

TED H. SZATROWSKI (SEPT. 2021)

EDUCATION

Stanford University 1976 Ph.D. Statistics

Stanford University 1971 M.S. Statistics

Oberlin College 1970 B.A. Mathematics

EXPERIENCE

2001 Acting Chair, MSIS Dept, (Spring 2001)
Rutgers University, Newark, NJ 07102

1991-1993 MBA Academic Director, Graduate School of Management,
Rutgers University, Newark, NJ 07102

1986- Professor, Graduate School of Management,
Rutgers University, Newark, NJ 07102

1981-1986 Associate Professor, Graduate School of Management,
Rutgers University, Newark, NJ 07102

1979-1983 Visiting Research Scientist and Consultant,
Educational Testing Service, Princeton, NJ

1979-1980 Visiting Investigator, Biostatistics Laboratory,
Sloan-Kettering Cancer Center, New York City, NY

1975-1981 Assistant Professor, Department of Statistics,
Rutgers University, New Brunswick, NJ

1977-1979 Visiting Scholar, Department of Statistics,
(Summers) Stanford University, Stanford, CA

1974-1975 Lecturer, Department of Statistics,
Rutgers University, New Brunswick, NJ

1970-1974 Teaching and Research Assistant, Department of Statistics,
Stanford University, Stanford, CA

1970-1973 National Science Foundation Competitive Fellow,
Stanford University, Stanford, CA

1967-1970 Programmer and Analyst, Management Science,
(Summers) IBM, Corporate Headquarters, Armonk, NY

PROFESSIONAL ACTIVITIES

1980-1982 Member: American Statistical Association Committee on Women in Statistics

Reviewer: Annals of Statistics, Communications in Statistics, Economic Theory, Journal of Educational Statistics, Journal of the American Statistical Association, Linear Algebra and Its Applications, National Science Foundation, Psychometrika

HONORS

2004-05 RBS-New Brunswick Chapter of Alpha Kappa Psi: Faculty Service Award
1986 American Educational Research Association Palmer O. Johnson Award
1984 Horace de Podwin Research Award
Fall.2016,Sp.2006, Sp, 2000, 1992; Fall, 1986; Sp., 1983; Fall, 1979: FASP Sabbatical Leave
Summers: 1982, 1983, 1985: Graduate School of Management Fellowship
Summer, 1977, Rutgers Competitive Summer Fellowship
1970 B.A. Summa Cum Laude
Phi Beta Kappa
National Science Foundation Competitive Fellow

PROJECT EXPERIENCE

1986-1990 Principal Investigator, NIH Grant, "Research on patterned covariance matrices", R01 GM35273-01A1, (\$236,000).

1988-1989 Consultant, Dupont Chemicals

1983-1986 Principal Investigator, NSF Grant, "Computer software and research on patterned covariance problems", MCS-83-01718 (\$43,000).

1984 Consultant, Major Petroleum Company

1983 Consultant, "Danbury Prison Overcrowding Lawsuit", for Silver, Golub and Sandak.

1980-1982 Co-principal Investigator, Educational Testing Service (ETS) Project, "Advanced shipping study". (with P.W. Holland).

1980-1982 Co-principal Investigator, ETS Project, "Law school validity study". (with H.I. Braun).

1980-1981 Co-principal Investigator, ETS Project, "Work leveling project". (with H.I. Braun).

1980-1981 Co-principal Investigator, ETS Project, "CICS response time study". (with H.I. Braun).

1979-1980 Co-principal Investigator, ETS Project, "Content validity problems". (with D.H. Jones).

1978-1980 Principal Investigator, NSF Grant, "Estimation and testing for patterned means and covariance in multivariate analysis." MCS 77-28184 (\$14,000).

PUBLICATIONS

Corporate culture and financial performance: a preliminary investigation. (with N. DiTomaso and G. Gordon). *Perspectives in Socio-Economics*, Edited by A. Etzioni and P. Lawrence, M.E. Sharpe, 1990.

