

Professor of Psychology, University of Pennsylvania, 1988-1998

Member of Graduate Group in Psychology, 1993-present

Senior Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania, 1976-present

Chair, Operations and Information Management Department, 1995-1997

Chair, Decision Sciences Department, 1989-1992.

Director of Research, Leonard Davis Institute of Health Economics, 1982-1990.

Acting Executive Director, Leonard Davis Institute of Health Economics, 1983-1984.

Director, Health Care Administration Program, The Wharton School, 1976-1982

Robert Wood Johnson Health Policy Fellow and Congressional Fellow, U.S. Congress, 1975-1976

Assistant Professor, Graduate School of Business and School of Medicine, Stanford University, 1970-1975

Associate Director, Health Services Administration Program, Stanford University, 1972-1975

EDUCATION

B.S., Mathematics, Carnegie-Mellon University, 1965

M.S., Operations Research, Stanford University, 1970

Ph.D., Graduate School of Business, Stanford University, 1970

PROFESSIONAL AFFILIATIONS

The Institute for Operations Research and the Management Sciences

Society for Medical Decision Making

Society for Judgment and Decision Making

HONORS

Excellence in Teaching Award, Wharton Undergraduate Division, 2010, 2013

Named a "Favorite Course" by MBA Program for Executives, 2005

Core Teaching Award for MBA Program for Executives, 2004

Distinguished Lifetime Service Award, Society for Medical Decision Making, 2003

Miller-Sherrerd MBA Core Teaching Award, The Wharton School, 1992, 1993, 1994, 1998, 1999, 2000

Wharton Excellence in Teaching Award, MBA Program, 1988, 1989, 1990, 1991, 1992

Best Paper Award, 1999, Journal of Risk and Insurance

1999 Telecon Award for Best Continuing Education Program, awarded for Wharton's Program in Building a Business Case

Graduate Division Class of 1984 Teaching Award (for best teaching rating for the previous two years), The Wharton School, 1988

Helen Kardon Moss Anvil Award for Teaching Excellence, The Wharton School, 1987

Bronze Medal Award in the 1973 "Society for Management Information Systems" Awards Paper Competition

"Rookie of the Year" Teaching Award, Stanford Graduate School of Business, 1971

PROFESSIONAL ACTIVITIES

Academic Director and Program Faculty, Advancing Business Acumen, 2013-2015
Academic Director and Program Faculty, Women's World Banking Advanced Leadership Program, Wharton Executive Education, 2011 – 2012
Academic Co-Director and Program Faculty, Critical Thinking Program, Wharton Executive Education, 1997 – 2013
Academic Director and Program Faculty, Executive Development Program, Wharton Executive Education, 2005 – 2008
Academic Director and Program Faculty, Advanced Management Program, Wharton Executive Education, 2000 – 2005
Academic Director and Program Faculty, Decision Models for Management Program, Wharton Executive Education, 1999 – 2002
Academic Director and Program Faculty, UNIMED/FAAP Executive Program, 2003 –2005
Academic Director and Program Faculty, Textron Global Leadership Forum, 2004
Academic Co-Director and Program Faculty, Novo Nordisk Program on Decision Making, 2000.
Academic Director and Program Faculty, Lucent Leadership Program, 1998 –2001
Advisory Board and Program Faculty, The Johnson & Johnson - Wharton Fellows Program in Management for Nurse Executives
Advisory Board and Program Faculty, SmithKline Beecham Executive Management Program Advisory Committee, 1990 –1996
Program Faculty, Wharton Staff Training Program, 2002, 2003, 2004, 2005, 2007, 2008
Program Faculty, Succeeding as an Executive: The Wharton Executive Development Program for Managed Care Medical Directors, 2003 – 2005
Program Faculty, Building a Business Case, Wharton Executive Education, 1998 – 2000
Program Faculty, Wharton Fellows in eBusiness Program, 2000, 2001
Program Faculty, Merck Program for Leaders, 2002, 2003
Program Faculty, Pricing Strategies Program, 2004
Program Faculty, DePuy Leadership Development Program, 2004
Program Faculty, CanTV Leadership Workshop, 2004
Program Faculty, Wharton Essentials of Management Program, 2005, 2007 – 2009
Program Faculty, Fidelity Investments Leadership Program, 2006
Program Faculty, Del Monte Sales Leadership Program, 2006
Program Faculty, Land Lease Executive Development Program, 2007
Program Faculty, Dubai Leaders Program, 2007
Program Faculty, Estee Lauder General Management Program, 2007
Program Faculty, Merrill Lynch Investment Banking Institute Program, 2007
Program Faculty, InBev Global Leadership Development Program, 2007
Program Faculty, Program for Gaming Executives, 2007
Program Faculty, United Healthcare President's Leadership Program, 2007
Program Faculty, UBS Program for Women Reentering the Workforce, 2007
Program Faculty, United Health Group Ovations Leadership Challenge, 2007
Program Faculty, Women's World Banking Advanced Leadership Program, 2010, 2012
Program Faculty, China CITIC Bank Global Executives Program, 2010
Program Faculty, Leading the Effective Sales Force, 2011 – 2014

