



Plenary & Awards Sessions

American Statistical Association
Committee of Presidents of Statistical Societies
Institute of Mathematical Statistics

presented at the
167th Annual Meeting
Salt Lake City, Utah

ASA

Monday, 4 p.m.

ASA President's Invited Address

July 30, 2007

Salt Palace Convention Center, Ballrooms E-J

Tuesday, 4 p.m.

Deming Lecture

July 31, 2007

Salt Palace Convention Center, Ballrooms E-J

Tuesday, 8 p.m.

ASA Presidential Address and Awards

July 31, 2007

Salt Palace Convention Center, Ballrooms E-J

Certificates of Appreciation

Samuel S. Wilks Award

Gottfried E. Noether Awards

Statistics in Chemistry Award

Award of Outstanding Statistical Application

W. J. Youden Award in Interlaboratory Testing

Edward C. Bryant Scholarship Award

Gertrude M. Cox Scholarship in Statistics Award

Statistics Partnerships among Academe, Industry, and Government Award

ASA Presidential Address

Founders Award

New ASA Fellows

Wednesday, 4 p.m.

COPSS Awards and Fisher Lecture

August 1, 2007

Salt Palace Convention Center, Ballrooms E-J

George W. Snedecor Award

Florence Nightingale David Award

Presidents' Award

Fisher Lecture

IMS

Sunday, 2 p.m.

Medallion Lecture I

July 29, 2007

Salt Palace Convention Center, 155 E

Sunday, 4 p.m.

Rietz Lecture

July 29, 2007

Salt Palace Convention Center, 255 B

Monday, 10:30 a.m.

Medallion Lecture II

July 30, 2007

Salt Palace Convention Center, 255 E

Monday, 8 p.m.

IMS Presidential Address and Awards

July 30, 2007

Salt Palace Convention Center, Ballroom B

IMS Presidential Address

Carver Medal

Tweedie New Researcher Award

New IMS Fellows

Laha Travel Award

Tuesday, 8:30 a.m.

Medallion Lecture III

July 31, 2007

Salt Palace Convention Center, 355 E

Tuesday, 4 p.m.

Wald Lecture I

July 31, 2007

Salt Palace Convention Center, Ballroom B

Wednesday, 8:30 a.m.

Medallion Lecture IV

August 1, 2007

Salt Palace Convention Center, 355 B

Wednesday, 10:30 a.m.

Wald Lecture II

August 1, 2007

Salt Palace Convention Center, Ballroom B

Wednesday, 2 p.m.

Medallion Lecture V

August 1, 2007

Salt Palace Convention Center, 355 E

Thursday, 10:30 a.m.

Wald Lecture III

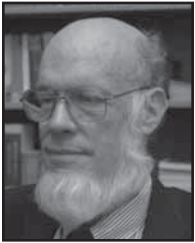
August 2, 2007

Salt Palace Convention Center, 255 E

Rietz Lecture

Sunday, July 29, 2007, 4 p.m.

Salt Palace Convention Center, 255 B



David Siegmund

“Statistical Problems of Gene Mapping”

David Siegmund
Stanford University

Gene mapping attempts to discover the genomic regions that contain genes contributing to specific phenotypes. It is used in experimental genetics to improve the hardiness or productivity of domestic animals or plants of agricultural value, explore basic mechanisms of inheritance, and/or study animal models of human inheritance. In human populations, it is used as a first step to identify genes associated with human health and disease. In this talk, Siegmund will discuss statistical issues of gene mapping, from the fundamental contribution of Fisher (1918) to the problems of today. Central issues involve models connecting genes and environment to phenotypes, statistical irregularities in the analysis of these models, multiple comparisons involved in testing many genetic markers for correlation with a phenotype or phenotypes, computational problems, and the role of population history.

Organizer: **Tony Cai, University of Pennsylvania**
Chair: **Tze Leung Lai, Stanford University**

2007

A Brief Look at Henry Rietz

Henry Lewis Rietz (1875–1943) was the first president, in 1935, of the Institute of Mathematical Statistics. He is credited with the early growth of interest in mathematical statistics.



Born in Gilmore, Ohio, Rietz earned his BS degree from The Ohio State University in 1899, then moved to Cornell University, first as a scholar, then fellow and assistant in mathematics. After earning his PhD in 1902, he spent a year at Butler College in Indianapolis before accepting an instructorship at the University of Illinois, where he stayed for 15 years, becoming full professor. In 1918, he moved to the University of Iowa to head the Department of Mathematics, staying until his retirement in 1942. In his second year at Illinois, a demand arose for a course in statistics. As nobody else wanted to teach it, Rietz was induced to try. He offered “Averages and Mathematics of Investment,” which led to his joint appointment as statistician at the College of Agriculture. From 1908 onward, Rietz published 150 papers on statistical and actuarial topics, though it was difficult at first to find a place of publication for a mathematical statistics paper. His 1926 book, *Mathematical Statistics*, was the basis for many university courses. His many honors include fellowship of the IMS, Royal Statistical Society (UK), and American Association for the Advancement of Science. In appreciation for Rietz’s contributions to the IMS, the 1943 volume of the *Annals of Mathematical Statistics* was dedicated to him.

ASA resident's Invited Address

2007

A Brief Look at Grace Wahba

Prior to joining the University of Wisconsin-Madison, Grace Wahba was a member of the technical staff at Operations Research Incorporated, and then at IBM. She also held a postdoctoral position at Stanford. She is a Fellow of the Institute of Mathematical Statistics, American Statistical Association, and American Association for the Advancement of Science and a member of the National Academy of Sciences and American Academy of Arts and Sciences.

Since the early 1970s, beginning with smoothing splines, Wahba has been interested in regularization methods for nonparametric statistical model-building, which involve a trade-off between fit to the data and complexity of the model. Early work involved optimization problems in Reproducing Kernel Hilbert Spaces (RKHS). These spaces attracted relatively modest interest until about 1996, when it was discovered that the popular Support Vector Machine for classification could be obtained as the solution for an optimization problem in RKHS.

Wahba's recent research has involved analysis of datasets where only noisy, incomplete, dissimilarity information is available between members of the set; problems looking for important patterns or clusters of interacting variables; and various issues involving large, complex datasets and model structures with noisy, indirect, and incomplete information. She has graduated 29 PhD students, and, according to the Mathematical Genealogy Project, has 88 descendants.



Grace Wahba

Monday, July 30, 2007, 4 p.m.

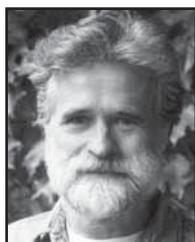
Salt Palace Convention Center, Ballrooms E-J

*“Regularization Methods in Statistical
Model-Building: Statisticians, Computer Scientists,
Classification, and Machine Learning”*

**Grace Wahba
University of Wisconsin-Madison**

Wahba will survey members of a broad class of statistical model-building tools that are popular in nonparametric regression and classification. These tools have the common feature that they involve an optimization problem with an explicit trade-off between fit to the data and complexity of the model. She will examine relationships between Bayes estimates, penalized likelihood nonparametric regression methods, and the classification method known as a Support Vector Machine in the context they share as regularization methods. Cross-validation-based methods for choosing the trade-off (tuning) parameters will be examined, along with problems in selecting important variables and variable clusters. Interplay between statisticians and computer scientists in extending this rich class of methods will be shown to be valuable to both.

PIMS *Presidential Address* & 2007 Awards



Jim Pitman
IMS President

Monday, July 30, 2007, 8 p.m.

Salt Palace Convention Center, Ballroom B

“Open Access to Professional Information”

Jim Pitman

University of California, Berkeley

A number of online resources now provide open access to information of value to students and professionals in probability and statistics. These include arXiv, Google Scholar, Wikipedia, MathWorld, PlanetMath, and several electronic journals. These developments are perceived by some professional societies as threats to their business model. By contrast, IMS sees open access electronic resources as effective means of achieving its primary purpose: to foster the development and dissemination of the theory and applications of statistics and probability.

