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EDUCATION:

- Rensselaer Polytechnic Institute, 1953-1957; B.A.E. 1957.
- University of Manchester, England, Fulbright Scholar, 1957-1958.
- Brown University, 1961-1964, Ph.D. Applied Mathematics, 1964.

REGULAR POSITIONS:

- Bateman Research Fellow and Assistant Professor of Mathematics, California Institute of Technology, 1964-1968
- Assistant Professor, Associate Professor, and Professor of Mathematics, Harvey Mudd College, 1968-2006.
- Professor of Mathematics Emeritus, Harvey Mudd College, 2006-present.
- Director of Freshman Division, Harvey Mudd College, 1990.
- Chair, Department of Mathematics, Harvey Mudd College, 1990-1995.
- Avery Professor in Mathematics for the Claremont Colleges, 1998-2006.
- Chair of Faculty (elected position), Harvey Mudd College, 2001-2004.

TEMPORARY POSITIONS:

- Visiting Professor, Technion-Israel Institute of Technology, Haifa, 1974-1975.
- Visiting Professor, Hebrew University of Jerusalem, 1981.
- Visiting Professor, Australian National University, Canberra, 1982.
- Research Scientist, CSIRO Division of Mathematics and Statistics, Canberra, 1982.
- Visiting Professor, Tel Aviv University, 1988-1989.
- Visiting Professor, United States Military Academy, West Point, 1996.
- Visiting Professor, University of South Australia, Adelaide, 2000.

MILITARY EXPERIENCE:

- Mathematics instructor in the Advanced Sciences Division of the U.S. Naval Nuclear Power School, U.S.N. Submarine Base, New London, CT, while serving on active duty as an officer in the Naval Reserve, 1958-1961.

PH.D. DISSERTATIONS SUPERVISED:

- Robert Jack Hemstead: *Stationary Absolute Distribution for Chains of Infinite Order*, California Institute of Technology, 1968.
- Cherlyn Converse: *Lower Bounds for the Maximum Number of Stable Pairings for the General Marriage Problem Based on the Latin Marriage Problem*, Claremont Graduate School, 1992.
- Susan Herring: *Statistical Tests for Stochastic Dominance*, Claremont Graduate School, 1992.

SENIOR THESES SUPERVISED:

- Philip L. Martin: *Optimal Expected Values for Cribbage Hands*, Harvey Mudd College, 2000.
- David J. Gaebler: *Toeplitz Operators on Locally Compact Abelian Groups*, Harvey Mudd College, 2004.
- Jason Murcko: *Cesaro Limits of Analytically Perturbed Stochastic Matrices*, Harvey Mudd College, 2005.

MATHEMATICS CLINIC PROJECTS SUPERVISED:

- Becton, Dickenson & Company: *Annual Planning Forecasts*, 1975-1976.
- Pacific Bell: *Telephone Database Information System*, 1984-1985.
- System Development Corporation: *Multispectral Classifier*, 1985-1986.
- Rand Corporation: *Optimal Strategies for Regional Defense*, 1986-1987.
- NASA/Dryden: *Flutter Stability of Aircraft in Flight*, 1987-88.
- Teledyne Corporation: *Statistical Process Control*, 1989-1990.
- Teledyne Corporation: *Advanced Statistical Process Control*, 1990-1991.

- Argonaut Insurance Company: *Workers Compensation Insurance Regional Cost Differentials*, 1993-1994.
- 3COM Corporation: *Predicting Inventory Levels for Efficient Turn-Around Time*, 1995-1996.
- Aerojet Corporation: *Multiple-Hypothesis Tracking*, 1997-1998
- Space Systems/Loral: *Analysis System for Satellite Propellant Budget Dispersions*, 1998-1999.
- Space Systems/Loral: *Advanced Analysis System for Satellite Propellant Budget Dispersions*, 1999-2000.
- Etec Systems, Inc.: *Statistical Methods for Analysis of Calibration Error from Laser Lithography Etching*, 2000-2001.
- Northrop-Grumman Corporation: *Noise Prediction for Onboard Infrared Detectors as a Function of Temperature*, 2001-2002.
- Fair, Isaac and Company, Inc.: *Identification of Suspicious Investors*, 2002-2003.
- Applied Biosystems: *Automated Analysis of GeneExpression Data*, 2004-2005.
- Beckman-Coulter, Inc.: *Modeling Bead-Based Immunoassays*, 2006-2007.
- Beckman-Coulter, Inc.: *Modeling Bead-Based Immunoassays*, 2007-2008.