Program Faculty, Building Effective Alliances, Toronto, 2011
 Program Faculty, High-Potential Leaders, 2011 – 2015
 Program Faculty, Making Strategy Work, 2011 – 2015
 Program Faculty, Rongsheng Leaders Program, 2011 – 2013
 Program Faculty, American Institute for Pediatric Dentistry Advanced Leadership Institute, 2012
 Program Faculty, Income Tax Department of India Foundations of Change Management Program, 2012, 2013
 Program Faculty, Leadership in the Knowledge Society, 2012
 Program Faculty, Shanghai Institute of International Finance Leadership Program, 2012, 2013
 Program Faculty, New Oriental Leadership Program, 2012, 2014, 2015
 Program Faculty, Crown Prince Court Leadership Program, 2013
 Program Faculty, E-House Holdings Executive Program, 2013 – 2015
 Program Faculty, SDM Executive Leadership Program, 2013, 2014
 Program Faculty, Nanyang Strategic Thinking and Execution Program, 2014
 Program Faculty, NIDA Leadership Program, 2014
 Program Faculty, Penn Executive Veterinary Leadership Program, 2014
 Program Faculty, Wharton Women's Leadership Program, 2014, 2015
 Program Faculty, Colonial First State Leadership Program, 2015
 Program Faculty, CREA Leadership Program, 2015

University and School Committees since 1986:

Faculty Search Diversity Advisor, 2012-present
 Executive Education Faculty Development Committee, 2010-present
 Implementation Committee for New WEMBA Curriculum, 2011
 Wharton Academic Freedom and Responsibility Committee, 2010 – 2011
 Dean's Advisory Committee, 2009-2011
 Executive Education Faculty Advisory Committee, 2004 – 2013
 Advisory Committee on Group Assessments for MBA Admissions, 2010, 2011
 Wharton Advisory Committee on Global Initiatives, 2010, 2011
 MBA Review Committee, member then advisor, 2009, 2010
 Advisory Committee for Open Enrollment programs, Wharton Executive Education, 2009, 2010
 Wharton Dean Search Committee, 2007
 Wharton Vice Dean for Executive Education Search Committee, 2008
 Chair, Zell-Lurie Real Estate Center Quinquennial Review Committee, 2006 – 2007
 Governing Board, Penn Program in Nonprofit/Non-Governmental Leadership, 2005 – 2008
 Preparation for Teaching Committee, Deputy Provost's Office, 2002 – 2003
 Chair, Real Estate Department Quinquennial Review Committee, 2002 – 2003
 Chair, Wharton Advisory Committee on Faculty Personnel, 2001 – 2002
 Wharton Advisory Committee on Faculty Personnel, 1986 – 1988, 2000 – 2002
 Research Policy Committee, The Wharton School, 1999 – 2000
 Chair, Wharton Academic Freedom and Responsibility Committee, 2000 – 2002
 Wharton Dean's Council on Education, 2000 – 2001
 Wharton Graduate Core Committee, 1994 – 2005
 Cluster Head, Wharton Graduate Division, 1994 – 2005
 Wharton MBA Executive Committee, 1998 – 2000