Commentary on three papers of T.W. Anderson. *Collected Papers of TW Anderson*, Edited by George P.H. Styan, John Wiley and Sons, New York, 1990, 1659-1662.

Statistical Primer for Real Estate Problem Solving. (with Norman Benedict). Publisher: American Society of Real Estate Counselors, November, 1989.

Videotape Lectures: Basic Mathematical Techniques: 18-hour short course (Six 3-hour lectures). (1989). Publisher: Educational Videotapes.

Videotape Lectures: Basic Statistical Techniques: 27-hour short course (Nine 3-hour lectures). (1989). Publisher: Educational Videotapes.

Young adults with cystic fibrosis: clinical features, survival rates and prognostic factors. (with N.N. Huang, D.V. Shidlow, J. Palmer, L. R. Laraya-Cuasay, W. Weung, K. Hardy, L. Quitell, S. Fiel). *The American Journal of Medicine*, **82**, 1987, 871-879.

Sample size savings for curtailed one-sample nonparametric tests for location shift. (with N. Herrmann) *Annals of Statistics*, **15**, 1987, 296-313.

Prognostic significance of terminal deoxynucleotidyl transferase activity in acute nonlymphoblastic leukemia. (with P. Benedetto, R. Mertelsmann, M. Andreeff, T. Gee, Z. Arlin, S. Kempin, B. Clarkson). *Journal of Clinical Oncology*, **4**, 1986, 489-495.

Videotape Lectures: Basic Mathematical Techniques: 30-hour short course (Fifteen 2-hour lectures). (1986). Publisher: Educational Videotapes.

Videotape Lectures: Basic Statistical Techniques: 30-hour short course (Fifteen 2-hour lectures). (1986). Publisher: Educational Videotapes.

The relationship between two parameterizations of linear patterned mean and covariance models. *Communications in Statistics, A, Theory and Methods*, **14**, 1985, 1709-1712.

Relationship of auer rods and chromosome findings to outcome in eighty-nine adults with acute nonlymphoblastic leukemia. (with M.K. Kris, R. Mertelsmann, S. Jhanwar, R. Chaganti, T.S. Gee, Z. Arlin, S. Kempin, P. Benedetto, B. Clarkson), *Leukemia Research*, **9**, 1985, 1231-1235.

Patterned means, **Encyclopedia of Statistical Sciences**, vol 6, ed. by S. Kotz and N.L. Johnson, New York: John Wiley & Sons, 1985, 641-642.

Patterned covariances, **Encyclopedia of Statistical Sciences**, vol 6, ed. by S. Kotz and N.L. Johnson, New York: John Wiley & Sons, 1985, 638-641.

Missing data in the k-population multivariate normal patterned mean and covariance matrix testing and estimation problem. *Communications in Statistics, B, Simulation and Computation*, **14**, 1985, 357-370.