A Brief Look at Jim Pitman

Pitman, the son of statistician Edwin J. G. Pitman, grew up in Hobart, Tasmania, and earned a BSc in statistics from Australian National University in 1970. After earning his PhD in probability and statistics from Sheffield University, United Kingdom, in 1974, he spent a couple of years at Cambridge. Since then, he has spent most of his career at Berkeley. He has served as editor of the *Annals of Probability* and on the management committee of Current Index to Statistics. His work includes the undergraduate textbook *Probability*, the graduate-level exposition “Combinatorial Stochastic Processes,” and more than 100 research articles about the theory of probability and stochastic processes. Recent research interests include the asymptotic study of random combinatorial objects—such as trees, permutations, and partitions—and continuum limits of such objects.

Pitman’s recent projects include launching the open access expository journals *Probability Surveys* and *Statistics Surveys*, supported by multiple professional societies, and constructing open systems for navigation of online resources in the mathematical sciences, including personal homepages and open resources such as arXiv, Wikipedia, and Google Scholar, as well as subscription services supported by university libraries and traditional publishers.

A Brief Look at Harry C. Carver



The Carver Medal was created by the IMS in honor of Harry C. Carver, founding editor of the *Annals of Mathematical Statistics* and one of the founders of the IMS.

The medal is for exceptional service, specifically to the IMS, and is open to any member of the IMS who has not previously been elected president. No more than one award is made each year.

A Brief Look at Richard Lewis Tweedie

Richard Lewis Tweedie played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities.

With funds donated by his friends and family, IMS is pleased to announce the creation of the Tweedie New Researcher Award. This award provides funds for travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference.



Harry C. Carver Medal—2006 Winner

David Siegmund

Chair, Committee on the Carver Medal

To Bob Hogg, whose past service as IMS Program Secretary (1969–1974) and long-term support of the Central Region helped build and sustain the IMS, and which continues to epitomize the best in service to the Institute, we award the Carver Medal.



Robert V. Hogg
Professor Emeritus,
Department of Statistics and
Actuarial Science,
University of Iowa

Harry C. Carver Medal—2007 Winner



William L. Harkness
Professor Emeritus,
Penn State University

To William L. Harkness for his years of distinguished service as Program Secretary and on various committees of the IMS.

Tweedie New Researcher Award

Thomas G. Kurtz

Past President, IMS



Samuel Kou
Harvard University

For his pioneering contribution to stochastic modeling and inference in biophysics and fundamental contributions to Monte Carlo and Bayesian methods. Together with his chemist collaborators, Samuel Kou has developed the first likelihood-based method for comprehensive inference of single-molecule biophysics experiments and introduced the first stochastic integrodifferential equation framework to successfully account for the subdiffusion phenomenon in biophysics. Together with his collaborators, Samuel Kou has introduced the new Monte Carlo framework, the equi-energy sampler, for efficient statistical sampling and inference and successfully applied the new method to the problems of protein folding and DNA sequence analysis in computational biology.

Fellows 2007 | IMS

Jianqing Fan
Chair, IMS Committee on Fellows



Kani Chen

Hong Kong University of Science and Technology

For significant contributions to statistical theory and methodology in semiparametric inference, nonparametric methods, survival analysis, and the large-sample theory.

Ming-Hui Chen

University of Connecticut

For outstanding contributions to research in Bayesian methodology, Bayesian computation, categorical data analysis, and analysis of missing data; and for innovative interdisciplinary work within industry and medicine, especially in advancing the understanding of prostate cancer.



Zhen-Qing Chen

University of Washington

For research on the Dirichlet form approach to Markov processes, reflected Brownian motion, and stable processes; and for editorial services for IMS-affiliated journals.



Ming-Yen Cheng

National Taiwan University

For her outstanding contributions to nonparametric and semiparametric statistics and for her dedicated service to the statistical profession.



Hans Follmer

Humboldt University, Berlin

For his leadership role in developing research in Germany, Europe, and the world, through his groundbreaking research, his inspiring lectures, and his role in teaching and inspiring others.



Fred J. Hickernell

Illinois Institute of Technology

For innovations in the construction and analysis of quasi-Monte Carlo methods and their applications to experimental design.



Yuzo Hosoya

Tohoku University and Meisei University

For theoretical contributions of outstanding originality, depth, and breadth to statistical time series analysis.



The Institute of Mathematical Statistics announces the election of **23 Fellows**. Fellowship in the IMS recognizes distinction in research in statistics or probability by publication of independent work of merit.

**Inchi Hu**

Hong Kong University of Science and Technology
 For original contributions to sequential analysis, importance sampling, and hidden Markov models.

Michael Rene Kosorok

The University of North Carolina at Chapel Hill
 For contributions to the applications of empirical processes and semiparametric methods in biostatistics, especially in event-time analysis, clinical trials, and microarray analysis; and for dedicated editorial service.

**Partha Lahiri**

University of Maryland and University of Michigan
 For outstanding research contributions to survey sampling and related areas, for ingenious applications of the theory so developed, and for conscientious editorial work.

**Bing Li**

The Pennsylvania State University
 For his contributions to sufficient dimension reduction, semiparametric optimal estimating equations and inference methods, and for conscientious editorial service.

**Gang Li**

University of California, Los Angeles
 For important contributions to research in the fields of nonparametric likelihood ratio methods for survival analysis, ROC curves, goodness-of-fit, and nonparametric/semiparametric inference.

**Xihong Lin**

Harvard University
 For her outstanding contributions in the areas of non- and semiparametric regression models; random effects models; measurement errors; analysis for correlated, clustered, longitudinal, and spatial data; and multivariate survival analysis; for outstanding collaborative research; and for stellar service to the profession.

**Oliver Linton**

London School of Economics and Political Science
 For extensive and influential contributions to statistical and econometric theory and practice, especially for outstanding research on non- and semiparametric methods, the analysis of censored data, and inference from time-dependent data.

**Wei-Liem Loh**

National University of Singapore
 For important contributions to statistics of random fields, Latin hypercube sampling, and orthogonal arrays; for creative use of Stein-Chen methods in challenging central limit problems; and for dedicated editorial service.

**Zhi-Ming Ma**

Chinese Academy of Sciences
 For fundamental contributions to the theory of Dirichlet forms and Markov processes; for original contributions to invariant aspects of Malliavin calculus, probabilistic studies of Schrodinger operators, and Feynman-Kac semigroups; and for dedicated professional service.

**Adrian E. Raftery**

University of Washington
 For seminal contributions to Bayesian model selection and computation, demography, clustering, and stochastic modeling; for influential and novel high-impact statistical applications; and for conscientious professional service.

**Eugenio Regazzini**

University of Pavia
 For his important contributions to finitely additive probabilities and exchangeability and for his pioneering work on the theory of the Dirichlet process.

**Sanat K. Sarkar**

Temple University
 For fundamental contributions to the field of multiple hypothesis testing; for important contributions to probability inequality and multivariate statistical inference; and for service to the profession.

**Jack William Silverstein**

North Carolina State University
 For seminal contributions to the theory and application of random matrices.

**Richard A. Vitale**

University of Connecticut
 For deep and influential contributions to probability inequalities, random sets and stochastic geometry, and symmetric statistics.

**Matthew P. Wand**

University of New South Wales
 For fundamental contributions to the theory, computation, and applications of nonparametric and semiparametric statistical methods.

**Hongyu Zhao**

Yale University
 For fundamental contributions to statistical genomics, genetic epidemiology, and computational biology; for editorial service; and for training of graduate and postdoctoral students.



Laha 2007 Travel Award

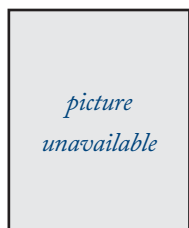
Victor Perez-Abreu
Chair, Committee on Travel Awards



Hukum Chandra
University of Southampton



Pierpaolo De Blasi
University of Turin



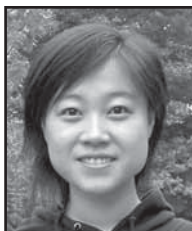
Meng Du
University of Toronto



Hongfei Li
The Ohio State University



Huilin Li
University of Maryland



Yingying Li
The University of Chicago

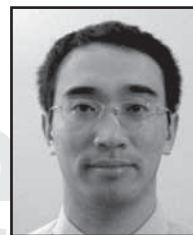
A Brief Look at Radha Govind Laha

With funds from a generous bequest by the late professor Radha Govind Laha, IMS established the Laha Award to provide funds for students and new researchers (within two years of their PhD degrees) to travel to present a paper at the IMS Annual Meeting.