Member, Quinquennial Review Committee, Marketing Department, 1997
University Honorary Degrees Committee, 1995 – 97
Member, Implementation Committee for New WEMBA Curriculum, 1993 – 94
Chair, Implementation Committee for New MBA Curriculum, 1992 – 93
MBA Curriculum Committee, 1987 – 1988
Senate Committee on Academic Freedom and Responsibility, 1986 – 89
University Personnel Benefits Committee, 1988 – 1991

Center and Departmental Committees

Chair and member, over 140 committee assignments in three Centers and four Departments

Other Service

Editorial Board, Wyeth Program on “Succeeding as an Executive,” 2003-2005
Editorial Board, Wharton Publishing, 2003-2008
Finance Committee, Society for Medical Decision Making, 1986-1992, 2003-2008
Associate Editor, *Operations Research*, 1983-88
Editorial Board, *Journal of Health Administration Education*, 1983-1990
Editorial Board, *Journal of Behavioral Decision Making*, 1987-present
Editorial Board, *Medical Decision Making*, 1987-1991
Secretary-Treasurer, Society for Medical Decision Making, 1987-1989
Governing Board, Society for Medical Decision Making, 1987-1990
Scientific Program Committee, Meeting of the Society for Medical Decision Making, numerous years
Chair, Administrator Search Committee, Society for Medical Decision Making, 1989-1990
Publications Committee, Society for Medical Decision Making, 1987-88
Awards Committee, Special Issue on Health Care, *Operations Research*, 1976
Health Planning and Health Policy Analysis Task Force of the Accrediting Commission on Education for Health Services Administration, 1977-1980
Numerous external reviews of universities, schools, departments, and centers
Numerous site visits for Department of Health and Human Services
Numerous site visits for Accrediting Commission on Education for Health Services Administration
Joint AUPHA/ASPH Epidemiology Task Force, 1981-84
Reviewer for *American Journal of Public Health*, *Annals of Internal Medicine*, *Behavioral Decision Making*, *Journal of Clinical Epidemiology*, *Decision Sciences*, *Health Education Quarterly*, *Health Services Research*, *Hospital and Health Services Administration*, *Journal of Experimental Psychology*, *Human Perception and Performance*, *Journal of Forecasting*, *Journal of General Internal Medicine*, *Journal of Health Administration Education*, *Journal of Risk and Insurance*, *Journal of Risk and Uncertainty*, *Judgment and Decision Making*, *Management Datametrics*, *Management Science*, *Medical Care*, *Medical Decision Making*, *New England Journal of Medicine*, *Omega*, *Operations Research*, *Organizational Behavior and Human Decision Processes*, *Production and Operations Management*, *Risk Analysis*, *Socio-Economic Planning Sciences*, *Vaccine*, Center for the Study of Aging, John Wiley and Sons, National Center

for Health Services Research, National Health Care Management Center, National Heart, Lung and Blood Institute, National Science Foundation, Prentice-Hall, Sage Publications, Elsevier, Wiley, Wharton Publishing, Harvard Business School Press.

CONSULTING

IBM, Systems Manufacturing Division
Ernst and Young, Management Services Division
Stanford University Hospital
Medicus Corporation
Subcommittee on Health and Scientific Research, Committee on Labor and Human Resources,
U.S. Senate
Association of American Medical Colleges
Hospital of the University of Pennsylvania
Einstein Medical System
Southeastern Pennsylvania Health Systems Agency
Central Jersey Health Planning Council
American Medicorp
Office of the Secretary, Department of Health and Human Services
Kellogg Foundation
University of Maryland, School of Medicine
Hall-Mercer Associates, Pennsylvania Hospital
Temple University School of Medicine
Accrediting Commission on Education for Health Services Administration
Johnson & Johnson
Robert Wood Johnson Foundation
Health Learning Systems Inc.
Veterans' Administration
Philadelphia Association for Clinical Trials
Squibb
National Institutes of Health, National Cancer Institute
Centers for Disease Control
Hewlett-Packard
Hoechst Marion Roussel
Merck
Novo Nordisk
Wyeth
Textron
Campbell Soup
Intel
Interdisciplinary Solutions
Mayo Clinic
Philadelphia Gas Works