COURSES TAUGHT:

- Single-variable and Multi-variable Calculus.
- Linear and Abstract Algebra.
- Ordinary and Partial Differential Equations.
- Probability Theory and Stochastic Processes.
- Mathematical Statistics.
- Real, Complex, and Functional Analysis.
- Deterministic and Stochastic Operations Research.
- Financial Mathematics.

PRINCIPAL PUBLICATIONS:

- “Toeplitz Operators on Locally Compact Abelian Groups”, *Journal of Mathematics and Mechanics*, 14, (1965) 439-478.
- “The Global Optimization of Incoherent-Phase Signals” (with C. A. Schaffner), *SIAM Journal of Applied Mathematics*, Vol. 21, No. 4, (1971), 573-589.
- *Measure Theoretic Probability*, University Press of America, Lanham, MD, 1980.
- “A New Look at Bergstrom’s Theorem on Convergence in Distribution for Sums of Dependent Random Variables”, *Israel Journal of Mathematics*, Vol. 47, No. 1, (1984), 32-65.
- “Interpolating a Topographical Map of the Ocean Floor” (by students David Ho, Kurt Overly, Lee Short), *Mathematical Modeling*, Vol. 7, (1986), 561-576.
- “Positioning of Emergency Facilities in an Obstructed Traffic Grid” (by students Jeff Cronk, Duff Howell, Keith Saints), *Mathematical Modeling*, Vol. 7, (1986), 611-626.
- “Stochastic Orderings Induced by Star-Shaped Functions”, *International Journal of Mathematics and Mathematical Sciences*, Vol. 14, No. 4, (1991) 639-664.
- “How Do I Marry Thee? Let Me Count the Ways!” (with A. Benjamin and C. Converse), *Discrete Applied Mathematics*, 59 (1995) 285-292.
- “Cesaro Limits of Analytically Perturbed Stochastic Matrices” (with J. Filar and Z. Syed), *Linear Algebra and Its Applications*, 353 (2002) 227-243.

OTHER ACTIVITIES AND INTERESTS:

- *Intercollegiate*
 - 21-Year Member of the Hillel Campus Council, Chair 2002-2004.
 - 11-Year Member of the Claremont Colleges Committee on Religious Activities.
 - 6-Year Member of Jewish Studies Council, School of Religion, Claremont Graduate University.
- *Tennis*
 - Coach of the Claremont-Mudd-Scripps Colleges men’s intercollegiate team, 1976-1999.
 - NCAA Division III Coach of the Year, 1985 and 1993.
 - Chair, NCAA Division III Men’s and Women’s Tennis Committee, 1997-1999.

Coach of U.S.A. Pan-American Maccabi Games team, Caracas, Venezuela, 1987.

Tournament Director: Claremont Junior Tennis Tournament, 1976-1990.

Southern California Intercollegiate Athletic Conference, Distinguished Service Award, 2000.

Claremont-Mudd-Scripps Athletic Hall of Fame: Elected in 2004.

- *Community*

10-Year Member of Board of Trustees, Temple Beth Israel, Pomona, CA; President, 1979-1981; Recipient of Crown of the Good Name Award, 1990.

12-Year Member, Board of Governors, Jewish Federation of Greater San Gabriel and Pomona Valleys; Treasurer and Chief Financial Officer, 2000-2001; Planning and Human Resources Governor, 2001-2004, President, 2004-2006, Secretary 2008-2009.

10-Year Member of the Senior Finance Committee of the Committee on Aging, City of Claremont.