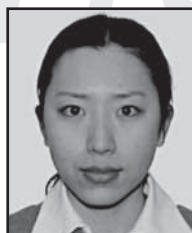


Laha

Travel Award



Rong Liu
Michigan State University



Lu Lu
Iowa State University



Sheng Luo
The Johns Hopkins University



Vladimir Minin
University of California, Los Angeles



Guilherme Rocha
University of California, Berkeley



Bodhisattva Sen
University of Michigan



Lifeng Wang
University of Minnesota



Olivier Wintenberger
Université Paris 1



Yichao Wu
Princeton University

Wald Lectures 2007



Jim Berger

Wald I, Tuesday, July 31, 2007, 4 p.m.
Salt Palace Convention Center, Ballroom B

Wald II, Wednesday, August 1, 2007, 10:30 a.m.
Salt Palace Convention Center, Ballroom B

Wald III, Thursday, August 2, 2007, 10:30 a.m.
Salt Palace Convention Center, 255 E

Jim Berger

Arts and Sciences Professor of Statistics,
Institute of Statistics and Decision Sciences, Duke University

Lecture I. A Review of Some Surprises Encountered in Bayesian Model Selection.

When I started looking at hypothesis testing and model selection from a Bayesian perspective many years ago, I thought the following were true: (i) Use of p -values is better than fixed alpha-level testing, as p -values are conditional on the data. (ii) Frequentist and Bayesian testing are incompatible; for instance, Bayes tests do not depend on the stopping rule in sequential settings, while frequentist tests do so depend, necessitating 'spending alpha' for looks at the data. (iii) The best single model is the highest posterior probability model. (iv) Finding the best (or a few of the best) models is sufficient. (v) Model selection priors cannot be derived from the data. I no longer think any of these are true and will review why. Included will be a discussion of large model spaces, including methods for effective search in and effective summarization of information from such spaces.

Lecture II. Model Selection: Approximations and Multiplicities. Two of the biggest hurdles in dealing with model uncertainty are dealing with multiplicity and dealing with computation. Issues of multiplicity in testing are increasingly being encountered in practice, and failure to properly adjust for multiplicities is being blamed for the apparently increasing lack of reproducibility in science. The first part of this talk will cover different types of multiplicities being encountered and methods for handling them. A major computational hurdle for Bayesians is computation of model likelihoods. Because of the difficulty of this computation, BIC is often used as an approximation. Unfortunately, BIC has a number of problems. The second part of the talk will cover new approximations that show considerable promise in significantly improving BIC, even potentially applying to situations where the model size grows with the sample size.

Lecture III. Working with Inexact Models: The World of Computer Modeling.

A major activity in science and engineering is the development of simulation- or math-based computer models of processes. Such models are virtually always incomplete representations of reality, and hence will be rejected by formal tests. The models will be used, however, so the statistical challenge is to understand how to do so effectively. Statistical issues that arise include determination of model bias, use of bias-adjusted predictions, and accounting for uncertainty in model parameters and inputs. The methodology used is a mix of Bayesian spatial, hierarchical, and nonparametric techniques; such techniques seem necessary, as will be shown with a simple example. Difficulties encountered include needing to deal with functional data, the presence of severe confounding, and the surprising phenomenon that full Bayesian analysis is often inferior to a modular, or partial, Bayesian analysis.

A Brief Look at Abraham Wald



Abraham Wald, best known for his work on statistical decision theory and sequential analysis, was born in 1902 in what was then part of Hungary and is now Romania. He was educated well at home by his parents and family (as a Jew, he could not attend school on Saturdays as was required). In 1927, he entered the University of Vienna; he earned his doctorate in 1931. Wald was an active participant of the Vienna Colloquium. When it was disbanded in 1938, he accepted an invitation by the Cowles Commission to work in the United States, a move that probably saved his life—almost all of his family died in the Nazi death camps. Wald taught statistics at Columbia University, where his students remember him as a superb teacher of unrivalled clarity and precision. However, his career was cut short by a plane crash during a lecture tour of India when he was just 48. During his short life, Wald made major contributions to statistics, geometry, econometrics, and mathematical economics, publishing more than 90 books and papers.

Organizer: Tony Cai, University of Pennsylvania

Chairs: Robert L. Wolpert, Duke University; Luis R. Pericchi, University of Puerto Rico, San Juan; and Dongchu Sun, University of Missouri-Columbia

Medallion 2007 Lectures



The Institute of Mathematical Statistics' Committee on Special Lectures arrange for papers of unusual interest to be given at regular meetings by distinguished scientists. Medallion Lectures are distinct from invited papers, which are chosen by various program committees for specific meetings. Each Medallion Lecturer will receive a Medallion in a brief ceremony preceding the lecture. Medallion Lecturers generally focus on probability, theoretical statistics, applied statistics, and interdisciplinary.

Medallion Lecture I, Sunday, July 29, 2007, 2 p.m.
Salt Palace Convention Center, 155 E



Peter Donnelly
University of Oxford

Modeling Genes: Statistical Challenges in Modern Genetics

Advances in experimental technology have made possible hypothesis-free, genome-wide, case-control association studies. These are proving to be a powerful tool for unlocking the genetic basis of common human diseases, but they bring with them a number of challenging statistical problems and opportunities. This talk will describe some of these in the context of the largest such study to date, the Wellcome Trust Case Control Consortium.

Medallion Lecture II, Monday, July 30, 2007, 10:30 a.m.
Salt Palace Convention Center, 255 E



Photo courtesy of Dawn Velle/AP, ©HHMI

Claudia Neuhauser
University of Minnesota

Understanding Ecological Communities

Ecological communities are assemblages of populations of different species (e.g., plants, animals, microbes). Community ecology is concerned with understanding the processes that govern diversity, distribution, and abundance of species that compose an ecological community. The standard framework of mathematical models in community ecology is ordinary differential equations. This framework assumes that species are well-mixed and stochastic effects can be neglected. I will present insights from work on spatially explicit and stochastic Markov processes on how local interactions and stochastic dynamics affect the outcome of community interactions, such as competition, mutualism, or parasitism.

Medallion Lecture III, Tuesday, July 31, 2007, 8:30 a.m.
Salt Palace Convention Center, 355 E



Hans-Georg Müller
University of California, Davis

Functional Regression Analysis: Models, Methods, and Applications

Functional regression analysis addresses the situation where predictors or responses in a regression setting include random functions. Early functional linear models were based on observing complete trajectories for the random functions. Generalized functional linear models can be used for classification. Recent extensions to be discussed include functional regression diagnostics, functional regression for sparse and noisy longitudinal data, time-varying functional models, functional additive and nonlinear regression, and the functional embedding of very high-dimensional data. A basic tool is the representation of random functions by functional principal component scores.

Medallion Lecture IV, Wednesday, August 1, 2007, 8:30 a.m.
Salt Palace Convention Center, 355 B



Xuming He
University of Illinois

Quantile Regression under Censorship

Censoring challenges any regression analysis, including quantile regression. However, the conditional quantile functions often have better identifiability than the conditional mean function when the response variable is censored. In this talk, I examine the impact of fixed and random censoring on the estimation of quantile regression models. A new approach to doubly censored response will be outlined and a discussion of existing algorithms on censored quantile regression will be attempted. In particular, I will demonstrate that commonly used censored regression quantile estimators that do not share the spirit of Kaplan-Meier could be poor in efficiency, but a global approach to redistributing the probability mass of censored observations is both challenging and rewarding.

Medallion Lecture V, Wednesday, August 1, 2007, 2 p.m.
Salt Palace Convention Center, 355 E



Jane-Ling Wang
University of California, Davis

Joint Modeling of Longitudinal and Survival Data

It has become increasingly common to observe the survival time of a subject along with baseline and longitudinal covariates. Due to several complications, traditional approaches to marginally model the survival or longitudinal data encounter difficulties. Jointly modeling these two types of data emerges as an effective way to overcome these. One of the difficulties is with the likelihood approaches when the survival component is modeled semiparametrically, as in Cox or accelerated failure time models. Several alternatives will be illustrated, including nonparametric MLEs, the method of sieves, and pseudo-likelihood approaches. Another difficulty has to do with the parametric modeling of the longitudinal component. Nonparametric alternatives will be considered to deal with this complication.