GRANTS

- HEW Contract HSM-110-70-383, "The Effect of the Livingston Health Center on its Community," (senior investigator), 1970-1972, \$439,709
- HEW Contract HSM-110-72-178, "Empirical Analysis of Evaluation of a Health Care Management Information System," (senior investigator), 1972-1974, \$320,391
- HEW Grant NIH 5T01 HS 00173-01,02,03, "Health Services Administration Training Program," (senior and principal investigator), 1972-1975, \$254,000
- California Regional Medical Programs Contract ROP-74-47-FSO5, "Quality Review Implementation in a Community Hospital," (co-principal investigator), 1974, \$15,000
- Parker B. Francis Foundation Grant, "Management of Allied Health Personnel in Outpatient Settings," (co-principal investigator), 1974-1975, \$68,000
- HEW Grant 5-A04-AH-02118-02, "Health Care Administration," (principal investigator), 1976-1977, \$93,000
- HEW Grant A19-AH-00016, "Health Care Administration Program Traineeships," (principal investigator), 1978-1980, 1979-1981, 1980-1982, and 1981-1983, \$200,000
- HEW Grant 1-E10-AH-00016, "Health Care Administration Program Grant," (principal investigator), 1978-1980, 1979-1981, 1980-1982, and 1981-1983, \$420,000
- HEW Grant 1-RO3-HS-03543-01, "Analysis of Regional Health Planning Methodologies," (co-principal investigator), 1978-1980, \$53,000
- H.J. Kaiser Family Foundation Health Care Administration Program Grant, (co-principal investigator), 1979-present, \$1,100,000
- NIH Grant 1-POAG-03934, "Vertically Integrated Systems: A Preliminary Study," (principal investigator), 1983-1984, \$4000
- HHS Grant HS-04953, "Derived Thresholds in Medical Decision Making," (senior investigator), 1983-1985, \$167,000
- NSF Grant SES-8218565, "Combining Continuously-Scaled with Dichotomous Diagnostic Tests," (principal investigator), 1983-1985, \$59,000
- IBM Cooperative Program with the University of Pennsylvania, THRESHOLD, "Microcomputer- Based Aids for Medical Decision Making: Research and Teaching Applications," (senior investigator), 1984-1986
- HHS Grant HS-05173, "Adverse Selection in Multiple-Option Group Insurance," (senior investigator), 1985-1990, \$632,000
- IBM "Courseware Development for Management of Information Systems," (principal investigator), 1986-1987, \$30,000
- NSF Grant SES-8509807, "Heuristics and Biases in Diagnostic Decisions," (co-principal investigator), 1986-1987, \$35,000
- HHS Grant T32 HS 00009, "Advanced Training in Health Services Research," (co-principal investigator), 1986-1991, \$1,173,000
- Robert Wood Johnson Foundation Grant 12545, "Nursing Home Infirmaries as a Cost Saving Strategy," (Senior Investigator), 1987-1990, \$298,000
- University of Pennsylvania Research Foundation, "Women's Priorities in Seeking Gynecological Care and Their Evaluation of Their Own Gynecologists," (principal investigator), 1988-1989, \$17,000
- Health Care Financing Administration, "Diagnostic Tests, Technical Component," (Senior Investigator), 1988-1989, \$98,000

Merck, Sharpe & Dohme, "Fellowships in Health Economics," (co-principal investigator), 1988-1990, \$200,000

NSF Grant SES-8809299, "Coping with Risk - Decision Biases in Insurance and Compensation," (co-principal investigator), 1988-1992, \$1,223,000

Hartford Foundation, "Development of a Community Hospital Quality Index," (senior investigator), 1988-1990, \$454,000

University of Pennsylvania Research Foundation, "Why Do People Buy Insurance for More than just Reduction of Risk?" (principal investigator), 1989-1990

Hartford Foundation, "Corporate Hospital Rating Project," (senior investigator), 1991-1993, \$750,000

Health Care Financing Administration, "Computer Assisted Test Interpretation: Use, Effects, and Privacy," (senior investigator), 1990-1991

