

**CURRICULUM VITAE**  
**ARTHUR LARRY WRIGHT**

EDUCATION

University of California, Los Angeles (1959-64); B.A. (1964) Mathematics

University of California, Irvine (1970-74); M.A. (1971); Ph.D. (1974) - Mathematics

MAJOR FIELDS

Statistics, Probability Theory, Stochastic Processes, Financial Mathematics.

EMPLOYMENT

1966-76      IBM Corporation; Systems Analyst, Statistician

1975-82      University of Arizona; Assistant Professor of Mathematics

1980-81      University of California, Riverside; Visitor, Statistics Department

1982-        University of Arizona; Associate Professor of Mathematics

PUBLICATIONS SINCE 1976

1976    "An Ergodic Theorem for the Square of a Wide-Sense Stationary Process", Ann. Prob. 4, 820-835.

1977    "Approximating the Distribution of the Random-Nikodym Derivative of one Stationary Gaussian Process with Respect to Another", Sankhya, Series A, 223-231.

1978    "On Tests for Markov Dependence" (jointly with J. Denny), Z. fur Wahrscheinlichkeits-theorie 43, 331-338.

1980    "Nonexistence of Complete Sufficient Statistics for Stationary k-State Markov chains, k  $\geq$  3, Ann. Inst. Stat. Math. 31, 67-69.

1980    "On a Theorem of Maruyama, Ann. Prob., Vol. 8, 851-852.

1981    "An Invariance Principle for Certain Dependent Sequences" (jointly with C.M. Newman), Ann. Prob. 9, 671-675.

- 1981 "An Integral Strong Law of Large Numbers for Processes with Independent Increments" (jointly with H. G. Tucker), *Israel Journal of Math.*, Vol. 38, No. 3, 177-181.
- 1982 "Associated Random Variables and Martingale Inequalities" (jointly with C.M. Newman), *Z. fur Wahrscheinlichkeitstheorie*, Vol. 59, 361-371.
- 1982 "Two Strong Limit Theorems for Processes with Independent Increments", *J. of Multivariate Analysis*, Vol. 12, 2, 178-185.
- 1982 "An Improved Method of Right Ventricular Gated Equilibrium Blood Pool Radionuclide Ventriculography" (with D. Morrison, et. al)/*Chest*, Vol. 82, 607-614.
- 1982 "The Normal Right Ventricular Response to Supine Exercise" (with D. Morrison, et.al)/*Chest*, Vol. 82, 6, 686-691.
- 1982 "Two Modified Wilcoxon Tests for Symmetry About an Unknown Location Parameter" (jointly with J. Gastwirth and P. K. Bhattacharya), *Biometrika*, Vol. 69, 377-382.
- 1983 "The Effect of Pulmonary Hypertension on Systolic Function of the Right Spacing Ventricle" (with D. Morrison, et.al)/*Chest*, Vol. 84, 3, 250-257.
- 1984 "On the Inconsistency of Bayesian Non-Parametric Estimates in Competing Risks/Multiple Decrement Models" (with B. C. Arnold, P. L. Brockett and W. Torrez) *Insurance: Management and Economics*, Vol. 3, 49-55.
- 1987 "Some Methods for Simulating Random Fields," *Proceedings of the 1987 Winter Simulation Conference*, 295-299.
- 1987 "Some Computational Methods for Simulating Stationary Stochastic Processes," *Proceedings of the 19th Symposium on the Interface*, 109-114.
- 1987 "Hepatitis B and Vaccination in Emergency Physicians," (with K. Iverson and L. Criss) *American Journal of Emergency Medicine*, Vol. 5, No. 3, May 1987, 227-231.
- 1988 "Stochastic Analysis of Paths of Hydraulic Conductivity in Porous Media," with (S. Silliman), *Water Resources Research*, Vol. 24, 11, 1901-1910.
- 1989 "A Limit Theorem for Processes with Associated Increment," *Proceedings of the Symposium on Dependence in Statistics and Probability*.
- 1990 "Inference About the Shape of Neighboring Points in Fields," (with J. L. Denny), *Proceedings of the Conference on Spatial Statistics and Imaging*.