2007 Deming Lecture



Douglas C. Montgomery

A Brief Look at W. Edwards Deming

When W. Edwards Deming joined the American Statistical Association (ASA) in 1937, a prospective member had to apply for consideration, be sponsored by one or more members, and then be voted on by the Board of Directors. Fellows—he became one in 1942—were limited to 100.

In the intervening years, Deming's incisive genius and personal style touched many of our members in ways reflective of the wide range and depth of his interests. To the Association, he remained an interested and active member, evidenced by his many generous gifts and by the notes frequently received with his decided opinions succinctly stated.

Deming acquired a reputation for expertise in sampling techniques and for applying statistical process control to organizational functions. He developed techniques for sampling that were first implemented in the 1940 Census. During World War II, he and his colleagues led seminars in quality control for wartime industries. He is, however, best known for his post-war work in Japan and for his subsequent quality management seminars, which he led with typical vigor until his death at 93. More than 100,000 participants attended his four-day seminars over his long and illustrious career.

At the 1989 ASA Sesquicentennial, Deming was one of the expert panelists (along with the good company of Morris Hansen, C. R. Rao, John Tukey, and Sir David Cox) in an overflow session; he joined us again for a reception in his honor in the fall of 1991, when his portrait and the ASA's Deming Library, which also displays a small sample of his many awards and honors, were dedicated. Our last formal contact with one of our best-known members was at the 1993 San Francisco Joint Statistical Meetings, where although frail, Deming gave the Presidential Invited Address to a captivated audience of more than 1,500.

In 1995, through a cooperative effort with the Deming Institute, the ASA dedicated the re-creation of Deming's office at the ASA headquarters in Alexandria, Virginia. This office is available for research to those interested in Deming's work.

Because Deming touched the ASA and its members in so many enduring ways, the ASA is pleased to honor his memory with the Deming Lecture.

—American Statistical Association

Tuesday, July 31, 2007, 4 p.m.

Salt Palace Convention Center, Ballrooms E-J

For significant and numerous contributions to the advancement of the philosophy and teachings of W. Edwards Deming

To Douglas C. Montgomery, who through his teaching, consulting, research, editorial service, and textbooks, has furthered the use and strengthened the impact of a broad range of statistical methods, including many of the methods championed by W. Edwards Deming.

Introduction to the Session.....William H. Woodall,
Deming Lectureship Committee

Acknowledgment of Support William H. Woodall

Introduction of Speaker..... William H. Woodall

Presentation of Plaque.....Mary Ellen Bock, ASA President

The 2007 Deming Lecture

"A Modern Framework for Enterprise Excellence"

Douglas C. Montgomery

Arizona State University

This lecture is made possible by donations from General Motors, Eastman Kodak, Bandag Inc., Gallery Furniture, Xerox, and friends of W. Edwards Deming.

2007 Deming Lectureship Committee

Nicholas I. Fisher (chair), John M. Bushery, Steven B. Cohen, Laura A. Knapp, Kenneth J. Koehler, George P. McCabe, Randall K. Spoeri, Jane-Ling Wang, William H. Woodall, and Dallas E. Johnson

Past Lecturers

*Brian L. Joiner, 1996 • Noriaki Kano, 1997 • Myron Tribus, 1998
Kenneth Prewitt, 1999 • George E. P. Box, 2000 • Gerald J. Hahn, 2001
Sir David R. Cox, 2002 • Wayne A. Fuller, 2003 • Colin L. Mallows, 2004
A. Blanton Godfrey, 2005 • Ronald D. Snee, 2006*

Organizer: Deming Lectureship Committee

ASA Awards

Sallie Keller-McNulty
Chair and 2006 ASA President

Tuesday, July 31, 2007, 8 p.m.

Salt Palace Convention Center, Ballrooms E-J

Certificates of Appreciation for Retiring Editors

Editor, ASA-SIAM Book Series, 2005–2007

★ **Martin T. Wells**, Cornell University, Ithaca

Editor, *CHANCE*, 2005–2007

★ **Michael L. Lavine**, Duke University

Abstracting Editor, Current Index to Statistics, 2000–2007

★ **George P. H. Styan**, McGill University

Editor, *Journal of Agricultural, Biological, and Environmental Statistics*, 2005–2007

★ **Byron J. T. Morgan**, University of Kent, Canterbury

Reviews Editor, *Journal of the American Statistical Association/ The American Statistician*, 2005–2007

★ **Robert B. Lund**, Clemson University

Editor, *Journal of Educational and Behavioral Statistics*, 2005–2007

★ **David M. Thissen**, The University of North Carolina

Editor, *STATS*, 2005–2007

★ **Paul J. Fields**, Brigham Young University

Editor, *Technometrics*, 2005–2007

★ **Randy R. Sitter**, Simon Fraser University



A Brief Look at Samuel S. Wilks



The award, one of the ASA's most prestigious, was established in 1964 to honor the memory and distinguished career of Samuel S. Wilks by recognizing outstanding contributions to statistics that carry on in the spirit of his work.

A Brief Look at Gottfried E. Noether

The Noether Awards were established in 1999 as a tribute to professor Gottfried Emanuel Noether, who died on August 22, 1991, in Windham, Connecticut. His wife, Emiliana Noether, and daughter, Monica Noether, presented the American Statistical Association with an endowment fund to recognize distinguished researchers and teachers and to support research in the field of nonparametric statistics.



Samuel S. Wilks Award

Marie Davidian

Chair, Samuel S. Wilks Memorial Medal Committee

For extraordinary broad and deep contributions to applied statistics methodology, to mathematical statistics, and to probability, encompassing topics such as regression model selection, covering designs, rankings, graphics, combinatorics, coding theory, and the foundations of data analysis; and for generous, unstinting, and productive collaborations and guidance to other statisticians, mathematicians, scientists, engineers, and business executives.



Colin L. Mallows

Gottfried E. Noether Awards

James J. Higgins

Chair, Noether Awards Committee



Peter Hall

University of Melbourne

Noether Senior Scholar Award

For outstanding contributions to the theory and applications of nonparametric statistics.



Davy Paindaveine

Université Libre de Bruxelles

Noether Young Scholar Award

For outstanding early career contributions to nonparametric statistics.

Statistics in Chemistry Award

Raymond Lam

Chair, SPES Committee on Chemometrics

No Award in 2007

Award of Outstanding Statistical Application

Karen Kafadar

Chair, Committee on Award of Outstanding Statistical Application



Jeffrey Grogger

University of California,
Los Angeles



Greg Ridgeway

RAND Corporation

Established in 1986, this award recognizes a paper that is an outstanding application of statistics in any substantive field.

To Jeffrey Grogger and Greg Ridgeway in recognition of their paper, "Testing for Racial Profiling in Traffic Stops from Behind a Veil of Darkness,"—an empirical investigation of racial profiling by police in Oakland, California, that cleverly takes advantage of a natural experiment resulting from Daylight Savings Time the setting sun to assess whether an officer's ability to see a driver's race in advance of a stop influences the officer's decision to stop; its methods are now being embraced by police departments and the communities they serve and this paper helped defuse the contentious battles over racial profiling in two cities where concerns over policing had resulted in court-ordered investigations of profiling.

A Brief Look at W. J. Youden

The W. J. Youden Award in Interlaboratory Testing was established in 1985 to recognize publications that make outstanding contributions to the design and/or analysis of interlaboratory tests, or describe ingenious approaches to the planning and evaluation of data from such tests.



W. J. Youden Award in Interlaboratory Testing

Neil R. Ullman

Chair, W. J. Youden Award in Interlaboratory Testing



Rafael A. Irizarry

The Johns Hopkins University

To Rafael Irizarry in recognition of his paper, "Multiple Laboratory Comparison of Microarray Platforms," published in *Nature Methods*, May 2005, Vol. 2, No. 5.