National Institutes of Health, "Prescriptive Decision Modeling for Cystic Fibrosis Screening," (co-principal investigator), 1991-1993, \$250,000

National Institutes of Health, "How Much Information About the Risk of Cystic Fibrosis do Couples Want?" (senior investigator), 1991-1993, \$250,000

AHCPR Grant 1-PO1-HS06481, "Outcome Assessment for Patients with Biliary Tract Disease," (senior investigator), 1989-93, \$1,200,000

National Institutes of Health, "Cost-Quality Tradeoffs in Cancer Screening, Diagnosis, and Treatment" (senior investigator), 1998-2000, \$240,000

National Institutes of Health. "Improving Value Measurement in Cost-Effectiveness to be Fair to the Elderly and People with Disabilities," (senior investigator), 1998-2001, \$580,000

National Institutes of Health. "Exploring Discrepancies between Patient and Public Utility Ratings," (senior investigator), 2000-2005, \$132,000

National Institutes of Health. "Genetic Testing and the Economics of Life Insurance," (senior investigator), 2000-2006, \$812,000

PUBLICATIONS

- "The nurse staffing problem: Issues and prospects," (with WJ Abernathy and N Baloff), *Sloan Management Review*, 13, 87-99 (Fall, 1971).
- "A spatial allocation model for regional health services planning," (with WJ Abernathy), *Operations Research*, 20, 629-642 (May-June, 1972).
- "Location for best service," (with WJ Abernathy), *The Logistics and Transportation Review*, 8, 5-20 (1972).
- "A three-stage manpower planning and scheduling model -- a service sector example," (with WJ Abernathy, N Baloff, and SE Wandel), *Operations Research*, 21, 693-711 (May-June, 1973).
- An integrated health services data system, (with N Baloff and JR Moore), Stanford University, 1973 (written under contract with National Center for Health Services Research and Development, DHEW).
- The Design and Operation of the Livingston Health Services Data System*, (with N Baloff and JR Moore), Stanford University, 1973 (written under contract with National Center for Health Services Research and Development, DHEW).
- "Comparison of nurse allocation policies -- a Monte Carlo model," (with WJ Abernathy and N Baloff), *Decision Sciences*, 5, 58-72 (January, 1974).
- "The use of an information system for community health services planning and management," (with JR Moore), *Medical Care*, 12, 114-125 (February, 1975).
- "Information systems for experimental social programs -- a health services example," (with JR Moore), *Management Informatics*, 3, 259-69 (1974).
- "Consequence evaluation in decision analytic models of medical screening, diagnosis, and treatment," *Methods of Information in Medicine*, 13, 197-203 (October, 1974).
- "A conceptual framework for nurse staffing management," (with SE Wandel), *Omega: The International Journal of Management Science*, 3, 541-50 (September-October, 1975).
- "Evaluation of nurse staffing policies using a manpower planning and scheduling model," (with SE Wandel), *Operational Research '75*, North Holland/American Elsevier, 561-80, 1975.
- "Making sense out of utilization data," (with HS Luft and JM Gianaris), *Medical Care*, 13, 838-54 (October, 1975).
- "Factors affecting the use of physicians' services in a rural community," (with HS Luft and J Morrell), *The American Journal of Public Health*, 66, 865-871 (September, 1976).

"Analysis of outpatient health care settings using new quantitative techniques," (with RC Carlson and DH Kropp), *Proceedings of the Ninth Annual Meeting of the American Institute of Decision Sciences*, Chicago (October, 1977).

"Drug-taking compliance as an innovation-decision process," (with HC Kunreuther), *Health Services Research*, 13 (Winter, 1978).

"The productivity potential of physicians' assistants: an integrated approach to analysis," (with D. H. Kropp and I. M. Kuhn), *Journal of Medical Systems*, 2, 123-38 (1978).

"A re-appraisal of the productivity potential and economic benefits of physician's assistants," (with DH Kropp), *Medical Care*, 17, 592-606 (June, 1979).

Also see Comment and Response in *Medical Care*, 18, 686-90 (June, 1980).

"Use of optimization and simulation models to analyze outpatient health care settings," (with RC Carlson and DH Kropp), *Decision Sciences*, 10, 412-33 (July, 1979).