- Asymptotic distributions in the testing and estimation of the missing-data multivariate normal linear patterned mean and correlation matrix testing and estimation problem. *Linear Algebra and Its Applications*, **67**, 1985, 215-231.
- Curtailed binomial sampling procedures for clinical trials with paired data. (with N. Herrmann), *Controlled Clinical Trials*, **6**, 1985, 25-37.
- A note on confidence interval estimation following curtailed binomial tests. (with N. Herrmann), *Sequential Analysis*, **3**, 1984, 75-83.
- The scale-linkage algorithm: construction of a universal criterion scale for families of institutions. (with H. Braun). *Journal of Educational Statistics*, **9**, 1984, 311-330.
- Validity studies based on a universal criterion scale. (with H. Braun) *Journal of Educational Statistics*, **9**, 1984, 331-344.
- Missing data in the one-population multivariate normal patterned mean and covariance matrix testing and estimation problem, *Annals of Statistics*, **11**, 1983, 947-958.
- Prognostic significance of receptors for the third component of complement and heavy chain phenotype in diffuse B cell lymphomas. (with E. Gold, R. Mertelsmann, D. Filippa, B. Koziner, B. Clarkson), *Blood*, **62**, 1983, 107-111.
- On the statistical determination of content validity. (with D.H. Jones) *Educational and Psychological Measurement*, **4**, 1983, 995-1004.
- Relative efficiencies of estimates using patterned covariances or correlations in the multivariate normal estimation problem. *Annals of the Institute of Statistical Mathematics*, **A, 34**, 1982, 299-307.
- Asymptotic formulas for expected sample size savings in curtailed binomial tests. (with N. Herrmann) *Sequential Analysis*, **1**, 1982, 221-245.
- Finding maximum likelihood estimates of patterned covariance matrices by the EM algorithm. (with D.B. Rubin) *Biometrika*, **69**, 1982, 657-60.
- Testing and estimation for block compound symmetry. *Journal of Educational Statistics*, **7**, 1982, 3-18.
- Discussion of "Section pre-equating: A preliminary investigation by P.W. Holland and L. Wightman." (with D.B. Rubin) **Test Equating**, ed. by P.W. Holland and D.B. Rubin, New York: Academic Press, 1982, 301-306.
- A controlled trial of prophylactic trimethoprim-sulfamethoxazole during consolidation chemotherapy for acute leukemia. (with B. Weiser, M. Lange, M.A. Fialk, C. Singer, D. Armstrong) *Annals of Internal Medicine*, **95**, 1981, 436-438.
- Expected sample size savings from curtailed procedures for the t-test and Hotelling's T². (with N. Herrmann) *Annals of Statistics*, **8**, 1980, 682-686.
- Explicit maximum likelihood estimates in the mixed model of the analysis of variance. (with J.J. Miller) *Annals of Statistics*, **8**, 1980, 811-819.

Necessary and sufficient conditions for explicit solutions in the multivariate normal estimation problem for patterned means and covariance. *Annals of Statistics*, **8**, 1980, 802-810.

Asymptotic nonnull distributions for likelihood ratio statistics in the multivariate normal patterned mean and covariance testing problem. *Annals of Statistics*, **7**, 1979, 823-837.

Explicit solutions, one iteration convergence and averaging in the multivariate normal estimation problem for patterned means and covariances. *Annals of the Institute of Statistical Mathematics, A*, **30**, 1978, 81-88.

Expected sample size saving for modifications of some one-population fixed sample nonparametric tests. (with N. Herrmann) *American Statistical Association 1978 Proceedings of the Statistical Computing Section*, 1978, 249-251.

Courses Taught:

MSIS Department, RBS (1981-present)

Undergraduate Courses:

Statistical Methods in Business (New Brunswick)

Research Methods in Business (Newark)

MBA Courses:

Basic Mathematical Techniques

Basic Statistical Techniques

Data Models

Regression Analysis

Statistical Models

Applied Multivariate Analysis

Ph.D. Courses:

Linear Statistical Models

Introduction to Probability

Statistics Department, Rutgers University (1974-1981)

Undergraduate Courses:

Introduction to Statistics (Business and Economics Section)

Introduction to Statistics (Education Section)

Introduction to Statistics (Psychology Section)

Regression Analysis

Graduate Courses:

Theory of Probability I,II

Theory of Statistics I,II

Design of Experiments

Applied Multivariate Analysis

Selected Service:

Faculty Scheduling Committee (2018-2019)-advising on INFOSILM implementation

University Senate (2006-present); Executive Committee (2006-07), ASRAC (2006-present)

New Brunswick Faculty Council (1/99-2005, 2007-present), Executive Committee (2018-2019)

Newark Faculty Council 2009-2015, 2016-2019

RBS Planning Committee (2020-21, 2021-22)

RBS MBA Policy Committee, Fall, 2005

RBS Nominating Committee: Chair: 2002-2005; 2007-2015

RBS Rules and Procedures Committee: Chair: 2002-2005, Member 2005-2015

FASIP Peer Review Committee (Sp. '98, Chair; F. '98, Chair; F. '00, Chair; F '01,Chair; F '02,Chair; F'04,Chair;)