Coauthors:

Shyam Biswal	Eric Hoffman	John Quackenbush
Bryan C. Frank	Anne E. Jedlicka	Alan Scott
Edward Gabrielson	Ernest Kawasaki	Forest Spencer
Joe G. N. Garcia	Hannah Lee	Daniel Warren
Joel Geoghegan	Francisco Martínez-Murillo	Michael Wilson
Gregory Germino	Laura Morsberger	Yanqin Yang
Constance Griffin	Irene F. Kim	Shui Qing Ye
Sara C. Hilmer	David Petersen	Wayne Yu

A Brief Look at Edward C. Bryant

Each year, an outstanding graduate student in survey statistics is awarded the Edward C. Bryant Scholarship to help support the student's graduate education. Westat established the Edward C. Bryant Scholarship Trust Fund in 1995 to honor its cofounder and long-time leader. Under Bryant's leadership, Westat, an employee-owned statistical firm established in 1961, grew into what is now one of the world's leading statistical research firms with a full-time permanent staff of 800.



A Brief Look at Gertrude M. Cox



Gertrude M. Cox was a pioneer for women in the statistics field. During an era when higher education was still considered a male pursuit, she earned a bachelor's degree in 1929, a master's in 1931, and an honorary PhD in 1958. Cox founded North Carolina State University's Department of Statistics in 1940 and headed the Statistics Research Division at the Research Triangle Institute from 1959 to 1964, bringing together statisticians from different universities.

Edward C. Bryant Scholarship Award

Elizabeth A. Stasny
Chair, Edward C. Bryant Scholarship Committee



To Mandi Yu for outstanding graduate work in survey statistics.

Mandi Yu

Program in Survey Methodology,
Institute for Social Research,
University of Michigan

Gertrude M. Cox Scholarship in Statistics Award

Amita K. Manatunga
Chair, Subcommittee to Committee on Women in Statistics &
The Caucus for Women in Statistics



Jennifer Anne Sinnott
The Ohio State University



Valerie Anne Smith
Stanford University

To Jennifer Anne Sinnott and Valerie Anne Smith for outstanding academic achievement in a statistical program.

Gertrude M. Cox Scholarship Award—*Honorable Mention*



Stacey Ackerman-Alexeeff
Carnegie Mellon University



Kari R. Hart
Emory University

To Stacey Ackerman-Alexeeff and Kari R. Hart for outstanding academic achievement in a statistical program.

SPAIG Award

George W. Williams
Chair, Statistical Partnerships among Academe, Industry, and
Government Committee

The 2007 SPAIG Award is awarded to the:

University of Michigan
University of Pennsylvania
National Cancer Institute
National Center for Health Statistics
National Center for Chronic Disease
Prevention and Health Promotion
Information Management Services

For an outstanding partnership, which has resulted in publication of improved small-area estimates for cancer risk factors and cancer screening behavior, improved mathematical analysis techniques of survey data for survey organizations, development of advanced techniques for combining results from multiple surveys that can be adapted to other surveys, and obtaining publications and grant opportunities in relatively new research areas for junior researchers.

The American Statistical Association, through the Statistics Partnerships among Academe, Industry, and Government Committee, established the SPAIG Award in 2002 to recognize outstanding partnerships established between academe, industry, and government organizations and to promote new partnerships. This award differs from other ASA awards, as it recognizes organizations instead of individuals.



ASA P Presidential Address



Mary Ellen Bock
ASA President

“Harnessing the Power of Information”

Mary Ellen Bock
Purdue University

“Statistics: Harnessing the Power of Information” is the 2007 conference theme, which highlights the power of statistics to inform and guide us through our world. Harnessing that power is equally important for our own strategic planning as an organization and a profession. We need data about ourselves when we make decisions about our future directions. We will use this opportunity to examine evolving facets of our discipline and its practitioners. Topics will include the current demographics and characteristics of statisticians; the changing research frontier for the field; our role in industry, government, and education; and our relationships to other disciplines and our communities. Finally, we will look to the future and attempt to predict some directions.

Presentation of Founders Award

Sallie Keller-McNulty
Chair, Founders Award Committee

In 1988, the Board voted to establish the ASA Founders Award to recognize members who have rendered distinguished service to the Association. Typically, no more than two awards are granted annually, and the award does not have to be granted every year; however, when warranted, up to five awards may be given each year.

2006 Founders Award Winners



Wendy L. Alvey, U.S. Census Bureau, received the 2006 Founders Award for 30 years of distinguished service to the Association as a visionary member of several ASA Committees, Sections, and Chapters; for noteworthy contributions, such as the well-known pamphlet, "Surveys and Privacy"; and for her mentoring of statisticians to strive for excellence in writing and presenting at JSM and other professional conferences.



John E. Boyer, Jr., Kansas State University, received the 2006 Founders Award for long and distinguished leadership in a major university statistics department; for enduring contributions to Section and Council of Chapters activities, including promoting prominence for statistics in science fair competitors at the state, national, and international level; and for excellence in statistical consulting.



E. Jacquelin Dietz, Meredith College, received the 2006 Founders Award for extraordinary contributions to advances in statistical education, as founding editor of the *Journal for Statistics Education* and other publications activities; for leadership on the Section for Statistics Education and Council of Sections; and for effective representation of the ASA to several intersociety activities.



Robert L. Santos, NuStats LP, received the 2006 Founders Award for excellence in survey statistics; for distinguished leadership in Section and committee activities, including a deep and enduring concern for the ASA's open access to members of all races and cultures; and for effective impact in work with sister statistical organizations.



Joe H. Ward, Health Careers High School, received the 2006 Founders Award for excellent efforts in K-12 education that are so far-ranging that an elementary school was named in his honor; for fundamental efforts with a Chapter; and for lasting efforts to make statistics understandable to the general population.

2007

ASA Fellows

The American Statistical Association announces the election of 59 new Fellows. A superlative honor for 93 years, fellowship in the ASA recognizes outstanding professional contributions in the field of statistical science.

Robert M. Bell
Chair, Committee on Fellows



Odd O. Aalen

Professor of Biostatistics

University of Oslo

For groundbreaking contributions to modeling survival and event history data via the introduction of counting processes, martingales, and stochastic integration; and for intellectual leadership in statistics.

John L. Adams

Senior Statistician

RAND Corporation

For developing new statistical methods, particularly in complex survey design, to support health services research; for innovative health policy research; for effective statistical consulting; and for service to the profession.



David B. Allison

Professor of Biostatistics and

Head of the Section on Statistical Genetics

University of Alabama at Birmingham

For outstanding contributions to statistical genetics; for leadership in establishing educational programs in statistical genetics; and for important methodological contributions to obesity and nutrition research.

Mick P. Couper

Research Associate Professor

University of Michigan

For outstanding contributions to survey research and applications, notably in web survey design and other uses of technology in data collection, identifying nonresponse mechanisms, and introducing paradata to control survey processes; and for excellent teaching and services to the profession





Lester R. Curtin

Mathematical Statistician

National Center for Health Statistics

For significant contributions to the design of important national health surveys; for outstanding research in survey methods; and for leadership in administering statistical research programs.

Michael J. Daniels

Associate Professor of Biostatistics and Statistics

University of Florida

For significant research in both theoretical and applied statistics, especially in the areas of longitudinal data analysis and covariance matrix estimation; for innovative teaching; and for service to the profession.



Charmaine B. Dean

Professor and Burnaby Mountain Research Chair of Statistics

Simon Fraser University

For important contributions to the modeling and assessment of over-dispersion; for the development of significant new methodology for spatio-temporal data and disease mapping; and for service to the profession.



John J. Deely

Professor Emeritus of Statistics

University of Canterbury

For outstanding research on empirical Bayes, ranking and selection, and Bayesian statistics; and for exemplary consulting work.



Rebecca W. Doerge

Professor of Statistics and Agronomy

Purdue University

For contributions to the design and analysis of studies involving plant genetics and genomics; for the development of new statistical techniques used by the experimental genetics community; and for leadership in collaborative research.



David Draper

Professor and Chair of Statistics

University of California, Santa Cruz

For seminal contributions to Bayesian hierarchical modeling, nonparametric methods, Markov chain Monte Carlo, quality assessment in health and education, and stochastic optimization; for extraordinary service to the profession; and for broad and high-impact contributions to statistics education.

David B. Dunson

Senior Investigator

National Institute for Environmental Health Sciences

For innovative research in latent variable models; for seminal contributions to the statistics of fertility research; and for excellence in editorial service.



Scott S. Emerson

Professor of Biostatistics

University of Washington

For leadership in developing statistical criteria for the early stopping of clinical trials; for service on data safety monitoring boards; and for direction of the Data Coordinating Center for the Resuscitation Outcomes Consortium.