"Recursive optimization-simulation modeling for the analysis of ambulatory health care facilities," (with DH Kropp), *Simuletter*, 10, 43-6 (Summer, 1979).

"Risk taking and problem context in the domain of losses: an expected utility analysis," (with PJH Schoemaker), *The Journal of Risk and Insurance*, 47, 111-32 (March, 1980).

This article also appears as Chapter 7 in Schoemaker, PJH, *Experiments on Decisions Under Risk: The Expected Utility Hypothesis*, Boston: Martinus Nijhoff Publishing, 1980.

"Quantitative methods for nurse staffing management," (with WP Pierskalla and SE Wandel), in D. Boldy (ed.), *Operations Research Applied to Health Services*, London: Croom Helm Ltd., 189-220, 1980.

"Prospect theory's reflection hypothesis: a critical examination," (with PJH Schoemaker), *Organizational Behavior and Human Performance*, 25, 395-418 (1980).

"Analysis of capacity decisions for progressive patient care facilities," (with MA Cohen and EN Weiss), *Health Services Research* 15, 145-60 (Summer, 1980).

"Patient compliance with antihypertensive medication," (with BG Morton, JB Davis, and MJ Reichgott), *American Journal of Public Health*, 70, 1081-89 (October, 1980).

"An analysis of regional health planning methodologies," (with MA Cohen), National Health Care Management Center, University of Pennsylvania, 1980 (written under contract with the National Center for Health Services Research, DHHS).

"A stochastic service network model with application to hospital facilities," (with MA Cohen and EN Weiss), *Operations Research*, 29, 1-22 (January-February, 1981).

Also see erratum, *Operations Research*, 31, 601-2 (May-June, 1983).

"Sources of bias in assessment procedures for utility functions," (with HC Kunreuther and PJ H Schoemaker), *Management Science*, 28, 936-54 (August, 1982).

This article also appears in D Bell, H Raiffa, and A Tversky (eds.), *Decision Making: Descriptive, Normative and Prescriptive Interactions*, Cambridge: Cambridge University Press, 422-42, 1988.

"An iterative estimation and validation procedure for specification of semi-markov models with application to hospital patient flow," (with MA Cohen and EN Weiss), *Operations Research*, 30, 1082-104 (November-December, 1982).

"Using multiple tests: series and parallel approaches," (with RD Cebul and SV Williams), *Clinics in Laboratory Medicine*, 2, 871-90 (December, 1982).

"Derived thresholds: determining the diagnostic probabilities at which clinicians initiate testing and treatment," (with JM Eisenberg), *Medical Decision Making*, 3, 155-68 (1983).

"Health insurance choice under competition: will consumers choose what is expected?" (with HC Kunreuther, JS Schwartz, and SV Williams), *Inquiry*, 21, 349-60 (1984).

"Probability versus certainty equivalence methods in utility measurement: are they equivalent," (with PJH Schoemaker), *Management Science*, 31, 1213-31 (October, 1985).

Review of *Decision Making and Control for Health Administration* by DM Warner, DC Holloway, and KL Grazier, *Journal of Health Administration Education*, 3, 396-397 (1985).

"Clinical guidelines for using two dichotomous tests," (with RD Cebul and SV Williams), *Medical Decision Making*, 6, 68-78 (1986).

"Multiple Test Analyzer (MTA): A microcomputer program for determining preferred strategies with two diagnostic tests," (with R Greene, RD Cebul, and SV Williams), *Medical Decision Making*, 6, 79-84 (1986).

"Comparing aggregate estimates of derived thresholds for clinical decisions," (with MJ Young, JM Eisenberg, and SV Williams), *Health Services Research*, 20, 763-80 (February, 1986).

This article also appears in GH DeFries, TC Ricketts III, and JS Stein (eds.), *Methodological Advances in Health Services Research*, Ann Arbor: Hospital Administration Press, 239-56, 1989.

"Vertically-Integrated systems in the 1980's," (with LM Hack), *Center for the Study of Aging Newsletter*, 8:1, 1986.

