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Position: Robert G. Putzel Professor, Department of Statistics
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Education: BA, Statistics, 1977, Hampshire College
AM, Statistics, 1978, Harvard University
PhD, Statistics, 1980, Harvard University

Employment: 2001-present, Robert G. Putzel Professor
Department of Statistics, The Wharton School

2008-present, Senior Fellow, Leonard Davis Institute of
Health Economics, University of Pennsylvania

2016, Sabbatical, Visiting Nelder Fellow in the Statistics Section of the
Department of Mathematics at Imperial College, London

2000-2001 Sabbatical, Fellow, Center for Advanced
Study in the Behavioral Sciences, Stanford, California

1990-2001, Professor of Statistics
The Wharton School of the University of Pennsylvania

1986-1990 Joseph Wharton Term Associate Professor of Statistics,
Wharton School of the University of Pennsylvania.

1983-1986 At first, Research Scientist, later Senior Research
Scientist, Research Statistics Group, Educational Testing Service,
Princeton, New Jersey.

1981-1983 Assistant Professor of Statistics and Human
Oncology, University of Wisconsin at Madison, Wisconsin.

1980-1981 Statistician, Office of Radiation Programs,
U.S. Environmental Protection Agency, Arlington, Virginia.

**Professional
Associations:** American Statistical Association, Biometric Society (ENAR)
Institute of Mathematical Statistics

Honors   Fellow of the American Statistical Association, Elected 1992
George W. Snedecor Award from COPSS, 2003
Nelder Lecture, Imperial College, 2016
C. G. Khatri Lecture, Penn State University, 2017
Nathan Mantel Award from the Section on Statistics in
    Epidemiology of the American Statistical Association, 2017
Long-Term Excellence Award from the Health Policy Statistics
    Section of the American Statistical Association, 2018

BOOKS

Observational Studies. Springer Series in Statistics, New York, Springer. First edition 1995, second edition 2002.

Design of Observational Studies. Springer Series in Statistics, New York, Springer, 2010.

Observation and Experiment: An Introduction to Causal Inference. Cambridge, MA: Harvard University Press, 2017.

ARTICLES
1981
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1983
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1984
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Testing the conditional independence and monotonicity assumptions of item response theory. *Psychometrika*, 1984, 49, 425-435.

1985

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1986

Conditional association and unidimensionality in monotone latent variable models. (With P.W. Holland) *Annals of Statistics*, 14, 1523-1543.

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1987

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1988

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1990

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1994

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1995

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1996

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Propensity scores (with M. Joffe). *American Journal of Epidemiology*, 15 August 1999, 150, 327-333.

Quantile plots, partial orders and financial risk (with J. Kuczmarski). *American Statistician,* 53, 239-246.

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2001

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2005

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2006

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2007

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2008

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2009

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2010

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Optimal matching with minimal deviation from fine balance in a study of obesity and surgical outcomes (with Dan Yang, Dylan S. Small and Jeffrey H. Silber). *Biometrics*, 2012, 68, 628-636.

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2013
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R Packages
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    sensitivitymw
    sensitivity2x2xk
    sensitivityfull
    exteriorMatch
    sensitivitymult
    senstrat
    exteriorMatch

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Member, Committee on National Statistics of the Commission on Behavioral and Social Sciences and Education of the National Research Council of the National Academy of Sciences, 1996-1999.

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Advisory Board of the Methodology, Measurement and Statistics Program of the National Science Foundation, 1999-2001.

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