Ziding Feng

Member, Public Health Sciences Division

Fred Hutchinson

Cancer Research Center

For outstanding leadership and contributions to the methodology and coordination of studies for the discovery and development of biomarkers for cancer diagnosis or prognosis.



Linda Gage

Senior Demographer

California Department of Finance

For significant advances in statistical practice related to population estimation; for outstanding creativity in data collection; for extraordinary leadership in facilitating adoption of the highest statistical standards at all levels of state and federal government; and for significant contributions and service to the American Statistical Association.





Marc G. Genton

Professor of Statistics

University of Geneva

For important contributions to the development of innovative statistical methods, particularly in skew-elliptical distributions, spatial statistics, and robustness; and for significant service to the profession.



Joseph M. Hilbe

Consultant and Adjunct Professor of Statistics

Arizona State University

For contributions in the field of generalized linear models, particularly in modeling counts; for promoting knowledge of statistical software; and for tireless service to the profession.

Mary W. Gray

Professor of Mathematics and Statistics

American University

For outstanding contributions in encouraging women and minorities in the study and practice of statistics and mathematics; for leadership in the applications of statistics in the field of human rights and litigation; and for statistical services to developing countries.



Jacqueline M. Hughes-Oliver

Professor of Statistics

North Carolina State University

For innovative and significant contributions to group testing; for outstanding research in spatial statistics; and for excellence in teaching and mentoring.



Patrick J. Heagerty

Professor of Biostatistics

University of Washington

For groundbreaking research on the analysis of longitudinal and survival data; for inspiring leadership as a teacher and mentor; for excellence as a statistical collaborator; and for strong editorial service to the profession.



Jiming Jiang

Professor of Statistics

University of California, Davis

For outstanding contributions to statistical theory and methodology, particularly in mixed effects models and small-area estimation; and for excellence in teaching.

Glenn Heller

Attending Biostatistician

**Memorial Sloan-Kettering
Cancer Center**

For excellent contributions to survival analysis and clinical trials methodology; for leadership of biostatisticians in major collaborative projects; and for outstanding statistical applications in the field of cancer research.



Michael I. Jordan

*Professor of Statistics, Electrical
Engineering, and Computer Science*

University of California, Berkeley

For innovative contributions to statistical methodology; and for the development of ties between statistics and the computational, engineering, and biological sciences.



Nicolas W. Hengartner

Project Leader Information Sciences Group

Los Alamos National Laboratory

For wide-ranging research contributions in nonparametric function estimation and inverse problems; for innovative general methodology incorporating statistics into the solution of scientific problems; and for statistical mentoring and leadership.



David R. Judkins

Senior Statistician

Westat

For theoretical and applied contributions in the fields of survey sampling and program evaluation, including the development of innovative methods for large-scale imputation, variance estimation, and propensity scoring; and for effective mentoring of young statisticians.



Samuel Kou

John L. Loeb Associate Professor of Natural Sciences
Harvard University

For influential contributions to stochastic modeling and statistical inference in biophysics and to Monte Carlo, Bayesian, and nonparametric methods; and for service to the profession.



JC Lu

Professor of Industrial and Systems Engineering
Georgia Institute of Technology

For outstanding contributions in reliability, industrial statistics, and data-mining; for dedicated editorial and professional service; and for leadership in promoting statistics in engineering.

Way Kuo

*University Distinguished Professor and
Dean of Engineering*
University of Tennessee

For contributions to reliability research and applications to the micro- and nano-electronics industry; and for the development of statistics education and research for engineering.



Robert B. Lund

Professor of Mathematical Sciences
Clemson University

For innovative research in applied probability, statistical climatology, and time series analysis; and for stellar editorial service to the American Statistical Association.



Edward Lakatos

President
BiostatHaven Inc.

For the development of innovative techniques for sample size and power calculations for complex survival trials; and for outstanding service to the profession.

Elizabeth H. Margosches

Statistician
**U.S. Environmental
Protection Agency**

For significant impact on scientific policy issues at the Environmental Protection Agency; for recruitment and mentoring of women in government agencies; and for exemplary service to the profession.



Joseph B. Lang

*Department of Statistics and
Actuarial Science*
University of Iowa

For influential and innovative contributions in categorical data research, especially in the areas of generalized log-linear models and multinomial-Poisson homogeneous models; and for excellence in both graduate and undergraduate teaching.



Sati Mazumdar

*Professor of Biostatistics,
Graduate School of Public Health*
University of Pittsburgh

For significant collaborative research in environmental health, reproductive toxicology, and psychiatry; and for outstanding teaching and mentoring of graduate students.



Chuanhai Liu

Professor of Statistics
Purdue University

For deep contributions in numerous areas of statistics, especially computational statistics, multivariate modeling, and missing data problems.



Ian W. McKeague

Professor of Biostatistics
Columbia University

For influential contributions to statistical and biostatistical research, particularly in the areas of empirical likelihood and survival analysis.



Leyla K. Mohadjer

Vice President

Westat

For excellence in designing, developing, and directing statistical aspects of large, national sample surveys for the federal government; for innovative use of sample design, estimation, variance estimation, and quality assurance techniques to achieve important improvements in data quality; and for service to the statistical profession, both nationally and internationally.



Mohsen Pourahmadi

Professor of Statistics

Northern Illinois University

For influential contributions to statistical modeling and inference, particularly in the areas of time series and covariance modeling; for leadership in an academic department and outstanding teaching; and for service to the profession.

Katherine L. Monti

Senior Statistical Scientist and Director

Massachusetts Office, Rho, Inc.

For outstanding service to the profession; for excellence in statistical applications in diverse areas; and for exemplary training of nonstatistical colleagues and mentoring of young statisticians.



Allen L. Schirm

Associate Director and Senior Fellow

Mathematica Policy Research

For outstanding contributions to applying advanced statistical methodology to small area estimation for federal program administration and program evaluation; and for service on panels to advance statistical methodology in the federal government.



Michael A. Newton

Professor of Statistics and of Biostatistics and Medical Informatics

University of Wisconsin

For contributions to statistics in the biomedical sciences, especially cancer biology and genomics; and for service to the profession.



Stuart Scott

Senior Mathematical Statistician

Bureau of Labor Statistics

For innovations and improvements to the seasonal adjustment of important macroeconomic statistics; for outstanding methodological research on seasonal adjustment; for important work in measurement of nonsampling error in federal government surveys; and for service to the profession, especially to the American Statistical Association.



Barry D. Nussbaum

Chief Statistician

U.S. Environmental Protection Agency

For innovative and influential applications of statistics to environmental problems; and for leadership in explaining, advocating, enhancing, and implementing the proper use of statistics in governmental decisionmaking.



Yu Shen

Professor of Biostatistics

University of Texas M. D. Anderson Cancer Center

For outstanding contributions to statistical methods in the analysis of cancer screening trials; for the development of adaptive clinical trial designs; for important applications of statistics to cancer prevention and treatment; and for service to the profession.



Walter W. Offen

Senior Research Fellow

Eli Lilly and Company

For outstanding leadership in implementing innovative statistical approaches in clinical drug development; for influential collaborative activities between pharmaceutical and regulatory scientists; and for continued service to the profession.



Joanna H. Shih

Mathematical Statistician

National Cancer Institute

For innovative contributions to the analysis of survival data; for effective collaborative research related to cancer and heart disease; and for outstanding service to the profession.





Elizabeth H. Slate
*Professor of Biostatistics,
 Bioinformatics, and Epidemiology*
Medical University of South Carolina

For contributions to statistical methods and applications in the biomedical sciences; for teaching excellence and the development of innovative educational programs; and for notable service to the profession.



Antony Unwin
*Professor for Computer-Oriented
 Statistics and Data Analysis*
Augsburg University

For influence on the practice of statistics through teaching and research in interactive graphics; and for creation of innovative, interactive graphics tools.

Jeffrey L. Solka
Principal Scientist

Naval Surface Warfare Center

For innovative application of statistical methodology to diverse fields, including intrusion detection, text mining, streaming data, manifold learning, and social networks; and for tireless advocacy of statistical and data mining methodologies in military applications.



Jonathan C. Wakefield
Professor of Statistics and Biostatistics
University of Washington

For statistical leadership in the areas of pharmacokinetics and environmental epidemiology; for creativity in applications; for excellence in training graduate students in statistics; and for editorial service to the profession.