"Do cardiologists have higher thresholds for recommending coronary arteriography than family physicians," (with MJ Young, JM Eisenberg, L Fried, and SV Williams), *Health Services Research*, 22, 623-635 (December, 1987).

This article also appears in GH DeFries, TC Ricketts III, and JS Stein (eds.), *Methodological Advances in Health Services Research*, Ann Arbor: Hospital Administration Press, 257-69, 1989.

"Heuristics and biases in diagnostic reasoning: I. Priors, error costs, and test accuracy," (with J Baron), *Organizational Behavior and Human Decision Processes*, 41, 259-79 (1988).

"Clinical reasoning and cognitive processes," (with J Baron), *Medical Decision Making*, 7, 203-11 (Oct.-Dec., 1987).

Also see Comment and Response in *Medical Decision Making*, 8, 310-11 (Oct.-Dec., 1988).

"The importance of considering single testing when two tests are available," (with RD Cebul and SV Williams), *Medical Decision Making*, 7, 212-19 (Oct.-Dec., 1987).

Also see Comment and Response in *Medical Decision Making*, 8, 223-225 (July-Sept., 1988).

"Heuristics and biases in diagnostic reasoning: II. Congruence, information and certainty," (with J Baron and J Beattie), *Organizational Behavior and Human Decision Processes*, 42, 88-110 (1988).

"Measuring the economic impact of perioperative total parenteral nutrition: principles and design," (with J Eisenberg, H Glick, A Hillman, J Baron, S Finkler, R Lavizzo-Mourey, and G Buszby), *American Journal of Clinical Nutrition*, 47, 382-91 (February, 1988).

"Outcome bias in decision evaluation," (with J Baron), *Journal of Personality and Social Psychology*, 54, 569-79 (1988).

"The single-cutoff trap: implications for interpreting diagnostic tests," (with MJ Young, LS Fried, J Eisenberg, and S Williams), *Medical Decision Making*, 9, 176-80 (July-Sept., 1989).

"Methods for pricing the technical component of diagnostic tests," (with M Pauly, J Eisenberg, J Highland, and M Radany), University of Pennsylvania, 1989 (written under contract with the Health Care Financing Administration).

- "Knowing for the sake of knowing: the value of prognostic information," (with D Asch and J Patton), *Medical Decision Making*, 10, 47-57 (Jan.-March, 1990).
- "Operations research as a strategic management tool," in S Rovin and L Ginsberg (eds.), *Managing Hospitals*, San Francisco: Jossey-Bass Inc., 112-137, 1991.
- "Prognostic information versus accuracy," (with D Asch and J Patton), *Medical Decision Making*, 11, 45-47 (Jan.-March, 1991).
- "Sensitivity analysis in medical decision making: a direct line to linear programming," *Medical Decision Making*, 11, 57-60 (Jan.-March, 1991).
- "Utility measurement: signal, noise, and bias," (with PJH Schoemaker), *Organizational Behavior and Human Decision Processes*, 52, 397-424 (1992).
- "Judgment by outcomes: when is it justified?" (with J Baron), *Organizational Behavior and Human Decision Processes*, 53, 89-93 (1992).
- "Assessing physicians' estimates of the probability of coronary artery disease: the influence of patient characteristics," (with K Schulman, J Escarce, J Eisenberg, M Young, D McCarthy, and S Williams), *Medical Decision Making*, 12, 109-14 (1992).
- "A model for making project funding decisions at the National Cancer Institute," (with N Hall, L Kessler, and C Stotts), *Operations Research*, 40, 1040-52 (1992).
- "Reporting the results of cystic fibrosis carrier screening," (with D Asch, J Patton, and M Mennuti), *American Journal of Obstetrics and Gynecology*, 168, 1-6 (1993).
- Reprinted in part in F Cunningham, P MacDonald, N Gant, K Leveno, and L Gilstrap III, *Obstetrics*, 19th Edition, Norwalk: Appleton-Lange, 945 (1993).
- Also see Comment and Reply in *American Journal of Obstetrics and Gynecology*, 169, 1358-9 (1993).
- "Framing, probability distortions, and insurance decisions," (with E Johnson, J Meszaros, and H Kunreuther), *Journal of Risk and Uncertainty*, 7, 35-51 (1993).
- This article also appears in D Kahneman and A Tversky (eds.), *Choices, Values, and Frames*, Cambridge: Cambridge University Press, 224-40, 2000.
- "Framing effects in the evaluation of multiple risk reduction," (with I Ritov and J Baron), *Journal of Risk and Uncertainty*, 6, 145-59 (1993).
- "Variation in physicians' decision-making thresholds in management of sexually transmitted disease," (with W Winkenwerder, BD Levy, JM Eisenberg, SV Williams, and MJ Young), *Journal of General Internal Medicine*, 8, 369-73 (1993).

