Committee of Presidents of Statistical Societies

Snedecor Award

Past Award Recipients

- (1977) A. P. Dawid.
- "Properties of diagnostic data distribution". *Biometrics*, 32, 1976, 647-658.
- (1978) Bruce W. Turnbull and Toby J. Mitchell
 "Exploratory analysis of disease prevalence data from survival/sacrifice experiments". Biometrics, 1978, 34, 555-570.
- (1979) Ethel S. Gilbert "The assessment of risks from occupational exposure to ionizing radiation". Energy and Health, Proceedings of a Conference, 1979, 209-225.
- (1981) Barry H. Margolin, Norman Kaplan, and Errol Zeiger
 "Statistical analysis of the Ames salmonella/microsome test," *Proceedings of the National Academy of Science*, 78, 1981, 3779-3783.
- (1982) Byron J. T. Morgan "Modeling polyspermy". *Biometrics*, 38, 1982, 885-898.
- (1983 C. Brownie and D. S. Robson
 "Estimation of time--specific survival rates from tag--resighting samples: a generalization of
 the Jolly--Seber model". *Biometrics*, 39, 1983, 437-453; and
 R. A. Maller, E. S. DeBoer, L. M. Joll, D. A. Anderson, and J. P. Hinde. (1983) "Determination
 of the maximum foregut volume of western rock lobsters (<u>Panulirus cygnus</u>) from field data".
 Biometrics, 39, 1983, 543-551.
- (1984) Stuart H. Hurlbert
 "Pseudoreplication and the design of ecological field experiments". *Ecological Monographs*, 54 (2), 1984, 187-211; and
 John A. Anderson, "Regression and ordered categorical variables". *Journal of the Royal Statistical Society*, 46, 1984, 1-30.
- (1985) Mitchell H. Gail and Richard Simon "Testing for qualitative interactions between treatment effects and patients subsets". *Biometrics*, 41, 1985, 361-372.
- (1986) Kung-Yee Liang and Scott L. Zeger "Longitudinal data analysis using generalized linear models". *Biometrika*, 73, 1986, 13-22; and "Longitudinal data analysis for discrete and continuous outcomes". *Biometrics*, 42, 1986, 121-130.
- (1987) George E. Bonney
 "Regressive logistic models for familial disease and other binary traits". *Biometrics*, 42, 1986, 611-625; and

"Logistic regression for dependent binary observations". *Biometrics*, 43, 1987, 951-973.

- (1988) Karim F. Hirji, Cyrus R. Mehta, and Nitin R. Patel "Exact inference for matched case--control studies". *Biometrics*, 44, 1988, 803-814.
- (1989) Barry I. Graubard, Thomas R. Fears, and Mitchell H. Gail "Effects of cluster sampling on epidemiologic analysis in population-based case-control studies". *Biometrics*, 1989, 45, 1053-1071.
- (1990) Kenneth H. Pollack, James D. Nichols, Cavel Brownie, and J. E. Hines "Statistical inference for capture-recapture experiments". *Wildlife Monographs*, 107, 1990, The Wildlife Society.

• (1993) Kenneth L. Lange and Michael L. Boehnke

"Bayesian methods and optimal experimental design for gene mapping by radiation hybrid". *Annals of Human Genetics*, 56, 1993, 119-144.

- (1995) Norman E. Breslow and David Clayton "Approximate inference in generalized linear models". *Journal of the American Statistical Association*, 88, 1994, 9-25.
- (1997) Michael A. Newton "Bootstrapping phylogenies: Large deviations and dispersion effects". *Biometrika*, 83 (2), 1996, 315-328, and Kathryn Roeder, Raymond J. Carroll and B. G. Lindsay. "A Semiparametric Mixture Approach to Case-Control Studies with Errors in Covariables". *Journal of the American Statistical Association*, 91, 1996, 722-732.
- (1999) Daniel Scharfstein, Anastasios "Butch" Tsiatis and Jamie Robins.
 "Semiparametric Efficiency and Its Implications on the Design and Analysis of Group-Sequential Studies". Journal of the American Statistical Association, 92, 1997, 1342-1350.
- (2001) Patrick J. Heagerty "Marginally specified logistic-normal models for longitudinal binary data". *Biometrics*, 55, 1999, 688-698.
- (2003) Paul R. Rosenbaum "Effects Attributable to Treatment: Inference in Experiments and Observational Studies with a Discrete Pivot". *Biometrika*, 88, 2001, 219-231; and

"Attributing Effects to Treatment in Matched Observational Studies". *Journal of the American Statistical Association*, 97, 2002, 183-192.

• (2005) Nicholas P. Jewell and Mark J. van der Laan, University of California, Berkeley School of Public Health

"Case-control Current Status Data". *Biometrika*, 91, 2004, 529-541.

For the noteworthy publication "Case-control Current Status Data," Biometrika (2004); 91(3):529-541, which focused on identifiability and nonparametric maximum likelihood estimation of survival distributions based on case-control samples of current status data. This paper represents one contribution among many from Nicholas Jewell and Mark van der Laan, and the Committee of Presidents of Statistical Societies acknowledges the overall impact of their research in the development of statistical theory in biometry.

• (2007) Donald Rubin, Harvard University

"The design versus the analysis of observational studies for causal effects: parallels with the design of randomized trials", *Statistics in Medicine*, 26, 2007, 20-36.

For a substantial body of scholarly work that advances the use of statistics in the biological sciences in areas including, but not limited to, the EM algorithm, missing data, imputation, and causality; for a legacy of students who continue to enrich our profession; for unflagging efforts to build our profession as an administrator, editor, and author; and for keeping us focused on the governing, foundational principles that guide the development of our discipline.

• (2009) Marie Davidian, North Carolina State University

"Improving efficiency of inferences in randomized clinical trials using auxiliary covariates." *Biometrics*, 64,2008, 707-715 (Zhang, M., Tsiatis, A.A., and Davidian, M.).

For fundamental contributions to the theory and methodology of longitudinal data, especially nonlinear mixed effects models; for significant contributions to the analysis of clinical trials and observational studies, and for leadership as president of ENAR, as editor, and as a member of the International Biometric Society council.

 (2011) Nilanjan Chatterjee, Division of Cancer Epidemiology & Genetics, National Cancer Institute, USA

"Shrinkage Estimators for Robust and Efficient Inference in Haplotype-Based Case-Control Studies." Chen YH, Chatterjee N, Carroll RJ. J Am Stat Assoc. 2009; 104: 220-233. For groundbreaking work in statistical genetics, especially in developing powerful methods for gene-gene and gene-environment interactions in case-control, genome-wide association

studies; for fundamental work in statistical methods used in epidemiological research, and for mentorship and leadership at the National Cancer Institute.

• (2013) Jack Kalbfleisch, University of Michigan

"Pointwise nonparametric maximum likelihood estimator of stochastically ordered survivor functions" Y Park, JMG Taylor and JD Kalbfleisch, Biometrika, 99, 327-343, 2012. For foundational contribution to the field of biometry, especially for innovative analysis methods for failure time data, event history analysis, mixture models and likelihood theory. For influential collaborative research, especially in the area of solid organ transplantation. For exceptional mentoring of junior researchers, exemplary senior leadership of statistical groups, and steadfast service to the profession.