Zachary G. Stoumbos
*Professor and Chair of Management
 Science and Information Systems*

Rutgers University Business School

For outstanding contributions to research in statistical process control; for leadership in promoting statistics within other major professional societies; and for excellence in teaching.



Russell D. Wolfinger
Director of Scientific Discovery and Genomics
SAS Institute

For outstanding contributions in statistical applications and in statistical software research and development, especially in the areas of mixed models and genomics; and for distinguished service to the profession.

Thérèse A. Stukel

Vice President, Research, and Senior Scientist

Institute for Clinical Evaluative Sciences

For developing innovative statistical methods in health services research and cancer epidemiology; for major contributions to reorganizing health service delivery in Ontario, Canada; for statistical support of international public health interventions; and for service to the profession.



Weng Kee Wong
Professor of Biostatistics
UCLA School of Public Health

For rigorous and seminal research on the optimal design of experiments with multiple objectives; for excellence in disseminating theoretical research into practice; and for creative applications of statistics in rheumatology and drug development.



Ming T. Tan
Professor and Division Head of Cancer Biostatistics
University of Maryland School of Medicine

For outstanding contributions to the design and analysis of clinical trials, the development of models for tumor xenograft and repeated measurements, and the evaluation of multiple biomarkers/diagnostic tests; for leadership in administering a biostatistics unit; and for excellent services to the statistical and cancer research communities.



Yannis Yatracos
Professor of Statistics
National University of Singapore

For fundamental results in minimum distance estimation with applications in nonparametric regression and density estimation; for innovative results in small sample estimation; and for excellence in teaching.

All awardees
and
histories of the
awards can be
found on the
ASA web site at
www.amstat.org/awards.



Kai Fun Yu

*Branch Chief, Biometry and
Mathematical Statistics Branch*

**National Institute of Child Health and
Human Development**

For significant contributions to mathematical statistics, sequential analysis, longitudinal data analysis, and applications in biomedical research; for leadership in administration; and for service to the profession.

Elizabeth Regina Zell

Mathematical Statistician

Centers for Disease Control and Prevention

For the development, evaluation, and dissemination of high-quality and innovative statistical methods to ensure that public health policies are based on sound scientific data; for the design and implementation of national and international surveys of major public health importance; and for dedicated service to the statistical community.



Cun-Hui Zhang

Professor of Statistics

Rutgers University

For outstanding and wide-ranging contributions to mathematical statistics, empirical Bayes, biased and incomplete data, and functional MRI; and for service to the profession.

Ji Zhang

*Vice President, Clinical Operations,
International Clinical Development*

sanofi-aventis Pharmaceutical Research

For important contributions to applied statistics and clinical trial methodologies; for exemplary leadership in building and directing outstanding statistical groups in the pharmaceutical industry; and for service to the profession.



Li-Xing Zhu

Professor of Statistics

Hong Kong Baptist University

For outstanding contributions to statistics and probability, especially dimension-reduction methods, goodness-of-fit testing, and empirical likelihood; for statistics leadership in China; and for outstanding service to the profession.

Committee of Presidents of Statistical Societies 2007

Wednesday, August 1, 2007, 4 p.m.

Salt Palace Convention Center, Ballrooms E-J

George W. Snedecor Award

This award honors an individual who has been instrumental in the development of statistical theory in biometry. The award is for a noteworthy publication in biometry within three years of the date of the award. The Snedecor Award, established in 1976, is awarded biannually (in odd years) and consists of a certificate and cash award.

2007 Committee: Daowen Zhang (Chair, ENAR), Pierre Dutilleul (SSC), Gilbert Fellingham (WNAR), Patrick Heagerty (COPSS), Paul Holland (IMS), and Marianthi Markatou (ASA)

Past Recipients: Nicholas P. Jewell and Mark J. van der Laan, 2005;
Paul R. Rosenbaum, 2003

Florence Nightingale David Award

This award is named after Florence Nightingale David, an accomplished statistician and the first recipient of the Elizabeth L. Scott Award. It is sponsored jointly by COPSS and the Caucus for Women in Statistics. The award is granted to a female statistician who serves as a role model to other women by her contributions to the profession through excellence in research, leadership of multidisciplinary collaborative groups, statistics education, or service to the professional societies. The F. N. David Award, established in 2001, will be awarded biannually and consists of a certificate and cash award.

2007 Committee: Subir Ghosh (Chair, WNAR), Donna Brogan (COPPS), Joan Chmiel (ASA), Sharon-L. Normand (SSC), Juliet Shaffer (IMS), and Naisyin Wang (ENAR)

Past Recipients: Alice S. Whittemore, 2005; Juliet Popper Shaffer, 2003

A Brief Look at George W. Snedecor

George W. Snedecor was a professor of mathematics at Iowa State University. He taught the first course in statistics offered there, and thence founded the first collegiate Department of Statistics in the United States with the help of R. A. Fisher. In 1948, Snedecor was the 43rd president of the American Statistical Association, the first president to come from an agricultural research background.



A Brief Look at Florence Nightingale David

F. N. David was a pioneer for women in the field of statistics. David was an ASA Fellow and a member of the International Statistical Institute, as well as the Institute of Mathematical Statistics. She authored two monographs, nine books, and more than 100 peer-reviewed papers. She also was the first recipient of the Elizabeth L. Scott Award, in 1992.



Committee of Presidents of Statistical Societies

Presidents' Award

The Committee of Presidents of Statistical Societies (COPSS) sponsors and presents the COPSS Presidents' Award annually to a young member of one of the participating societies in recognition of outstanding contributions to the profession of statistics. The award consists of a certificate and cash award, and is presented annually at a joint meeting of two or more sponsoring societies.

2007 Committee: Michael O'Fallon (Chair, ASA), Charmaine Dean (WNAR), Nancy Heckman (SSC), Jack Kalbfleisch (ENAR), Mark van der Laan (IMS), and Steve Vardeman (COPSS)

Past 10 recipients: Xihong Lin, 2006; Mark J. van der Laan, 2005; Michael A. Newton, 2004; Andrew Gelman, 2003; Jun Liu, 2002; Xiao-Li Meng, 2001; Jianqing Fan, 2000; Larry Wasserman, 1999; Pascal Massart, 1998; and Kathryn Roeder, 1997

Committee of Presidents of Statistical Societies

Jessica Utts, Chair • Madhuri Mulekar, Secretary/Treasurer



Past Presidents

Sallie Keller-McNulty, ASA • Jane F. Pendergast, ENAR • Thomas G. Kurtz, IMS
David A. Binder, SSC • Christine E. McLaren, WNAR

Presidents

Mary Ellen Bock, ASA • Lisa LaVange, ENAR • Jim Pittman, IMS
Charmaine Dean, SSC • Ken Burnham, WNAR

Presidents-Elect

Peter A. (Tony) Lachenbruch, ASA • Eric Feuer, ENAR • Jianqing Fan, IMS
Christian Genest, SSC • John M. Neuhaus, WNAR



Acknowledgements

The Committee of Presidents of Statistical Societies (presidents, presidents-elect, and past presidents of the American Statistical Association, the Biometric Society (ENAR/WNAR), the Institute of Mathematical Statistics, and the Statistical Society of Canada) acknowledges those institutions that have generously contributed to an endowment fund for the George W. Snedecor and Elizabeth L. Scott Awards:

Abbott Laboratories

Biopharmaceutical Research Consultants

*Bristol-Myers Squibb Pharmaceutical
Research Institute*

Chapman and Hall/CRC

Committee of Presidents of Statistical Societies

Duxbury Press

*Institute for Social Research,
Survey Research Center*

Institute of Mathematical Statistics

Iowa State University

Procter & Gamble

*Section on Statistical Graphics of the
American Statistical Association*

Springer

SYSTAT

Trilogy Consulting Corporation

John Wiley & Sons, Inc.