- "The roles of altruism, free riding, and bandwagoning in vaccination decisions," (with D Asch, T Thumasathit and J Meszaros), *Organizational Behavior and Human Decision Processes*, 59, 177-87 (1994).
- "CE-PE bias and probability level: an anchoring model of their interactions," (with PJH Schoemaker), in *Models and Experiments on Risk and Rationality*, M Machina and B Munier (eds.), Kluwer Academic Publishers, 35-55, 1994.
- "Judgment by outcomes: when is it warranted?" (with J Baron), *Organizational Behavior and Human Decision Processes*, 62, 127 (1995).
- "Omission bias and pertussis vaccination," (with D Asch, J Baron, H Kunreuther, J Meszaros, I Ritov, and M Spranca), *Medical Decision Making*, 14, 118-24 (1994).
- "Awarding contracts at the National Institutes of Health: a sensitivity analysis of the critical parameters," (with RC Stotts, L Kessler, N Hall, and J Gruman), *International Transactions in Operational Research*, 1, 117-24 (1994).
- "Psychological determinants of decision attitude," (with J Beattie, J Baron and M Spranca), *Journal of Behavioral Decision Making*, 7, 129-44 (1994).
- "Moral hazard, risk seeking, and free riding in insurance markets," (with L Berger), *Journal of Risk and Uncertainty*, 9, 173-86 (1994).
- "Why some health policies don't make sense at the bedside," (with D Asch), *Annals of Internal Medicine*, 122, 846-50 (1995).
- "Cognitive processes and the decisions of some parents to forego pertussis vaccination for their children," (with J Meszaros, D Asch, J Baron, H Kunreuther, and J Schwartz), *Journal of Clinical Epidemiology*, 49, 697-703 (1996).
- "Maximizing your chance of winning: the long and short of it revisited," (with PJH Schoemaker), *Organizational Behavior and Human Decision Processes*, 65, 194-200 (1996).
- "Genetic screening for reproductive planning: methodologic and conceptual issues in policy analysis," (with D Asch, M Pauly, J Patton, M Jedrziwski, and M Mennuti), *American Journal of Public Health*, 86, 684-90 (1996).
- "Individual choice in spending accounts: can we rely on employees to choose well?" (with M Schweitzer and D Asch), *Medical Care*, 34, 583-93 (1996).
- "Measuring hospital outcomes from a buyer's perspective," (with M Pauly, D Brailer, G Kroch, O Even-Shosan, and S Williams), *American Journal of Medical Quality*, 11, 112-22 (1996).

- "Undercontribution bias in health care spending account decisions," (with M Schweitzer), *Benefits Quarterly*, 13, 36-45 (1997).
- "The limits of boardroom thinking at the bedside," (with D Asch), *Journal of Evaluation in Clinical Practice*, 3, 1 (1997).
- "The three-salesmen conundrum in medicine," (with DA Asch), *Lancet*, 350, 1393-4 (1997).
- Also see "The illusion of deterministic rules," (with DA Asch), [letter], *Annals of Internal Medicine*, 127, 165-6, (1997).
- "Public preferences for prevention versus cure," (with PA Ubel, M Spranca, M. DeKay, and DA Asch), *Medical Decision Making*, 18, 141-8 (1998).
- "Carrier screening for cystic fibrosis: costs and clinical outcomes," (with D Asch, M DeKay, M Pauly, J Patton, M Jedrzejewski, F Frei, R Giardine, J Kant, and M Mennuti), *Medical Decision Making*, 18, 202-12 (1998).
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