University Senate: (1994-2005); Budget and Planning Committee (1995-2005; Co-chair 2001-02, 03-05; Chair 2002-2003;);Appeals Committee (2003-Fall,2004); Vice Chair (1996-97)

Faculty Promotion Grievance Hearing Committee, Chair, Spring, 2005

Faculty Promotion Grievance Hearing Committee, Chair, Spring, 2004

Faculty Promotion Grievance Counselor, Summer, 2002- Spring, 2004

AAUP: Bargaining Team Member for 2003-04 contract negotiation

Rutgers University President's Faculty Advisory Council (1998-99,2001-2002)

Newark Provost Faculty Advisory Council (1997-2000,2001-2004), Secretary (1998-99,2001-02)

Appointments and Promotions Committee, GSM: Chair (1993-1995)

San Fillipo vs Rutgers University: Chair of University Senate Dismissal Hearing Panel-testified in federal court (1995)

MBA Director, New Brunswick Campus, (1991-1993)

Chair, GSM Merit Committees: (1989-1993)

Proficiency Exam Administrator (1987-1993)

GSM Student Course Evaluation Administrator (1985-1993)

Bylaws Committee: Three Business Units (1991-1992); GSM (1992-1993)

AAUP: Executive Committee (1991-1993); Steering Committee (1991-1992)

AAUP: Bargaining Team Member for 1986-1989 contract negotiation (1987)

University Senate: (1985-1987); Vice Chair (1986-87); Chair, San Fillipo Dismissal Hearing Panel (1986-1987); Educational Policy Committee (1985-1986)

Selected List of seminars, conferences, lectures attended (in person, remote synchronous or asynchronous)

4/29/21 MSIS Dept Seminar, Gustavo Vulcano: The Value of Observability in Dynamic Programming

4/22/21 MSIS Dept Seminar, Gemin George: Decentralized Learning-Operationalizing AI for MDO

4/15/21 MSIS Dept Seminar, Amin Karbasi: Robust Combinatorial Optimization Though Non-Convex Relaxation

4/8/21 MSIS Dept Seminar, Michael Pinedo: Operational Risk Management: Preventive vs Corrective Control

4/1/21 MSIS Dept Seminar, Chunyang Tong: The Impact of Physician-Hospital Inegration on China's Referral-Based Healthcare System

3/25/21 MSIS Dept Seminar, A. Shapiro Distributionally Robust Stochastic Programming

3/11/32 MSIS Dept Seminar, Hamed Hassani: Two Facets of Learning Robust Models: Fundamental Limits and Generalization to Natural Out-of-Distribution Inputs

2/25/21 MSIS Dept Seminar, Spyros Angelopoulos: The power of predictions in online computation

2/4/21 MSIS Dept Seminar, Manel Baucells: Range Utility Theory for Risk and Time with Applications to Game Theory.

1/28/21 MSIS Dept Seminar, Bo Chen: Atomic Dynamic Flows: Adaptive versus Non-adaptive Agents

12/10/20 MSIS Dept Seminar, Kyle Lin: Optimal Patrol of a Perimeter

11/19/20 MSIS Dept Seminar, Milind Tambe: AI for Public Health & Conservation: Learning and Planning in the Data to Deployment Pipeline

11/12/20 MSIS Dept Seminar, Peter E. Caines: An Optimal Execution Problem in Finance Targeting the Market Trading Speed: an MFG Formulation

10/15/20 MSIS Dept Seminar, Esra Buyuktatakin Toy: Scenario Dominance for Risk-Averse Multi-State Stochastic Mixed-Integer Programs

10/8/20 MSIS Dept Seminar, David Simchi-Levi: Bypassing the Monster: A Faster and Simpler Optimal Algorithm for Contextual Bandits under Realizability

9/24/20 MSIS Dept Seminar, Matt Weinberg: (A biased selection of) Recent Developments in Combinatorial Auctions