Committee of Presidents of Statistical Societies

2007

Fisher Lecture



Marvin Zelen

Wednesday, August 1, 2007, 4:20 p.m.
Salt Palace Convention Center, Ballrooms E-J

COPSS established the R. A. Fisher Lectureship in 1963 to honor the contributions of Sir Ronald Aylmer Fisher and the work of a present-day statistician. The Fisher Lectureship recognizes the importance of statistical methods for scientific investigations, and the list of past Fisher lecturers well-reflects the prestige COPSS and its member societies place on the award. The lecture is to be broadly based and emphasize aspects of statistics and probability that are closely related to scientific collection and interpretation of data, which are areas in which Fisher made outstanding contributions. It is anticipated that this lecture will be published in one of the COPSS society journals. Since 1982, COPSS has added a cash prize and a certificate to the lectureship.

Marvin Zelen

Harvard School of Public Health

“R. A. Fisher, Randomization, and Current Practice in Multicenter Clinical Trials”

R. A. Fisher's pioneering book, *The Design of Experiments*, published in 1935, laid the foundations for the modern design of experiments. The basic principles were randomization, replication, and local control. The importance of randomization, as a way of reducing biases, in carrying out studies on humans, was early recognized by Bradford Hill. Today, the randomized clinical trial is regarded as the “gold standard” for carrying out clinical trials. This lecture will discuss models in which the patient populations and hospitals are random samples, or simply collections, and the implied limitations on making statistical inferences. In reality, the randomization process may serve as the only basis for making statistical inferences, as the patients and hospitals are not random samples.

2007 Committee: Elizabeth Thompson (Chair, COPPS), Loveday Conquest (WNAR), Michael Newton (IMS), Louis-Paul Rivest (SSC), Jeremy Taylor (ENAR), and Lori A. Thombs (ASA)

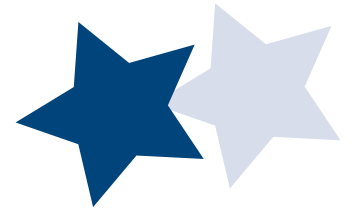
Past 10 lecturers: Terence P. Speed, 2006; R. Dennis Cook, 2005; Donald B. Rubin, 2004; Adrian F. M. Smith, 2003; Raymond J. Carroll, 2002; James O. Berger, 2001; Ingram Olkin, 2000; Jack D. Kalbfleisch, 1999; Arthur P. Dempster, 1998; Colin L. Mallows, 1997

A Brief Look at R. A. Fisher



Sir Ronald Aylmer Fisher is considered one of the founders of modern statistics for his many contributions to the field. He was led to statistics while at Cambridge, where he was fascinated by the theory of errors. Fisher earned his bachelor's degree in astronomy in 1912 and taught mathematics until 1919. Fisher was elected Fellow of the Royal Statistical Society in 1929 and was awarded the Royal Medal of the Society in 1938; in 1948, he received the Darwin Medal of the Society. In 1955, he was honored again with the Copley Medal of the Royal Society. Fisher's published works include *Statistical Methods for Research Workers* (1925), *Genetical Theory of Natural Selection* (1930), and *The Design of Experiments* (1935). All told, he published approximately one paper every two months for half a century, almost all of which broke new ground.

Section ★ Chapter ★ Education



Section on Bayesian Statistical Science

Student Paper Awards

- ★ Wei Chen, University of Michigan
- ★ Yeonseung Chung, The University of North Carolina at Chapel Hill
- ★ Feng Guo, University of Connecticut
- ★ Joo Yeon Lee, Brown University
- ★ Natesh Pillai, Duke University
- ★ Abel Rodriguez, Duke University
- ★ Christian Röver, University of Auckland
- ★ Shiling Ruan, The Ohio State University
- ★ Donatello Telesca, University of Washington
- ★ Anton Westveld, University of Washington

Biometrics Section

David P. Byar Young Investigator Award

- ★ Egil Ferkingstad, University of Oslo

Travel Award

- ★ Min Zhang, North Carolina State University

Biopharmaceutical Section

Best Contributed Paper

- 1st: Richard Higgs, Eli Lilly and Company
- 2nd: Hoa Phuong Nguyen, Genentech
- 3rd: Katja S. Remlinger, GlaxoSmithKline R&D

Student Paper Award

- ★ Wenato Feng, University of Pittsburgh

Statistical Computing Section

2005 Best Contributed Presentation

- ★ Adam Petrie

John M. Chambers Statistical Software Award

- ★ Heather Turner, University of Warwick

Statistical Computing Section and Statistical Graphics Section

Student Paper Award

- ★ Andrew O. Finley, University of Minnesota
- ★ Alexander T. Pearson, University of Rochester
- ★ Sijian Wang, University of Michigan
- ★ Hadley Wickam, Iowa State University

Statistics in Defense and National Security

Distinguished Achievement Award

- ★ Donald P. Gaver, Naval Postgraduate School

Section on Statistical Education

Waller Education Award

- ★ Johanna Hardin, Pomona College

Section on Statistics and the Environment

Distinguished Achievement Award

- ★ Peter Guttorp, University of Washington
- ★ Sarah Nusser, Iowa State University
- ★ Dale Zimmerman, Iowa State University

2006 JSM Presentation Award

- ★ Melanie Autin, University of South Carolina

Student Paper Award

- ★ Andrew O. Finley, University of Minnesota

Statistics in Epidemiology Section

Young Investigator Award

- ★ Sheng Luo, The Johns Hopkins University

Travel Award

- ★ Zhangsheng Yu, The Ohio State University
- ★ Xin He, University of Missouri-Columbia
- ★ Mulugeta Gebregziabher, Medical University of South Carolina
- ★ Li Su, Brown University
- ★ Guanghui Wei, University of Michigan
- ★ Pang Du, Virginia Tech
- ★ Tamanna Howlader, Concordia University, Montréal
- ★ Shannon Fraker, Virginia Tech
- ★ Lori Chibnik, Boston University
- ★ Jonathan Norton, Florida State University
- ★ Kenneth Shirley, University of Pennsylvania
- ★ Adam Glynn, Harvard University
- ★ Terri Kang Johnson, University of Southern California
- ★ Lu Wang, Harvard University
- ★ Kristin Javaras, Harvard University

★ Other Awards

Government Statistics Section/Social Statistics Section/Washington Statistical Society

Roger Herriot Award

- ★ Nancy Kirkendall, EIA

Government Statistics Section/Social Statistics Section/Washington Statistical Society/Caucus for Women in Statistics/Harris-Smith Institutes/Mathematica Policy Research/Synectics for Management Decisions, Inc.

Wray Jackson Smith Award

- ★ Romesh Silva, University of California, Berkeley

Section on Health Policy Statistics

Student Paper Award

- ★ Benjamin French, University of Washington
- ★ Ying Huang, University of Washington
- ★ Michael Law, Harvard University
- ★ Charles Minard, The University of Texas
- ★ Qing Pan, University of Michigan

Section on Physical and Engineering Sciences

Most Outstanding Presentation Award

- 1st: Bela Nagy, University of British Columbia
- 2nd: Steven LaLonde, RIT

Honorable Mentions:

- ★ Tirthankar Dasgupta, Georgia Institute of Technology
- ★ Sundar Dorai-Raj, PDF Solutions, Inc.
- ★ Robert Mee, University of Tennessee
- ★ Aaron J. Owens, DuPont
- ★ Oksoun Yee, Schering-Plough

Section on Quality and Productivity

Mary G. and Joseph Natrella Scholarship Award

- ★ Shannon Fraker, Virginia Tech
- ★ Rachel Johnson, Arizona State University

Section on Sports in Statistics

Statistics in Sports Award

- ★ Scott Berry, Berry Consultants

Section on Statistical Consulting

Travel Award

- ★ William B. Fairley, Analysis and Inference, Inc.
- ★ Edward Rothman, University of Michigan
- ★ Samaradasa Weerahandi, Time Warner/RSM

2007 Chapter Service Recognition Awards

- ★ Christelle Darstein, Central Indiana Chapter
- ★ Sterling Hardy, Connecticut Chapter
- ★ Mark Yang, Florida Chapter
- ★ Alfred Barron, New Jersey Chapter
- ★ Louis H. Primavera, New York City Metro Chapter
- ★ John Boddie, North Texas Chapter
- ★ Tim Hesterberg, Puget Sound Chapter
- ★ Hassan Zahedi, South Florida Chapter
- ★ John L. Czajka, Washington Statistical Society

2007 Excellence-in-CE Course Recognition Awards

Applied Longitudinal Analysis

- ★ Garrett Fitzmaurice, Harvard University

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