- 1990 "Prehospital Cardiac Arrest: The Impact of Witnessed Collapse and Bystander CPR in a Metropolitan EMS System with Short Response Times," (with D. Spaite, et al), Annals of Emergency Medicine, 1264-1269.
- 1990 "Analyzing Particle Release of Cleanroom Coverings," (with B. Brandt), Microcontamination, November, 53-55.
- 1990 "Cost Effectiveness Analysis of Paramedic Emergency Medical Services in the Treatment of Prehospital Cardiopulmonary Arrest," (with T. V. Venzuela, et al), Annals of Emergency Medicine, December 1990, 1401-1411.
- 1990 "Statistical Consideration of Very Low Background Count in Liquid Scintillation Spectrometry with Applications to Radiocarbon Dating," (with B. Kalin).
- 1990 "Generation of Random Fields Characterized by Discrete Regions of Constant Value," (with S. E. Silliman), submitted for publication.
- 1991 "On Confidence Regions and Tests for the Difference Between Two Binomial Proportions," submitted for publication.
- 1993 "Emergency vehicle intervals versus collapse to CPR and defibrillation intervals: Monitoring EMS system performance and sudden cardiac arrest, Annals of Emergency Medicine, vol 22, 1678-1683, with T.D. Valenzuela, et. al.
- 1998 "Comparison of clinically significant infestation cades among prehospital versus hospital initiated intravenous lines, Annals of Emergency Medicine, vol. 25, 502-506, with T.D. Valenzuela, et. al.

## BOOKS

The Mathematics of Investing, with D. Lovelock and M. Mendel, under review.

## ACADEMIC AND PROFESSIONAL APPOINTMENTS

- 1970-72      Community Teaching Fellow/University of California, Irvine
- 1972-74      Teaching Assistant/University of California, Irvine
- 1975-82      Assistant Professor/Dept. of Mathematics/University of Arizona
- 1982-        Associate Professor/Dept. of Mathematics/University of Arizona

## DEPARTMENT AND UNIVERSITY COMMITTEES

1981-82	Mathematics Department Computer Committee
1983-84	University Mathematics Department Review Committee
1984-86	Undergraduate Committee
1985-86	Personnel Committee
1987-88	Chairman, Statistics Department Faculty Review Committee
1987-90	Committee Head, Head Search Committee for the Statistics Department
1990-	Applied Mathematics Committee
1999-	Head, Mathematics Department Statistics Committee

## PROFESSIONAL MEMBERSHIP

Institute of Mathematical Statistics  
American Statistical Association

## INVITED LECTURES

- 1975 "Statistical Inference for Stochastic Processes," University of California, Davis
- 1980 "On Tests for Markov Dependence," University of California at Riverside
- 1986 "Associated Random Variables and Processes with Associated Increments," Institute of Mathematical Statistics Regional Meeting
- 1987 "Some Computational Methods for Simulating Stationary Stochastic Processes," 19th Symposium on the Interface
- 1987 "Some Methods for Simulating Stochastic Processes," Winter Simulation Conference
- 1987 "Associated Processes: Results and Conjectures," Symposium on Dependence in Statistics and Probability
- 1988 "Associated Random Variables and Associated Processes," University of California, Davis
- 1998 "Polling and Surveys", Raytheon, Tucson.
- 1999 "Associated Random Variables and Processes", University of Athens, Greece.
- 2001 "Some topics in the mathematics of investing" Department of Statistics and Insurance Science, University of Paraeus, Piraeus, Greece

## REFEREEING

Annals of Probability

Journal of Multivariate Analysis

Stochastic Processes and Their Applications

The American Statistician

Transactions of the Society for Computer Simulation

Inequalities in Statistics and Probability

Statistics and Probability Letters

Air Force Office of Scientific Research

Water Resources Research

Stochastic Models

## GRANTS

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|---------|---|
| 1983-84 | “Unloading the Right Ventricle in Chronic Lung Disease”, with D. Morrison, et. al. Arizona Heart Association.             |
| 1986-87 | “New Garment Technology for Class Ten and Class One Clean Rooms,” with B. Brandt, Center for Micro-contamination Control. |
| 1988-91 | “Pre-hospital Sudden Cardiac Arrest,” with T. Valenzuela and L. Criss, Flinn Foundation.                                  |